



In partnership with the New Mexico Statistical Analysis Center
and Pivot Evaluation

Evaluation of Santa Fe's LEAD Program: Criminal Justice Outcomes

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Purpose and Methods

Purpose

The purpose of this report is to outline and interpret the findings from the evaluation of short- and long-term recidivism outcomes (i.e., arrests/bookings and criminal charges) for LEAD clients and the comparison group.

The comparison group was compiled from Santa Fe County Detention Center 2014-2017 arrest data using Propensity Score Matching. The sample was first limited to individuals who were arrested between 2014 to 2017. We then limited the sample to those who only had charges that LEAD clients also had, therefore excluding those with charges unlike those of the clients. After these limitations, we matched clients with potential comparison group members 1:1 (or as close as possible if there wasn't a perfect match) on gender, age, and year of referral year. In some cases we had more than one match for a client, which is why the comparison group is slightly larger than the client group.

Measures

We received informational data on clients from the LEAD program coordinator, which included both demographic and program data. Data used to make engagement level variables were given to us by the LEAD service provider. Data on criminal recidivism (i.e. arrests, bookings) came from the Department of Public Safety and the Santa Fe County Detention Center. For this evaluation, new arrests refer to those arrests which did not only include parole or probation violations, warrants, or failure to comply offenses. Total arrests included these excluded offenses.

Methods

Several analyses were run to study how LEAD clients fare in criminal justice outcomes both in the short-term and long-term. Both averages and dichotomous (yes/no) outcomes were measured.

Arrests

In order to calculate the average number of arrests prior to and post-referral date to the program (for the comparison group, this day is a comparable date of arrest), a few steps were taken. First, arrests after the referral date were limited to those that occurred before December 31, 2017. Then, exposure time was calculated by the number of days between the date of referral and this end date. The exposure time was then used to limit prior arrests to those that occurred within the same number of days before the referral date for each client and comparison group member. Six different criminal offense categories were examine: overall prior and post arrests, prior and post new arrests only, failures to appear, comply, and/or warrants, and parole/probation violations. If the charges for an arrest date only included failure to appear or comply and/or parole/probation violations, then they were not considered new arrests. Independent-samples t-tests were used to determine whether the average number of arrests were significantly different for the clients and those in the comparison group. Paired-samples t-test were used to test whether the average number of prior and post arrests were significantly different within the client group and within the comparison group.

Time to Re-Arrest

To calculate the average number of days to re-arrest post referral date to the program (for the comparison group, this day is a comparable date of arrest) arrests after the referral date were limited to those that occurred before December 31, 2017. Then, for those arrests that occurred after the referral date, the number of days to re-arrest were calculated. The minimum number of days to re-arrest for six different criminal offense categories were examined, along with overall post arrests, post new arrests only, failures to appear, comply, and/or warrants, and parole/probation violations. Independent-samples t-tests were used to determine whether there were any statistically significant differences between LEAD clients and those in the comparison group.

Length of Detainment

To calculate the number of days detained, we used booking data from the Santa Fe County Detention Center. This means that only those clients and comparison group members that were booked in Santa Fe were included in the sample. To get the number of days detained, we calculated the number of days between the booking date and the release date. Independent-samples t-tests were used to determine whether the average number of days detained were significantly different for the clients and those in the comparison group for overall prior and post arrests, prior and post new arrests, and prior and post drug arrests. Paired-samples t-test were used to test whether the average number of prior and post days detained were significantly different within the client group and within the comparison group.

Supplemental Analyses by Engagement Level

The level of engagement takes into account both services received and the length of time in LEAD. Several steps were taken to measure the level of engagement for clients using service data provided by the LEAD service provider. First, a percentage completed variable was created by taking the number of completed appointments and dividing that number by the total number of appointments they had scheduled. Second, clients were divided into several groups based on the amount of days that they received services: less than six months, six to twelve months, thirteen to eighteen months, nineteen to twenty-four months, and twenty-five or more months. We then calculated four percentage quartiles based on the percentage completed for each of the groups, so that each specific group had a measure of low, moderate, moderately high, and high engagement. Finally, overall low, moderate, moderately high, and high engagement variables were formed by combining the measures from each of the groups.

Results

Sample Description

Clients in this evaluation ($N=67$) had an average age of about 29 years and were predominantly female. The comparison group ($N=98$) had an average age of about 29 as well and were also predominantly female. Most of the referrals took place in 2015 or 2016. Clients and the comparison group did not significantly vary in their prior criminal histories except for in DWIs. While statistically significant, the difference is based on very low numbers (1 LEAD client and 9 comparison group individuals) and was not considered substantively different.

Table 1. Demographics and Criminal History

	Clients (N=67)	Comparison (N=98)
Gender		
Female	66%	61%
Male	34%	39%
Age		
Mean age (s.d.)	29.2 (6.03)	28.7 (5.39)
Year of Referral		
2014	8%	3%
2015	38%	38%
2016	50%	52%
2017	4%	7%
Prior Arrest History		
Drug	39%	36%
Violent	6%	12%
Property	55%	62%
DWIs *	1%	9%

*p<.05

Arrests

Short Term

Table 2 shows the average number of prior and post arrests for clients and the comparison group within 6 months prior to and post referral date. There were no statistically significant differences either between the two groups or within each of the groups. Descriptively, however, LEAD clients have fewer total and new arrests after their referral to the program within this timeframe.

Table 2. Average number of prior and post arrests for clients and the comparison group within 6 months

Crime Category	Client (N=67)		Comparison (N=98)	
	Prior	Post	Prior	Post
Total^a	1.31	0.93	1.04	1.04
New Arrests Only	0.73	0.51	0.54	0.57
Public Order	0.18	0.13	0.27	0.23
Violent^c	0.07	0.00	0.06	0.03
DWI	0.01	0.00	0.01	0.00
Other	0.21	0.19	0.13	0.15

Property^a	0.34	0.22	0.19	0.20
Drug	0.33	0.24	0.24	0.34
All Warrants	0.58	0.42	0.50	0.47

a Statistically significant difference between groups for Prior $p < .10$

b Statistically significant difference between groups for Post $p < .10$

c Statistically significant difference within Clients $p < .10$

d Statistically significant difference within Comparison $p < .10$

e Statistically significant difference between groups for Prior $p < .05$

f Statistically significant difference between groups for Post $p < .05$

g Statistically significant difference within Clients $p < .05$

h Statistically significant difference within Comparison $p < .05$

Long Term

Table 2a shows the average number of arrests that LEAD clients and the comparison group accrued both prior to and following the date of referral within the entire exposure period. There were no significant differences between clients and the comparison group when looking at the average number of overall prior and post arrests. However, within the client group there was a significantly higher average number of arrests post referral date compared to prior ($p < .05$). When looking at new arrests only, the comparison group had a significantly higher average number of prior arrests compared to the clients ($p < .10$). Clients had a significantly higher average number of post new arrests compared to priors when looking at within group differences ($p < .05$). Focusing on specific crime categories, clients had a significantly lower average number of arrests for public order offenses prior to the referral date compared to the comparison group ($p < .05$). Within the client group, there was a significantly higher average number of post arrests for public order offenses compared to priors ($p < .05$). The comparison group had higher averages for post arrests for violent offenses compared to clients ($p < .05$). Within the client group, there were no arrests for violent charges post. When looking at DWI arrests, the comparison group has a higher average for priors compared to clients ($p < .05$), however the client group had higher post averages compared to their priors ($p < .10$). Although there weren't many differences between the comparison group and clients for post referral date arrest averages, that there were significant differences for the more serious offenses categorized as violent is important to note. We also ran these analyses by whether the client was referred through arrest or socially and there were no significant differences for overall or new arrests.

Table 2a. Average number of prior and post arrests for clients and the comparison group

Crime Category	Client (N=67)		Comparison (N=98)	
	Prior	Post	Prior	Post
Total^g	2.61	3.69	3.21	3.32
New Arrests^{a g}	1.18	2.01	1.62	1.62
Public Order^{e g}	0.36	0.75	0.72	0.71
Violent^{c f}	0.09	0.00	0.18	0.15
DWI^{c e}	0.01	0.10	0.09	0.06
Other^{b g}	0.28	0.72	0.42	0.46
Property	0.64	0.84	0.65	0.58
Drug^c	0.48	0.70	0.53	0.66
All Warrants	1.43	1.67	1.59	1.69

a Statistically significant difference between groups for Prior $p < .10$

b Statistically significant difference between groups for Post $p < .10$

c Statistically significant difference within Clients $p < .10$

d Statistically significant difference within Comparison $p < .10$

e Statistically significant difference between groups for Prior $p < .05$

f Statistically significant difference between groups for Post $p < .05$

g Statistically significant difference within Clients $p < .05$

h Statistically significant difference within Comparison $p < .05$

Engagement Level

Table 2b shows the average number of prior and post arrests for clients based on their engagement level for the entire exposure period. The low engagement clients had a significantly higher average number of post arrests. There were some significant within group differences as well. Most of the within group differences were found for clients with low engagement levels. These individuals had significantly higher average number of post total, new, public order, DWI, other, and all warrants compared to priors (see table for p values). ($p < .10$), with the average being higher for post arrests. Figure 1 shows the total arrest averages by engagement level.

Table 2b. Supplemental analysis: Clients average arrests by engagement level

Crime Category	Low Engagement (N=16)		Moderate Engagement (N=19)		Moderately High Engagement (N=17)		High Engagement (N=15)	
	Prior	Post	Prior	Post	Prior	Post	Prior	Post
Total^f	2.75	6.06	2.16	2.47	2.59	2.82	3.07	3.67
New Arrests^b	1.13	3.38	1.11	1.53	1.00	1.41	1.87	1.53
Public Order^f	0.63	1.56	0.21	0.37	0.24	0.65	0.40	0.47
Violent	0.13	0.00	0.11	0.00	0.12	0.00	0.00	0.00
DWI	0.00	0.25	0.00	0.11	0.00	0.00	0.07	0.07
Other	.13	1.13	0.26	0.63	0.24	0.65	0.53	0.47
Property	0.50	1.44	0.74	0.63	0.65	0.47	0.67	0.87
Drug	0.38	0.88	0.53	0.53	0.29	0.76	0.73	0.67
All Warrants^f	1.63	2.69	1.05	0.95	1.59	1.41	1.20	2.14

Statistically significant differences within groups $p < .10$

Statistically significant differences within groups $p < .05$

a Statistically significant difference between groups for Prior $p < .10$

b Statistically significant difference between groups for Post $p < .10$

e Statistically significant difference between groups for Prior $p < .05$

f Statistically significant difference between groups for Post $p < .05$

Time to Re-Arrest

Table 3 shows the average time (number of days) to the first arrest after the date of referral to the program. Significance tests showed that there were no statistically significant differences between the two groups. Considering the substantive differences between the two, however, there were several offenses for which the clients had a higher average number of days to first arrest after the referral date. Especially important to notice given the expressed goals of the LEAD diversion program are the averages for both drug offenses and DWIs. For drug offenses, the average number of days to re-arrest for clients was about 274, while for the comparison group it was about 201 days. For DWIs, the average number of days to re-arrest for clients was about 600 days, while for the comparison group it was about 454 days. This means that clients, on average, were not arrested again for a drug or alcohol-related offense as quickly as the comparison group was once the treatment began.

Table 3. Average time to re-arrest

Crime Category	Time to Arrest	
	Client	Comparison
Total	191.93 (N=54)	159.18 (N=82)
New Arrests	197.22 (N=46)	204.96 (N=68)
Public Order	321.84 (N=25)	248.40 (N=47)
Violent	0 (N=0)	245.67 (N=12)
DWI	600.5 (N=6)	453.75 (N=4)
Other	315.81 (N=27)	214.72 (N=32)
Property	236.47 (N=30)	232.67 (N=33)
Drug	274.03 (N=30)	200.66 (N=41)
All Warrants	259.27 (N=37)	221.67 (N=65)

Engagement Level

Table 3a. shows the average time to re-arrest for LEAD clients by engagement level.

Table 3a. Supplemental analysis: clients by engagement level

Crime Category	Time to Arrest			
	Low Engagement	Moderate Engagement	Moderately High Engagement	High Engagement
Total	176.93 (N=15)	160.25 (N=12)	157.38 (N=13)	267.21 (N=14)
New Arrests	168.00 (N=12)	145.10 (N=10)	153.73 (N=11)	301.08 (N=13)
Public Order	323.88 (N=8)	374.00 (N=4)	208.63 (N=8)	458.00 (N=5)
Violent	0.00 (N=0)	0.00 (N=0)	0.00 (N=0)	0.00 (N=0)
DWI	621.00 (N=4)	361.00 (N=1)	--- (N=0)	758.00 (N=1)
Other	354.50 (N=10)	364.71 (N=7)	200.00 (N=5)	285.80 (N=5)
Property	224.83 (N=6)	219.23 (N=9)	174.80 (N=5)	289.80 (N=10)
Drug*	245.88 (N=8)	192.34 (N=6)	143.71 (N=7)	454.89 (N=9)
All Warrants	295.92 (N=12)	247.88 (N=8)	207.38 (N=8)	266.67 (N=9)

* Statistically significant difference between groups $p < .05$

Length of Detainment

Table 4 shows the average length of detainment for clients and the comparison group both prior to and post referral date. Overall, the comparison group had higher averages for days detained compared to the clients. For both prior and post average days detained, the comparison group was on average detained longer compared to clients ($p < .05$). Within the comparison group, the average number of days

detained was higher post referral date ($p < .05$). Overall these results suggest that the comparison group was detained for longer periods of time than the LEAD clients. This could impact some of the other results related to arrests, for if comparison group members spend more time detained then they have less opportunities to be re-arrested.

Table 4. Length of Detainment

Crime Category	Length of Detainment			
	Client		Comparison	
	Prior	Post	Prior	Post
Total ^{ef}	14.38 (N=67)	22.83 (N=67)	55.94 (N=98)	126.51 (N=98)

■ Statistically significant differences within groups $p < .05$
 e Statistically significant difference between groups for Prior $p < .05$
 f Statistically significant difference between groups for Post $p < .05$

Engagement Level

Table X2 shows the average number of days that LEAD clients were engaged by engagement level.

Table X2. Supplemental Analysis: Clients by engagement level

Crime Category	Low Engagement		Moderate Engagement		Moderately High Engagement		High Engagement	
	Prior	Post	Prior	Post	Prior	Post	Prior	Post
	Total	17.74 (N=16)	47.48 (N=16)	8.22 (N=19)	15.34 (N=19)	14.17 (N=17)	13.71 (N=17)	18.82 (N=15)

Discussion

This evaluation looked at several criminal recidivism outcomes for LEAD clients overtime as well as relative to the comparison group. For the most part, there were not many significant differences either within the LEAD client group or between the comparison group and LEAD clients. For time to re-arrest measures, there were no significant differences between clients and the comparison group and there were only a few differences within clients based on engagement level. However, there were some differences found for arrests and length of detainment.

Arrests

Within six months pre and post-referral, LEAD clients had fewer arrests post-referral and fewer new arrests ($p < 0.05$). Within the full exposure period, LEAD clients had no arrests for violent offenses. There were significant differences between clients and the comparison group for post-referral violent charges. Despite these positive findings, LEAD clients experienced a significant increase in the average number of charges overall and new charges. While the average number of charges increased for the comparison group as well, the increase was not statistically significant.

It does appear that how engaged clients were in LEAD services mitigated the increase in number of charges for some people. Clients with low levels of engagement had a significantly greater average number of charges overall after they were referred to LEAD than before the referral. Although the number of arrests for those with moderate, moderately high, and high engagement also increased overtime, these changes were not statistically significant. Furthermore, post-referral arrests were lower for those with moderate to moderately-high engagement compared to low engagement.

Detainment

Clients were detained significantly fewer days than the comparison group both prior to and post referral date. Furthermore, LEAD participation was significantly related to lower post-referral detention days after controlling for key variables (i.e., exposure time, prior criminal history, prior days detained) in multivariate analyses.

Overall the results of this report suggest that clients are faring better than the comparison group on several measures of recidivism, but there is some room for improvement. In the short-term the average number of overall arrests decreased from the time before referral to after for LEAD clients, however this trend does not hold overtime with LEAD clients being arrested, on average, more after they've been referred to the program. This finding may be driven in part by the low-engagement clients who are arrested, on average, more after their referral date. Ways to further study this relationship will be discussed in the limitations section.

Limitations

This evaluation's limitations should also be noted in this report. First, large administrative datasets that are often used to study arrests cannot measure actual offending, but rather those incidents that the police are aware of. Furthermore, they often include missing data or clerical errors that could impact results. There may also be differences in policing tactics overtime or in different jurisdictions that are

reflected in administrative data. Second, although we tried to create the most comparable control group by matching on whether the current offense was one that LEAD clients had, gender, and age, we did not control for criminal history. However, as illustrated in table 1, clients and the comparison group did not significantly vary in their prior criminal histories except for in DWIs. While statistically significant, the difference is based on very low numbers (1 LEAD client and 9 comparison group individuals) and was not considered substantively different.

Furthermore, LEAD clients are in some ways self-selected and we are not able to account for differences between these individuals and those in the comparison group that are not in the administrative arrest data. Third, the data we used for this evaluation was statewide meaning that if they were arrested in another state we are not able to account for that arrest. Fourth, we were not able to control for whether a charge was considered a felony or misdemeanor, which means that we are lacking a measure of severity. Finally, we did not follow charges to disposition in the courts.

Future evaluations could try to use an experimental or quasi-experimental design in order to acquire a more comparable control group. Even so, this would probably not change the results by much, and if anything the comparison group may fare better than the clients based on the current results. Finding a way to determine whether the charge was a felony or misdemeanor could also be implemented in future evaluations.

Our ability to tie engagement to outcomes would have been stronger if we had received detailed engagement information so that we could look at engagement over time.