

Bernalillo County Department of Behavioral Health Services CARE Campus Review, January 2014–August 2019



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In this brief: This study describes the nature and impact of services utilized by clients of five DBHS CARE Campus Programs between January 2014 and August 2019.

The full report can be found at: <http://cara.unm.edu/reports/index.html>

Highlights:

- A total of 14,333 clients accounted for 65,387 visits to CARE programs during a period of five years and eight months.
- The average client visited CARE programs 4.6 times.
- Less than 1% of the total number of clients garnered over 100 visits each during the study period, comprising nearly 30% of all visits.
- The average number of visits per client increased every year between 2014 and 2017, but leveled off in 2018.
- Most clients were Caucasian/White or Hispanic/Latino and in middle adulthood, but mean visits per person were highest among seniors and Native Americans.
- All participation in ATP was court-ordered, but self- or relative-referrals made up the majority of visits to the other programs.

Report in Brief: DBHS CARE Campus Programs Review

This report reviews five CARE Campus programs for January 1, 2014 through August 21, 2019: the Public Inebriate Intervention Program (PIIP), Addiction Treatment Program (ATP), Detoxification and Treatment Program (Detox), Supportive Aftercare Community Program (SAC), and Mariposa Program (Mariposa). The CARE Campus is managed by the Bernalillo County Department of Behavioral Health Services (DBHS). The purpose is to describe program services and their impact on medical encounters for ATP and Detox.

CARE Programs Background

The purpose of PIIP is to reduce emergency room admissions for adult public inebriates by diverting them to observation and stabilization services (for up to 12 hours). PIIP also provides placement support to serve as a gateway into other services.

ATP is a jail-based program serving inmates with substance use disorders. ATP

lasts four weeks and uses Community Reinforcement Approach therapy, relapse prevention planning, psycho-educational programming, and living skills groups.

Detox is a voluntary detoxification program. Those admitted must be in need of detoxification from alcohol or dual substances and generally stay for 3 to 5 days with the option to extend the stay based on clients' needs.

SAC is a residential program designed to allow clients to remain in a supportive recovery environment after completing detoxification. SAC is a voluntary program ranging in length from 30 to 180 days.

Mariposa provides housing, medical services, case management, and drug rehabilitation to pregnant and post-partum women and their infants who are part of the Milagro program. Mariposa serves women in the community as well as those transitioning out of MDC.

Methodology

This review draws on two data sources. First, program data included number of clients and visits by program; duration of services; referral source; and client demographics including age, gender, and race/ethnicity. The aggregate data describe a study period covering January 1, 2014 through August 21, 2019. The period of data is lesser for two programs because they had an earlier data collection start date: March 2014 for Mariposa and August 2014 for SAC.

Second, medical data included information on patients and medical encounters for ATP and Detox clients. Variables included whether encounters involved a diagnosis, procedure, or rehabilitation; included a behavioral health disorder and its type; and were emergency, inpatient, or outpatient. These data

covered January 2013 through March 2020 and were matched to clients by the New Mexico Health Information Collaborative (NMHC).

We were interested in whether the average number of distinct visits to medical providers changed for CARE clients after their first program visit. We therefore focused only on diagnosis encounters. We relied on ICD-9 or ICD-10 codes to select total, all behavioral health disorder, all mental health disorder, and all substance use disorder diagnoses.

To create the post-program period, we computed the time between each client's first discharge and March 8, 2020. The pre-program period was obtained by counting backward by this amount of time from the client's first admission, ensuring the pre- and post-periods are identical for each client.

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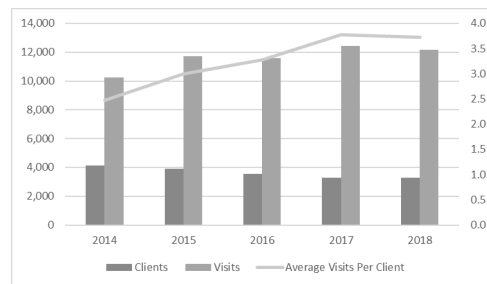
- The Detox program accounted for the largest share of total clients over the study period (42%).
- The PIIP program accounted for the largest share of total visits over the study period (66%).
- Between January 2013 and March 2020, average numbers of encounters with medical providers increased among both ATP and Detox clients following their first visit to the programs.
- Increases in behavioral health encounters were higher among Detox than ATP clients for both mental health and substance use disorders.
- Pre- to post-program mean medical encounter increases were driven by clients with the highest frequencies of encounters overall.
- Elevations in pre- to post-program average medical encounters were evident regardless of whether encounters involved emergency, inpatient, or outpatient services.

Total CARE Clients and Visits

Over the five years and eight months comprising the study period, a total of 14,333 clients accounted for 65,387 visits to CARE (averaging to 3,625 clients and 11,628 visits per full calendar year), with the average client visiting 4.6 times. Nearly three-quarters (74.3%) of clients participated in any of the programs on only 1-2 occasions, yet less than 1% garnered at least 100 visits and together comprised 19,096 visits, or 29.2% of the total.

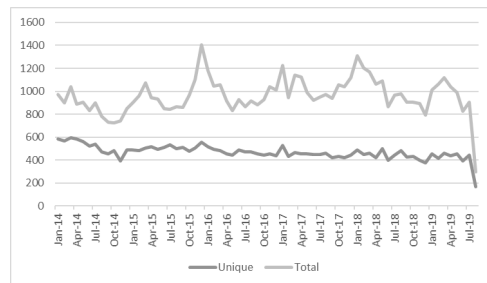
The total number of clients decreased, and the total number of visits and average visits per client increased, over nearly the full period with complete annual data. The average number of visits per client rose from 2.5 in 2014 to 3.8 in 2017, a 52% increase. However, the usual per capita number of visits leveled off afterward with an average of 3.7 in 2018 (**Figure 1**).

Figure 1. Total Clients, Visits, and Average Visits Per Client for CARE, 2014-2018



The number of unique visits, or first visits by a single client in a given month, held stable at approximately 500 visits each month while total visits peaked in the winter of each year (**Figure 2**).

Figure 2. Trends in Unique and Total Visits, January 2014-August 2019



Most clients were male (72%) and ranged in age from 18-39 (62%). A majority identified as Caucasian/White or Hispanic/Latino. However, average visits per client were highest among clients age 60 and over (5.8 visits) and Native American clients (13.2 visits).

All visits to ATP are court-ordered by design, but visits to other programs could in theory result from a variety of different referral sources. In fact, nearly 70% of visits were initiated by clients themselves or their family members. Another 20% resulted from referrals from courts, PIIP, UNM Hospitals, or APD. Three-quarters of visits to CARE programs lasted 1 day or less and 23% had a duration between 2 days and one month. The remaining 2% received CARE services for longer than one month during their visit.

Clients and Visits by Program

The total number of clients over the study period was greatest for Detox at 7,782 clients (or 42% of all clients), while the total number of visits was greatest for PIIP at 42,860 visits (or 66% of all visits) (**Table 1**). The average number of visits per client was highest for PIIP at 6.8.

Table 1. Total Clients, Total Visits, and Average Visits Per Client, by Program

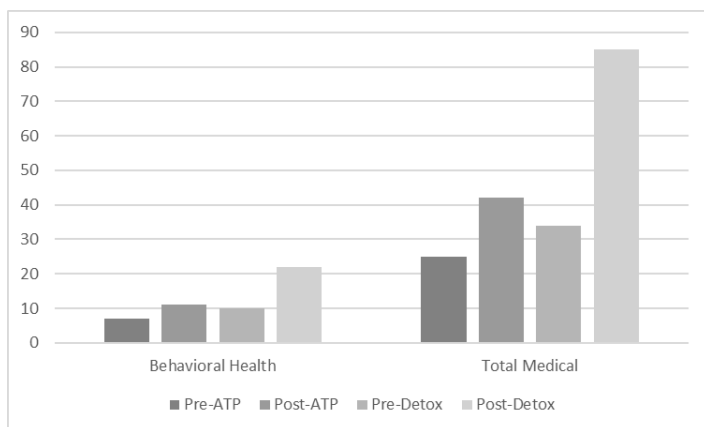
Program	Total Clients	Total Visits	Average Visits per Client
ATP	4,247	5,102	1.2
Detox	7,782	17,090	2.2
Mariposa	70	73	1.0
PIIP	6,301	42,860	6.8
SAC	244	262	1.1

The gender, racial/ethnic, and age composition of clients in each program largely replicated that for CARE generally with a few exceptions. Mariposa is comprised of only females because the program serves pregnant women specifically, and Native Americans comprised the second-largest share of clients served by PIIP. Clients usually visited on 1-2 occasions but for PIIP there were nearly 7 visits per person on average. Each program has a distinct visit duration: clients typically receive services from PIIP for less than 1 day, from Detox for 3-5 days, from ATP for 4 weeks, and from SAC and Mariposa for 1-6 months.

Medical Encounters Pre- and Post- ATP and Detox

Between January 2013 and March 2020 ATP clients garnered 226,512 diagnosis encounters with a medical provider. Nearly half (48.8%) were emergency room visits and over 80% were classified using ICD-9 or ICD-10 codes (see "Methodology" box), which allowed identification of encounters involving mental health or substance use disorders (about 16%). Similarly, among the 806,073 encounters by Detox clients 50.2% were emergency room

Figure 3. Pre- and Post-Program Mean Medical Encounters for ATP and Detox Clients, for Behavioral Health and Total Encounters



visits and 84.3% had ICD-9 or ICD-10 codes. Approximately 21% of the encounters by Detox clients involved a mental health or substance use disorder (hereafter simply “behavioral health” encounter).

On average, ATP clients accumulated 64 total encounters and 13 behavioral health encounters, while Detox clients tallied 118 total encounters and 28 behavioral health encounters. Mean encounters increased among both ATP and Detox clients following their first visit to the programs. During the pre-program period ATP clients averaged 25 encounters which increased to 42 encounters in the post-program period, while Detox clients averaged 34 encounters in the pre-program period and 85 encounters in the post-program period. Pre- to post-program averages also rose for behavioral health encounters from 7 to 11 encounters for ATP clients and from 10 to 22 encounters among Detox clients (Figure 3).

Increases in mean encounters were larger among Detox than ATP clients for both behavioral health encounter types. Among ATP clients mean mental health encounters increased by 78% (from 1.8 to 3.2) and substance use encounters increased by 36% (from 5.3 to 7.2); among Detox clients the corresponding figures were 122% (from 2.7 to 6) and 125% (from 7.3 to 16.4). Pre- to post-program increases in average encounters were driven by clients with the highest frequencies of encounters overall. For example, averages increased between the two periods by about 3% among ATP clients across different encounter frequency ranges except

Table 2. Pre- and Post-Mean Mental Health and Substance Use Disorder Diagnosis Encounters for ATP, by Encounter Ranges

ATP				
	Mental Health		Substance Use	
	Pre	Post	Pre	Post
1-2	1	1	1	1
3-6	4	4	4	4
7-14	10	10	9	10
15-24	18	18	18	19
25-49	33	33	35	34
50+	63	74	90	91

Table 3. Pre- and Post-Mean Mental Health and Substance Use Disorder Diagnosis Encounters for ATP, by Encounter Ranges

	Detox			
	Mental Health		Substance Use	
	Pre	Post	Pre	Post
1-9	3	3	3	4
10-29	16	16	16	17
30-49	37	37	37	37
50-74	56	60	60	60
75-124	97	96	91	97
125+	145	178	167	251

for those with at least 200 encounters, among whom average encounters rose by nearly 6%. For Detox clients, averages increased by 5% across the periods except for those with at least 500 encounters, for whom mean encounters rose by 13%.

The same concentration of pre- to post-program encounter increases emerges when clients with behavioral health encounters are examined separately. ATP clients with 1-2 encounters through those with 25-49 encounters show similar average encounters between the periods, but clients with at least 50 encounters indicate a 17% increase in mental health encounters (from 63 to 74) (Table 2). Stability is also evident for Detox clients with 1-9 through 75-124 encounters, but clients with at least 125 encounters indicate a 23% increase in mental health encounters (from 145 to 178) and a 50% increase in substance use encounters (from 167 to 251) (Table 3).

Examining pre- to post-program mean encounters by encounter type reveals that increases between the periods are evident regardless of whether encounters involved emergency, inpatient, or outpatient encounters. Relative increases were especially sizeable for average inpatient encounters, which were twice as large among ATP clients (from 2.7 to 5.5) and three times as large among Detox clients (from 5 to 14.3) during the post-program period as during the pre-program period.

When behavioral health encounters are considered alone, pre- to post-program mean increases are also evident across encounter

Table 4. Mean Mental Health and Substance Use Medical Encounters Pre- and Post-Participation in ATP, by Encounter Type

	Pre-Program Mean	Post-Program Mean
Mental Health		
Emergency	2.7	2.8
Inpatient	0.6	1.0
Outpatient	1	2.4
Substance Use		
Emergency	3.9	4.6
Inpatient	0.7	1.2
Outpatient	1.0	2.0

Table 5. Mean Mental Health and Substance Use Medical Encounters Pre- and Post-Participation in Detox, by Encounter Type

	Pre-Program Mean	Post-Program Mean
Mental Health		
Emergency	3.0	5.0
Inpatient	1.0	2.0
Outpatient	1.2	2.6
Substance Use		
Emergency	5.1	11.3
Inpatient	1.1	2.6
Outpatient	1.4	3.1

types. ATP clients’ mean behavioral health encounters rose most sharply among outpatient encounters (from 1.4 to 3.1), and this also held for mental health and substance use encounters (Table 4). Among Detox clients mean behavioral health encounters increased most among inpatient encounters (from 1.5 to 3.8). Mean mental health and substance use encounters increased more evenly for Detox clients (Table 5).

Although more than 80% of ATP clients either completed or came within one day of completing the four-week program, variation in length of stay was associated the size of pre- to post-program medical encounter increases. Except for clients who participated for 27 days or more, longer stays in the program predicted larger relative changes in pre- to post-program mean encounters (Figure 4). Variation in the number visits to Detox also predicted the magnitude of medical encounter increases for clients of that program: the more frequency clients visited Detox during the study period, the larger the relative increase in their mean medical encounters (Figure 5).

Key Takeaways

Clients participated in CARE programs an average of 4 to 5 times, amounting to over 65,000 visits across more than 14,000 individuals. The number of unique clients decreased as the average number of visits per client rose each year through 2017, but both values leveled off after 2018. Most clients were male, White or Hispanic/Latino, and in middle adulthood, but average frequencies per person were greatest among Native Americans and seniors. Most visits were initiated by self- or family-referrals and involved services completed within a day. PIIP

Figure 4. Pre- and Post-ATP Mean Medical Encounters and Percent Change by Length of Stay Ranges (in Days)

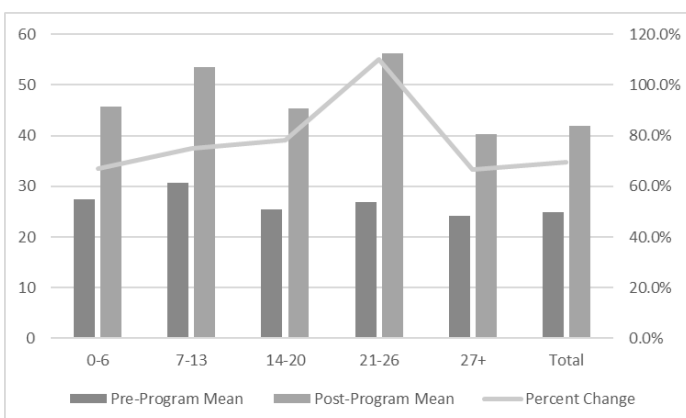
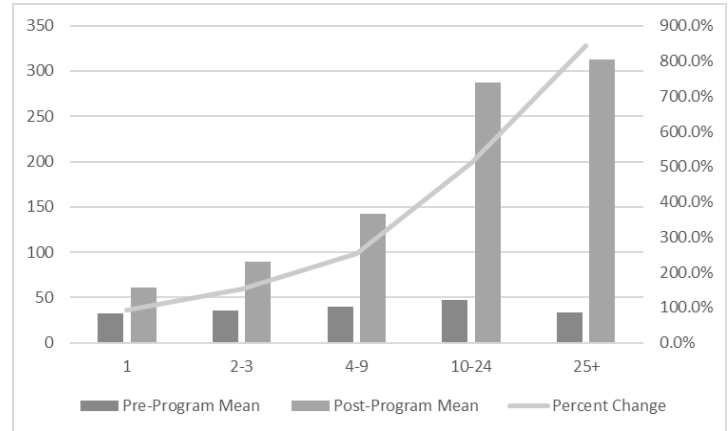


Figure 5. Pre- and Post-Detox Mean Medical Encounters and Percent Change by Visit Frequency Ranges



comprised the largest proportion of total visits while Detox comprised the largest proportion of total clients.

Deviations are evident for specific programs: participants usually visited on 1-2 occasions but for PIIP there were nearly 7 visits per person on average. Behind Hispanics/Latinos, Native Americans were the second-largest racial/ethnic group making up the individuals served by PIIP. The clientele of Mariposa was predominantly female, and participants of ATP were typically court-ordered. The average duration of services was approximately one month for ATP and 3-4 months for SAC and Mariposa.

Clients accumulated more medical encounters after their initial participation. Among ATP participants, mean encounters rose by 68% and behavioral health encounters rose by 57%; among Detox participants, the corresponding increases were 150% and 120%. Increases in behavioral health encounters were higher among Detox than ATP clients for both disorder types. Elevations in pre- to post-program average medical encounters were particularly steep for ATP clients with longer lengths of stay, Detox clients with more visits, and with the highest frequencies of medical treatment for clients of both programs. Increases were evident for all three encounter types (emergency, inpatient, and outpatient).

Conclusion

The purpose of this study was to describe DBHS CARE Campus Programs for January 2014 through August 2019 and their impact on medical encounters for ATP and Detox clients. There was an increasing concentration of services among a smaller group of clients through 2017; highest frequencies of use per capita among Native Americans and seniors; and the tendency of ATP and Detox clients to increase their receipt of medical services following their first participation in CARE. We hope to have access to additional information to better understand the processes by which the CARE programs are shaping clients’ interactions with the healthcare system in the future.

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