Pinellas County Empowerment Team High-Utilizer Behavioral Pilot

Year Two Cost Analysis and Qualitative Evaluation

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Introduction

The Pinellas County Board of County Commissioners committed funding to address the needs of residents with serious behavioral health concerns who are frequently hospitalized or incarcerated. Key issues affecting this population include inconsistent coordination across behavioral health, homeless, criminal justice and health care systems, along with insufficient funding for needed services. The Pinellas County Empowerment Team (PCET) pilot program was developed to respond to these issues and began delivering services in June 2016 to a select group of individuals who represent some of the highest service users in Pinellas County. This pilot program is being evaluated by researchers at the Florida Mental Health Institute at the University of South Florida.

This report includes a quantitative and qualitative evaluation of the PCET. Part 1 compares public costs associated with the pilot participants for the baseline and six month follow-up period. The follow-up numbers were annualized to allow for comparison. Part 2 examines the implementation of PCET interventions, documenting core program components, service strategies, challenges, and lessons learned.

Part I: Pinellas County Empowerment Team (PCET) Quantitative Evaluation

Baseline Time Period

July 1, 2015 through June 30, 2016

First Year Follow-up Time Period

Jan 1, 2017 through December 31, 2017

Second Year Follow-up Time Period

Jan 1, 2018 through December, 2018

Demographics

There are 31 participants in the study. They are predominantly male (83.9%) and ranged in age from 21 to 60 at the end of the baseline study period with an average age of 38.3 years old. The group is 52.0% white and 38.7% black. The rest are mixed race, and 6.4% have identified as Hispanic. Most (83.9%) were homeless upon entry into the program.

Key Client Characteristics

Though there are differences among individuals served by the PCET, there are also common characteristics that are shared by this client group.

Complex *Diagnoses*: Common diagnoses include schizoaffective disorder, reflecting a broad range of experiences with psychosis, anxiety, depression, suicide attempts, and behavioral disturbances. Clients also experienced moderate to extreme levels of severity with co-occurring mental health/poly-substance abuse, creating complex challenges for effective diagnosis and treatment. Substances abused included alcohol, crack/cocaine, opioids/heroin, spice, and marijuana. Clients were also diagnosed with paranoid schizophrenia and bi-polar disorder, often associated with more severe disabilities.

Homelessness: Homelessness and disaffiliation are a key distinguishing characteristic of the PCET client group. All of the clients were homeless or at high risk of homelessness at time of PCET engagement, living in impoverished conditions, at high risk for disease and violent victimization, and profoundly disaffiliated from mainstream support networks, including family.

Trauma Histories: Many PCET clients present with histories of trauma, including childhood physical and sexual abuse, abuse in the foster care system, witnesses to violence as a child, and victims of violence in adulthood. Trauma histories provide an important context for understanding presentations of symptoms, substance use, coping difficulties, social disconnection/homelessness, and encounters with the criminal justice system. These histories highlight the vital importance of establishing trusting relationships and safe/secure living conditions as a necessary foundation for other program interventions.

Legal Histories: Most PCET clients have a history of involvement with the criminal justice system, with offenses including robbery, assault, prostitution, battery against a law enforcement officer, food stamp fraud, disorderly conduct, and trespassing.

In summary, this group presents with multiple/complex problems, but is also distinguished by remarkable resilience, reflected in each individual's ability to survive. On-going recovery and community integration are built upon this foundation of resilience.

Cost Analysis

For this report we analyzed the system interactions of the 31 participants and their associated costs. Not all data systems were available for this report. The systems we examined were Pinellas County Jails, Pinellas Homeless Management Information System (HMIS) Florida Medicaid and the DCF Substance Abuse and Mental Health Information System (SAMHIS).

We also included an estimate of total project cost by including the total cost for implementing the PCET Pilot for the period May 2016 to May 2017. Total cost for PCET implementation was $664,331, or $35,578 per client.

Summary of Findings

- Total costs for these systems decreased by 58.8% ($610,682) in the first year and 56% ($580,321) in the second year for a total savings of $1,190,603.
- Total cost for funding the PCET Pilot was approximately $664,000 in year one and $650,862 in year two for a total of $1,314,862.
- The total net cost to the system for implementing the PCET was $124,259 or a 5.3% increase. Not all cost savings were able to be captured making the next savings under estimated.
    - Jail costs decreased by 52.4% in year one and 87.7% in year two.
    - Shelter costs decreased by 91.0% in year one and 93.9% in year two.
    - Medicaid costs decreased by 59.5% per person in year one but increase in year two from the year one amount. This was still a decrease of 22.7% from the baseline.
    - DCF SAMHIS costs decreased by 58.8% in year one and 91.0% in year two.
    - Costs increased for Medicaid pharmacy by 32.3% in year one and $668.2% in year two. These increase were primarily due to the use of long acting injectable antipsychotic drugs.
- While overall costs for DCF SAMHIS decreased, cost for substance abuse treatment increased by 86.9% in year one and 52.0% in year two.

Table 1. Summary of Costs (Not including PCET Pilot Program)

System	Baseline Jul 1, 2015-Jun 30, 2016	One Year Follow-up Actual Costs Jan 1, 2017- Dec 31, 2017	Second Year Follow-up Jan 1, 2018 –Dec 31,2018
Jails Stays	$227,000 (122 stays, 1816 days)	$108,125 (-52.4%)	$28,000 (-87.7%)
Medicaid	$534,456	$216,452 (-59.5%)	$412,869 (-22.7%)
SAMHIS	$266,737	$109,906 (-58.8%)	$24,103 (-91.0%)
Shelter Stays	$18,208 (842 days)	$1,636 (-91.0%)	$1,108 (-93.9%)
Total	$1,046,401	$440,574 (-57.9%)	$466,080 (-55.5%)
Average Cost per Person	$33,755	$14,212	$15,035

Table 1a. Summary of Costs (Including PCET Pilot Program)

System	Baseline Jul 1, 2015-Jun 30, 2016	One Year Follow-up Actual Costs Jan 1, 2017- Dec 31, 2017	Second Year Follow-up Actual Costs Jan 1, 2018- Dec 31, 2018
PCET Pilot Cost	0	$664,000	$650,862
Total including PCET Pilot	$1,046,401	$1,101,732 (+5.3%)	$1,116,942 (+6.7%)
Average Cost per Person	$33,755	$35,540 (+5.3)	$36,030 (6.7%)

Medicaid Cost Breakdown

Medicaid Eligibility

At baseline 11 (35.5%) of the 31 participants in the study had Medicaid coverage during the baseline time period. An additional 5 of the participants have Medicaid coverage during the one year interim follow-up period and one more in the second year for a total of 17 (56.7%).

Medicaid Costs by Provider Type

Medicaid costs were broken down by provider type. The majority of costs for these individuals during the baseline time period were associated with Hospitals and Community Mental Health Service Centers. The costs associated with the Community Mental Health Center (including CSU utilization) all but disappeared in the first year follow-up period decreasing by 98.0%. It was higher the second year but still lower than the baseline by 49.7%. The hospital costs decreased by 36.0% in year one and 46.3% in year two. Overall costs per person decreased by 70.7% in year one and 54.1% in year two. There were large cost increases for pharmacy and other services. These cost increases likely represent better services for the participants. Participants are getting more of the medications they need and that is helping to keep them out of the hospital and out of jail.

The PCET team essentially provided comprehensive community based care for all clients served virtually eliminating CSU use and substantially reducing hospital use. This shift in service delivery accounts for most of the cost benefit of the intervention.

Table 2. Medicaid Costs by Provider Type

Provider Type	Baseline Jul 1, 2015-Jun 30, 2016	One Year Follow-up Actual Costs Jan 1, 2017-Dec 31, 2017	Second Year Follow-up Actual Costs Jan 1, 2018-Dec 31, 2018
General Hospital	$245,413	$157,181 (-36.0%)	$131,680 (-46.3%)
Psychiatric Inpatient Hospital	0	$3,305 (100%)	$0
Community Mental Health Service Center†	$225,019	$4,497 (-98.0%)	$113,141 (-49.7%)
Physician	$35,584	$23,908 (-32.8%)	$26,120 (-26.6%)
Pharmacy	$16,090	$21,284 (32.3%)	$123,609 (668.2%
Ambulance	$5,710	$15,870 (177.9%)	$5,324 (-6.8%)
Other	$6,730	$10,181 (51.3%)	$12,995 (93.1%)
Total	$534,546	$216,453 (-59.5%)	$412,869 (-22.8%)
Per Person	$48,595	$14,226 (-70.7%)	$22,286 (-54.1%)

†Includes CSU costs.

Medicaid Hospital Costs by Revenue Center

Hospital costs where broken down by revenue center. The largest drop was for medical/surgical bed stays which decreased by $22,774 (61 days) in year one and $53,613 (66 days) in year two. Intensive care days decreased by $21,197 in year one and $20,374 in year two. Notable emergency room costs decreased by $12,186 (66 visits) in year one and 24,456 in year two.

Table 3. Medicaid Hospital Costs by Revenue Center

	Baseline Jul 1, 2015-Jun 30, 2016		One Year Follow-up Actual Costs Jan 1, 2017- Dec 31, 2017		Second Year Follow-up Actual Costs Jan 1, 2018- Dec 31, 2018	
Revenue Center	Number	Cost	Number	Cost	Number	Cost
Psychiatric Bed Stay (Days)	114	$84,266	135	$85,180 (1.1%)	136	$96,565 (14.6%)
Medical/ Surgical Gyn Stay (Days)	69	$60,647	8	$37,874 (-37.6%)	3	$7,034 (-88.4%)
Intensive Care (Days)	31	$38,424	31	$17,128 (-58.4%)	5	$18,050 (-53.0%)
Emergency Room (Visits)	212	$29,553	146	$17,367 (-41.2)	66	$5,097 (-82.8%
General Classification Stay (Days)	8	$9,226	0	0 (-100%)	0	0 (-100%)
Obstetric Stay (Days)	2	$2,259	0	0 (-100%)	0	0 (-100%)
Drugs/Labs and other Ancillaries (Units)	20,098	$21,038	11,185	$11,225 (-46.6%)	2,160	$4,934 (-76.5%)
Total		$245,413		$157,181 (-36.0%)		$131,680 (-46.3%)

Medicaid Physician Costs by Specialty

Physician costs were broken down by specialty (Table 4). The largest decrease was for emergency medicine at $5,518 (52.0%) in year one and $6,044 (57.0%) in year two consistent with the drop in emergency room visits.

Table 4. Medicaid Physician Costs by Specialty

	Baseline Jul 1, 2015-Jun 30, 2016		One Year Follow-up Actual Costs Jan 1, 2017- Dec 31, 2017		Second Year Follow-up Actual Costs Jan 1, 2018- Dec 31, 2018	
Physician Specialty	Number (Visits)	Cost	Number (Visits)	Cost	Number (Visits)	Cost
Emergency Medicine	98	$10,605	49	$5,088 (-52.0%)	45	$4,561 (-57.0%)
General Practice	94	$6,165	76	$6,009 (-2.5%)	57	$6,706 (8.8%)
Family Practice	64	$4,184	48	$2,944 (-29.6%)	19	$1,314 (-68.6%)
Psychiatry	19	$4,031	47	$1,911 (-52.6%)	55	$3,263 (-19.1%)
Internal Medicine	46	$3,716	29	$2,208 (-40.6%)	36	$3,365 (-9.4%)
Other	190	$6,883	93	$5,749 (-16.5%)	85	$6,910 (0.4%)
Total		$35,584		$23,908 (-32.8%)		$26,120 (-26.6%)

Medicaid Pharmacy Costs by Medication Class

Pharmacy costs were broken down by medication class (Table 5). Medication costs increased from baseline to the six month follow-up. The largest increase was for Antipsychotics which increased by $5,342 in year one and $93,777.

The use injectable anti-psychotic medications to support management of psychiatric symptoms accounts for most of this cost and is a central feature of the PCET intervention. This option is offered to all PCET clients and is preferred by most as an alternative to oral medication. It significantly increases treatment compliance, ensures that compliant clients get the desired effects from the medication, and helps the psychiatrist better determine and monitor the drug's level of effectiveness.

Table 5. Medicaid Prescription Costs by Medication Class

	Baseline Jul 1, 2015-Jun 30, 2016		One Year Follow-up Actual Costs Jan 1, 2017- Dec 31, 2017		Second Year Follow-up Actual Costs Jan 1, 2018- Dec 31, 2018	
Medication Class	Prescriptions	Cost	Prescriptions	Cost	Prescriptions	Cost
Antipsychotic	74	$ 12,750	112	$18,092 (41.9%)	108	$106,527 (735.5%)
Anticonvulsant	59	$ 609	107	$814 (33.6%)	129	$419 (-31.2%)
Antidepressant	31	$30	41	$52 (73.3%)	77	$80 (166.7%)
Antianxiety	20	$14	13	$39 (178.6%)	20	$23 (8%)
Other	69	$2,688	85	$2,288 (-14.9%)	210	$16,561 (516.1%)
Total	190	$16,090	358	$21,284 (32.3%)	544	$123,609 (668.2%)

SAMHIS Cost Breakdown

The majority of SAMHIS costs are for clients not covered by Medicaid and continue to mostly be for services in the mental health program (Table 6). While overall costs decreased by 58.8% in year one and 90.6% in year two, substance abuse treatment costs increased by 86.9% in year one and 52.0% in year two, though this reflects an increase of only $8,790 in year one and $5,264 in year two, far below the level of need for this client group. The demand for substance abuse treatment, especially residential treatments, are far greater than current availability in the community.

Table 6. SAMHIS Costs by Program

Program	Baseline Jul 1, 2015-Jun 30, 2016	One Year Follow-up Actual Costs Jan 1, 2017-Dec 31, 2017	Second Year Follow-up Actual Costs Jan 1, 2018-Dec 31, 2018
Mental Heath	$256,621	$91,000 (-64.5%)	$24,103 (-90.6%)
Substance Abuse	$10,116	$18,906 (86.9%)	$15,380 (52.0%)
Total	$266,737	$109,906 (-58.8%)	$39,483 (-85.2%)

SAMHIS Mental Health Costs by Cost Center

The majority of the costs for the SAMHIS mental health program (Table 7) during the baseline period were for crisis stabilization at $169,711(66.1%). This area decreased by $101,245 in year one and $167,861 in year two. Remarkably, the cost for year two was only $1,850. The reduction in number of units of service and cost is consistent with reductions in crisis services for all cost centers. Case management increased in year one but dropped off in year two. Incidental expenses increased by $8,654 in year one and $17,217 in year two. Incidental expenses included items like short term housing, food, and personal services. Cost centers 19 and 35 both were reduced to $0. These are for short term residential mental health treatment. This likely represents the fact that they are now receiving their mental health care through the PCET team.

Table 7. SAMHIS Mental Health Costs by Cost Center

	Baseline Jul 1, 2015-Jun 30, 2016		One Year Follow-up Actual Costs Jan 1, 2017- Dec 31, 2017		Second Year Follow-up Actual Costs Jan 1, 2018- Dec 31, 2018	
Cost Center (Units)	Number of Units	Cost	Number of Units	Cost	Number of Units	Cost
01-Assessment (Hours)	4	$171	0	0 (-100%)	1	$77 (-55.0%)
02-Case management (Hours)	223	$7,140	272	$9,953 (34.4%)	53	$1,254 (-82.4%)
03-Crisis Stabilization (Bed Day)	642	$169,711	259	$68,466 (-59.7%)	7	$1,850 (-98.9%)
04-Crisis Support / Emergency (Hours)	690	$16,620	37	$1,230 (-92.6%)	10	$394 (-97.6%)
06-Day treatment (4 hour day)	136	$28,820	0	$0 (-100%)	0	$0 (-100%)
12-Medical Services (Hour)	29	$3,381	15	$969 (-71.3%)	3	$850 (-74.9%)

14-Outpatient-Individual (Hour)	18	$735	0	$0 (-100%)	1	$70 (-90.5%)
19-Residential Level 2 (Day)	46	$6,657	0	$0 (-100%)	0	$0 (-100%)
26-Supported Housing/Living	0	0	33	$1,625 (100%)	39	$1,928 (100%)
28-Incidental Expenses (Each)	9	$463	65	$9,117 (1869.1%)	354	$17,680 (3718.6%)
35-Outpatient Group (Hour)	0	$0	7	$198	0	$0
37-Room & Board w/Supervision, Level 2 (Day)	213	$22,924	0	$0 (-100%)	0	$0 (-100%)
Total Mental Health		$256,621		$91,000 (-64.5%)		$24,103 (-90.6%)

SAMHIS Substance Abuse Costs by Cost Center

Substance abuse treatment costs went up overall by $8,790 (86.9%) in year one and 5,264 in year two. Decreases were seen in detoxification and increases in outpatient and residential treatment. Most PCET clients have been untreated for substance use and the actual number of units is relatively small and not reflective of the level of need for treatment. As the PCET continues to engage clients in substance abuse treatment, we can expect to see continued rise in services and cost in this area. However, reductions in substance use can be expected reduce the burden on the criminal justice system and increase housing stability.

Table 8. SAMHIS Substance Abuse Costs by Cost Center

	Baseline Jul 1, 2015-Jun 30, 2016		One Year Follow-up Actual Costs Jan 1, 2017- Dec 31, 2017		Second Year Follow-up Actual Costs Jan 1, 2018- Dec 31, 2018	
Cost Center	Number of Units	Cost	Number of Units	Cost	Number of Units	Cost
01-Assessment (Hour)	1	$70	1	$48 (-31.4%)	2	$97 (38.6%)
02-Case management (Hours)	0	$0	0	$0	1	$53 (100%)
11-Intervention (Hour)	11	$398	9	$333 (-16.3%)	1	$43 (-89.2%)
12-Medical Service (Hour)	12	$420	0	0 (-100%)	0	$0
14-Outpaient Individual (Hour)	0	0	21	$1,137	6	$447
18-Residential Level I (Day)	0	0	117	$12,973	0	$0
19- Residential Level II (Day)	0	$0	0	$0	39	$4,806

20- Residential Level III (Day)	0	$0	0	$0	89	$8,518
24-Substance Abuse Detoxification (Bed-Day)	24	$4,410	10	$1,838 (-58.3%)	6	$1,103 (-75.0%)
32-Outpatient Detoxification (4-Hour Day)	13	$1,917	5	$737 (-61.6%)	0	$0 (-100%)
35-Outpatient Group	0	0	47	$1,243	6	$1,103
38-Room & Board w/Supervision, Level 2	34	$2,901	7	$597 (-79.4%)	0	$0 (-100%)
Total Substance Abuse		$10,116		$18,906 (86.9%)		$15,380 (52.0%)

Part II: Pinellas County Empowerment Team (PCET) Qualitative Evaluation

Period of Analysis: February 19, 2018 through February 5, 2019

Introduction:

The first phase of the Pinellas County Empowerment Team (PCET) qualitative evaluation included a review of the period of initial client engagement beginning in the summer of 2016 through submission of the first report on May 19, 2017. The initial evaluation included a review of ten case records, a summary of a focus group with PCET service recipients, and interviews with administrative, supervisory, and service delivery staff at Suncoast and Boley Centers, the agencies responsible for PCET implementation. The second report focused on the period May 19, 2017 through August 29, 2017, a period of about three months after the first report. That report followed-up with a review of case records for each of the ten clients identified in the first report, along with a review of five new case records of recently enrolled clients, and a summary of staff interviews. A follow-up One Year Interim Cost Analysis and Preliminary Qualitative Evaluation applied the same methodology to document program activities for the period August 30, 2017 through February 19, 2019.

This report focuses on a qualitative evaluation of activities conducted from February 20, 2018 through February 5, 2019. This evaluation follows up with a review of the original ten case records and the five additional cases summarized in the last interim report. In addition, we conducted a focus group on February 7, 2019 with 5 clients from the PCET regarding their experience with receiving services in the program, and conducted interviews with administrative, supervisory, and direct service and Pinellas Sheriff's Department staff regarding the implementation of the PCET (eight interviews).

The PCET approach was mostly unchanged during this period, continuing to provide in-vivo mental health, substance abuse, and other behavioral health services as part of a team approach that includes a special focus on locating clients in need, active engagement, coordination with the county's service array, and connection to housing. A counselor was added to the team to address trauma related issues. As individuals acquire HUD Housing administered by the Boley program, the services required to support individuals in housing has required some modifications in services that are described in this report. A small sub-set of clients with severe substance use disorders had jail encounters and difficulties with managing stable housing.

PCET Case Reviews:

As in the initial evaluation period, the review of case records was designed to document key client issues being addressed by the program, evidence of timely assessments and

corresponding treatment plans, and direct service activities implemented by the program. The initial 10 cases include eight men and two women, with white, African American and Hispanic backgrounds. The PCET team first engaged five of these clients in June 2016, three in July 2016, one in August 2016, and one in September 2016.

The five new clients were first engaged on May 17, July 11, July 17, August 1 and August 25, 2017 and include 3 men and 2 women.

Review of Ten On-Going Cases

The evaluation of case records included a review of assessments, treatment plans and progress notes. As was the case in previous evaluation reports, all ten clients continued to receive frequent visits in the community by the PCET team, timely on-going assessments, and interventions specific to the treatment plan. The only exception was one client who was sentenced to state prison on April 2018 and cannot be followed because he resides outside of Pinellas County.

All treatment plans were updated and reflected client participation in planning. The range of treatment activities provided by the team included case management, medication therapy (oral and injectable), psychotherapy (individual and group), trauma therapy, motivational enhancement therapy, and psychoeducation. In addition, the team provided skill/support activities for budget management and cooking skills. Progress notes included detailed descriptions of case activities and evidence of regular, often daily contact with clients. Contacts focused on a broad array of issues, often involving support for activities of daily living: maintaining housing, food, and clothing, shopping, resolving disputes, emotional support, as well as clinical interventions related to medication management and substance use issues. One case includes coordination with DCF and on-going support activities regarding custody of a client's child that was placed in foster care. In addition, there was evidence of on-going direct contact with clients during stays in hospitals, crisis units, and jails. Activities increase in both frequency and intensity when clients are transitioning to different living environments. Case activities supported the goals and outcomes described in the treatment plan.

In all the reviewed case records, substantial case activity during this evaluation period is related to maintaining clients in their current residences or in supporting transition to different residences. The following is a summary of current residential status:

One sentenced to state prison in April 2018,
Two are in jail awaiting hearing,
One is in an assisted living facility,
One is in an independent apartment,
One is in Boley/HUD supported housing,
One is in Boley Safe Haven housing,
Two are living with family (one moved to California), and
One has not been located since leaving the Operation PAR residential drug treatment program in November 2018.

The case records describe the efforts made by PCET staff to support transfers to new housing and to assist clients with meeting the behavioral expectations in these residences. Managing issues related to substance use at HUD/Boley housing was a special challenge, including problems with intoxication, drug using visitors, buying/selling drugs, and prostitution. In addition, there was substantial case activity for two jailed clients. The case manager was actively involved with plans to transfer one client to a court ordered residential drug treatment program. The case manager provided support to the other jailed client through the court process of a downgrading a felony charge to petty theft.

Summary of Five New Cases

Two of the clients from this group required long-term care for serious mental illness. Both are now patients at Florida State Hospital in Chattahoochee, FL. And have been discharged from the PCET. The other three clients are residing in assisted living facilities (ALFs) and are being followed by the PCET.

Review of Five New Cases

All five clients were referred to PCET by PEHMS. The three clients remaining in the PCET program are residing in ALFs. All three records included a bio-psycho-social assessment, and documentation of treatment planning and on-going program activities. Activities included weekly visits to ALF's that focused on medication management, behavior management, visits with payees, and visits with ALF staff. One client regularly participates in groups at the PCET program site. One client with severe mental illness and a co-occurring developmental disability has been improving on injectable medications and been supported by PCET staff in attending the Agency for People with Disability Program (APD).

Key characteristics of the reviewed clients include the following:

- Histories of long-term homelessness, including deep affiliations with street culture and a corresponding disaffiliation from mainstream culture.
- Histories of trauma, including involvement with the foster care system. Trauma histories are often severe, described as "intense and catastrophic", reflected in experiences of hopelessness, despair, fear of abandonment, chronic loneliness, and an expectation that positive things would be taken away.
- Chronic substance addictions: Staff were challenged by the severity and enduring/persistent quality of addictions and the degree to which basic support resources (e.g., money for food or clothing) provided to clients was directed toward substances. This recognition of the depth of substance abuse problems became greater as staff developed deeper and more honest/trusting relationships with PCET clients over time.
- Moderate to severe psychiatric disorders were evident in all cases reviewed.

Major Themes from Chart Review:

1. Providing access to a full array of services/supports

   PCET staff continue to provide in-vivo mental health, substance abuse, and other behavioral health services as part of a team approach that includes a special focus on locating clients in need, active engagement, coordination with the county's service array, and connection to housing.

2. The value of on-going outreach/engagement

   The case records reflect an on-going emphasis on outreach and specifically on respecting each client's choice, enhancing the person's experience of self-direction and empowerment. This high level of engagement is evident in the frequency and intensity contacts that were documented during this period.

3. On-going challenges related to supporting clients in community residences

   HUD/Boley program housing has helped some clients achieve better stability. However, some clients have struggled with meeting the behavioral demands of these residences and are at high risk of eviction. Issues related to drug use and connections to individuals in the street culture are most problematic. However, clients are making progress toward higher functioning and community integration, and none returned to homelessness.

4. Management of substance abuse problems

   Most of the clients continue to struggle with some form of alcohol and or substance use problems, but many have become more amenable to treatment. On-going case management support continues to be significant in ensuring that issues related to substance abuse do not result in eviction from housing or behaviors that lead to arrest/jail. However, there were significant substance abuse issues among all three of the jailed clients. In addition, untreated substance abuse is the major factor contributing to problem behaviors requiring PCET staff attention.

5. Management of mental health problems

   Injectable medications have been effective in helping to manage disturbing symptoms, not only for clients who would otherwise not be compliant with a regimen for oral medications, but they have also helped to ensure that compliant clients get the desired effects of medication. In addition to medications, achieving residential stability and the on-going support provided by case managers significantly reduces stressors that contribute to mental health problems.

6. Need for day programming and vocational supports

The lack of vocational and social (day program) supports is a significant barrier for many clients, as most are not employed. Vocational opportunities, employment, and opportunities for positive social relationships are essential for individuals making the transition from street/drug culture. Vincent House (clubhouse model program) has been a valued resource, with four clients engaged/attending. However, clubhouses are not a good match for all individuals. Other alternatives such as drop-in centers and vocational development programs provide critical pathways to community integration. Many PCET clients, even those living in ALFs, continue to struggle with loneliness and a lack of connection to meaningful relationships, beyond those with PCET staff.

7. Addressing Trauma

   As staff have developed closer relationships with clients they report a deeper awareness of the profound depth of physical/emotional and sexual abuse experienced by this client group. These histories are strongly correlated with the kinds of substance abuse behaviors and mental health symptoms experienced by these individuals. In response the PCET has added trauma informed counseling to the team. As individuals achieve stability in living environments, the availability of on-going clinical treatment related to trauma is a significant key for achieving long-term recovery.

PCET Staff Interviews

PCET Staffing Model

The PCET implements a team approach with staffing provided by Suncoast Center, Boley Services, and the Pinellas County Sheriff's Department. The team includes a program director, psychiatrist, psychiatric nurse, case managers, trauma-informed counselor, an officer from the Pinellas County Sheriff's department, and support with housing from Boley Services. The team employs a modified version of the Assertive Community Treatment (ACT) model, an evidence-based approach to providing community support to individuals with severe behavioral health disorders that has a long-standing history of successful implementation in the state of Florida. The PCET has also integrated key elements of Permanent Supportive Housing, an evidence-based practice designed to address the needs of persons who are homeless and dealing with mental health and substance use disorders.

Distinguishing characteristics of the ACT model implemented by the PCET include: provision of compressive services at the person's residence, case review meetings with all team members twice per week, caseloads that do not exceed ten clients, and shared responsibility among team members in delivering specific tasks. For example, if during a home visit for administering medication the nurse learned of difficulties the client was encountering with acquiring a bus pass, he or she would intervene to address the issue,

even though it is technically the responsibility of the case manager. Fidelity to these elements of the ACT model were evident in chart reviews, staff interviews, and the client focus group.

The PCET modified the traditional ACT model by integrating interventions that address the needs of persons who are homeless, including on-going assertive outreach efforts for locating and engaging clients, rapid response to needs for safety, food, clothing, and shelter, and intensive support of individuals after they are housed. As the program matured over the last two years, the emphasis of program activities shifted significantly to supportive housing interventions. For persons in apartments, this involved supporting clients in meeting the requirements of the lease. For clients in Assisted Living Facilities (ALFs), this involved on-going coordination with the housing provider. For clients in transition, the focus was on connecting the person to the least restrictive housing option available. In addition, traditional ACT programs are designed to provide for most, if not all of the client's needs, within the program. In contrast, the PCET also refers clients to a variety of community services providers and assists with the coordination of those services.

PCET Primary Staff Responsibilities:

Program Manager: Key activities include oversight/monitoring of all case activities, supervision of case manages, direct service to clients on an as needed basis, coordination with community service providers, and program reporting at system-wide meetings.

Nurse: Key activities include medication management, administering injectable medication, delivering oral medications, addressing medication side-effects, providing discharge instructions, addressing primary health care issues, health education, and managing prior authorization with insurers.

Psychiatrist (Two hours per week): Key activities include facilitating team meetings, providing consultation to team on managing psychiatric disorders, prescribing and managing medication regimens, including injectable medications.

Case manager: Key activities include home/ALF visits, visits to hospitals, crisis service units, substance abuse treatment programs, and jails if clients are admitted/arrested, supporting applications for insurance, bus passes, housing, or other entitlement programs, supporting compliance with medication regimens, providing rapid response to crisis/acute situations as well as on-going emotional support.

Sheriff's Department Officer (half time): The officer plays a vital role in supporting and locating clients who had been arrested or jailed, providing protection to clients who are vulnerable to exploitation by elements within street culture after being housed, providing security for staff during home visits, and assisting program staff with issues related to eviction. And most importantly, the officer establishes on-going relationships not only with PCET clients, but with other members of the community. Though no arrests were necessary, the officer's regular presence creates conditions that supported lawful behavior.

He also assists clients in "saying no to friends" involved with illegal activities such as the trade of drugs or prostitution.

PCET Administration:

PCET Administrators from Suncoast identified staff selection as being especially important for successful implementation of the program model. Staff were specially selected from within the agency based on interpersonal skills, engagement ability, flexibility, and interest in working with the client population. In addition, the role of the Sheriff's Department officer was described as critical to locating/engaging clients, and with providing support and ensuring safety for the program team.

Community meetings and positive feedback were an important source of support for the team in their work.

Funding for supporting incidental expenses for clients was important for engagement contributed to achieving stability in housing. Clients later contributed after disability income was established.

County flexibility in support of staff adaptation was important: adding a therapist and substituting a Suncoast position when Boley position was vacated.

Staff Interview Themes

Changes in Clients Needs

All of the staff described the shift of focus from client survival, with an emphasis on acquiring food, clothing, and shelter, to greater focus on issues related to mental health, substance use, and working toward goals for permanent housing and social/vocational engagement. Service delivery activities have shifted from a heavy emphasis on building client trust and responding to crises to supporting positive functioning in the community. There has also been significantly less involvement with hospital care and more connection with the community system.

Successful Program Strategies

All staff identified the use of injectable psychotropic medications as critical to helping PCET clients achieve symptom stability, support positive functioning in the community, and reduce the need for crisis interventions. Equally critical was the development trusting relationships with clients that have endured/deepened over the two-year course of the program. The integration of law enforcement as a fully integrated team member providing support for locating/engaging clients and ensuring safety was also described as important program success. In addition, the availability of resources for financial support for the basic needs of clients, especially at the during the early phase of program was also a critical component.

Recommendations for Making Program Improvements

Staff described a variety of strategies that, based on the two-year experience with implementing services, would benefit the PCET program:

- Include both a trauma-informed therapist and a substance abuse specialist with connection to a specialty agency, such as Operation PAR, on the PCET team.
- Develop day programming or other related intervention to address issues related to loneliness and social disconnection.
- Avoid using hotels as a transition to permanent housing. Though they are a step above homelessness, the residences offer easy access to drugs and do not adequately support stability in the community.
- Create a formal structure (including designating staff at facilities) to support communication between hospital/emergency rooms and PCET and other community-based staff regarding client discharges. Creating a system coordinator position was also recommended.
- Place special emphasis on the importance of social engagement in supporting compliance with medication management. One staff person observed: "Magic things happen when you break bread with someone."
- Expand sheriff officer training to include more information about case management and housing rules/regulations.
- Implementing evidence-based early community-based intervention strategies could prevent many clients from reaching the high service utilizer status.

Recommendations for System Improvement

Staff described a variety of system improvement recommendations that would most benefit clients served by the PCET program:

- Development of more affordable housing.
- Development of controlled access housing for clients who ae closely connected to street/drug culture.
- Development of a Marchman Facility to address substance abuse.
- Create mechanisms that allows for rapid access to substance abuse treatment when individuals demonstrate readiness to enter treatment.
- Day programming facilities.
- Expand community service capability to address trauma issues.
- System-wide initiative to ensure access to services (system needs to be more "user friendly").

How PCET Caseload Would Manage in Current System Without PCET Support

Staff identified about three to six clients who might be able to function successfully with the support of a case manager to ensure connection/follow-up in the traditional community-

based system. All staff concurred that in a short amount of time, the other clients would return to baseline status, prior to PCET connection.

System Improvements Connected to PCET Implementation

Administrative staff identified benefits that the community system has derived from PCET implementation. They include:

- Training to jails on long-acting injectable medications provided by PCET nurse
- CSU's have expanded use of injectable medication based on effectiveness demonstrated in medication management protocols implemented by team PCET team.
- An open access hospital discharge clinic has been added based on the high service user experiences of PCET clients. The clinic is open two hours per day where a Psychiatrist is available for administering oral and injectable medications. A discharge planner sets up an appointment with Sucoast within 7 days of discharge. After discharge, a case manager can be assigned based on client need. The client will also receive reminder calls about the appointment. The person then receives an intake evaluation and if medication is needed, it is prescribed through the Discharge Clinic. If not required, a safety plan and subsequent follow up therapy is scheduled.
- Recovery Room at PEHMS: Based on the recognition that many high-service user individuals were seeking entry to crisis units for issues relating to poverty, homelessness, and a lack of community supports, PEHMS implemented a Recovery Room Model as part of its admission process. Individuals that do not meet criteria for psychiatric admission are provided with supports in a Recovery Room for a period of up to 23 hours and connected to community support services prior to discharge.

Client Experience of PCET – Focus Group Findings:

Though this focus group included only 5 clients in comparison to groups of 12 and 10 documented in the previous two evaluation reports, the major themes and most of the responses are essentially unchanged. Participants in this group described a generally high level of satisfaction with services and a remarkably high level of personal connectedness to program staff. They described high levels of choice/self-determination in the program. The discussion was also remarkable for the levels of relief expressed at no longer being homeless and for appreciation expressed to the program staff for helping them to get off the streets. The combination of housing, on-going contact regarding basic support needs, and a strong/trusting relationship with staff has contributed to an experience of stability most participants had not known in years. Mental health and substance abuse services were also identified as critical to achieving stability. The following summary describes major themes in the discussion:

Connection to PCET:

All of the participants in this client focus group were first connected to the PCET through the Personal Enrichment through Mental Health Services (PEMHS) program, a crisis stabilization unit (CSU). A staff person from the PCET met clients at the CSU to establish a connection shortly after the admission. Several clients discussed how PCET created an alternative to frequent Baker Act admissions. They all described admissions to PEMHS as a last resort and expressed appreciation for not needing to use crisis services because of the support of the PCET. The following quote highlights this client experience:

- "I was desperate, ringing PEHMS doorbell, homeless for years with a history of being in foster care and juvenile detention. It was hard to have the energy to go the extra mile, but they (PCET staff) came to me and met me where I was."

Type of Services Accessed:

The discussion regarding the type of services received through the PCET focused in part on basic supports: clothing, food, and shelter. The group emphasized the importance of access to hygiene products and clean clothes to regaining a sense of self-esteem. In addition, the group identified mental health/substance abuse treatment, counseling, medication, therapy, and support with disability and food stamp applications. The discussion reflected regular on-going interactions with PCET staff for a variety of support needs.

Most Helpful Services:

As was the case with the two previous focus groups, the group unanimously agreed that being provided with housing was the most important part of their experience with the PCET. The discussion focused on how the PCET assisted with the transition out of homelessness: Specific experiences included:

- "I'm free of the stress of homelessness", "
- "I don't have to worry about where I would eat or sleep that night",
- "The structure of having my own place is important."
- "I have a reason for living and I could not always say that."

Clients described the stability achieved through housing as a key to preventing Baker Act admissions to PEHMS.

The group also described assistance with mental health and substance abuse as vitally important. Some clients described services as lifesaving. One client described treatment at Operation PAR for substance abuse treatment as being very important, even as he continues to struggle with addiction. Another client expressed appreciation for the therapist and groups provided by the PCET. Some clients expressed having a positive experience with injectable medication.

- “the meds support you until you can take steps on your own”.

There was also discussion of the importance of assistance with food, finances, assistance with medical appointments, and support with SSDI claims.

The predominate theme in the discussion about the most helpful services was the relationships formed with PCET staff:

- “She is a beautiful and self-sacrificing person. I felt safe sharing”
- “They earned my trust with time and attention. I would have committed suicide.”
- “She is a great individual. You see the goodness in them and it brings it out of you.”

Least Helpful Services:

Clients were hard pressed to describe any criticisms of their experience with the PCET. There was agreement that staff are not as available as they had been in the past and that there are sometimes longer response times to requests for assistance.

Experience with Other services in Pinellas County:

We also discussed client experiences with other services in Pinellas County outside of the PCET. Services accessed included, substance abuse treatment at Operation Par, dental care, the County health plan (blue card), vocational rehabilitation, homeless shelters, and Vincent House (clubhouse). Two clients described having positive on-going contact with Vincent House.

Wrap-Up Discussion:

In an open-ended discussion of areas that had not been discussed, almost all the participants identified permanent housing/having own apartment as the prime goal for participating in the PCET. They also shared how much they appreciate that case managers frequently ask about whether they have needs that are not being addressed. All concurred that they could not have achieved the stability they enjoy today without the PCET.

Summary Analysis

The PCET continues to demonstrate significant successes with helping the high service-use group engage with the program, gain access to housing, and achieve stability with mental health problems. PCET interventions have dramatically reduced service usage and associated costs across the system. The major challenges facing the program include ongoing difficulties for many clients with substance abuse, assisting individuals with the transition to long-term stability in independent housing, and in supporting vocational

opportunities and positive social connections with friends and family. The following are the major qualitative evaluation findings:

1. Program Model: The PCET implementation of a modified Assertive Community Treatment (ACT) Model that integrates aspects of permanent supportive housing was clearly a good match for responding to the broad and diverse needs of high-service utilization clients. The PCET modified the traditional ACT model by integrating interventions that address the needs of persons who are homeless, including on-going assertive outreach efforts for locating and engaging clients, rapid response to needs for safety, food, clothing, and shelter, and intensive support of individuals after they are housed. As the program matured over the last two years, the emphasis of program activities shifted significantly to supportive housing interventions.

2. Locating and Engaging Clients: Collaborations among the PCET, community service providers and law enforcement were key to locating and engaging PCET clients. Homelessness and disaffiliation are key distinguishing characteristics of this client group, evidenced by disconnection from the mainstream services array and other community supports, including family. Consequently, locating and maintaining connections with the client group presented significant challenges. By employing a multidisciplinary team approach with a strong focus on outreach, engagement, and the rapid availability of housing, the PCET was successful in establishing trusting and enduring connections. These bonds not only provided the foundation for the delivery of mental health, substance abuse, and psychosocial support services, but also have intrinsic value in helping clients connect to mainstream culture. Clients in focus groups clearly identified these relationships as the lynchpin of the program and a key to mostly eliminating the need for using crisis services.

3. Housing: Rapid access to housing and on-going support is a vital part of the PCET approach, described as critical by both the staff and clients. Having housing available assists with the outreach/engagement process and provides the foundation for an experience of safety, security, and stability. Boley Services provision of supportive housing combined with the support services provided by Suncoast's PCET was clearly a successful partnership. However, the use of hotels for temporary residence when permanent apartment options are not available has inherent challenges. These kinds of facilities put residents at greater risk for exposure to drugs and crime. However, they still provide a base from which the PCET can begin to provide services and supports until permanent housing is located. Rapid access to permanent housing should still be the goal of the intervention but will require the expansion of affordable housing resources in the community.

4. Injectable Medication Regimens: Both PCET staff and clients have identified the use of long acting injectable psychotropic medication as central to effective management of psychiatric symptoms. Injectable medications have been effective in helping to manage disturbing symptoms, not only for clients who would otherwise not be compliant with a regimen for oral medications, but they have also helped to ensure that compliant clients get the desired effects of medication. PCET staff have provided training to other community providers that are replicating this approach. Effective implementation for the PCET has required the psychiatric nurse to devote a substantial amount of time to negotiating with insurance companies for preauthorization to cover the cost of the injectable form of medicine. There is also a greater overall cost than with oral medications.

5. Substance Abuse Challenges – Housing Instability and Jail: Nearly all of the individuals engaged by the PCET have had problems with substance abuse. Many continue to have less severe problems that do not interfere with the person's ability to maintain housing or avoid jail. The PCET has been successful in supporting these individuals. However, there is a sub-set of clients with more severe substance abuse problems who faced eviction from housing and arrest/jail because of issues related to these disorders. These individual require more intensive levels of care than can be provided by PCET staff. The partnership with Operation Par to provide residential substance abuse treatment to PCET clients was an important development for addressing the needs of these individuals. Some staff suggested that developing a greater capability to provide substance abuse treatment within the PCET would also be helpful.

6. PCET in Context of Current System of Care: The PCET provides an enriched range of services that high service use clients have difficulty accessing. In some cases, PCET provides services that may not otherwise available in the system of care. By design, the PCET model makes up for gaps/deficits in the system of care. After two years of implementation, the PCET staff identified three to six clients who might be able to make the transition to receiving support in the traditional system of care, but only if there is case management support to ensure follow up and monitoring. Staff predicted that the other clients would soon return to baseline condition, as at the time of program entry. Less intensive program alternatives to address the needs of PCET clients would require some combination of strategies that address service gaps and access issues in the traditional continuum, as well as a range of community support alternatives that may be less intensive than the PCET, such as Intensive Case Management.

7. Response to Traumatic Experiences: The PCET has added trauma informed counseling as part of its service offering as it became clear that nearly every client presented with histories of trauma, including childhood physical and sexual abuse,

abuse in the foster care system, witnesses to violence as a child, and victims of violence in adulthood. These histories are strongly correlated with the kinds of substance abuse problems, mental health symptoms, and relationship difficulties experienced by these individuals. Responding to traumatic experience is vital to helping individuals develop trusting relationships and to establishing a base experience of safety/security that is necessary for recovery.

8. Integrating Law Enforcement on the PCET: Including a half-time officer from the Pinellas County Sheriff's Department was a vital and innovative component of the PCET model. Police data was critical to locating individuals who had encounters with arrest and/or incarceration. In addition, the partnership with the officer helped the program team to employ rapid/early intervention strategies that helped to prevent crisis escalations and reduce encounters with crisis services and jail. The officer plays a vital role protecting clients who are vulnerable to exploitation by elements within street culture. The officer also establishes on-going relationships not only with PCET clients, but also with other members of the community, creating conditions that support lawful behavior.

9. Social and Vocational Opportunities: Vincent House, an ICCD certified clubhouse model program, has worked closely with the PCET to provide social and vocational/employment opportunities for several clients. However, there are very few other alternatives for these services in Pinellas County. For individuals so profoundly disconnected from family and meaningful relationships, day programs and drop-in centers can provide important opportunities to develop friendships.

10. PCET as Catalyst for Systems Discussions: The monthly PCET meetings provided an important forum for community service providers and other stakeholders to share ideas, brainstorm solutions to problems, and explore strategies for making the system of care more responsive. The consistently high level of attendance at these meetings served as testimony to the community's commitment to helping individuals who have been the most challenging to serve. The meetings resulted in some changes in policy and practice among the participants. However, the spirit of partnership and comradery developed in the meetings was just as important. The complex issues presented by high service use clients require a community-wide response. The feedback received from this meeting also helped support the PCET staff with this challenging work.

In its two-year period of program operation, the PCET has significantly reduced the costly cycling through the acute care and jail system, and dramatically enhanced the quality of life for this high service use group. However, a small number continue to struggle with legal issues and maintaining residential stability, while most of the client group will need continued support to maintain their current level of functioning. Any plan to support the

transition of these clients to the standard system of care should consider integrating the core elements of engagement, housing, mental health/substance abuse treatment, and on-going supports that were critical to PCET success.