Final Evaluation Report for the

Pinellas County, Florida Sheriff's Office Mental Health Unit

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Project Background

In collaboration with University of South Florida (USF), in March 2015 the Pinellas County Sheriff's Office (PCSO) submitted a grant application to Bureau of Justice Assistance in response to the solicitation titled, "Smart Policing Initiative: FY 2015 Competitive Grant Announcement" (grant.gov number BJA-2015-4065). All applicants were required to select a Research Partner, and PCSO selected USF to serve in that capacity. In September 2015 PCSO was notified that they were awarded a three-year grant, with grant activities commencing October 1, 2015. The grant was used to establish a Mental Health Unit in order to help individuals with behavioral health problems who come in contact with PCSO.

Description of the Problem: Individuals with Multiple Involuntary Commitments also have Numerous Additional Law Enforcement Contacts

Over the years Pinellas County, Florida, has completed several local analyses regarding the involvement of individuals with mental illness with the criminal justice system. One such analysis was the 2012 *Individuals Use of Multiple Systems and Frequent Flyers* report developed by USF in partnership with the Pinellas County Data Collaborative. The report examined 12 years of administrative data in Pinellas from five systems: Emergency Medical Services, Criminal Justice Information System (CJIS), Health and Human Services, Sixth Judicial Circuit Public Defender's

Office Jail Diversion, and the Department of Children and Families Substance Abuse and Mental Health Information System (SAMHIS) to determine what percentage of individual users of specific systems were "frequent flyers" and what percentage of users crossed over the multiple systems. The report identified an individual as a "frequent flyer" of a system if they ranked in the 95th percentile of average cost and/or average number of interactions. Analysis revealed that approximately 11% of all individuals in the CJIS had mental health (MH) or dual substance abuse/mental health (SA/MH) diagnoses. Of the subjects identified as "frequent flyers" in the CJIS, nearly 25% had a MH or SA/MH diagnosis. From these numbers, it can be inferred that, just as in crime, a small portion of the population account for a large percentage of the costs and/or services. Furthermore, while overall 11% of criminal justice involved individuals had a MH or SA/MH diagnosis, this percentage more than doubled (25%) when looking at the top 95th percentile of criminal justice systems users. It can further be inferred that such "frequent flyers" have not sufficiently had their needs met to help prevent them from continually recycling through the criminal justice, mental health, and substance abuse systems.

Recent tragic events have also brought national attention to Pinellas County's issue of mental health and criminal justice involvement. On New Year's Eve 2014, PCSO received a 9-1-1 call regarding the decapitation of a middle aged woman; investigators later arrested the victim's son for the crime. The son had a criminal history that included arrests for minor offenses, but he also had a history of being involuntarily held and evaluated under Florida's Baker Act involuntary commitment law. While this is a worst case scenario regarding persons involved with both the mental health and criminal justice systems, this tragedy underscored the need for case management and follow-up services for the population of chronic consumers of both systems. Law enforcement is often called upon to evaluate if a person showing signs of a mental health crisis meets the criteria to be temporarily committed and evaluated under Florida's Baker Act involuntary commitment law. According to the Florida Department of Children and Families (DCF), in 2014 half (50%) of all involuntary exams were initiated by law enforcement. However, law enforcement officers are not mental health professionals; rather, their purpose is to determine if the person presents a danger to themselves or others. Florida's Baker Act requires that within 72 hours of arrival at a designated receiving facility the individual must be released or have a petition filed for involuntary placement. The focus of the services provided is not intended for long term treatment; rather, these very brief services are merely intended to stabilize the immediate crisis. Once a person is stabilized and

released, there is often no further follow-up to determine if additional treatment is sought, necessary medication is taken, or referrals for services have been contacted.

PCSO further determined that 809 (31%) of the 2,581 individuals who were involuntarily committed by law enforcement in 2015 were also arrested that same year. Table 1 presents information on individuals with more than one involuntary commitment in 2015, specifying the number of times that they were arrested during the same time frame. Arrest data was pulled from PCSO's Jail Inmate Management System (JIMS) and is inclusive of all law enforcement agencies throughout the County.

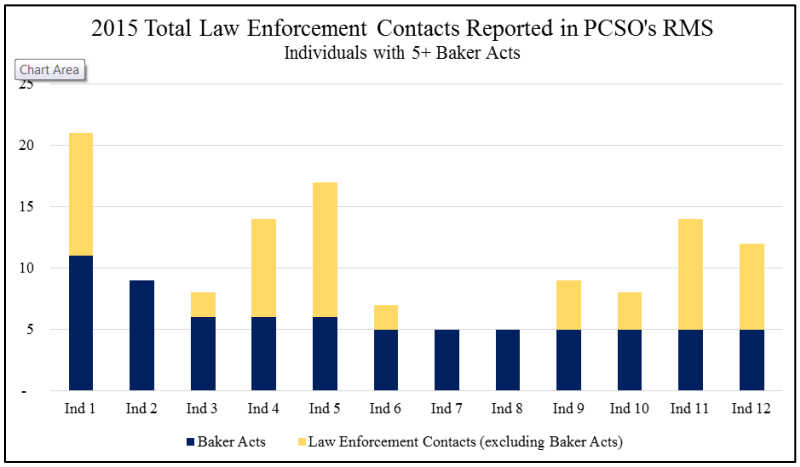
Table 1. Individuals with More than one Baker Act in 2015 Broken Down by the Number of JIMS Arrests in the Same Timeframe

2015 Individual Baker Acts vs. Arrests							
	Two Baker Acts	Three Baker Acts	Four Baker Acts	Five Baker Acts	Six Baker Acts	Nine Baker Acts	Eleven Baker Acts
Total Individuals	286	66	18	7	3	1	1
No Arrest	184	45	10	5	3	1	1
One Arrest	61	13	5				
Two Arrests	22	4	1	2			
Three Arrests	7	2	1				
Four Arrests	2						
Five Arrests	2						
Six Arrests	2	1	1				
Seven Arrests	1						
Eight Arrests	3						
Nine Arrests	1						
…							
Fourteen Arrests		1					
…							
Sixteen Arrests	1						

Additional analyses of 2015 data indicated that the most frequently Baker Acted individual was not arrested during the same timeframe, but this individual was involved in 21 law enforcement contacts that included the instances of Baker Acts plus additional incidents and offenses for which PCSO deputies responded. Twelve individuals were identified as having been Baker Acted five or more times during 2015. While two of the twelve had law enforcement contacts that resulted in arrests, the remaining ten had no arrests. A lack of an arrest does not mean an individual did not

have contact with law enforcement. Figure 1 indicates the number of total law enforcement contacts for each individual with the portion of contacts related to a Baker Act notated with blue.

Figure 1. Total Number of Law Enforcement Contacts, per Person, in 2015 for Individuals with Five or More Baker Acts



Strategies to Address the Identified Problem

PCSO used grant funds to invest in strategies that address the mental health needs of PCSO service consumers. Specifically, resources were directed to support law enforcement deputy positions assigned to a new Mental Health Unit (MHU) supervised by the Special Operations Unit. The MHU unit was planned to consist of two mental health clinicians (Navigators) and up to four certified law enforcement deputies. The MHU law enforcement deputies were outfitted in plainclothes and used unmarked vehicles to reduce the stigma associated with law enforcement contact. When possible, MHU deputies rotated between answering mental health calls for service and assisting the Navigators with field visits. The Navigators were tasked with regularly reviewing PCSO calls for service and RMS reports to determine if specific subjects of mental health calls could benefit from additional follow-up or if a known subject has had recent PCSO contact. Navigators also provided intensive case management to PCSO's identified consumers to help ensure that their mental and behavioral health needs were met in an effort to reduce their subsequent law enforcement contacts. Navigators provided consumers with appropriate outpatient service referrals, and they followed-up to ensure services were received.

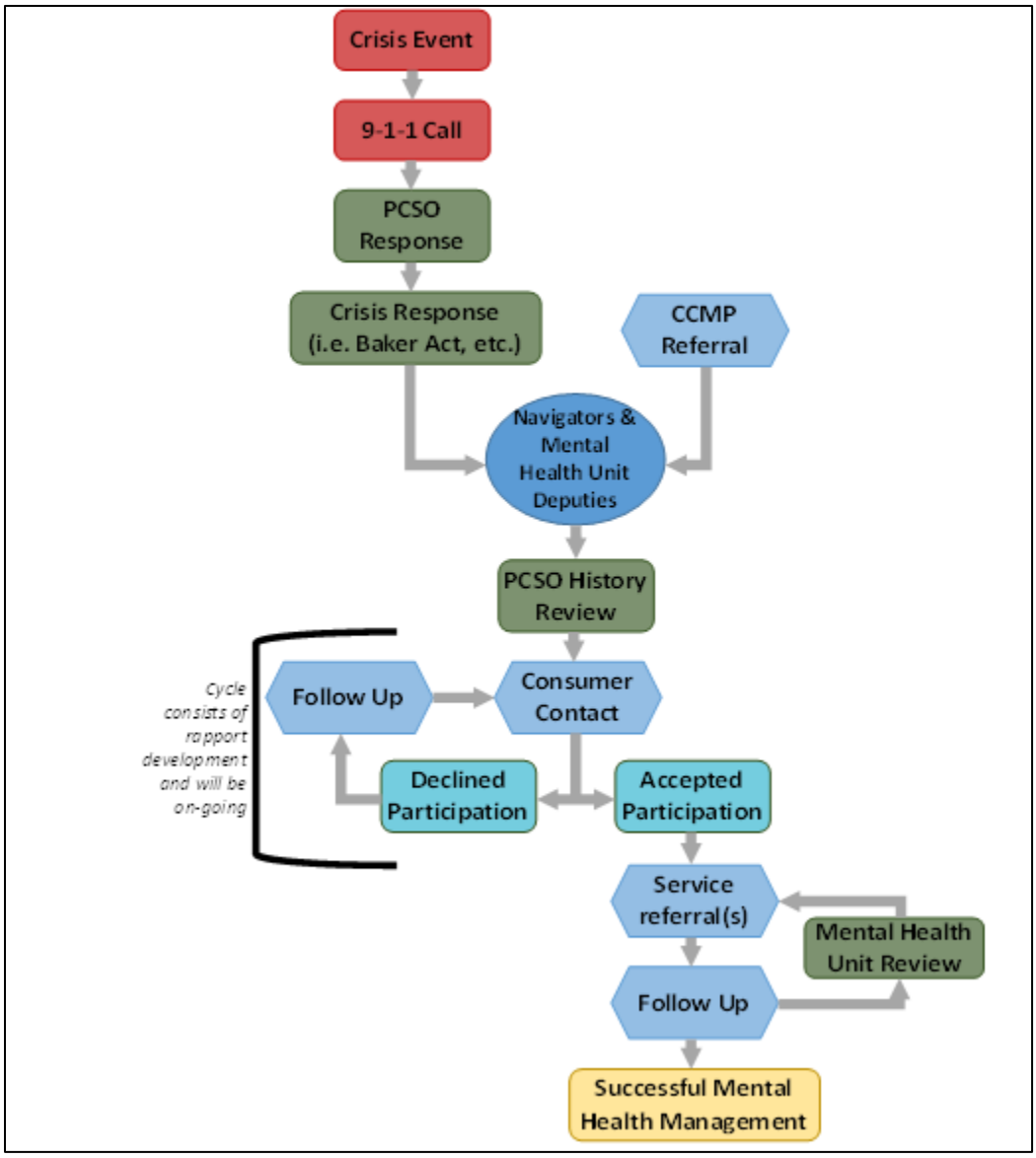
This proposed strategy allowed MHU deputies to coordinate a quasi-mobile crisis response with the Navigators. While PCSO's response did not include mobile access to a psychiatrist as indicated in the American Psychiatric Association's (APA) Task Force on Psychiatric Emergency Services definition of mobile crisis services, the service referrals provided through the Navigators aided in the diversion of persons to outpatient services, when appropriate. Additional tele-psychiatry services were implemented to maximize MHU participants' compliance with referrals for psychiatric care. Once a crisis was stabilized, Navigators reached back out to consumers to seek their input regarding any additional service referrals required/desired.

Additionally, PCSO also implemented comprehensive Crisis Intervention Training (CIT) to ensure that law enforcement staff received training in appropriate responses to encounters with individuals with mental illness.

PCSO used an RFP process to solicit interest from and select community providers with mental health expertise to fill the project's two Navigator positions. Two Navigator positions were filled, and these staff received training in late 2016.

Figure 2 provides an overview of the process by which cases were brought to the attention of and handled by the Mental Health Unit (MHU).

Figure 2. Overview of the Mental Health Unit (MHU) Process



Project Goals

Plans to evaluate project effectiveness considered program development, implementation, and outcome goals as indicated in Table 2 below.

Table 2. Project Goals

Program Development Goals	Data Source(s)	Local Performance Measures
Identify & engage collaborators	List of project collaborators, collaborator subcontracts	# identified & engaged; # subcontracts executed
Collaboratively develop Action Plan within 180 days of award	Collaboratively developed action plan	Submission of Action Plan to BJA within 180 days of award
Flesh out & extent the Impact Evaluation Plan	Evaluation report detailing the impact evaluation plan	Submission of Impact Evaluation Plan to BJA within 180 days of award
Implementation Goals	**Data Source(s)**	**Local Performance Measures**
Implement the updated impact evaluation plan	Interim evaluation reports	Submit evaluation reports analyzing results; # steps implemented
Enhance LE knowledge of effective strategies/tactics to work with offenders with mental health problems	Project records	# trainings; # staff receiving trainings
Implement intervention	Program records, reporting templates	# participants enrolled; # having contact with Navigator
Implement data monitoring plan	MOUs and other arrangements in place; stakeholder interviews; administrative data analysis	# arrangements in place; # data collection activities conducted; submission of interim evaluation reports
Link participants to needed services	Reporting templates; program records listing the service providers offering assistance, referrals to them, and receipt of service from them	# receiving referrals; # receiving services
Outcome Goals	**Data Source(s)**	**Local Performance Measures**
Reduce arrests	Reporting templates summarizing arrest administrative data to be populated by PCSO	# participants arrested
Reduce jail admissions	Reporting templates summarizing jail administrative data to be populated by PCSO	# participants incarcerated

Save taxpayer dollars	Cost-Benefit analysis based on: administrative data summarized in reporting templates to be populated by PCSO; project records; project reports; and local cost data provided by PCSO	Submission of final evaluation report that includes cost analysis
Reduce court dockets for offenders with mental health problems	Reporting templates summarizing court administrative data to be populated by PCSO; program records	# participants with court hearing; # court hearings
Increase participant benefits enrollment	Program records, reporting templates	# participants enrolled in benefits (e.g. SSI/SSDI)

Analytical Approach

Descriptive statistics were used to summarize the data and to provide an overview of the participants served by and process of the MHU.

A series of repeated measures analyses of variance (RMANOVA) were be performed to determine whether, since starting the program, participants achieved statistically significant reductions in the number of: 1) arrests, 2) days incarcerated, 3) court docket appearances, 4) Baker Acts, and 5) Marchman Acts. Each RMANOVA was conducted for each outcome using the following specifications:

- Two time periods were used:
    - Baseline scores for each outcome were used as Time 1 values (e.g., number of arrests before program entry).
    - Follow-up scores for each outcome were used as Time 2 values (e.g., number of arrests following program entry).
- Different periods of time (i.e., 3-month, 6-month, and 9-month) were examined in the RMANOVAs to include as many participants as possible in the analyses of change over time.

Additional cost-related analyses were performed to determine whether cost savings were associated with the project. (i.e., costs of jail days, baker Acts).

Background on This Report

This Final Evaluation Report was prepared by the USF Research Partner, Dr. Scott Young, to summarize de-identified data provided to USF by the Mental Health Unit (MHU) of the Pinellas County Sherriff's Office (PCSO) that covers MHU activities through 09/30/2018. The information is organized in two phases to reflect the shift in the project's target population.

Phase 1 includes analyses of data regarding 168 participants that were served by the MHU from 11/01/2016 to 12/31/2017. The target area for this phase of the project focused on the Lealman neighborhood, which research indicated was saturated with individuals having both Baker Acts and a history of law enforcement contact. The number of clients enrolled in the project rose rapidly, and did not have a pre-determined start/end date. In late 2017, a new supervisory team was assigned to the MHU. After reviewing the cases assigned to the project, it was determined that changes needed to be made to the target area/population in order to have a more manageable, meaningful and measurable case load. Phase 2 of the project began in January 2018, when PCSO shifted to a County-wide approach, focusing on a standardized list of mental health clients who were considered to be chronic consumers (3+ baker acts, overdoses and/or suicide attempts). These 70 participants were served by the MHU from 01/01/2018 to 09/30/2018.

Results from MHU Phase 1 Participants (N = 168)

Table 3 presents information concerning the initial month that each Phase 1 MHU participant was involved with the MHU. Sixteen participants had their first encounter with the MHU in November 2016. June 2017 was the month in which the largest number of participants first encountered the MHU, with 31 individuals.

Table 4 presents information regarding the source by which each Phase 1 participant case was generated. Most (144; 85.7%) cases were generated from Patrol.

Table 5 provides information concerning how many MHU follow-up contacts were received for each Phase 1 participant, based on a total of 1,176 follow-up contacts. On average, the 168 Phase 1 participants received 7 follow-up contacts.

Table 3. Number of Cases Entering the PSCO MHU Program, by Month – Phase 1 Participants

Month of Initial Case	Number of Cases	Percent of the Total Cases
November 2016	16	9.5%
December 2016	15	8.9%
January 2017	19	11.3%
February 2017	24	14.3%
March 2017	19	11.3%
April 2017	12	7.1%
May 2017	13	7.7%
June 2017	31	18.5%
July 2017	15	8.9%
August 2017	4	2.4%
September 2017	0	0.0%
October 2017	0	0.0%
November 2017	0	0.0%
December 2017	0	0.0%
Total	**168**	**100%**

Table 4. Source of Case Generation – Phase 1 Participants

Source of Case Generation	Number of Cases	Percent of the Total Cases
ALF	1	0.6%
CPO	1	0.6%
Mental Health Unit (MHU)	11	6.5%
Missing Data	4	2.4%
Other	7	4.2%
Patrol	144	85.7%
Total	**168**	**100%**

Table 5. Number of PCSO MHU Follow-Up Contacts Provided to Each Case – Phase 1 Participants

# MHU Follow-Up Contacts Received by Each Case	# Cases Receiving This Many MHU Follow-Up Contacts	Total # MHU Follow-Up Contacts
1	9	9
2	9	18
3	16	48
4	20	80
5	16	80
6	24	144
7	19	133
8	5	40
9	12	108
10	9	90
11	9	99
12	6	72
13	2	26
14	2	28
15	3	45
16	1	16
17	1	17
18	2	36
26	1	26
30	1	30
31	1	31
Total	**168 Cases**	**1,176 Follow-Up Contacts**
Average Number of Follow-Up Contacts	**Mean = 7.00** **Standard Deviation = 4.74**	

Table 6 presents information concerning why each Phase 1 participant's case was closed. Of the cases that were closed, the most common reasons for closure were due to the cases being completed (N=40), non-compliant (N=40), or relocated to another county (N=22).

Table 6. Breakdown of Reasons Why Cases Were Closed – Phase 1 - Participants

Reason for Closing Case	Number of Cases	Percent
Completed	40	25.2%
Deceased	1	0.6%
Incarcerated	4	2.5%
Non-Compliant	40	25.2%
Relocated out of County	22	13.8%
Missing Data	52	32.7%
Total	**159**	**100%**

Notes: "Non-Compliant" cases involved those in which the MHU informed the individual that services are available to assist them, and the individual declines assistance from MHU, refusing to be connected with mental health services.

Table 7 presents analyses of change over time based on the 145 Phase 1 MHU participants with 180 or more days of follow-up data after the start of the case. The “before" time period covers 180 days, and it ends on the date that each case started. The "after" time period covers 180 days following the start date of each case. Results indicate statistically significant reductions in: 1) the average number of Baker Acts, and 2) the average number of PSCO LEO contacts.

Table 7. Change over Time for PCSO MHU Cases Having Six or More Months of Follow-Up Data – Phase 1 Participants

	Six Months Before MHU Participation		Six Months After MHU Participation		Paired Sample *t*-test
Event (Data Source)	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**	
Number of Arrests (JIMS)	0.14	0.55	0.11	0.36	$t(144) = 0.69$, $p = .494$
Number of Baker Acts (ACISS)	0.90	1.21	0.20	0.63	$t(144) = 7.41$, $p < .001$
Number of PCSO LEO Contacts (ACISS)	1.34	1.97	0.68	1.52	$t(144) = 4.14$, $p < .001$

Notes. These analyses were restricted to the 145 MHU cases with 180 or more days of follow-up data after the start of the case. The “before" time period covers 180 days, and it ends on the date that each case started. The "after" time period covers 180 days following the start date of each case.

Table 8 presents information concerning the criminal histories of Phase 1 MHU participants, and Table 9 specifies the reasons why the Phase 1 participants became involved with the MHU.

Table 8. Criminal History of Cases Served by PCSO Mental Health Unit – Phase 1 Participants

Criminal History of Cases Served by PCSO MHU – Phase 1 Participants	Number of Cases
Aggravated Assault	1
Aggravated Battery	1
Aggravated Battery(Domestic)	1
Assault; Battery; Disorderly Intoxication	1
Assault; Battery; Pedestrian Violations	1
Battery	5
Battery, Disorderly Intoxication, Aggravated Assault	1
Battery On A LEO, CCW, Aggravated Assault Deadly Weapon	1
Battery, Disorderly Conduct, DUI	1
Battery, Family Trouble, Narcotics, Possession Controlled Sub, Possession Drug Paraphernalia	1
Battery, Forgery, Multi State Offender, Possession Controlled Sub, Prowling/Loitering, Robbery, Theft, Traffic Violations	1
Battery, Possession Of Control Sub, Disorderly Intoxication	1
Battery, Theft, Criminal Mischief And Habitual Runaway	1
Battery; Resist Arrest, DWLSR, Disorderly Intoxication, Trespass After Warning And Ordinance Violations	1
Battery/ Grand Theft/ Disorderly Intoxication	1
Burglary, Battery, No Valid DL, DWLSR, Criminal Mischief, DV Battery, Aggravated Assault	1
Burglary, Larceny, Aggravated Assault, Possession Of A Weapon, Marijuana, CCW, Battery, Probation Violation, Traffic	1
Burglary, Theft, Trespass, Open Container	1
Burglary, Criminal Mischief, Firearm Possession, Possession Control Sub	1
Burglary, Disorderly Conduct, Family Trouble, Weapons Violations, Possession Of Controlled Substance, Possession Of Paraphernalia, Prowling, Theft ,Traffic Violations	1
Burglary; Criminal Mischief; Possession Of Marijuana; Battery	1
Criminal Mischief, Juvenile-Using Explosives/Throw Projectile Etc. Attempt. Aggravated Assault Deadly Weapon, Probation Violation	1
Criminal Mischief, Burglary	1
Disorderly Conduct, Violation Or Protective Order, Possession Of Control Substance	1
Disorderly Conduct, Disorderly Intoxication	1
Disorderly Conduct/ Narcotics/ Possession Of Controlled Substance & Drug Paraphernalia/ Burglary	1
Disorderly Intoxication	1
Disorderly Intoxication, Domestic Battery	1
Disorderly Intoxication, Domestic Battery, Trespass	1
Disorderly Intoxication, Simple Battery, Shoplifting, Petit Theft, Violation Conditional Release	1
Disorderly Intoxication; Resist W/Out Violence; Batt Leo	1
Domestic Violence Battery, Resisting W/Out Violence	1
DUI	1
DUI, Burglary	1
DUI, Disorderly, Battery On Firefighter	1
DUI, DWLSR, Resisting W/Out Violence, Warrant Arrest, Fleeing & Eluding, Batt LEO	1

Criminal History of Cases Served by PCSO MHU – Phase 1 Participants	Number of Cases
DWLSR, Possession Of Controlled Substance, Possession Of Drug Paraphernalia	1
DWLSR, DUI, Narcotics; Grand Theft; Worthless Checks	1
DWLSR; Possession Of Controlled Substances	1
Failed Supp Of Deliq, Possession Of Narcotics	1
FTA Zoning Violation, FTA Open Storage, FTA Housing Violation, FTA Storage Inoperable Vehicle; A3LL3BE Red Light Violation	1
Grand Theft Auto	1
Habitual Runaway	1
Habitual Runaway, Battery	1
Missing Data	33
Narcotics	1
Neglect/Abuse Of Aged, DUI, Possession Of Control Sub	1
No Criminal History	60
Obstructing An Officer	1
Person Engaged In Criminal Offense, Having Weapon & Accessory After The Fact 2/17/15	1
Possession Control Sub, Battery, Child Neglect, DWLSR, Disorderly Intoxication	1
Possession Of Narcotics, Resisting LEO, Battery	1
Possession Of Control Sub, Open Container, Theft	1
Possession Of Control Sub, Possession Of Paraphernalia	1
Possession Of Marijuana, DWLSR	1
Possession, Injunction Violation	1
Possession Of Control Sub	3
Prostitution, Battery	1
Resisting Officer W/O Violence	1
Runaway	1
Sell Controlled Substance/1000' Of School, Theft, Sex Batt	1
Strong Arm Robbery	1
Subject Has A History Of Running Away From A Group Home.	1
Theft	1
Theft, Reckless Driving, Narcotics	1
Threat To Kill Deputies, Possession Of Control Sub, Battery, Intoxicated Person, Burglary	1
Traffic Infractions	1
Traffic, Theft	1
Trespass	1
Trespass, Disorderly Intoxication, Resisting An Officer, Battery, Possession Of Control Sub, Uttering Forge Bills	1
Unknown	1
Total	**168**

Table 9. Reason That Cases Participate in the PCSO Mental Health Unit – Phase 1 Participants

Reason for Participation in PCSO MHU	Number of Cases
Aggressive Towards Other Children	1
Assistance Requested	35
Baker Act	24
Carlton Manor Boy's Group Home	3
Chronic Caller Due To Mental Illness	1
Higher Level Of Care	1
Intel Request	1
Mental Health Evaluation	1
Missing Data	1
Multiple Baker Acts	42
Multiple Overdose	1
Original Case Agent	3
Request For Assistance	1
Request From CPO	1
Request From Juvenile Div	1
Request From Sheriff	1
Special Request	1
Suicidal- Plan And Carried Out	31
Suicidal- Plan And Weapon Involved	1
Violence Involved	3
Violence Involved/Multiple Baker Acts	1
Weapon Involved	13
Total	**168**

Results from MHU Phase 2 Participants (N = 70)

Nature of the Data Sets – Phase 2 Participants

The grant period's final data files that USF received for Phase 2 participants were based on the 70 individuals who were served by the MHU since 01/01/2018. Table 10 provides an overview of the data files, and Tables 11 through 19 summarize the information contained in each data file. The success of the program is being evaluated by examining pre-post changes over time for participants based on a period before their first involvement with the MHU (pre) as compared to a period following their first MHU involvement (post); change over time is examined for the number of arrests, Baker Acts, Marchman Acts, court docket appearances, and days incarcerated. To this end, Tables 20 through 25 summarize analyses performed across the multiple data files to assess changes over time on these outcomes and their associated costs.

Table 10. Description of Data Files Provided to Research Partners – Phase 2 Participants

File Name	# Unique Case #s (ID #s)	Date Range	Notes
MHU Participants - 3rd Qtr 2018.xlsx	70	01/02/2018 – 06/27/2018	+Provides demographics and date the case opened for the 70 individuals who received MHU services;
MHU Events - 3rd Qtr 2018.xlsx	70	01/02/2018 – 09/30/2018	+610 events; +Represents activities of the MHU (MHU Follow-ups and Contacts with other LEO)
MHU History - 3rd qtr 2018.xlsx	70	01/03/2016 – 06/10/2018	+908 events; +Represents past 2-yr history for the 70 individuals participants, two years before first being served by MHU; +Does not include MHU contacts because it is based on time before involvement with MHU

Phase 2 Target Population

After adjusting and redefining the target population midway through the grant, the PCSO team decided that the MHU would focus on individuals with behavioral health problems who have extensive histories of contact with law enforcement and extensive histories of involuntary commitments due to mental health-related conditions. These were considered to be Phase 2 participants, as the nature of the target population changed. In Florida, involuntary commitments for mental health reasons are called Baker Acts, while involuntary commitments related to substance use disorders are referred to as Marchman Acts. The specific criteria that PCSO utilized to identify the MHU's target Phase 2 population are as follows:

- 3 or more Baker Acts or other related incidents (attempted suicide, Marchman Acts, and overdoses) over a 2 year period
- Adults only, no transient, no group homes, and no Assisted Living Facilities
- Resides in PCSO jurisdiction since last incident, to include the contract cities
- Last incident occurred within the last 6 months

Description of the Participants and Program Activities

Table 11 presents information on all 70 members of the Phase 2 target population who were served by the MHU over the course of the grant. These participants had their first encounter with the MHU between January 2018 and June 2018. The vast majority of participants were White (87.1%), with a relatively even representation of males (48.6%) and females (51.4%). Participants averaged 46.9 years of age when they were first involved with the MHU, ranging from 20 to 84 years of age. Most (n=39; 55.7%) participants had their first encounter with the MHU in January 2018, with others initiating in February 2018 (n=13; 18.6%), March 2018 (n=6; 8.6%), April 2018 (n=2; 2.9%), or June 2018 (n=10; 14.3%).

Because the MHU was being evaluated by the extent to which it can reduce participants' elevated levels of law enforcement, criminal justice, and involuntary commitment encounters, it was necessary to obtain historical information on each person's activities before they had their first encounter with the MHU. Table 12 summarizes each MHU participant's history two years before they first became involved with the MHU, including information on their number of arrests, days

incarcerated, court docket appearances, Baker Acts, Marchman Acts, and negative contacts with Law Enforcement Officers (LEOs). Negative LEO contacts are defined as any time that a law enforcement entity other than the PCSO MHU contacted participants for a negative reason (e.g., arrest, Baker Act, Marchman Act, disorderly conduct, family trouble as a result of their mental illness, etc.). This historical information indicates that participants were heavily involved with these activities, averaging the following during the two year years prior to their first MHU contact: 1.39 arrests, 7.47 days incarcerated, 1.74 court docket appearances, 4.73 Baker Acts, 0.16 Marchman Acts, and 5.97 negative LEO contacts. Strikingly high in many cases, Table 12 indicates that the number of times each participant experienced these events over that two-year timeframe ranged as follows: 0 to 29 arrests; 0 to 151 number of days incarcerated; 0 to 22 court docket appearances; 2 to 21 Baker Acts; 0 to 4 Marchman Acts; and 0 to 53 negative LEO contacts.

Table 11. Participant Data File (N = 70) – Phase 2 Participants

	# of Individuals (N = 70)	Percent of Individuals
Number of Rows in Data File	70 MHU Case #s	
Date Range Covered by Data File		
Earliest Date	01/02/2018	
Latest Date	06/27/2018	
Race/Ethnicity		
Asian	2	2.9%
Black	3	4.3%
Hispanic	4	5.7%
White	61	87.1%
Gender		
Male	34	48.6%
Female	36	51.4%
Age at Time of Initial Contact		
Average	46.9	
Standard Deviation	15.9	
Minimum	20.1	
Maximum	84.8	
Under 21 years old	1	1.4%
21 to 30 years old	15	21.4%
31 to 40 years old	15	21.4%
41 to 50 years old	8	11.4%
51 to 60 years old	17	24.3%
61+ years old	14	20.0%
Month of Initial Contact with MHU		
January 2018	39	55.7%
February 2018	13	18.6%
March 2018	6	8.6%
April 2018	2	2.9%
May 2018	0	0.0%
June 2018	10	14.3%

Table 12. History Data File based on Each Participant's Activities Two Years before their First Contact with the MHU (N = 70) – Phase 2 Participants

	Negative Events Two Years Prior to First Involvement with MHU					
	Arrests	**Days Incarcerated**	**Court Docket Appearances**	**Baker Acts**	**Marchman Acts**	**LEO Contacts[a]**
Mean	1.39	7.47	1.74	4.73	0.16	5.97
SD	3.80	27.38	3.25	3.30	0.61	8.24
Range	0 – 29	0 – 151	0 – 22	0 – 21	0 – 4	8 – 53
# of Events for Each Participant[b]						
0	41	59	30	0	64	8
1	13	2	18	0	3	9
2	8	2	6	5	2	5
3	1	0	7	28	0	12
4	2	0	4	18	1	4
5	0	0	1	4	0	9
6	2	0	0	1	0	6
7	1	0	0	7	0	2
8	0	0	0	2	0	3
9	1	0	2	0	0	1
10	0	0	1	0	0	3
12	0	0	0	2	0	1
13	0	0	0	0	0	2
14	0	1	0	1	0	0
15	0	0	0	1	0	0
17	0	1	0	0	0	0
19	0	0	0	0	0	1
21	0	0	0	1	0	1
22	0	0	1	0	0	1
29	1	0	0	0	0	0
36	0	0	0	0	0	1
48	0	1	0	0	0	0
53	0	0	0	0	0	1
63	0	1	0	0	0	0
90	0	1	0	0	0	0
134	0	1	0	0	0	0
151	0	1	0	0	0	0

a. These are Negative LEO contacts that include any time a law enforcement entity outside MHU contacts participants for a negative reason (arrest, Baker Act, disorderly conduct, family trouble

as a result of their mental illness, etc.).
b. These represent the frequency distributions for each negative event, with each column summing to the number of participants. For instance, with regard to LEO contacts, 8 people had no LEO contacts, and 1 person had 53 LEO contacts.

Figure 3. Frequency Distributions for Number of Negative Events Experienced by MHU Participants during the Two Years before their First Involvement with MHU.

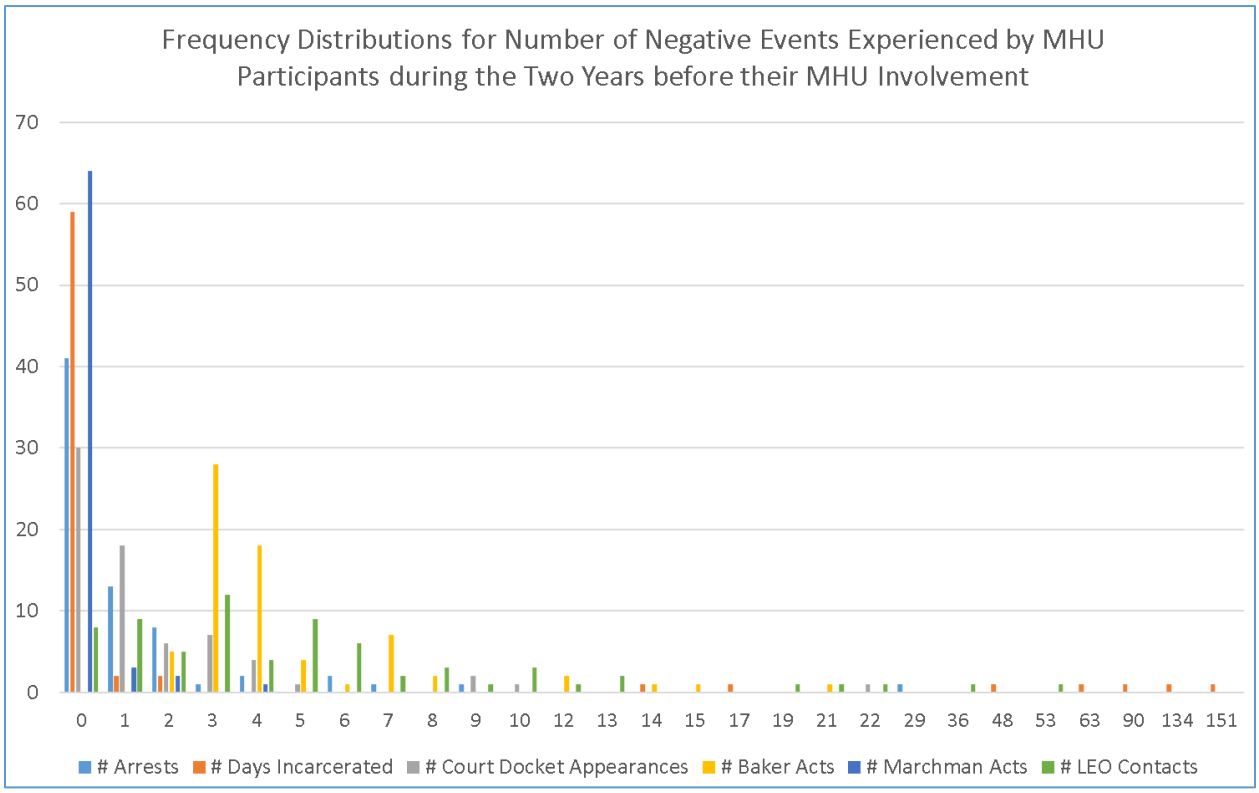


Table 13 presents the same historical information on which Table 12 is based, but it breaks the history into several shorter timeframes that summarize participants' activities one year prior to their first involvement with the MHU, six months prior to their first MHU involvement, and three months prior to their first MHU involvement. This descriptive information indicates that participants had extensive histories of experiencing these adverse events before they became involved with the MHU.

Table 13. Descriptive Statistics Describing Participants' History before Becoming Involved with MHU (N = 70) – Phase 2 Participants

	Amount of Time Before First Involvement with the MHU								
	One Year Before			**Six Months Before**			**Three Months Before**		
	Mean	**SD**	**Range**	**Mean**	**SD**	**Range**	**Mean**	**SD**	**Range**
Number of Arrests	0.77	2.66	0 to 21	0.37	1.22	0 to 9	0.16	0.58	0 to 4
Number of Days Incarcerated	3.50	14.51	0 to 97	1.46	10.15	0 to 84	0.00	0.00	0 to 0
Number of Court Docket Appearances	0.87	1.56	0 to 7	0.51	0.93	0 to 4	0.17	0.45	0 to 2
Number of Baker Acts	3.26	2.35	0 to 14	1.96	1.65	0 to 8	0.79	0.87	0 to 3
Number of Marchman Acts	0.11	0.53	0 to 4	0.06	0.29	0 to 2	0.04	0.27	0 to 2

PCSO conceptualized four different stages that participants may be in during the course of their involvement with the MHU operationalized as follows:

1. **Crisis Phase:** The individual has been identified as being having a mental health crisis. This is defined under POB 65 as an individual who is believed to have a mental illness who displays one or more of the following: having delusions, exhibiting erratic behavior, creating a disturbance, real and present threat to substantial harm due to self-neglect, threatening harm to oneself or others, or displays other activity or behavior that causes alarm. MHU will initiate contact with the individual and keep contact with the individual at a frequency necessary to help the person reach the Maintenance Phase as quickly and safely as possible. MHU anticipates making contact with the individual 1 to 4 times a week, depending on the result of initial and subsequent contacts.
2. **Maintenance Phase:** The individual is no longer in crisis mode. They are in the process of being connected to services and programs to aid them in gaining stabilization. Weekly follow ups will continue. Follow ups may include a phone call, face to face meeting, or contact made with a reliable acquaintance of the individual. MHU anticipates being in contact with the individual 1 to 2 times weekly. The number of contacts will be based on the outcome of each contact and the amount of assistance needed to be linked to services
3. **Stabilization Phase:** The individual has been connected with services. They are participating in a mental health program and reached stabilization. MHU will conduct a monthly follow up with the individual over the course of several months to verify the individual is continuing with services. Should it be determined that assistance is no longer needed by MHU the file will be closed. MHU anticipates being in contact with the individual 1 to 2 times monthly. The number of contacts will be based on the outcome of each contact and the individual not showing signs of regression back to Maintenance or Crisis Phase.
4. **Closed**

Additionally, PCSO determined that MHU cases could be closed for any of the following six reasons for case closure:

1. **Non-Compliant:** MHU has informed the individual that services are available to assist them and the individual declines assistance from MHU. The individual refuses to be connected with mental health services.
2. **Connected with Services:** MHU can validate that the individual has been connected with services and has been in Stabilization Phase for a period of time that would lead MHU to believe the individual is no longer in need of our contact.

3. **Stabilized:** MHU is unable to validate a connection with services, however, believes the individual to be in Stabilization Phase for a long enough period of time that our contact is no longer needed. Criteria that may be used to determine this would include not being Baker Acted since MHU has been in contact with them and no negative contact with law enforcement. Or, services may not have been needed and the individual was able to reach Stabilization Phase for a long enough period of time that our contact is no longer needed.
4. **Moved out of County:** The individual has moved to a location that is no longer in the Pinellas County Sheriff's Office jurisdiction. When possible, the jurisdiction where the individual has moved will be contacted to provide details of MHU's involvement with the individual.
5. **Incarcerated:** The individual is or will be incarcerated for an amount of time exceeding 3 months. Should the individual return to crisis mode upon release, MHU will reinitiate contact and attempt to connect the individual with services. Contact should be made with the individual in jail to inform them of services MHU is able to offer, so that upon release they are aware of what is available to them.
6. **Other:** Deceased; unable to locate.

All activities/events related MHU activities are noted in a PCSO – Mental Health Supplement to the participant's corresponding incident report. This includes involvement with the MHU as well as any other encounter identified as a Negative Contacts with Other LEOs, defined as any time that law enforcement outside of the MHU has had contact with a participant for a negative reason. Negative reasons include events like arrests, Baker Acts, Marchman Acts, disorderly conducts, and family troubles as a result of a participant's mental illness.

Table 14 summarizes the activities of the MHU between 01/02/2018 and 09/30/2018, as reflected in the Events data file. During this timeframe, there were a total of 610 MHU events. Most events (n=323; 53.0%) were in response to participants in the Maintenance phase, and the fewest events involved participants in the Crisis phase (n=40; 6.6%). Clients may be in multiple phases across their numerous encounters with the MHU. Table 14 also presents the number and percent of participants who were ever in each of the various phases during their encounters with the MHU. Approximately 25% (n=18) were classified as being in the crisis phase at some point over their contact with the MHU. Most participants (64.3%; n=45) were in the Maintenance phase during their involvement with the MHU. Nearly a third (32.9%; n=23) were classified as Stabilized during their MHU involvement, and 57 (81.4%) of participants were considered to have their cases closed during involvement with the MHU.

In terms of reasons that cases were closed, events were typically closed due to either non-compliance (n=91) or connecting participants with services (n=63). In terms of the number of participants having their cases closed for various reasons, 29 individuals (41.4% of participants) had their cases closed due to their being connected to services. The next most common reason for case closure was non-compliance, with 27 (38.6%) participants having their cases closed due to non-compliance.

Table 14 also presents information on the month/year of each MHU event. This indicates June 2018 was the busiest month for the MHU, as there were 102 MHU events during that month. The number of monthly MHU events slowed down after that point, with 47 events in July 2018, 34 events in August 2018, and 41 events in September 2018.

Table 14. Events Data File, Part 1 of 6 – Phase 2 Participants

	# of Events (N = 610)	Percent
Phase Noted in MHU Event		
Crisis	40	6.6%
Maintenance	323	53.0%
Stabilization	68	11.1%
Closed	179	29.3%
# Clients Who Were Ever in Each Phase		
Crisis	18	25.7%
Maintenance	45	64.3%
Stabilization	23	32.9%
Closed	57	81.4%
Case Closed Reason Noted in MHU Event		
Blank Field - Not Closed	425	69.7%
Connected with Service	63	10.3%
Incarcerated	1	0.2%
Moved out of County	11	1.8%
Non-Compliant	91	14.9%
Other	14	2.3%
Stabilized	5	0.8%
# Clients Who Ever Had Case Closed for This Reason		
Connected with Service	29	41.4%
Incarcerated	1	1.4%
Moved out of County	7	10.0%
Non-Compliant	27	38.6%
Other	6	8.6%
Stabilized	2	2.9%
Month/Year of Event		
January 2018	84	13.8%
February 2018	82	13.4%
March 2018	80	13.1%
April 2018	54	8.9%
May 2018	86	14.1%
June 2018	102	16.7%
July 2018	47	7.7%
August 2018	34	5.6%
September 2018	41	6.7%

Table 15 presents information regarding participants' phase when first encountering the MHU, cross-tabulated by the phase that was denoted in their final/latest MHU encounter. This allows the phase information to be examined longitudinally.

Table 15. Events Data File, Part 2 of 6 – Phase 2 Participants

		Client Phase at Time of First MHU Event[a]				
		Crisis	Maintenance	Stabilization	Closed	**Total**
Client Phase At Last MHU Event[b]	Crisis	0	0	0	1	**1**
	Maintenance	0	4	1	0	**5**
	Stabilization	0	5	3	1	**9**
	Closed	0	25	12	18	**55**
	Total	**0**	**34**	**16**	**20**	**70**

a. This reflects the client phase upon first/earliest encounter with the MHU.
b. This reflects the client phase at time of final/latest encounter with the MHU.

It was anticipated that the target population to be served by the MHU would have low rates of healthcare insurance that could be used to alleviate the costs of obtaining needed services. Accordingly, one goal of the MHU was to increase the number of participants who had health care insurance. To this end, the MHU documented each participant's healthcare insurance status at the time of each MHU encounter.

Table 16 presents information on participants' healthcare status at the time of their first MHU contact, cross-tabulated with any healthcare status changes noted over the course of their MHU involvement. Consistent with these considerations, baseline data obtained at the time of each participant's first MHU encounter indicated that only 35 participants (50.0%) had healthcare insurance. Once the MHU became involved and tried to facilitate healthcare insurance acquisition, 52 participants (74.3%) reported being personally insured or obtaining a health program card. Thus MHU participants had low rates of healthcare insurance coverage upon becoming involved with the MHU, and becoming involved with the MHU was associated with increased rates of healthcare insurance coverage.

Table 16. Events Data File, Part 3 of 6 – Phase 2 Participants

		Healthcare Insurance Status at Time of First MHU Event[a]				
		Personally Insured	Needs Health Program Card	Applied for Health Program	Unknown	**Total**
Healthcare Insurance Status Following First MHU Event[b]	Personally Insured	35	0	0	9	**44**
	Needs Health Program Card	0	6	0	0	**6**
	Obtained Health Program Card	0	7	1	0	**8**
	Unknown	0	0	0	12	**12**
	Total	**35**	**13**	**1**	**21**	**70**

a. This reflects the healthcare insurance status upon first encounter with the MHU.
b. This reflects the healthcare insurance status achieved over the course of involvement with the MHU.

Information summarized in Table 17 indicates that, of the 610 events logged by the MHU, 81.6% (n = 498) were related to routine MHU follow-up contacts, and 110 (18.0%) represented negative contacts with law enforcement officers outside of the MHU that included the following:

- 54 Baker Acts (FL involuntary commitment for mental health reasons)
- 3 court docket appearances
- 7 arrests
- 113 law enforcement contacts outside of the MHU (109 events with 1 contact, and 2 events with 2 contacts)

In terms of how many participants experienced each event during the course of their involvement with the MHU, Table 17 indicates that 30 participants (42.9%) experienced a Baker Act, 3 (4.3%) had court docket appearances, 7 (10,0%) were arrested, and 43 (61.4%) had contact with an outside law enforcement agency.

Table 18 presents this same information broken out for non-compliant versus other participants. Participants were classified as non-compliant if any of their MHU events listed a case closed reason as being due to non-compliance.

Table 17. Events Data File, Part 4 of 6 – Phase 2 Participants

	Events (N=610)		All Participants (N=70)[a]	
	#	%	#	%
Activity				
MHU Follow-Up	498	81.6%	68	97.1%
Blank – No info Provided	2	0.3%	2	2.9%
Contact with Other LEO	110	18.0%	38	54.3%
Number of Baker Acts (LINX)				
No Baker Acts	556	91.1%	40	57.1%
1	54	8.9%	30	42.9%
Number of Marchman Acts (LINX)				
No Marchman Acts	610	100%	0	0%
Court Docket Appearances				
None	607	99.5%	67	95.7%
1	3	0.5%	3	4.3%
Number of Arrests (LINX)				
No Arrests	603	98.9%	63	90.0%
1	7	1.1%	7	10.0%
Arrest Charge Type				
No Charge (not an Arrest)	603	98.9%	63	90.0%
Non-Violent Charges	3	0.5%	3	4.3%
Violent Charges	4	0.7%	4	5.7%
Number of Days Incarcerated				
3	1	0.2%	1	1.4%
5	1	0.2%	1	1.4%
8	1	0.2%	1	1.4%
23	1	0.2%	1	1.4%
31	1	0.2%	1	1.4%
60	1	0.2%	1	1.4%
No Days Incarcerated	604	99.0%	64	91.4%
Number of LEO Contacts				
No LEO Contacts	499	81.8%	27	38.6%
1 or More	111	18.2%	43	61.4%
Number of Calls Made Directly to MHU				
No Direct Calls to MHU	567	93.0%	53	75.7%
1 or More	43	7.0%	17	24.3%

a. This is defined as the number of participants who experienced each type of activity.

Table 18. Events Data File, Part 5 of 6 – Phase 2 Participants

	Non-Compliant[a] Participants (N=27)		Other[b] Participants (N=43)[a]	
	#	%	#	%
Number of Baker Acts (LINX)				
No Baker Acts	12	44.4%	28	65.1%
1	15	55.6%	15	34.9%
Number of Marchman Acts (LINX)				
No Marchman Acts	0	0.0%	0	0.0%
Court Docket Appearances				
None	26	96.3%	41	95.3%
1	1	3.7%	2	4.7%
Number of Arrests (LINX)				
No Arrests	23	85.2%	40	93.0%
1	4	14.8%	3	7.0%
Arrest Charge Type				
No Charge (not an Arrest)	22	81.5%	40	93.0%
Non-Violent Charges	3	11.1%	1	2.3%
Violent Charges	2	7.4%	2	4.7%
Number of Days Incarcerated				
3	1	3.7%	0	0.0%
5	1	3.7%	0	0.0%
8	0	0.0%	1	2.3%
23	0	0.0%	1	2.3%
31	1	3.7%	0	0.0%
60	1	3.7%	0	0.0%
No Days Incarcerated	23	85.2%	41	95.3%
Number of LEO Contacts				
No LEO Contacts	6	22.2%	21	48.8%
1 or More	21	77.8%	22	51.2%
Number of Calls Made Directly to MHU				
No Direct Calls to MHU	21	77.8%	32	74.4%
1 or More	6	22.2%	11	25.6%

a. Non-compliant participants were defined as those who ever had one of their MHU events specify that the case was closed due to non-compliance.

b. Other participants included everyone who was not classified as “non-compliant”.

Table 19 lists how many referrals were made to each service and how many participants were referred to each service. Participants could be referred to more than one service. These include a diverse set of community providers offering a range of services related to mental health, addictions, and physical health care. Overall, the MHU made 143 service referrals. On average, the MHU provided 2.03 (SD=3.64) service referrals to each participant.

Table 19. Events Data File, Part 6 of 6 – Phase 2 Participants

	Service Referral Events (N=143)		**Participants Referred to Each Service (N=70)**	
	#	**%**	**#**	**%**
Connected with Services				
Private Doctor / Services	5	3.5%	5	7.1%
Subject Refused Services	1	0.7%	1	1.4%
Alcoholics Anonymous	1	0.7%	1	1.4%
Bay Pines/ Tri Care	15	10.5%	7	10.0%
Baycare Behavioral Health	1	0.7%	1	1.4%
Boley Center - Markus Mittemayer Group Home	1	0.7%	1	1.4%
P. I. C. Team	46	32.2%	22	31.4%
Directions for Living	48	33.6%	11	15.7%
Food Cards	1	0.7%	1	1.4%
Home Care Services	1	0.7%	1	1.4%
Largo Medical Center	4	2.8%	1	1.4%
PEMHS Long Treatment	1	0.7%	1	1.4%
Solutions for Substance Abuse	1	0.7%	1	1.4%
Suncoast	15	10.5%	4	5.7%
Wyndmoore Rehab	2	1.4%	2	2.9%

Project Outcomes Examining Change over Time – Phase 2 Participants

Table 20 presents information on comparisons made among the 17 Phase 2 participants who had been involved with the MHU for at least 270 days. These **nine-month pre-post results indicate that, on average, participants significantly reduced their average number of Baker Acts following their first contact with the MHU**. Whereas these 17 individuals averaged 3.29 Baker Acts in the nine months prior to their first MHU involvement, they averaged only 0.82 Baker Acts over the nine months following their initiation with the MHU, F (1, 16) = 19.709, $p < .001$, partial $\eta^2 = .552$.

Table 20. Nine-Month[a] Pre-Post Change over Time in Negative Events (N = 17)[b] – Phase 2 Participants

	9 Months Before MHU Involvement		9 Months Following MHU Involvement		Statistical Results[c]
	Mean	**SD**	**Mean**	**SD**	
Number of Arrests	0.24	0.56	0.12	0.33	F (1, 16) = 0.485, p = .496, partial η^2 = .029
Number of Days Incarcerated	2.24	9.22	0.88	2.21	F (1, 16) = 0.349, p = .563, partial η^2 = .021
Number of Court Docket Appearances	0.47	0.94	0.06	0.24	F (1, 16) = 2.861, p = .110, partial η^2 = .152
Number of Baker Acts	3.29	2.89	0.82	1.07	**F (1, 16) = 19.709, $p < .001$, partial $\eta^2 = .552$**
Number of Marchman Acts	0.06	0.24	0.00	0.00	F (1, 16) = 1.000, p = .332, partial η^2 = .059

a. Nine months is defined as 270 days.
b. These analyses are based on only the 17 Phase 2 participants who were involved with the MHU for at least 270 days as of 09/30/2018.
c. Statistical tests included two-tailed, repeated measures analyses of variance that examined whether there were significant changes over time; statistically significant results are in **bold font**. Effect sizes are reported as partial eta squared (partial η^2) in order to describe the magnitude of change.

Table 21 presents information on costs associated with some of the outcomes presented in Table 20, based on comparisons made among the 17 Phase 2 participants who had been involved with the MHU for at least 270 days. These nine-month pre-post cost results indicate that, on average, participants reduced their average cost related to incarceration from $237.64 to $93.36. Additionally, over these timeframes participants also reduced their average Baker Act costs from $1,096.39 to $273.27.

Table 21. Nine-Month[a] Pre-Post Change in Costs over Time for Negative Events (N = 17)[b] – Phase 2 Participants

	9 Months Before MHU Involvement			9 Months Following MHU Involvement		
	Mean Units	**Cost / Unit**	**Average Cost / Participant**	**Mean Units**	**Cost / Unit**	**Average Cost / Participant**
Number of Days Incarcerated	2.24	$106.09	$237.64	0.88	$106.09	$93.36
Number of Baker Acts	3.29	$333.25	$1,096.39	0.82	$333.25	$273.27

a. Nine months is defined as 270 days.

b. These analyses are based on only the 17 Phase 2 participants who were involved with the MHU for at least 270 days as of 09/30/2018.

Table 22 presents information on comparisons made among the 58 Phase 2 participants who had been involved with the MHU for at least 180 days. These **six-month pre-post results indicate that, on average, participants significantly reduced their number of Baker Acts and court docket appearances following their first contact with the MHU**. Whereas these 58 individuals averaged 1.98 Baker Acts in the six months prior to their first MHU involvement, they averaged only 0.66 Baker Acts over the course of six months following their start with the MHU program, F (1, 57) = 33.724, $p < .001$, partial $\eta^2 = .372$. Similarly, while these 58 individuals averaged 0.55 court docket appearances in the six months prior to their first MHU involvement, they averaged only 0.05 court docket appearances over the course of six months following their start with the MHU program, F (1, 57) = 16.366, $p < .001$, partial $\eta^2 = .223$.

Table 22. Six-Month[a] Pre-Post Change over Time in Negative Events (N = 58)[b] – Phase 2 Participants

	6 Months Before MHU Involvement		6 Months Following MHU Involvement		Statistical Results[c]
	Mean	**SD**	**Mean**	**SD**	
Number of Arrests	0.26	0.66	0.09	0.28	F (1, 57) = 3.740, p = .058, partial η^2 = .062
Number of Days Incarcerated	1.72	11.15	1.84	8.85	F (1, 57) = 0.004, p = .949, partial η^2 = .000
Number of Court Docket Appearances	0.55	0.94	0.05	0.22	**F (1, 57) = 16.366, $p < .001$, partial $\eta^2 = .223$**
Number of Baker Acts	1.98	1.78	0.66	1.07	**F (1, 57) = 33.724, $p < .001$, partial $\eta^2 = .372$**
Number of Marchman Acts	0.03	0.18	0.00	0.00	F (1, 57) = 2.036, p = .159, partial η^2 = .034

a. Six months is defined as 180 days.

b. These analyses are based on only the 58 Phase 2 participants who were involved with the MHU for at least 180 days as of 09/30/2018.

c. Statistical tests included two-tailed repeated measures analyses of variance that examined whether there were significant changes over time; statistically significant results are in **bold font**. Effect sizes are reported as partial eta squared (partial η^2) in order to describe the magnitude of change.

Table 23 presents information on costs associated with some of the outcomes presented in Table 22, based on comparisons made among the 58 Phase 2 participants who had been involved with the MHU for at least 180 days. These six-month pre-post cost results indicate that, on average, participants did not reduce their average cost related to incarceration, but they did reduce their average Baker Act costs from $659.84 to $219.95 over this timeframe.

Table 23. Six-Month[a] Pre-Post Change in Costs over Time for Negative Events (N = 58)[b] – Phase 2 Participants

	6 Months Before MHU Involvement			6 Months Following MHU Involvement		
	Mean Units	**Cost / Unit**	**Average Cost / Participant**	**Mean Units**	**Cost / Unit**	**Average Cost / Participant**
Number of Days Incarcerated	1.72	$106.09	$182.47	1.84	$106.09	$195.21
Number of Baker Acts	1.98	$333.25	$659.84	0.66	$333.25	$219.95

a. Six months is defined as 180 days.

b. These analyses are based on only the 58 Phase 2 participants who were involved with the MHU for at least 180 days as of 09/30/2018.

Table 24 presents information on three-month pre-post comparisons made among all 70 Phase 2 participants, as they had all been involved with the MHU for at least 90 days. These **three-month pre-post results indicate that, on average, participants significantly reduced their number of Baker Acts and court docket appearances following their first contact with the MHU**. Whereas these 70 individuals averaged 0.79 Baker Acts in the three months prior to their first MHU involvement, they averaged only 0.40 Baker Acts over the three months following their start with the MHU program, F (1, 69) = 14.205, $p < .001$, partial $\eta^2 = .171$. Similarly, while these 70 individuals averaged 0.17 court docket appearances in the three months prior to their first MHU involvement, they averaged only 0.04 court docket appearances over the three months following their start with the MHU program, F (1, 69) = 5.768, $p = .019$, partial $\eta^2 = .077$.

Table 24. Three-Month[a] Pre-Post Change over Time in Negative Events (N = 70)[b] – Phase 2 Participants

	3 Months Before MHU Involvement		3 Months Following MHU Involvement		Statistical Results[c]
	Mean	**SD**	**Mean**	**SD**	
Number of Arrests	0.16	0.58	0.07	0.26	F (1, 69) = 1.821, p = .182, partial η^2 = .026
Number of Days Incarcerated	0.00	0.00	0.56	2.96	F (1, 69) = 2.477, p = .120, partial η^2 = .035
Number of Court Docket Appearances	0.17	0.45	0.04	0.20	**F (1, 69) = 5.768, p = .019, partial η^2 = .077**
Number of Baker Acts	0.79	0.87	0.40	0.77	**F (1, 69) = 14.205, p < .001, partial η^2 = .171**
Number of Marchman Acts	0.04	0.27	0.00	0.00	F (1, 69) = 1.821, p = .182, partial η^2 = .026

a. Three months is defined as 90 days.
b. These analyses are based on all 70 Phase 2 participants because all were first involved with the MHU for at least 90 days as of 09/30/2018.
c. Statistical tests included two-tailed repeated measures analyses of variance that examined whether there were significant changes over time; statistically significant results are in **bold font**. Effect sizes are reported as partial eta squared (partial η^2) in order to describe the magnitude of change.

Table 25 presents information on costs associated with some of the outcomes presented in Table 24, based on comparisons made among all 70 Phase 2 participants because they had all been involved with the MHU for at least 90 days. These three-month pre-post cost results indicate that, on average, participants did not reduced their average cost related to incarceration, though they did reduce their average Baker Act costs from $263.27 to $133.30 during this timeframe.

Table 25. Three-Month[a] Pre-Post Change in Costs over Time for Negative Events (N = 70)[b] – Phase 2 Participants

	3 Months Before MHU Involvement			3 Months Following MHU Involvement		
	Mean Units	**Cost / Unit**	**Average Cost / Participant**	**Mean Units**	**Cost / Unit**	**Average Cost / Participant**
Number of Days Incarcerated	0	$106.09	$0	0.56	$106.09	$59.41
Number of Baker Acts	0.79	$333.25	$263.27	0.40	$333.25	$133.30

a. Three months is defined as 90 days.
b. These analyses are based on all 70 Phase 2 participants because all were first involved with the MHU for at least 90 days as of 09/30/2018.

The effect size indicator partial eta squared (partial η^2) was provided in the rightmost column of Table 20, Table 22, and Table 24 in order to gauge the magnitude of the statistically significant findings. Tests of statistical significance tell us whether changes have occurred at or above what would be expected by chance, but they do not tell us anything about the magnitude of such changes. As such, effect size indices like partial η^2 are reported in the statistical results in order to gauge the magnitude of any observed effects. There are several helpful rules of thumb for interpreting effect sizes. When it comes to interpreting the partial η^2 effect sizes used in this report, Cohen (1988) indicates that:

- η^2 values of .1 are interpreted as effect sizes that are small in magnitude
- η^2 values of .3 are interpreted as effect sizes that are medium in magnitude
- η^2 values of .5 are interpreted as effect sizes that are large in magnitude

Accordingly, it appears that the statistically significant reductions in Baker Acts reported in Table 20's nine-month pre-post timeframe can be described as large (partial $\eta^2 = .552$) statistically significant reductions. The Baker Act reductions reported in Table 22's six-month pre-post timeframe can be described as medium in magnitude (partial $\eta^2 = .372$), while the Baker Act reductions reported in Table 24's three-month pre-post timeframe can be described as small (partial $\eta^2 = .171$).

With regard to the statistically significant reductions in court docket appearances, findings in Table 22's six-month pre-post timeframe can be described as small to medium in size (partial $\eta^2 = .223$), while those reported in Table 24's three-month pre-post timeframe can be described as small (partial $\eta^2 = .077$).

Summary of Evaluation Methods and Findings

Methods

This project evaluation included process evaluation methods that were designed to describe the activities of and individuals served by the Pinellas County Sherriff's Office (PCSO) Mental Health Unit (MHU), and it also included outcome evaluation methods designed to assess the effectiveness of the MHU. Quarterly Advisory Committee meetings were held with the Research Partner and MHU staff in order to provide the team with a routine forum to discuss the project, review interim findings, and make adjustments as needed. Procedures for ongoing data collection were determined early in the beginning of the project; MHU staff were responsible for gathering and entering project data, and they securely transmitted de-identified data sets to the Research Partner who drafted reports to summarize the information. Before each quarterly Advisory Committee meeting, the Research Partner prepared an updated report that summarized the latest project data. Routinely discussing these reports with the team in these meetings served several helpful purposes. First, it allowed the Research Partner to ask questions to clarify the precise nature of each data element captured by the MHU staff. Second, these discussions allowed MHU staff to give the Research Partner feedback on the formatting and nature of the reports that he prepared, including opportunities for MHU staff to request that the information be analyzed in different ways. Third, these discussions allowed all parties to become more familiar with the data sources and reporting formats. Fourth, reviewing the reports allowed the team to monitor information concerning the activities of the MHU, the individuals served by the MHU, and the effects that the MHU was having on the various outcomes assessed. Fifth, discussing the reports also provided an opportunity for the team to discuss unanticipated events, potential adjustments, and the implications of such adjustments.

One important adjustment that was implemented in January 2018 was to redefine the nature of the target population served by the MHU. After new supervision reviewed the cases assigned to the project in late 2017, it was determined that changes needed to be made to the target area/population in order to have a more manageable, meaningful and measurable case load. Due to this shift, the initial activities and 168 individuals served by the MHU through December 2017 were classified into Phase 1 of the project, with Phase 2 referring to the MHU activities and 70 participants

associated with the adjusted target population that started in January 2018. An important implication of adjusting the target population in the project's third year was that there was less time to monitor individuals following their involvement with the MHU. This had consequences for the outcome evaluation analyses that examined changes over time; as the timeframe for monitoring outcomes increased, the resulting sample size was reduced, as there were fewer individuals who could be monitored for a long period of time due to the project's end date. For instance, participants who were not involved with the MHU until June 2018 could not be monitored for longer than four months because the grant ended on 09/30/2018.

The evaluation's outcome analyses were based on a pre-post, within subjects design in order to assess the MHU's effectiveness with regard to achieving changes over time for various outcomes. Desired outcomes included increasing participants' health insurance befits enrollment and reducing their number of arrests, involuntary commitments, days incarcerated, and court docket appearances. Administrative databases were queried in order to document the extent to which participants experienced any of the outcome events over the course of two years immediately prior to their involvement with the MHU; this historical information was used to define the "pre" time period, as it was information before participants were involved with the MHU. These same types of events (arrests, involuntary commitments, etc.) were also documented any time that participants experienced them after becoming involved with the MHU; this information comprised the "post" period, as it represented information after participants became involved with the MHU. Information from each participant's "pre" timeframe was compared to the information from their associated "post" timeframe in order to determine whether there were changes over time in the number of times that each outcome event was experienced. In order to make fair comparisons, the "pre" and "post" timeframes needed to represent an equal number of days. The program's effectiveness was examined in this pre-post fashion for three different periods of time, including an examination of change over three-month, six-month, and nine-month timeframes. For the three-month timeframe, the "pre" and "post" periods were 90 days each; the six-month comparisons used 180 days in each of the "pre" and "post" periods, and the nine-month timeframe used 270 days in this manner.

Cost analyses were performed to quantify the costs of participants' involuntary commitments and days incarcerated, with changes over time examined to determine if the MHU was associated in cost reductions in these areas.

Summary of Phase 1 Results

Descriptive findings from the Phase 1 process evaluation indicate that the MHU served 168 individuals in Phase 1 between November 2016 and December 2017. These individuals received an average of seven contacts from the MHU, with participants receiving anywhere from one to 31 MHU contacts. Contacts were defined as any time that MHU staff made contact with participants and included things like making phone calls to check in on participants or more intensive activities like involuntarily committing or arresting an individual, though these intensive activities were only used as a last resort. With regard to criminal history, many (n=60) Phase 1 participants did not commit crimes during the two years prior to becoming involved with the MHU, though many experienced adverse events such as one or more involuntary commitments which do not technically qualify as a crime.

Outcomes for Phase 1 participants indicate that participants significantly reduced their number of involuntary commitments (i.e., Baker Acts) and law enforcement officer (LEO) contacts following their involvement with the MHU. Participants averaged 0.90 Baker Acts during the six month period prior to their involvement with the MHU, compared to an average of 0.20 Baker Acts over the six months after they became involved with the MHU. Likewise, participants averaged 1.34 LEO contacts during the six month period prior to their involvement with the MHU, compared to an average of 0.68 LEO contacts over the six months following their initial involvement with the MHU.

Summary of Phase 2 Results

Descriptive results from the Phase 2 process evaluation indicate that the MHU served 70 individuals between January 2018 and September 2018. These individuals had extensive histories of criminal activity and other adverse events over the two years prior to their involvement with the

MHU. Overall, during the two year years prior to their first MHU contact, participants experienced an average of 1.39 arrests, 7.47 days incarcerated, 1.74 court docket appearances, and 4.73 involuntary commitments. One individual experienced 21 involuntary commitments in this timeframe. Information on health care coverage indicates that 35 participants (50.0%) had healthcare insurance when they first became involved with the MHU. Because the MHU sought to facilitate participants' healthcare insurance acquisition, over time this rate promisingly increased to 52 individuals (74.3%) reporting that they were personally insured or obtained a health program card. MHU staff provided participants with a variety of referrals to community services (e.g., behavioral and physical health treatment providers, food cards). Overall, the MHU made 143 service referrals, with each participants receiving an average of two service referrals. Although following up on the referral was voluntary and not mandatory for participants, and although information was not available with regard to whether participants actually utilized the referrals, it is encouraging that MHU staff offered and encouraged participation in these helpful resources. MHU staff routinely made follow-up contacts to check in with participants, with each participants receiving an average of seven follow-up contacts.

Outcomes for Phase 2 participants were examined in a pre-post fashion over time for three different timeframes (3-month, 6-month, and 9-month). The decision to use several timeframes was largely based on the dilemma that outcomes could not be examined for long timeframes without reducing the number of individuals used in those calculations. For instance, only 17 of the 70 participants were involved with the MHU for nine months or longer before the project ended. As such, only those 17 individuals could be included in the analyses examining changes occurring over that timeframe. Aside from being less representative, small sample sizes also have negative statistical implications with regard to making it more difficult to detect statistically significant changes.

In general, outcome findings indicate that the MHU was successful in significantly reducing participants' rates of involuntary commitments and court docket appearances. Nine-month outcome results indicate that, on average, participants significantly reduced their average number of involuntary commitments following their first contact with the MHU. Whereas these 17 individuals averaged 3.29 involuntary commitments in the nine months prior to their first MHU involvement, they averaged only 0.82 involuntary commitments over the nine months following their initiation with the MHU. With regard to costs, these 17 participants averaged $1,096 in

involuntary commitment costs over the nine months prior to becoming involved with the MHU, compared to an average of only $273 in these costs over the nine months following their first MHU contact. Six-month outcome findings were based on 58 individuals who were involved with the MHU for six or more months before the end of the grant. These findings indicate that, on average, participants significantly reduced their rates of involuntary commitments and court docket appearances after becoming involved with the MHU. Whereas these individuals averaged 1.98 involuntary commitments in the six months prior to their first MHU involvement, they averaged only 0.66 over the six months following their start with the MHU. Similarly, while these individuals averaged 0.55 court docket appearances six months prior to their first MHU involvement, they averaged only 0.05 over the six months after they became involved with the MHU. Three-month pre-post results indicate that, on average, participants significantly reduced their involuntary commitments and court docket appearances after becoming involved with the MHU. Whereas these 70 individuals averaged 0.79 involuntary commitments in the three months prior to their first MHU involvement, they averaged only 0.40 over the three months following their start with the MHU program. Similarly, these individuals averaged 0.17 court docket appearances in the three months prior to their first MHU involvement, compared to an average of only 0.04 during the three months following their first involvement with the MHU.

Implications and Conclusions

Taken together, these Phase 1 and Phase 2 process and outcome evaluation findings indicate that the Pinellas County Sherriff's Office (PCSO) Mental Health Unit (MHU) was successful in targeting individuals with extremely high rates of involuntary commitments, providing these individuals with referrals to a variety of community resources, helping these individuals obtain healthcare insurance coverage, and reducing these individuals' subsequent rates of involuntary commitments and court docket appearances. Statistically significant findings support the MHU's effectiveness in reducing participants' rates of involuntary commitments and court docket appearances over different timeframes; although this project's analyses of change over time were limited due to the relatively short follow-up timeframes and relatively small sample sizes, the pattern of findings overwhelmingly supports the MHU's success in reducing involuntary commitments and court appearances. In general, the pattern of findings indicates that the largest

reductions were observed when outcomes were examined over longer timeframes, suggesting that the benefits of the MHU may extend, and even increase, well beyond the timeframes cited in this report. These results support the continued implementation and expansion of similar partnerships between law enforcement and behavioral health staff designed to reduce rates of involuntary commitments among individuals with extensive histories of behavioral health crises.

References

Cohen, J (1988) Statistical power analysis for the behavioral sciences (2nd ed.). Hillsdale, NJ: Erlbaum.