Department of Community Justice

Multnomah County

Director's Office

December 5, 2014

Dear Colleagues,

The Multnomah County Department of Community Justice (DCJ) is committed to continued learning and adoption of evidence-based practices. We look for evidence both externally and internally through quality assurance activities and the development of evaluation studies. I am pleased to share a recent report published by our Research and Planning team entitled: *An Examination of Multnomah County's RAIN Program and START Court: Collaborative Programs for Offenders with Substance Use Disorders.*

DCJ conducted this study to inform future policy discussions and resource allocation decisions. This study builds on a recent statewide evaluation of Oregon's Measure 57/Intensive Drug Courts conducted by the Oregon Criminal Justice Commission[1]. This study found that participants in drug court show a 20.6% drop in one-year new charge rate and 36.6% drop in new drug crimes as compared to a control group. This study also found that participants in drug court had a statistically significant lower average number of new charges than a control group. Multnomah County's START Drug Court was the largest program included in that report. Those results prompted DCJ to take a closer look at our local programming serving offenders with substance use disorders and the public safety outcomes they achieve.

I know that many jurisdictions are also grappling with similar questions about what constitutes effective programming for offenders with substance use problems. This report describes two models of how services, accountability and supervision can effectively be provided. There are certainly more options and I hope this report encourages more dialogue about the possibilities available to Community Corrections agencies.

Sincerely,

Scott Taylor
Director

---

[1] *Criminal Justice Commission (June 2014), Randomized Controlled Trial of Measure 57 Intensive Drug Court for Medium to High Risk Property Offenders.*

An Examination of Multnomah County's RAIN Program and START Court:
Collaborative Programs for Offenders with Substance Use Disorders

Objectives
The goals of this report are to a) provide descriptive information about the RAIN (*Recidivism Addiction Intervention Network*) and START (*Success Through Accountability, Restitution and Treatment Drug Court*) Programs, such as population served and services provided and 2) Examine recidivism outcomes for the RAIN and START Programs, two programs designed to serve very similar populations.

Key Finding
There were no statistically significant differences in the recidivism rates of RAIN and START clients, regardless of the recidivism measure tested.

Background
The Department of Community Justice (DCJ) is responsible for the community supervision of over 9,000 adult offenders in Multnomah County, Oregon. Many of these offenders suffer from a substance use disorder or dependency. In 2013, assessments of 2,225 clients beginning their period of supervision revealed that 58% evidenced a medium or high need for treatment or case planning pertaining to substance misuse.[1] This rate is consistent with studies showing that more than half of state prisoners and 2/3 of jail inmates have a substance use disorder or dependency (Karberg and James 2005; Mumola and Karberg 2006).

In response, DCJ has established programs for criminally-involved individuals whose criminal risk is driven largely by drug usage: the START Drug Court and RAIN Program. The Multnomah County START Court was one of four sites recently profiled in a statewide evaluation of Oregon's Measure 57/Intensive Drug Courts conducted by the Oregon Criminal Justice Commission. This study concluded that, statewide, participants in drug courts showed a 20.6% drop in one-year new charge rate and 36.6% drop in new drug crimes as compared to a control group. Although trending in the right direction, these differences were below the level of statistical significance. The study also found that participants in drug court had a lower average number of new charges than a control group, and this difference was statistically significant. This report builds

---

[1] Clients with assessments represent roughly 80% of all clients beginning a period of supervision. Those without an assessment are offenders assigned to a reduced supervision caseload or those whose assessment scores were missing for reasons unknown.

on this statewide study to more closely examine START and a similar collaborative program, RAIN, at the county-level.

Overview of RAIN Program

RAIN (Recidivism Addiction Intervention Network), initiated in 2010, was designed to provide enhanced services to criminally-involved individuals whose criminal behaviors are largely fueled by addiction. Offenders are formally eligible for the RAIN program if they reside in East Multnomah County, are rated as high or medium risk to recidivate on the Public Safety Checklist[2] assessment tool, have a significant drug problem as identified on the LS/CMI, and have committed one of a number of drug-related property crimes. Both probation and post-prison supervision clients are eligible. Informally, RAIN staff have also excluded clients with major medical conditions, medical marijuana or medical opioid use, severe mental illness, anti-sociality, and extensive past periods of incarceration and/or criminal history.[3]

RAIN offers a variety of enhanced supervision services and supports to participants. Program staff consists of two probation/parole officers (PO's), one clinician (an employee of the treatment agency, CODA, Inc.) and one corrections technician. PO's have a reduced caseload, which allows more time to work closely with clients, as well as the time needed to communicate and collaborate with other members of the team and treatment providers. The clinician serves as a crucial hub—monitoring clients' clinical indicators, scheduling residential stays, and communicating frequently with all stakeholders. Because treatment providers reserve residential treatment beds specifically for RAIN clients, clients are quickly initiated into treatment, which is often scheduled before they leave their initial appointment with the clinician. (RAIN has seven reserved residential beds in CODA Gresham. Although there are not reserved detoxification beds for RAIN clients, they do have expedited access to detoxification beds at CODA Tigard). Cognitive change groups, offering EPICS-style interventions, are offered weekly for pre-contemplative clients. PO's also offer monthly groups for clients who are doing well on supervision and are no longer in need of individual supervision meetings. The program offers positive incentives for good behavior, including praise, gift cards, monthly Tri-met passes to facilitate access to treatment, and the possibility of early termination from supervision. UA's are free and take place on a weekly basis at random for engaged clients, and at a reduced level as clients make progress through the program. Finally, in collaboration between RAIN, Corrections Health, and CODA, XR-NTX (Vivitrol), a medication-assisted treatment (MAT) for opioid addiction, is now offered to opioid-dependent patients free of charge. Methadone has been offered since the program began.

The RAIN Team feels strongly that the program is successful. PO's described it as, "what the PO's job is supposed to be" and "a way more collaborative model." PO's have the time and resource-availability to form relationships with clients, hold twice monthly residential treatment "office hours" at CODA, run cognitive-behavioral groups, and provide clients with the supports that they need to be successful. Caseloads average 35-45 clients/PO in comparison with an average generic caseload of 60. The PO's, clinician and correctional technician staff each client's case on a monthly basis. The clinician also has a strong relationship with the

---

[2] https://risktool.ocjc.state.or.us/psc/

[3] Exclusion of clients with major medical or mental health problems has become more common recently and there are plans to formally review and revise the screening process at Central Intake soon. The hope is that this will lead to a higher percentage of RAIN clients engaging in, and benefiting from, program services.

dedicated-RAIN inpatient and outpatient counselor at the providing agency, CODA, emailing several times a day to communicate about clients. PO's explain that they find it more rewarding than working as a traditional PO because they see more positive changes in their clients. This may be in part because PO's on the RAIN Program continue to work with lower and medium risk clients, rather than bumping them to a lower level of supervision as clients improve.

While PO's feel that Vivitrol has been a great tool for a subset of motivated clients, unmotivated clients remain hard-to-reach. They explain that being injected with Vivitrol, and committing to abstaining from substances for one month, is a significant challenge for RAIN clients. They noted that the same clients who abscond are often those that also refuse to take Vivitrol. However, a partnership with Corrections Health is now offering Vivitrol induction in jail, which has been a promising approach to reach this group most likely to abscond. Inducted clients are placed into treatment directly from jail. The fact that Vivitrol prevents clients from using opioids for one month following injection appears to be helping frequent-absconders remain in treatment following release from jail. Further, Laura McNeil, the RAIN clinician, added that some clients who abscond later return and begin Vivitrol treatment, "Even if they are not ready that minute, knowing that they have free access to a medication that can reduce cravings and relapse rates may be valuable to them when they are ready. It may even speed their return to treatment, if they believe that recovery is possible."

RAIN Summary Statistics

Table 1 shows that 260 DCJ clients have participated in the RAIN Program since it began in 2010. This number was calculated by counting each client just once, regardless of whether they cycled in and out of the program over time. Of the total number of participants, 71% were male and 28% female. The large majority of clients were white (80%), while the second largest group was Black (7%). More than a third of participants listed opioids as their primary drug of choice. Amphetamines were the next most common at 25%. Nearly half of participants were listed as "dual diagnosis," suffering from both an addiction as well as a mental illness. Just 6% of clients have received either Methadone or Vivitrol. Recidivism was calculated based on unique RAIN clients (those who cycled through the program multiple times were counted just once), and based on arrests and convictions that occurred only within Multnomah County. Forty-four percent of RAIN clients had an arrest within one year of entering the program, 23% had a felony arrest within one year of program entry, and 26% had a felony conviction within two years of entering RAIN.

Table 1. RAIN Participants (n=260)			
		n	*%*
Gender			
	Male	184	71%
	Female	74	28%
Race/Ethnic			
	White	207	80%
	Black	18	7%
	Latino/a	6	2%
	Native American	10	4%
	Asian/Pacific	7	3%
Primary Drug of Choice			
	Opioids	91	35%
	Amphetamines	64	25%
	Alcohol	14	5%
	Marijuana	22	9%
Dual Diagnosis			
	Yes	127	49%
	No	106	41%
MAT			
	Vivitrol	8	3%
	Methadone	8	3%
Assessment Scores			
Average PSC	42	(High)	
Average LSCMI	27	(High)	
Recidivism Measures			
Percent with any arrest w/in one year of entering RAIN		44%	
Percent with a felony arrest w/in one year of entering RAIN		23%	
Percent with a felony conviction w/in 2 years of entering RAIN		26%	

Table 2 summarizes program information for clients who have concluded their participation and been discharged from the RAIN program. The average time spent in the program (calculated as date of program exit subtracted from date of program entry) was 460 days and the median was 401 days. RAIN participants can take one of four paths to program discharge: graduation from RAIN, probation completion, transfer to a new caseload, or through recidivating or absconding. Of the 172 discharged clients, 21% graduated from RAIN, 31% completed probation, 19% discharged through transfer (examples of caseload transfers include clients transferred to specialty caseloads such as sex offender or mentally ill units, or transferred to other counties), and 29% were discharged after either absconding or recidivating.

Table 2. Discharged RAIN Participants (*n* = 172)			
Time in Program			
	Mean	460 days	
	Median	401 days	
		n	*%*
Paths to Discharge			
	Graduated RAIN	36	21%
	Completed Probation	54	31%
	Transfer	32	19%
	Recidivate/abscond	50	29%

Table 3 displays descriptive statistics for a snapshot of the 76 "current" RAIN participants (as of 7/25/14). Of these, roughly 2/3 are male and 1/3 female. Eighty-seven percent of current RAIN clients are white, four percent black, three percent Asian/Pacific Islander and two percent Native American. Just one current participant is Latino. Among current participants, nearly half indicated that opioids were their primary drug of choice, 37% indicated amphetamines and 9% indicated marijuana. Half of current clients indicated a dual-diagnosis status. Finally, a growing number of RAIN clients are using MAT, with 11% of current RAIN clients utilizing Vivitrol and 5% Methadone.

Table 3. Current RAIN Participants (*n* = 76)		
Time in RAIN		
Mean	476 days	
Median	360 days	
	n	*%*
Gender		
Male	50	66%
Female	26	35%
Race/Ethnic		
White	56	87%
Black	3	4%
Latino/a	1	1%
Native American	2	3%
Asian/Pacific	3	4%
Primary Drug of Choice		
Opioids	35	46%
Amphetamines	28	37%
Alcohol	1	1%
Marijuana	7	9%
Dual Diagnosis		
Yes	38	50%
MAT		
Vivitrol	8	11%
Methadone	4	5%

Overview of START Program

START Program Eligibility

The START program was designed to be an alternative to prison and a cost savings measure. Formal eligibility criteria include: offenders must have 12 months of supervision remaining on qualifying probation offenses, a medium to high risk to recidivate as scored on the PSC assessment tool, and an LS/CMI score indicating a significant drug problem. There are also "informal" eligibility criteria, which are imposed on a case-by-case basis. These include potential exclusions for those with a significant mental illness, those with sex offense or DV conditions, those living outside of the state, and offenders whose felony drug offence grid scores are above an 8E on the sentencing guidelines. Some eligibility criteria have changed over time, reflecting both fluctuations in the implementation of Measure 57, as well as additional slots made available by the Criminal Justice Commission's randomized control trial, which required a control group of program participants for

analysis purposes.[4] In 2010, recognizing that there were simply not enough eligible offenders to fill available slots, the program was opened up to a limited number of additional crimes including felony drug cases, as well as presumptive probation cases.[5] After the START study ended, and the control group was no longer necessary, the intake numbers become too high, and eligibility criteria have narrowed in response. The program now accepts only offenders with a downward departure case again, although certain felony drug crimes are still accepted. Offenders already on active supervision, once allowed to enter START, are no longer eligible to enter the program.

START Processes, Services & Supports

One major difference to traditional probation is the frequent and more therapeutic contact with the judge (and court). The judge delivers positive incentives as well as a number of sanctions. Offenders' positive and negative behaviors are recognized swiftly and with certainty in the court setting. Another distinguishing characteristic is the high-level of collaboration and communication between the judge, DA, PO, CT and treatment providers. For instance, cases are staffed by all parties prior to court. Treatment providers are also in constant contact with the PO, which contributes to a high level of supervision and accountability for offenders. Violations are responded to swiftly--by the next court date--and are also more frequent due to the increased oversight by all stakeholders. Offenders receive drug treatment and other services at VOA through the INACT program.

Programmatic Comparison: RAIN versus START

Before moving to the statistical analyses, we first directly compare the services, accountability practices and incentives utilized by each program.

Eligibility: Both target high or medium-risk to recidivate offenders whose crimes are fueled largely by substance abuse issues. A small number of crimes are eligible for START but not RAIN (e.g., fraudulent use of a credit card, robbery in the third degree). START targets those with downward departure cases, while RAIN targets anyone on supervision, whether probation or post-prison. Both programs have a number of informal disqualifying criteria. For instance, RAIN limits those with antisocial personality, extensive incarceration history, DV or sex offense-conditions or a serious mental illness. START excludes those with significant mental illness, sex offense or DV conditions, field transfers, those living outside of the state, and offenders whose felony drug offence grid scores are above an 8E on the sentencing guidelines.

Services: RAIN has PO's with smaller caseloads than generic PO's (which allows for more frequent and therapeutic interactions), cognitive programs and groups to serve those at different stages of change, a clinician that monitors compliance and interacts frequently with treatment providers, Vivitrol and Methadone provided free of charge, and rapid and reliable access to residential treatment. For START court, the therapeutic

---

[4] In 2009, the Oregon Legislature passed House Bill 3508 which partially suspended M57 due to its cost in a time of economic recession. Both the repeat property and repeat drug offense portion of M57 were suspended for sentences imposed after February 15, 2010.

[5] For those on presumptive probation, a violation and subsequent revocation would entail 60 days in jail.

interaction occurs in the courtroom and through interaction with the judge. START PO's also have smaller caseloads, which provides greater opportunity for interaction. Cross-system collaboration is also a key element of the START Program, with frequent meetings held between all START team members. Both programs have positive incentives and additional oversight that make supervision more intensive than traditional probation.[6] See Table 4 for a detailed summary of program elements.

Sanctions & Accountability: Both programs utilize swift and certain structured sanctions determined by the Multnomah County Sanctioning Grid, (See Appendix 3). The judge is ultimately responsible for determining the sanction in the START Program, while the PO makes the final decision in the RAIN Program. (See Table 4).

Table 4. Programmatic Comparison of RAIN and START		
Wraparound and Treatment Services		
	RAIN	**START**
Clinical/medical services	• A dedicated clinician • Free access to medication-assisted treatment (Vivitrol and Methadone)	• Not funded through START
Therapeutic/Treatment Modality	• Weekly cognitive change groups for pre-contemplative clients • Corrections counselor outreach during incarceration	• Frequent, therapeutic contact with the judge and courtroom environment
Drug Treatment Services	• Drug treatment and services offered through CODA, Inc. • Seven dedicated residential treatment beds • Expedited access to detoxification beds	• Drug treatment and services provided through VOA INACT. • Three dedicated residential beds • Liaison services between VOA INACT and other agencies
Probation Officer Interaction/Services	• PO's with a reduced caseload (35-45) • Weekly PO "office hours" at the treatment facility	• PO's with a reduced case load (40-45)
Mentorship[7]	• Two mentors to assist program participants	• 1.5 mentors to assist program participants

---

[6] All DCJ offenders who qualify, including those in the RAIN and START Programs, may access a variety of additional services and supports including: classes at the Londer Learning Center (English language, GED, literacy), employment assistance, housing assistance, alcohol/drug and/or mental health assessment, and referral to treatment programs.

[7] In both programs mentors are a recent addition and would not have affected participants in this evaluation

Cross-system Collaboration	• Daily contact between clinician and treatment agency counselors • Monthly meetings attended by key partners from CODA, DCJ, the sheriff's office, and the Vivitrol Company • Monthly cross-system clinical staffings	• A high level of collaboration and communication between the judge, DA, PO, CT and treatment providers (e.g., weekly meetings and an internal email system for team communication)
Aftercare	• Aftercare meetings with the RAIN clinician every thirty days following treatment completion, on-going for 3-4 months. • Twice monthly CBT group co-led by the clinician and PO's	• Twice monthly START Alumni group for graduates
Sanctioning & Accountability		
Approach	• Swift and certain sanctioning	• Swift and certain sanctioning
Sanctioning Grid	• Use of the Multnomah County sanctioning grid, generally at the medium or lower level • Sanctioning grid used at the higher level for Vivitrol patients (who require 7-10 days detox prior to induction) • Sanctioning decisions made by the PO	• Use of the Multnomah County sanctioning grid, generally at the lower level • Sanctioning decisions made by the judge
Program-Specific Sanctions	• Combination sanctions (e.g., a short jail stay followed by a required class at the Day Reporting Center) • Use of GPS monitoring	• Use of "sit sanction," (sanction to spend time in the courtroom observing and doing an assignment)
Incentives		
Rewards/Benefits	• Milestone certificates and coins • Praise • Gift cards • Monthly Tri-met passes • Graduation ceremonies	• Milestone certificates and milestone coins • Gift cards • Monthly Tri-met passes and bus tickets • Graduation ceremonies
Reduced Supervision	• Monthly PO group meetings for those doing well on supervision • Reduced UA frequency • Early termination	• Reduction in reporting • Reduction in mandated outside group attendance • Reduced UA frequency • Reduction in supervision level and/or felony reduction at graduation • Early termination

Statistical Analyses

      Our goal in this analysis is to compare differences in recidivism between clients served by the RAIN Program with those served in the START Program. Before comparing client outcomes, we wanted to know how similar or different the two programs were in terms of client characteristics and, to the extent possible, statistically correct for these differences to ensure that the recidivism rate we saw for each program reflected a program effect rather than differences between the populations served. Averages in key client demographics for RAIN and START are presented in **Table 5**.

Table 5.		
Average Program Demographics		
	RAIN	**START**
Age at Entry	32.86	30.86
Average PSC Score	42.99	40.84
% Male	77%	77%
% White	85%	78%
Average LSCMI Score	27.28	27.52
% High/Very High on LSCMI	87%	92%
% High/Very High on PSC	81%	77%
Sample Size	204	319

As evident in Table 5, the two programs enroll clients that are remarkably similar along the dimensions listed above. When we look at the raw recidivism values for clients in each of the programs displayed in **Table 6** below (not corrected for differences in the populations of offenders served between the two programs), we see that they also appear quite similar.

Table 6.		
Raw Recidivism Values RAIN Versus START		
Percents	**RAIN**	**START**
% with Any Arrest w/in One Year of Program Entry	44%	43%
% with a Felony Arrest w/in One Year of Program Entry	23%	23%
% with a Felony Conviction w/in Two Years of Program Entry	26%	25%
Differences reported between programs are not statistically significant.		

Although the populations appear quite similar, there were some differences, for instance in PSC score and age, that we wanted to correct for before drawing conclusions about program effects. To do this we utilized matching techniques to ensure the compared populations were as similar as possible. Matching techniques are pre-processing methods that remove outlier observations from the sample to increase the similarity (or "balance") of the two populations on the measured demographic variables such as gender and criminal history. The technique used here was one-to-one nearest neighbor matching on gender, race, age, PSC score, and LSCMI score. PSC and LSCMI scores served as reasonable proxies for the overall severity of criminal history.

The analyzed population consisted of all offenders supervised by the RAIN or START programs since the programs began. However, offenders who did not have the opportunity to experience the full recidivism window were excluded from the analysis (142 observations excluded), as were offenders who had missing data on key variables (18 observations excluded). The matching process then paired RAIN and START clients on a 1:1 basis, leaving 115 unmatched START observations, or about 36% percent of the total START sample.[8] A total of 408 observations remained, 204 from START and 204 from RAIN. Results of the matching exercise are presented in **Table 7** below:

Table 7.		
Average Program Demographics: Matched Sample		
	RAIN	**START**
Average age at Entry	32.86	31.85
Average PSC Score	42.99	42.01
% Male	77%	77%
% White	85%	85%
Average LSCMI Score	27.28	27.45

After employing the matching technique, the average score along key dimensions for RAIN and START clients looks even more similar.

Next, we analyzed differences in recidivism outcomes between the matched samples. We defined recidivism in four ways: 1) arrest for any charge in the year following entry into the program, 2) arrest for a felony charge within one year of program entry, 3) total number of arrests within one year of program entry,

---

[8] Before matching, there were 319 START offenders and 204 RAIN offenders. Outliers from either population are detected and discarded. In this case, no outliers were found, so no offenders were discarded. One-to-one matching works by pairing each treatment observation with the most similar control observation (or vice versa), and is thus limited by the sample size of the smaller group. In this case the RAIN group has fewer observations (204), so an equal number of START group observations will be matched and the remaining START group observations (115 of them) will remain unmatched. Both unmatched and discarded observations are removed from the data, but discarded observations are classified as outliers while unmatched observations were merely unable to find a partner.

and 4) total number of arrests for a felony charge within one year of program entry.[9] (Recall that recidivism represents only arrests that occurred within Multnomah County).

We use regression techniques to analyze the matched data for each of the four recidivism measures. Regression allows us to test the independent predictive effect of key variables, (aspects of our data that "vary" between observations, such as age, gender, or program membership), on the outcome we are interested in, namely, recidivism. This gives us an estimate of the independent effect of each variable on recidivism, as well as the likelihood of that effect being caused by random chance (i.e., statistical significance).

Table 8 below reports the independent effect of each variable on recidivism when the outcome is any arrest within one year of program entry. As can be seen in the RAIN column below, the estimate for RAIN participation is not statistically significant. (A p-value of .05 or below would indicate statistical significance, and note that the p-value listed is much larger than this value). This means that RAIN clients are no more likely to experience an arrest than are START clients, suggesting that the two programs do not have different effects on recidivism.

Table 8.		
Regression Results: Any Arrest		
	Estimate	**P-Value**
Intercept	-1.19	0.08
RAIN	**0.02**	**0.92**
Age	-0.02	0.08
PSC	0.01	0.21
Male	0.13	0.61
White	-0.47	0.11
LSCMI	0.06	0.00

Next we tested whether RAIN participants were more likely to experience a higher number of arrests in the year following program entry than were START clients. **Table 9** shows that, although the p-value is lower, it is still above the .05 threshold for statistical significance, indicating that there is no evidence that being in the RAIN Program versus the START Program has any effect on clients' total number of arrests.

---

[9] We were not able to utilize Oregon's historical standard for recidivism, three-year felony conviction, because a large share of each sample entered each program less than three years ago, and their recidivism data would be lost in such an analysis.

Table 9.		
Regression Results: Total Arrests		
	Estimate	**P-Value**
Intercept	-1.37	0.02
RAIN	**0.29**	**0.08**
Age	-0.01	0.09
PSC	0.00	0.74
Male	0.07	0.73
White	-0.14	0.52
LSCMI	0.05	0.00

We analyzed many additional recidivism measures as well to test for differences and found none.[10] In sum, there was no evidence of a difference in recidivism between RAIN and START for any tested measures.

In a final analysis, we compared the use of jail bed days between the two programs. We did this in two ways. In the first, we compared the use of jail bed days used by offenders within one year of assignment to each of the programs, regardless of whether they were discharged from the program during that year or not. This should be understood as an "intent to treat" model, such that offenders' jail usage following program exit is attributed to that program. In the second, we compared the use of jail bed days for clients active in each program.

Table 10 shows that there was a statistically significant difference in the number of all jail bed days used by START and RAIN clients (both discharged and active) at three months, six months and one year, although both the relative gap and significance of this difference diminishes over time. Specifically, START clients use more jail bed days on average than RAIN clients at each of the time intervals selected. All jail bed days is defined as jail beds used due to violations, sanctions or arrests for new crimes. However, if we look more narrowly at jail bed days used due to probation violations and sanctions, we no longer see a difference between clients of the two programs. We believe this difference may partially reflect the fact that START clients are held in jail until they are able to be seen by a START Court judge, whereas RAIN clients may be seen by any judge, thus START clients may spend more time in jail overall, particularly early in their program participation.[11] We checked to see if the more frequent use of jail beds may have been explained by more frequent arrests of START clients relative to RAIN clients, particularly early in their program participation, and found that there were no statistically significant differences in arrest rates at three months, six months or one year.

---

[10] See the appendix for a complete list of recidivism measures tested.

[11] Because Vivitrol requires a 7-10 day detoxification period prior to induction, if a growing share of RAIN clients are inducted in jail (and remain in jail during the detoxification period), the use of jail bed-days by the RAIN Program may increase in the future.

Table 10.						
RAIN-START Jail Bed Days Used Within One Year of Program Entry Regardless of Program Exit						
	All Jail Bed Days			**Violation-Related Jail Bed Days**		
	Three Months	Six Months	One Year	Three Months	Six Months	One Year
START Mean	15.9	32	55.8	6.1	13.7	25.5
RAIN Mean	9.9***	21.6***	44*	6	13.5	27.3
START Median	8	20.5	42	0	4	10
RAIN Median	0	7	20.5	0	3	10
START Sample Size	421	396	338	421	396	338
RAIN Sample Size	254	241	212	254	241	212
* Indicates a statistically significant difference between average jail bed days used between programs. ****Significant at the .0001 level. **Significant at the .01 level. *Significant at the .05 level*						

Finally, we analyzed any jail bed usage (including for new crimes committed while in the program), as well as jail-bed usage attributable to sanctions and violations, for clients *actively participating* in RAIN and START. **(See Table 11).** The jail bed usage of clients discharged from the programs was not included after their discharge date, regardless of how quickly they were discharged. We found that the START Program used an average of 25.8 probation violation-related jail bed days per offender-year of supervision, while RAIN used an average of 28. (An offender-year of supervision can be understood as, for instance, the jail bed days used by one offender supervised for one year in the program, or 12 offenders supervised for one month in the program).[12] Turning to any jail-bed usage per offender-year of supervision, we found that the START program used an average of 50.4 jail bed days, while RAIN used an average of 45.1. Differences in jail bed usage between the two programs were not statistically significant. We also tested differences in jail-bed usage for the matched sample, described previously, and again found no statistically significant differences.

---

[12] We created this average offender-year by averaging jail beds used by clients between the years 2010 and 2014. Offenders' jail bed usage was normalized by their time spent in the program, such that offenders who were only briefly in the program received less weight in the final analysis than those who were in the program for a longer period of time. This accounted for program differences in both length of stay and program size to create numbers that were directly comparable between programs.

Table . 11			
Jail-Bed Usage for Active RAIN and START Clients During One "Offender-Year" of Supervision			
	RAIN	START	P-Value
Jails beds days due to sanctions & violations	28	25.8	.74
All Jail-bed days	45.1	50.4	.13

On balance, our analyses show no evidence of a significant difference in jail bed usage between active RAIN and START clients.

Discussion

In some respects, the fact that this evaluation found such similar outcomes for RAIN and START participants should not be surprising. Both programs are designed to treat a very similar group of offenders (with the most significant difference being geographic residence within the county), utilize a variety of wraparound services and treatment modalities to enhance supervision, and employ incentives and structured sanctions. Whereas the therapeutic interaction occurs in the courtroom for START participants, it occurs in cognitive groups and via clinical services for RAIN participants. Both programs aim to hold offenders accountable by employing swift, certain sanctions determined by the Multnomah County Sanctioning Grid. A summary of the more detailed programmatic comparison (Table 4) presented on pages 7-8 is included below in **Table 12**, reveals the substantial overlap in evidence-based approaches used by both programs.

Table 12 . Programmatic Comparison of RAIN and START		
Wraparound and Treatment Services		
	RAIN	START
Clinical/medical services	✓	-
Therapeutic Interventions	✓	✓
Drug Treatment Services	✓	✓
Reduced PO caseload	✓	✓
Mentorship*	✓	✓
Cross-system Collaboration	✓	✓
Aftercare	✓	✓
Sanctioning & Accountability		
Swift and Certain Sanctioning	✓	✓
Sanctioning Grid	✓	✓
Incentives		
Rewards/Benefits	✓	✓
Supervision Reductions	✓	✓

Conclusion

The findings presented here, when viewed together with the recent Criminal Justice Commission evaluation of Oregon's Measure 57/Intensive Drug Courts,[13] suggest that the mix of therapeutic interventions, enhanced services, incentives, and swift and certain sanctions provided in both RAIN and START is a successful model for reducing recidivism and future justice involvement among the population of high-risk to recidivate, drug-dependent offenders. Currently, when comparing clients in START to clients in RAIN, who have been matched on key variables, there are no differences in recidivism rates between clients in the two programs. This suggests that the two programs are equally successful in preventing recidivism.

Literature

Criminal Justice Commission. *Randomized Controlled Trial of Measure 57 Intensive Drug Court for Medium to High Risk Property Offenders: Preliminary Outcome Evaluation,* 2014.
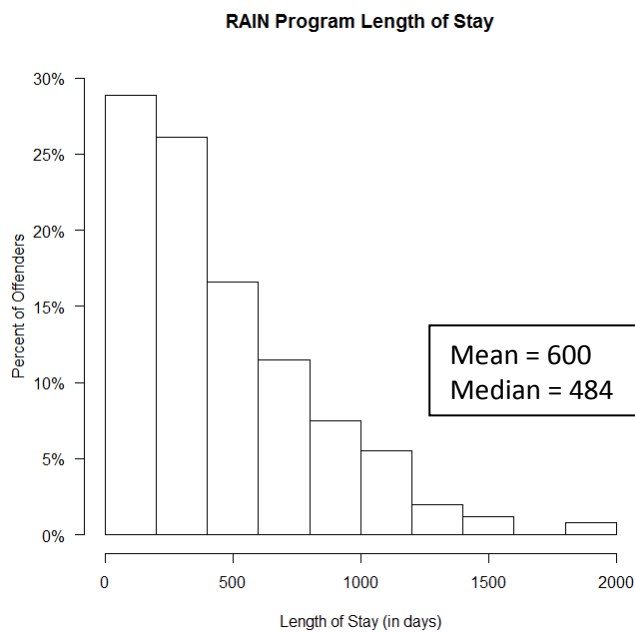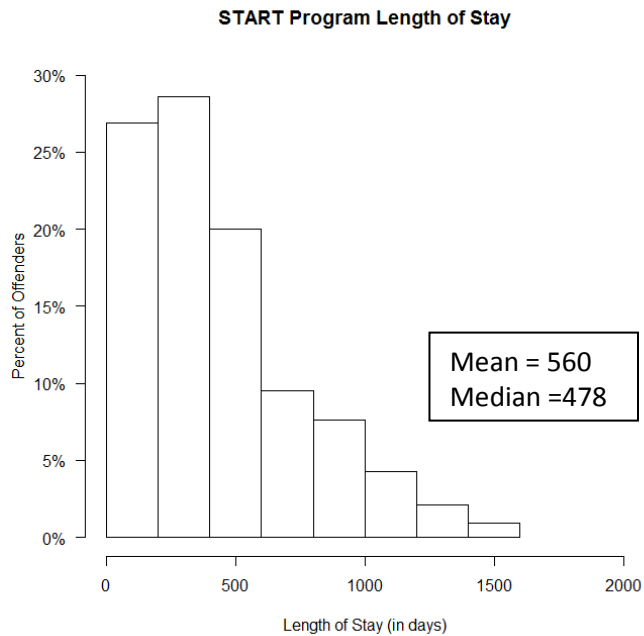
Karberg, Jennifer C., and Doris J. James. *Substance dependence, abuse, and treatment of jail inmates, 2002*. Washington, DC: US Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, 2005.

Mumola, Christopher J., and Jennifer C. Karberg. *Drug use and dependence, state and federal prisoners, 2004*. Washington, DC: US Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, 2006.

---

[13] The evaluation, commissioned jointly with NPC Research, employed a multi-site, randomized control design to evaluate the effectiveness of Oregon drug courts in relation to traditional probation. While the drug court group showed a 20.6% drop in the one-year charge rate and a 36.6% drop in new charges for drug crimes, these differences were slightly below the level of statistical significance. Differences in the mean number of new charges, drug charges and felony charges *were* all lower for the drug court group, and these differences were also statistically significant. NPC Research is expected to release a companion evaluation to the CJC Drug Court study soon, which will include process evaluation components, cost analysis and participant interviews.

Appendix 1.

RAIN and START length of Stay

START Program Length of Stay

Mean = 560
Median =478

RAIN Program Length of Stay

Mean = 600
Median = 484

These histograms detail the length of stay spent in the RAIN and START Programs by all past and present program participants. Survival analysis techniques were utilized to correct for the truncated length of stay of those offenders currently in each program.

Appendix 2.

Additional recidivism measures tested include the following:

1 Year Rearrest After Program Entry
1 Year Number of Rearrests After Program Entry
1 Year Felony Rearrest After Program Entry
1 Year Number of Felony Rearrests After Program Entry
1 Year Rearrest After Program Exit
1 Year Number of Rearrests After Program Exit
2 Year Conviction After Program Entry
2 Year Number of Convictions After Program Entry
2 Year Felony Conviction After Program Entry
2 Year Number of Felony Convictions After Program Entry

No statistically significant differences were found between the two programs for any of these outcome measures.

Appendix 3.

Multnomah County Department of Community Justice
MODIFIED ADMINISTRATIVE SANCTIONS SANCTIONING GRID

SYSTEM RESPONSE	BEHAVIOR LEVEL I	BEHAVIOR LEVEL II	BEHAVIOR LEVEL III
Fails to report truthfully or notify Probation Officer as directed. *Willfully fails to meet payment schedule.* *NOTE: SYSTEM RESPONSE TO BE USED WHEN OTHER RESPONSES ARE NOT APPLICABLE*	*Prohibited use of alcohol and/or drugs (1 or 2 times) or fails to submit to testing.* *Misses appointments (1 or 2 times) for treatment programs.* *Refuses to accept personal responsibilities.* *Willfully fails to meet restitution or compensatory fine payment schedule.*	*Crimes with Crime Seriousness Scale of 3 and less (Sentencing Guidelines Grid).* *Participates irregularly and fails to successfully complete prescribed treatment programs; takes prescribed psychotropic medications irregularly.* *Fails to take antabuse.* *Prohibited use of alcohol and/or drugs or fails to submit to testing (3 or more times).* *Fails to recognize the authority of the Releasing Authority or Probation Officer and consistently fails to follow the directives of the Releasing Authority and Probation Officer related to conditions of supervision not otherwise listed.*	*Crimes with Crime Seriousness Scale of 4 & above (Sentencing Guidelines Grid) and all Person-to-Person crimes.* *Possession or use of dangerous/deadly weapons.* *Prohibited contact with minors/victims/survivors.* *Refusal to take prescribed psychotropic medications.* *Refusal to participate in or comply with conditions of prescribed treatment programs.* **Refuses to comply with imposed sanctions.* ***Absconds supervision (see notation below).*

Sanctions Units other than Jail include:
- Community Service/Work Crew (16 hours = 1 Unit)
- Residential Treatment Facility (Inpatient, residential, secure)
- Electronic Monitoring
- House Arrest
- Release Programs (Restitution/Work Center, Work Release)

SECTION 1 CRIME SERIOUSNESS/CRIMINAL HISTORY GRID (7A, 8A-8D, 9, 10, 11)

Supervision Level	BEHAVIOR LEVEL I	BEHAVIOR LEVEL II	BEHAVIOR LEVEL III	BEHAVIOR LEVEL III
HIGH	0-5 UNITS *Maximum of 3 Units Jail*	0-25 UNITS *Maximum of 7 Units Jail*	0-90 UNITS *(See Attachment)*	0-90 UNITS *(See Attachment)*
MED	0-2 UNITS *Non-Jail Units Only*	0-20 UNITS *Maximum of 5 Units Jail*	0-30 UNITS *Maximum of 15 Units Jail*	0-90 UNITS *(See Attachment)*
LOW	0-2 UNITS *Non-Jail Units Only*	0-15 UNITS *Maximum of 2 Units Jail*	0-25 UNITS *Maximum of 10 Units Jail*	0-90 UNITS *Maximum of 20 Units Jail*

SECTION 2 CRIME SERIOUSNESS/CRIMINAL HISTORY GRID (4A-4B, 5A-5F, 6, 7B-7I, 8E-8I)

Supervision Level	BEHAVIOR LEVEL I	BEHAVIOR LEVEL II	BEHAVIOR LEVEL III
HIGH	0-5 UNITS *Non-Jail Units Only*	0-20 UNITS *Maximum of 5 Units Jail*	0-25 UNITS *Maximum of 10 Units Jail*
MED	0-2 UNITS *Non-Jail Units Only*	0-15 UNIT *Maximum of 2 Units Jail*	0-20 UNITS *Maximum of 8 Units Jail*
LOW	0-2 UNITS *Non-Jail Units Only*	0-10 UNITS *Non-Jail Units Only*	0-15 UNITS *Maximum of 5 Units Jail*

(Section 2 Behavior Level III column):
HIGH: 0-90 UNITS *(See Attachment)*
MED: 0-90 UNITS *Maximum of 20 Units Jail*
LOW: 0-30 UNITS *Maximum of 15 Units Jail*

SECTION 3 CRIME SERIOUSNESS/CRIMINAL HISTORY GRID (1, 2, 3, 4C- 4I, 5G-5I) and MISDEMEANORS

Supervision Level	BEHAVIOR LEVEL I	BEHAVIOR LEVEL II	BEHAVIOR LEVEL III
HIGH	0-5 UNITS *Non-Jail Units Only*	0-15 UNITS *Maximum of 2 Units Jail*	0-20 UNITS *Maximum of 8 Units Jail*
MED	0-2 UNITS *Non-Jail Units Only*	0-10 UNITS *Non-Jail Units Only*	0-15 UNITS *Maximum of 5 Units Jail*
LOW	0-2 UNITS *Non-Jail Units Only*	0-5 UNITS *Non-Jail Units Only*	0-10 UNITS *Maximum of 2 Units Jail*

(Section 3 Behavior Level III column):
HIGH: 0-90 UNITS *Maximum of 20 Units Jail*
MED: 0-30 UNITS *Maximum of 10 Units Jail*
LOW: 0-25 UNITS *Maximum of 8 Units Jail*

► The sanctioning units are caps only. The sanctioning authority may impose sanctions below the cap.
► Refer to DCJ's Level of Authority Guidelines for sanctioning limitations of Officers, Managers & Hearings Officers

OAR 58-45: If the indicated level of sanction response is considered insufficient to address the seriousness of the violation behavior, a higher level of sanction may be imposed only after consultation and agreement of the unit supervisor [and supervisory authority or designee]. A departure response of returning an offender to court or the Board of Parole and Post-Prison Supervision may be imposed only after consultation with the unit supervisor and the agreement of the supervisory authority or designee.

*An offender can be required to complete the balance of a previously imposed sanction that was not complied with, in addition to receiving a new sanction for failing to comply with imposed sanction.
** Abscond: Changed residence, do not know whereabouts; supervising officer has exhausted all reasonable means to locate and has requested a warrant.