



## Office of Research and Strategic Planning

# RESEARCH BRIEF

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# Recidivism by Direct Sentence Clients Released from Day Report Centers in 2011: Five Year Update

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## Highlights:

- **Approximately 42% of DRC clients are booked into regional jails and about 10% are incarcerated within 5 years of release from DRC custody.**
- **Clients with higher LS/CMI risk levels are much more likely to recidivate, and LS/CMI risk scores continue to be a strong predictor of jail bookings and incarcerations that occur in the period 3-5 years after release.**
- **Clients who completed the DRC program successfully were significantly less likely to be booked or incarcerated within 5 years of release than those who failed to complete the program.**

## EXECUTIVE SUMMARY

Day Report Centers (DRCs) are an important community-based alternative to incarceration that supervise offenders while providing them with rehabilitative treatment and other services. Prior research by the ORSP examined post-release outcomes for DRC clients using a two-year follow-up period (Spence & Haas, 2014; Spence & Haas, 2016). This brief updates those analyses with additional data and extends the follow-up period from 2 to 5 years. Consequently, this brief provides the first investigation into the long-term recidivism patterns for community-based offenders in West Virginia.

The results of these analyses are largely consistent with those of prior research. They show that Level of Service/Case Management Inventory (LS/CMI) risk and needs scores continue to be an effective predictor of recidivism during the period 3-5 years after release, and that clients who successfully completed the DRC program had significantly lower rates of recidivism than unsuccessful clients over the long term. The implications of these findings for policy-makers as well as for DRC staff and administrators are discussed in greater detail below.

## KEY FINDINGS

The present brief replicates the analyses conducted in a recidivism study by Spence and Haas (2014) but updates the results by extending the length of the follow-up period from 2 years to 5 years. Please see Spence and Haas (2014) for a detailed discussion of the sample selection process, data sources, measures, and methodology used in these analyses. **Selected findings from the updated analyses include:**

- Within 5 years of being released from DRC custody, about 42% of DRC clients are booked into a regional jail and about 10% are committed into DOC custody. However, booking and commitment rates are significantly higher for clients assessed as having a higher risk level by the LS/CMI, and lower for clients who completed the program successfully (see Table 1).
- Most recidivism events occurred in the first two years after termination. Within two years of leaving the DRC, about 39% of high-risk clients and about 25% of low-risk clients had been

### Defining and Measuring Recidivism

Recidivism is generally understood to refer to a relapse by offenders into prior patterns of criminal behavior (Blumstein & Larson, 1971).

However, precise definitions of recidivism often vary considerably depending on the offender population under study (e.g., probationers, parolees), the criteria used to indicate a return to criminal behavior (e.g., arrests, convictions), and the length of time for which offenders are observed.

In response to this diversity, many recent recidivism studies, such as the Bureau of Justice Statistics' national recidivism reports, use multiple measures of recidivism (Durose, Cooper, & Snyder, 2014).

This approach asserts that "there is no 'right' measure of recidivism" and instead measures recidivism using a series of performance indicators that capture offenders' involvement with different agencies and actors in the justice system (King & Elderbroom, 2014, p. 2).

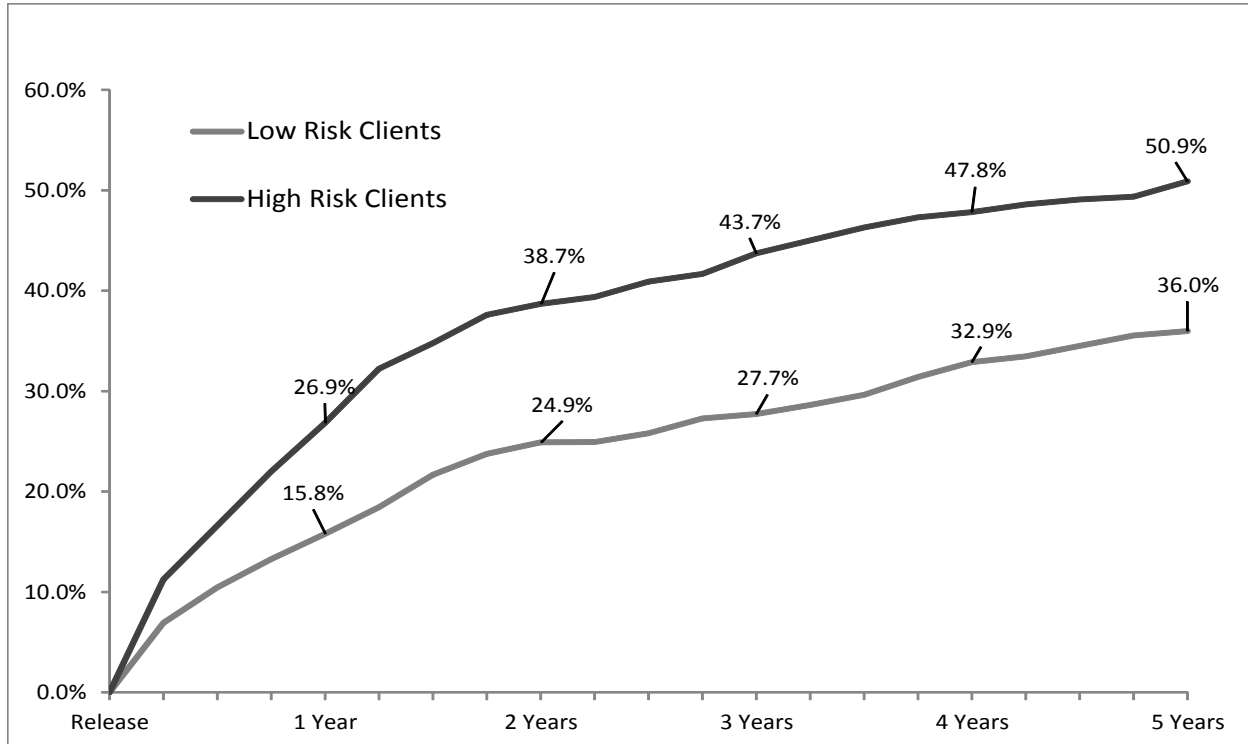
**Table 1**  
**Recidivism Rates by LS/CMI Risk Score and Program Completion for the 5 Year Period after DRC Termination**

	<i>% Booked</i>	$\chi^2$	<i>% Incarcerated</i>	$\chi^2$
<b>LS/CMI Risk Score</b> (mean = 16.94, S.D. = 7.51)				
Very Low	13.6	41.289***	0.0	26.560***
Low	32.8		2.6	
Medium	40.2		9.4	
High	49.6		14.2	
Very High	65.4		17.3	
<b>Program Completion</b>				
Successful Program Completion	36.4	41.541***	7.6	18.855***
Unsuccessful Program Completion	54.3		14.9	

Note: \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . Recidivism rates calculated using a 5-year follow-up period. Study sample includes all direct sentence clients terminated from WV day report centers in 2011 (N = 1495). See Spence & Haas (2016) for a more detailed discussion of data sources and the sample selection process.

**Figure 1**

Cumulative Percentage of DRC Clients Booked into Regional Jail over Time by LS/CMI Risk Level



booked into a regional jail (see Figure 1). Within five years of leaving the program, cumulative booking rates increased to about 51% for high-risk clients and 36% for low-risk clients.

- High-risk clients were about twice as likely to be committed into DOC custody as low-risk clients (see Figure 2).
- The results of multiple logistic regression analyses indicate that LS/CMI risk scores continue to be a strong predictor of recidivism events that occur as many as 3-5 years post-release (see Table 2), even when controlling for other factors such as age, gender, and ethnicity. On average, each additional 1-point increase in a client's LS/CMI risk score is associated with a 5% increase in the likelihood of a regional jail booking and a 9% increase in the likelihood of a DOC commitment.
- Multiple logistic regression models predict that clients who successfully complete their programs

### Explaining Variation in Recidivism Over Time

Research indicates that the likelihood of reoffending varies over time, with recidivism risk being greatest the initial months after release and then declining steadily thereafter (Kurlychek, Bushway, & Brame, 2006). Extant studies point to two primary explanations for this pattern.

First, there is evidence that higher-risk individuals tend to recidivate more quickly after release (Huebner & Berg, 2011). Consequently, researchers are likely to observe a declining recidivism rate over time because fewer high-risk offenders remain in the study sample.

Second, research also shows that the immediate post-release period presents many significant challenges for offenders (Visser & Travis, 2003). While this transition is likely to be easier for community-based offenders, these individuals may still face an increased risk of recidivism as they adjust to life with less supervision and often lose access to services and resources (Craddock, 2009).

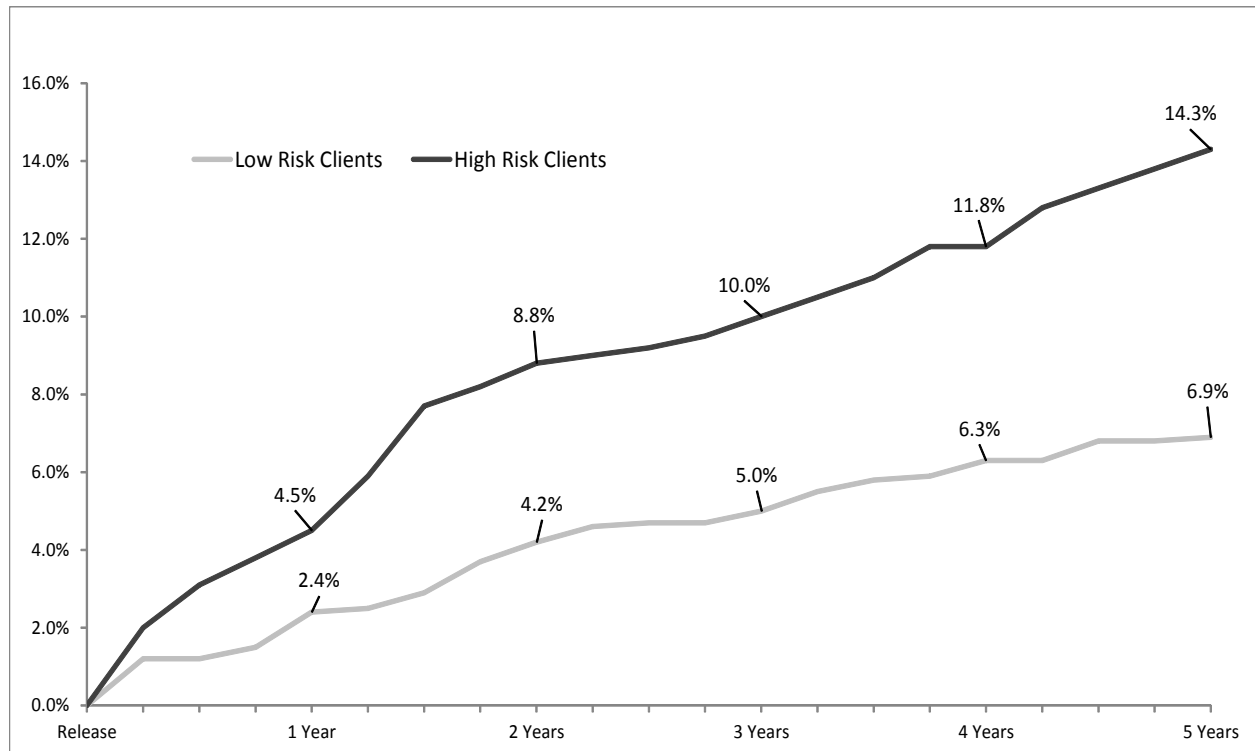
**Table 2****Logistic Regression Estimates for Factors Associated with Recidivism for the 5 Year Period After DRC Termination**

<i>Variable</i>	<i>Regional Jail Booking</i>		<i>Incarceration</i>	
	<i>B</i> <i>(SE)</i>	<i>Odds Ratio</i>	<i>B</i> <i>(SE)</i>	<i>Odds Ratio</i>
Age	-0.024** (0.009)	0.976	-0.027 (0.017)	
Female	-0.665*** (0.181)	0.514	-0.477 (0.327)	
Minority	-0.507 (0.306)		-0.134 (0.563)	
High School Graduate	-0.086 (0.172)		0.177 (0.295)	
Unemployed	-0.017 (0.166)		-0.081 (0.296)	
Prior Convictions	0.004 (0.019)		0.031 (0.023)	
Felony Offense	-0.022 (0.173)		0.589* (0.284)	1.802
Property Offense	0.019 (0.180)		0.336 (0.291)	
Living with Parents	-0.107 (0.211)		-0.256 (0.387)	
Living with Spouse/Partner	-0.066 (0.211)		0.181 (0.376)	
LS/CMI Risk Score	0.051*** (0.011)	1.052	0.086*** (0.020)	1.089
Length of Stay	0.000 (0.001)		-0.002 (0.001)	
Successful Program Completion	-0.748*** (0.176)	0.473	-0.720* (0.282)	0.487
N	766		766	
Nagelkerke R-Squared	0.135		0.167	
AUC	0.690		0.783	

Note: \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001. Please see Spence & Haas (2016) for additional information about model specification.

**Figure 2**

Cumulative Percentage of DRC Clients Committed to WV DOC over Time by LS/CMI Risk Level



are about 52% less likely to be booked and about 53% less likely to be committed than other clients during the first five years post-release.

- In regard to the control variables included in the multiple logistic regression models, only age, gender, and offense type had a statistically significant impact on long-term recidivism outcomes. The results indicate that clients were significantly less likely to be booked if they were older or were female, and that they were significantly more likely to be committed if they were originally placed in DRC custody as a result of a felony offense.
- The results of area-under-the-curve analyses indicate that the multiple regression models specified by Spence and Haas (2016) continue to be accurate, correctly predicting booking outcomes in about 69% of cases and commitment outcomes in about 78% of cases.

## CONCLUSION

The findings presented above have several important implications for DRC staff, administrators, and policy-makers. First, they suggest that a majority of DRC clients do not enter the WV correctional system after release, as only about 40% of clients were booked into a regional jail and about 10% were incarcerated within five years of being released from DRC custody. These rates also vary significantly across clients with different LS/CMI risk levels, with high-risk clients being much more likely to recidivate than low-risk clients. Consequently, these findings lend further support to the efforts of DRC staff to target high-risk clients for treatment. However, they also suggest that low- and very low-risk clients, who comprise roughly 22% of the study sample, may not need the higher levels of services and supervision typically associated with a DRC sentence. Furthermore, since research indicates that intensive treatment and greater contact with high-risk offenders can actually increase the risk of recidivism for low-risk offenders, care should be taken when assigning

services to low-risk clients in order to minimize the potential for harm (Andrews & Dowden, 2006).

Second, the results presented above also provide further evidence of the predictive accuracy of the LS/CMI. In particular, they show that LS/CMI risk scores continue to be predictive of recidivism events that occur as many as 5 years later and hold well for both measures of recidivism employed in the analyses. In contrast, none of the other variables included in the analyses were significant predictors of both bookings and incarcerations in both the initial recidivism study (Spence & Haas, 2016) and in the updated analyses presented here. This suggests that the results of older LS/CMI assessments are likely to continue to provide accurate measures of offender risk levels and therefore have considerable value for case planners and other correctional staff. As a result, these findings highlight the importance of ensuring that the results of prior assessments are shared across staff and agencies, and that record systems retain the results of old assessments.

Finally, the present study also highlights the utility of updating recidivism analyses in order to track long-term outcomes for offenders. While most recidivism studies typically track offenders for a period of 2-3 years, research has increasingly begun to emphasize the importance of tracking offenders for longer periods in order to examine potential variation across individuals that reoffend in earlier and later periods (Huebner & Berg, 2011). The present study suggests that further efforts to update recidivism analyses or examine the timing of recidivism events by offenders are likely to yield important additional insights.

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