



Briefing Report
**Recidivism Time to Failure by
Placement and Risk Level**
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Issue:

The purpose of this brief is to examine the length of time between successful completion of a Florida Department of Juvenile Justice placement and subsequent recidivism for those youth that do re-offend within one year. The analysis will examine this “time to failure” across various placement types, as well as across risk to re-offend levels and demographics.

Highlighted Results:

The following bullets provide a brief synopsis of the analyses. Comprehensive results and detailed explanations follow below:

- The average youth who re-offended did so during the 5th month post-completion (135 days). The average time to re-offend was either during the 4th month post-release (days 91-120) or the 5th month post-release (days 121-150) for all placement types;
- There is a step-wise progression in that each increase in risk classification (low, moderate, mod-high, high risk to re-offend) is associated with a decrease in the average number of days to failure, meaning higher risk to re-offend youth that recidivate do so faster than lower risk to re-offend youth that recidivate;
- There are few substantive differences in time to failure between males and females of the same overall risk to re-offend classification;
- 14% of the recidivists re-offended within the first month of service completion (within the first 30 days). Over half of the youth that will re-offend, do so within the first 5 months of service completion (by day 150);
- Within the 1st month post-completion of diversion only 13% of the low risk recidivists had re-offended, compared to 22% of the moderate risk recidivists, over 1/3 of the moderate-high risk recidivists, and 27% of the high risk recidivists;
- Within the 1st month post-completion of probation, 1.5 times more moderate and moderate-high recidivists, and 2 times as many high risk recidivists had re-offended than low risk recidivists;
- Over 50% of all youth who re-offended post-completion of day treatment had done so within the first 3 months, regardless of risk to re-offend level;

- Only 9% of the low risk Redirections recidivists had re-offended in the first month. This is in stark contrast to the 48% of high risk recidivists having re-offended the first month post-completion of Redirections;
- High risk to re-offend youth who completed non-secure residential and recidivated did so in a shorter time to failure than all other risk levels;
- Of the youth who recidivated after completion of secure residential placement, 60% had re-offended by the end of the 4th month post-completion;
- Of the aftercare youth that re-offended, 54% had recidivated by the end of the 4th month post-completion;
- 47% of the Redirections Aftercare recidivists had re-offended by the end of the 3rd month post-completion;
- The C-PACT risk to re-offend level is the strongest predictor of time to failure in predictive models. As the PACT score increases, the time to failure decreases such that for every 1 unit change in PACT risk level (ex. moving from low to moderate risk) is associated with a 13.5 day decrease in time to failure;
- Individual predictors of time to failure include age at 1st arrest, history of 4 or more instances of running away, youth with current drug use, youth who associate with exclusively antisocial peers or are gang members, and youth with family members that have a jail/prison history;
- While overall 52% of youth who will recidivate according to the FDJJ definition of recidivism (adjudication/adjudication withheld for an offense committed within 12 months post-completion of service) will do so within the first 4 months post-completion of services, this figure differs not only by placement type (diversion, probation, etc.) but by risk to re-offend as assessed by the C-PACT as well.

Methodology:

Data was taken from the final completion files used in the creation of the 2013 Comprehensive Accountability Report (CAR). The CAR is published annually by the FDJJ and contains information regarding recidivism rates for all youth who completed a FDJJ service during fiscal year 2011-12 (July 1, 2011 through June 30, 2012). Youth were tracked twelve months post-completion for a subsequent juvenile adjudication/adjudication withheld, or adult offense for which the individual was found guilty (for youth who turned eighteen years of age during the follow-up period). A particular youth could have been included more than one time in the current study if that youth completed more than one FDJJ placement during the examined fiscal year.

The current study used data for these 2011-2012 fiscal year completions, and matched them to the most appropriate corresponding risk assessment information. The Community Positive Achievement Change Tool (C-PACT) is the risk/needs assessment used by the FDJJ to determine a youth's overall risk to re-offend. For youth completing community-based placements, the last C-PACT during that placement was used. For youth completing residential commitment placements, the closest C-PACT prior to placement was used. The C-PACT assessment captures the youth's overall risk to re-offend and rank orders the youth's top risk factors. The C-PACT assessment has been validated across multiple samples totaling over 130,000 Florida DJJ youth, published in multiple peer-reviewed

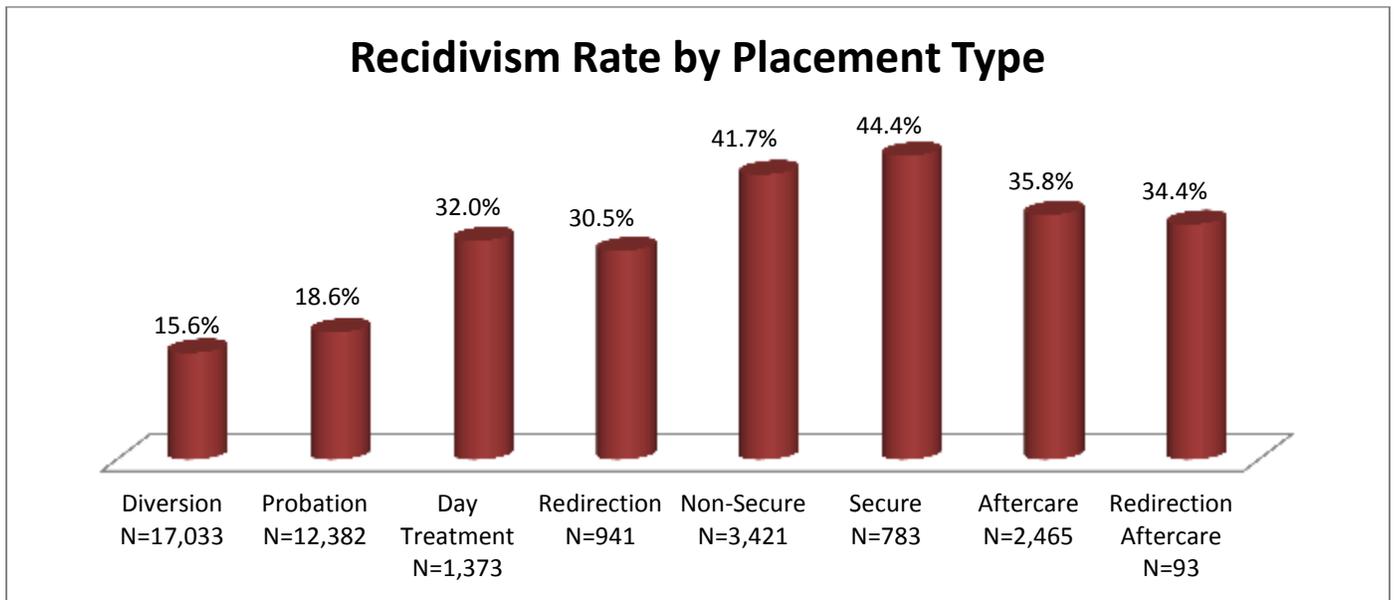
journals and independent research agency reports (Baglivio, 2009; Baglivio & Jackowski, 2013; Baird, Healy, Johnson, Bogie, Dankert, and Scharenbroch, 2013; Winokur-Early, Hand, & Blankenship, 2012).

All youth that completed a FDJJ placement during fiscal year 2011-12 were included to examine recidivism rates for the overall sample, and for each placement type. The type of placements examined included Diversion Services, Probation Supervision, Day Treatment, Redirection, Non-Secure Residential Services, Secure Residential Services, Post Commitment Services (both state-run and provider-run combined), and Redirections Aftercare Services. All youth completions were grouped into one of those placement types. After recidivism rates were calculated, only youth that recidivated were selected for the remainder of the analysis to examine the time between successful completion of the placement and recidivism (the number of days from discharge from placement/service to the date of the first subsequent offense that was eventually adjudicated/convicted).

Comprehensive Results:

The study sample included all 38,491 youth who completed a FDJJ service during fiscal year 2011-12, who also had a C-PACT assessment completed. The recidivism rate for those youth was 21.7%. Figure 1 illustrates the recidivism rate by placement type, as well as the number of youth completing each placement type (ex. 17,033 youth completed diversion; 15.6% of those youth, meaning 2,649 youth, recidivated).

FIGURE 1.



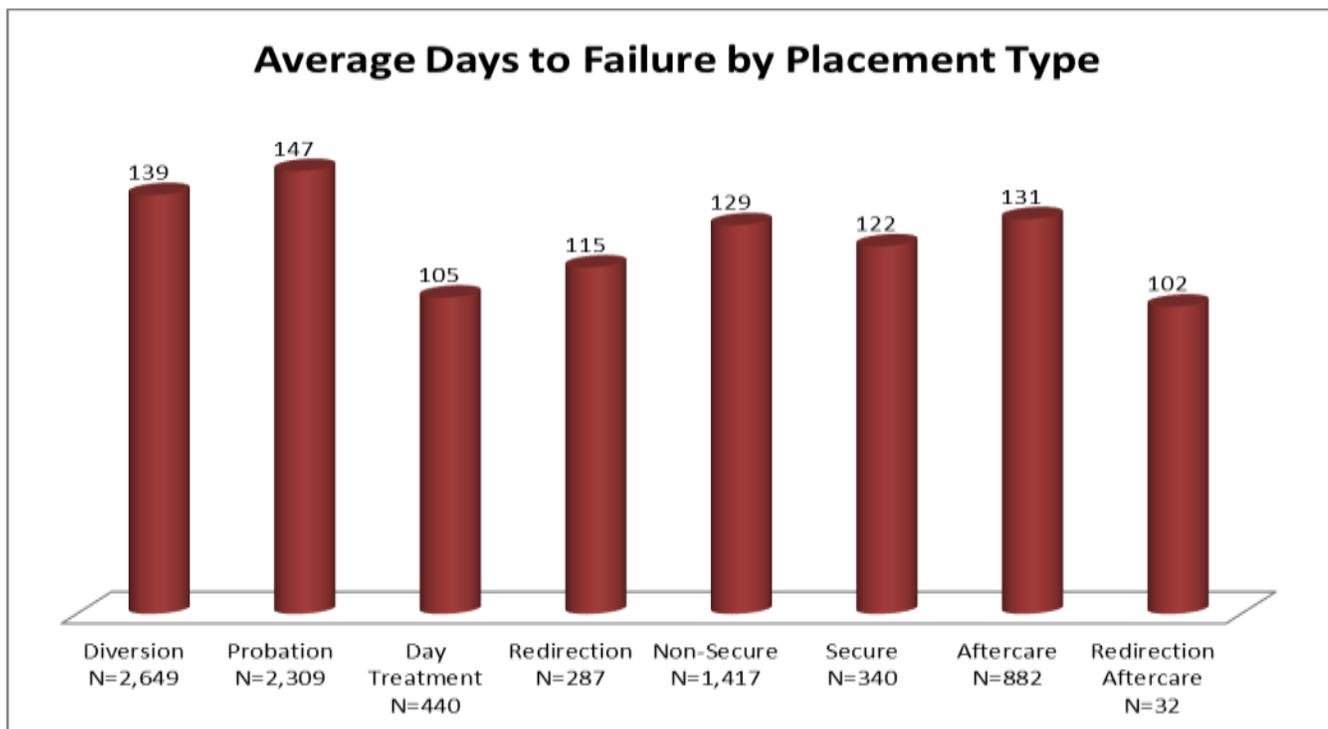
As expected, the recidivism rates are lower for less restrictive placements than for deeper end placements, as, presumably, those placements serve lower risk youth. The purpose of this brief is to

examine differences in the average number of days between the date of discharge from a placement and subsequent recidivism for each placement type, and by risk to re-offend level.

Time to Failure by Placement Type

The 21.7% of the sample that recidivated had an average time to failure of 135 days. **This means that the average recidivist re-offended during his/her 5th month post-completion** (as days 0-30 are month 1, 31-60 month 2, etc.). Of note, the average male recidivist re-offended ten days faster than the average female recidivist, a difference which was statistically significant ($t=3.39$, $p<.001$). Figure 2 illustrates the average number of days to recidivate for each placement type, and the number of youth in each subsample (these are the youth that recidivated to make up the percentages reported in Figure 1). Figure 2 shows that there is some variation between placement types in how quickly those youth re-offended, of those that did recidivate. The average day treatment and Redirections aftercare recidivist re-offends in the 4th month post-completion (105 and 102 days, respectively), while the average diversion or probation recidivist re-offends during the 5th month post-completion. **The average time to re-offend was either during the 4th month post-release (days 91-120) or the 5th month post-release (days 121-150) for all placement types.**

FIGURE 2.



Statistical tests can assist with determining whether the differences in time to failure by placement type shown in Figure 2 are statistically significant. An Analysis of Variance (ANOVA) test was conducted and found the number of days to the first subsequent offense differed between the groups ($F=16.103$, $p<.001$). Post-hoc comparison tests can be performed to examine exactly which

placement types had significantly different average days to failure from one another. The results of these tests are presented in Table 1. The placement type used in the comparison is indicated on the far left-hand column. The table reads across. Services with a longer time to fail than the placement of comparison indicate that youth in the other placement who re-offend do so after a longer period of time (essentially, have “better” performance than the placement being examined). Services with an equal time to fail have youth that re-offend doing so in statistically the same number of days as the placement being examined. Services with shorter time to fail perform “worse” than the placement being examined as youth completing those services who re-offend do so in fewer days than the service being examined.

TABLE 1. Comparison of “Time to Failure” by Placement Type

Placement Type	Service with Longer Time to Fail	Service with Equal Time to Fail	Service with Shorter Time to Fail
Diversion	None	Probation Aftercare Redirection Aftercare	Day Treatment Redirection Non-Secure Secure
Probation	None	Diversion	Day Treatment Redirection Non-Secure Secure Aftercare Redirection Aftercare
Day Treatment	Diversion Probation Non-Secure Secure	Redirection Aftercare Redirection Aftercare	None
Redirection	Diversion Probation	Day Treatment Non-Secure Secure Aftercare Redirection Aftercare	None
Non-Secure	Diversion Probation	Redirection Secure Aftercare Redirection Aftercare	Day Treatment
Secure	Diversion Probation	Day Treatment Redirection Secure Aftercare Redirection Aftercare	None
Aftercare	Probation	Diversion Redirection Non-Secure Secure Redirection Aftercare	Day Treatment
Redirection Aftercare	Probation	Diversion Day Treatment Redirection Non-Secure Secure Redirection Aftercare	None

Note: Tamhane post-hoc test used. All differences statistically significant at p<.05.

For example, the first row examines diversion. No service has a longer time to failure than diversion (indicated by “none”), meaning there is no placement type that has youth re-offending that take, on average, longer to re-offend than diversion youth. That speaks well of diversion. Probation, aftercare, and Redirection aftercare have statistically equivalent average time to failure as diversion. Those services are no worse, and no better than diversion in terms of how quickly youth who re-offend do so. Day treatment, Redirection, non-secure, and secure residential all have shorter time to failures than diversion. That means youth who recidivate after completing those services do so faster (in fewer days) than do youth completing diversion. Each row of the table is interpreted in the same manner.

It must be reiterated that time to failure does not indicate anything about recidivism rates. For example, while diversion and probation may have statistically identical average time to failure, the recidivism rate of diversion is considerably lower than probation (15.6% compared to 18.6%, which is statistically significant; $t=6.929$, $p<.001$). Time to failure simply examines the average number of days to re-offending *of the youth who re-offend*.

Time to Failure by Risk to Re-offend

The next step in the analysis examined time to failure (days) by the overall risk to re-offend classification from the C-PACT (low, moderate, mod-high, or high). Prior research, as indicated above, has shown the C-PACT risk classifications predict subsequent offending with higher risk youth more likely to re-offend. The current examination analyzes whether higher risk youth who re-offend do so faster than lower risk youth who re-offend. Essentially, while higher risk youth are more likely to re-offend, the question here is whether those who do re-offend do so much faster after completion of service. Figure 3 illustrates the average number of days to re-offense by overall risk classification. As shown, high risk youth that recidivate do so faster than lower risk youth who recidivate. Furthermore, **there is a step-wise progression in that each increase in risk classification is associated with a decrease in the average number of days to failure.**

FIGURE 3.



Analysis of Variance (ANOVA) tests indicated that the differences in time to failure by risk to re-offend classification were significant ($F=49.131$; $p<.001$). Post hoc tests (Tamhane was used as Levene statistic was significant) revealed which risk classifications had significantly different average time to failure than which others (results are presented in Table 2). Low risk youth have a statistically longer average time to failure than all other risk classifications. Their average time to failure was longer by approximately 14 to 33 days (**meaning low risk youth did not recidivate for 2 weeks to 1 month longer than all other risk classifications**). Moderate and moderate-high youth had statistically equivalent average times to failure. High risk youth re-offended faster than any other risk classification by 11 days to 33 days. These results indicate high risk youth who recidivate do so over 1 month faster than low risk youth who recidivate. The 7 day difference between moderate and moderate-high average days to failure was, again, not statistically significant. Table 2 is interpreted in the same manner as explained above for Table 1. For example, there is no risk classification that has a longer time to failure than low risk youth (as all other classifications fail faster than low risk youth). No risk classification has an equivalent time to failure as low risk youth, and all other risk classifications (moderate, mod-high, and high) have a shorter time to fail than low risk youth (i.e. all other risk classifications fail faster).

TABLE 2. Comparison of “Time to Failure” by Overall Risk to Re-offend Classification

Placement Type	Risk with Longer Time to Fail	Risk with Equal Time to Fail	Risk with Shorter Time to Fail
Low	None	None	Moderate Moderate-High High
Moderate	Low	Moderate-High	High
Moderate-High	Low	Moderate	High
High	Low Moderate Moderate-High	None	None

Note: Tamhane post-hoc test used. All differences statistically significant at $p<.05$.

Percent of Recidivists that Re-offend Each Month Post-Completion

As stated, the average time to failure for the sample of 8,356 youth who re-offended was 135 days. However, it is equally important to examine the percent of recidivists that re-offend each month post-completion of a FDJJ placement. The next step in the analysis examined that question. Figure 4 illustrates the percent of youth who recidivated that had re-offended within a given month post-completion of service. For example, **14% of the recidivists re-offended within the first month of service completion** (within the first 30 days). 29% of the recidivists re-offended within the first two months of completion (within the first 30 days). This means that 15% of the youth re-offended during month 2, as 14% had already re-offended month 1. Figure 4 shows that **over half of the youth that will re-offend, do so within the first 5 months of service completion (by day 150)**. 75% of the youth

who re-offend do so within the first 7 months post-completion. It should be reiterated that this brief uses a cut-off period of 365 days for recidivism. Any youth that did not commit an offense (for which that youth was ultimately adjudicated/convicted) within 12 months from completion of service was labeled as a non-recidivist. The official definition of recidivism for FDJJ involves tracking the youth 1 year post-completion to examine recidivism. Figure 4 is showing the proportion of youth that did re-offend within 1 year who did so before a given month had ended post-completion.

FIGURE 4.

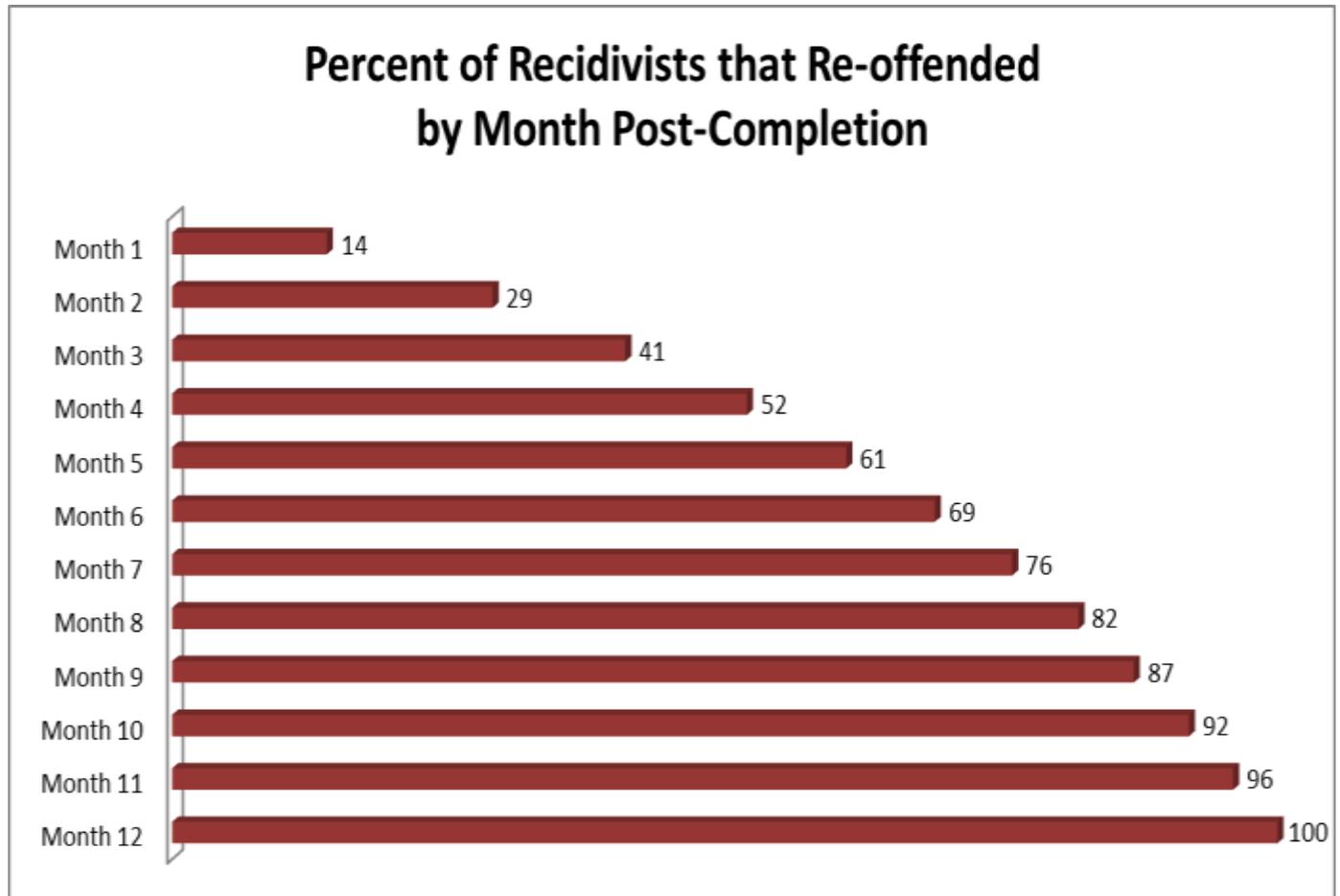


Table 3 illustrates the proportion of males and females that re-offended each quarter post-completion of services by overall risk to re-offend level. For example, as indicated in Table 3, of the low risk to re-offend females that recidivated, 11% re-offended during the first month post-completion of services. This is in contrast to 19% of the high risk to re-offend females that recidivated having done so within the first month. As illustrated in Table 3, there are few practical differences in time to failure by gender within any given risk classification.

TABLE 3. Comparison of “Time to Failure” by Gender and Overall Risk to Re-offend

Time from Completion	Overall Risk to Re-offend							
	Low		Moderate		Mod-High		High	
	Male	Female	Male	Female	Male	Female	Male	Female
Month 1	12%	11%	16%	14%	18%	16%	17%	19%
Month 3	36%	36%	44%	37%	45%	40%	50%	44%
Month 6	65%	63%	70%	64%	73%	69%	80%	73%
Month 9	85%	84%	87%	88%	90%	89%	91%	92%

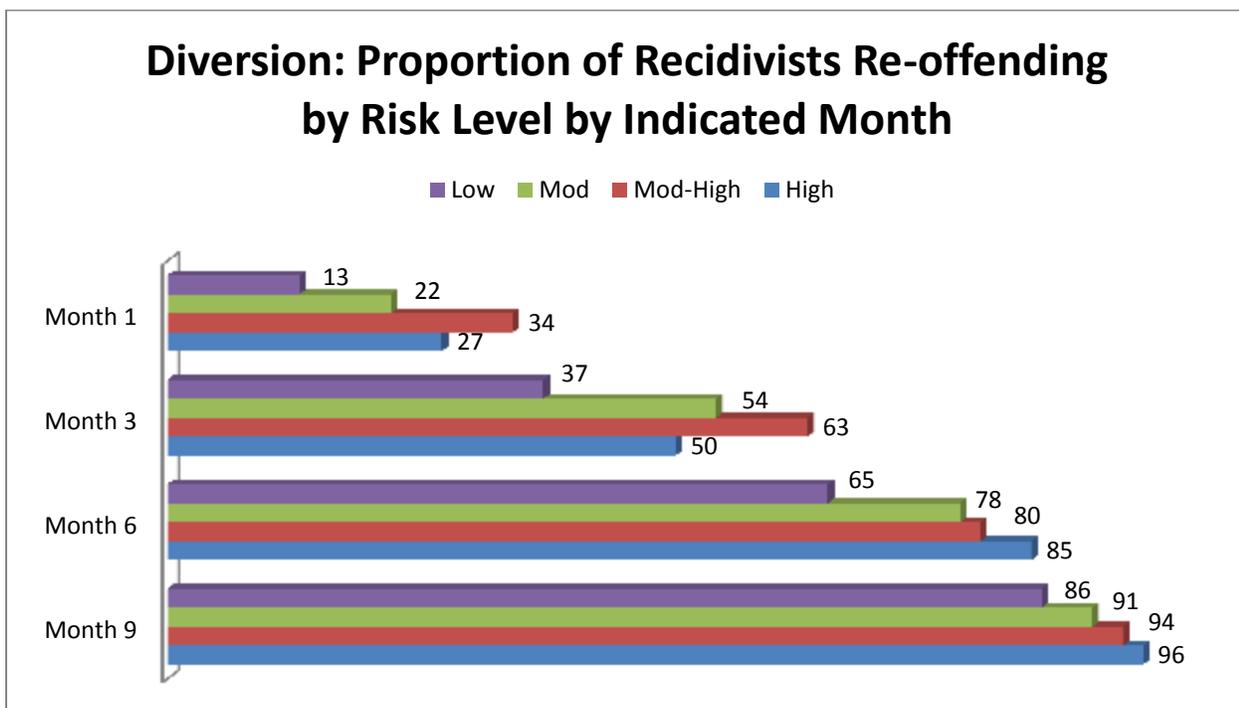
Note: proportion of youth who recidivated that did so by the end of the given month is reported.

Time to Failure by Risk Level for Each Placement Type

The next step in the analysis examines time to failure of youth who re-offend by risk level (from the C-PACT) within each placement type. Each placement type will be examined, beginning with diversion, ending with Redirection aftercare, as presented in Figure 1.

Diversion-

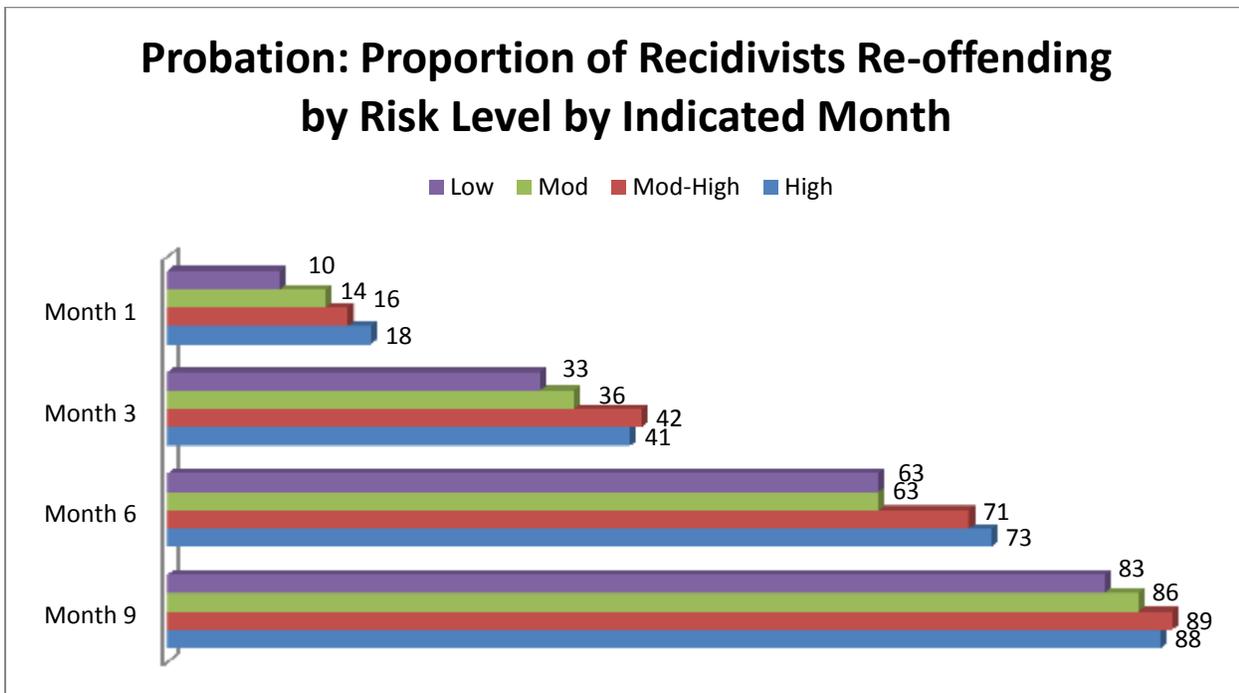
FIGURE 5.



Of the 2,649 diversion youth who re-offended, moderate-high risk youth actually re-offended the fastest, followed by high risk youth, then moderate risk youth, and finally low risk youth. The difference in average days to failure between low and moderate-high risk youth was 52. Low risk youth served by diversion programs who recidivated did so, on average, more than 1 month after the average time of any other risk level of youth served by diversion. The difference in time to failure across risk classifications was significant (ANOVA: $F=21.586$; $p<.001$). Youth from each risk level had an average time to failure of at least 94 days (moderate-high risk youth) to an upper average of 146 days (low risk youth) post-completion of diversion. Figure 5 illustrates the proportion of youth who re-offended post-diversion that fail by quarter (every three months) for each risk level of youth. As shown, **within the 1st month post-completion of diversion only 13% of the low risk recidivists had re-offended, compared to 22% of the moderate risk recidivists, over 1/3 of the moderate-high risk recidivists, and 27% of the high risk recidivists.** It is essential to remember these results are NOT showing the percent of youth that completed diversion that re-offended, they are showing the proportion of the diversion youth who re-offended that did so during a given time (ex. during the first month post-completion). Figure 5 shows that by the end of the 3rd month post-completion of diversion over 50% of the moderate, mod-high, and high risk youth who re-offended had done so, compared to only 37% of the low risk diversion recidivists. These results help illustrate that low risk youth are ideal candidates for diversion placements.

Probation-

FIGURE 6.

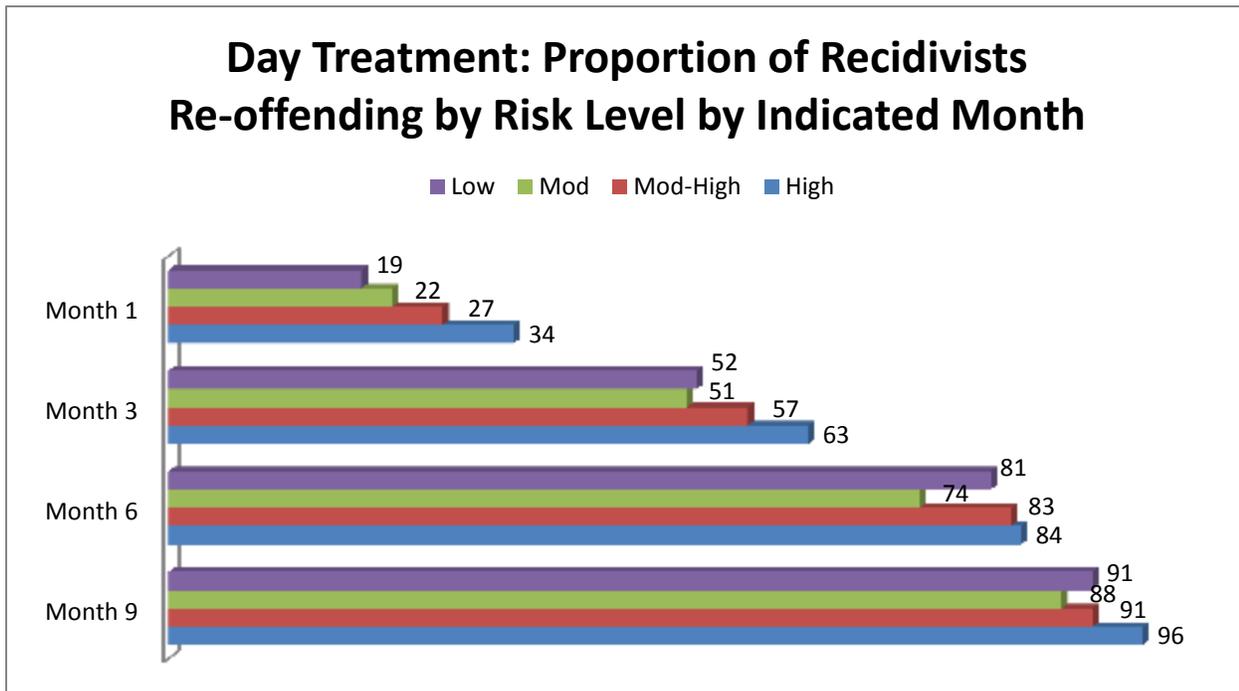


Of the 2,309 youth who completed probation supervision that re-offended, low risk to re-offend youth took the longest to do so. The average time to failure for a low risk to re-offend probation

recidivist was 155 days (during the 6th month post-completion). On average, moderate, moderate-high, and high risk to re-offend youth who recidivated had re-offended during the 5th month post-completion of probation supervision. ANOVA confirmed the differences in time to failure between risk levels was significant ($F=7.046$; $p<.001$), however, post hoc tests revealed only the time to failure of low risk youth differed from all others (moderate, moderate-high, and high risk recidivists had statistically equivalent times to failure). Figure 6 presents the proportion of recidivists who had re-offended by quarter. **Within the 1st month post-completion of probation, 1.5 times more moderate and moderate-high recidivists, and 2 times as many high risk recidivists had re-offended than low risk recidivists.** The majority (over 50%) of low and moderate risk recidivists had re-offended by the end of the 5th month, compared to the majority (over 50%) of moderate-high and high risk recidivists having re-offended by the end of the 4th month (see Figure 6).

Day Treatment-

FIGURE 7.

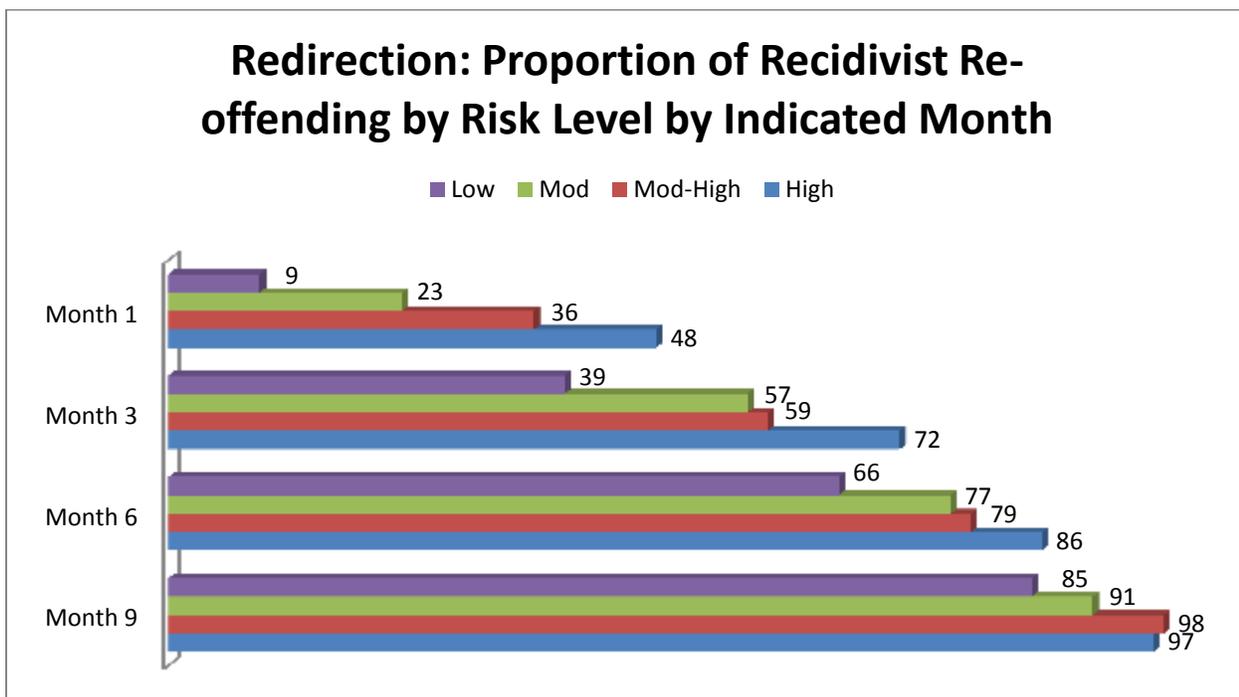


440 youth who completed day treatment re-offended, with an average time to failure of 105 days (during the 4th month post-completion). ANOVA tests indicate the difference in time to failure between risk levels of youth was significant ($F=2.654$; $p=.048$). Post hoc tests, however, did not indicate any group performed differently from any other group, meaning high risk to re-offend youth who re-offended did not do so any faster than low risk to re-offend youth who recidivated (for example). **The average time to failure for a high risk recidivist of day treatment was 87 days (during the 3rd month post-completion), while each other risk level average indicated failure during the 4th month post-completion.** Figure 7 presents the proportion of day treatment youth who re-offended that did so by quarter by each risk level. As indicated, almost 20% of the low risk youth who

completed day treatment and subsequently re-offended had done so within the 1st month post-completion and over 1/3 (34%) of the high risk recidivists had re-offended within the 1st month. **Over 50% of all youth who re-offended post-completion of day treatment had done so within the first 3 months, regardless of risk to re-offend level.** Day treatment is the only placement type for which that figure of 50% of the recidivists re-offending within the first 3 months regardless of risk level was true. Over 75% of the day treatment recidivists, of all risk levels, had re-offended by the end of the 6th month post-release.

Redirections-

FIGURE 8.



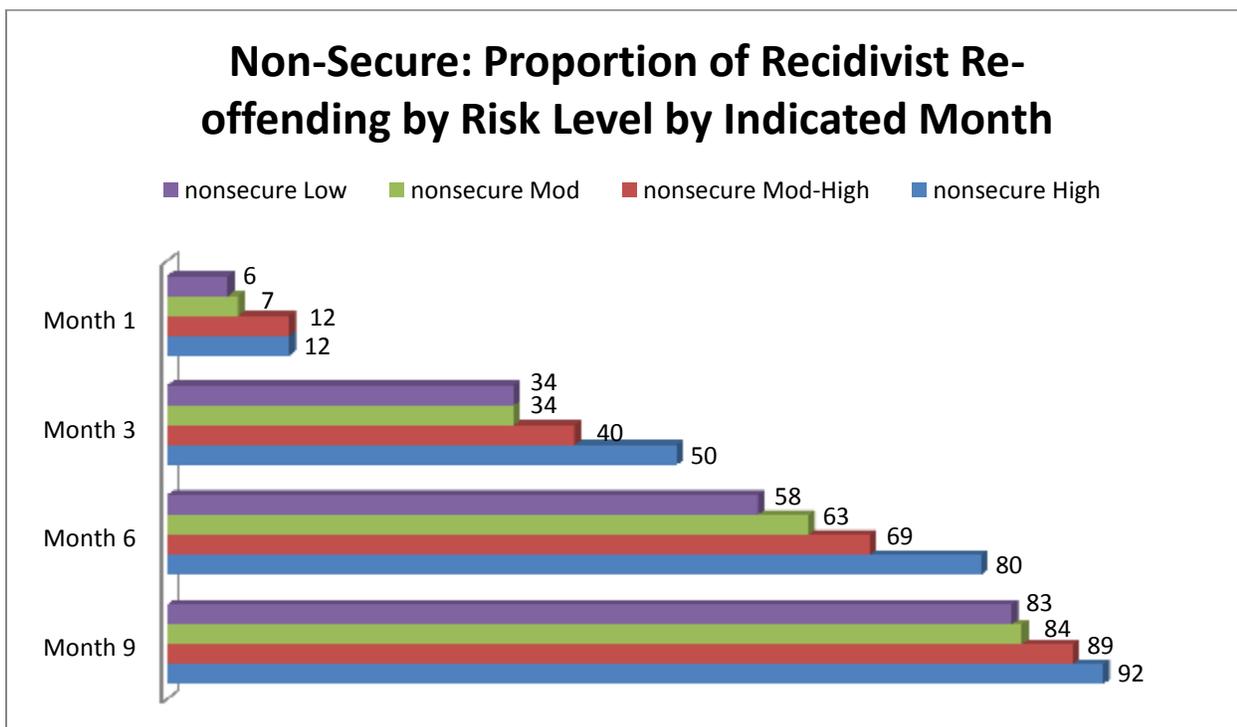
287 youth who completed Redirections during fiscal year 2011-12 re-offended, with an average time to failure of 115 days (during the 4th month post-completion). Examining time to failure of these Redirections recidivists reveals significant differences across risk levels ($F=7.332$; $p<.001$). Low risk youth had longer times to failure than moderate-high and high risk youth ($p=.001$). Moderate-high risk youth who re-offended did so (on average) 51 days, and high risk youth 73 days, faster than low risk youth who re-offended. The differences in time to failure between moderate, moderate-high, and high risk youth were not significant. Figure 8 shows the percent of youth who re-offended, by risk level, who did so by quarter post-completion. As shown, **only 9% of the low risk recidivists had re-offended in the first month. This is in stark contrast to the 48% of high risk recidivists having re-offended the first month post-completion of Redirections.** By the third month post-completion over 50% of the Redirections youth that would recidivate had done so, with the exception of low risk youth (of whom 39% of the recidivists had done so). High risk youth had very fast average time to failure post-Redirection, compared to high risk youth in all other community-based pre-residential

services examined thus far. This finding is unfortunate as Redirection placements (primarily MST and FFT during the time period examined) were procured to be a means of redirecting (hence the name) youth otherwise bound for residential placement. Of course, the analyses of the current brief do not match similar youth across placement types (there may be something different about the high risk youth that were sent to Redirections versus the high risk youth that were placed on probation, for example).

Non-Secure Residential-

1,417 youth completing non-secure residential programs in fiscal year 2011-12 recidivated at an average time to failure of 129 days (during the 5th month post completion). ANOVA analysis indicates significant differences in time to failure across risk to re-offend levels (F=13.146; p<.001). Post hoc tests indicate low, moderate, and moderate-high risk youth had statistically identical average times to failure (which differed from one another by 4 to 20 days). However, **high risk to re-offend youth who completed non-secure residential and recidivated did so in a shorter time to failure than all other risk levels.** Low, moderate, and moderate-high risk youth, on average, who re-offended did so during the 5th month post-completion, while high risk youth who re-offended did so during the 4th month post-completion, on average. Figure 9 presents the results of time to failure by risk level for non-secure residential completions who re-offended. As shown, the proportion of moderate-high and high risk recidivists is nearly double that of low and moderate risk during the first month post-completion. However, the gap between low and moderate risk youth with moderate-high risk youth narrows by the 3rd month. **High risk youth, in contrast, continue to have higher proportions of recidivists throughout at least the first six months post-completion.**

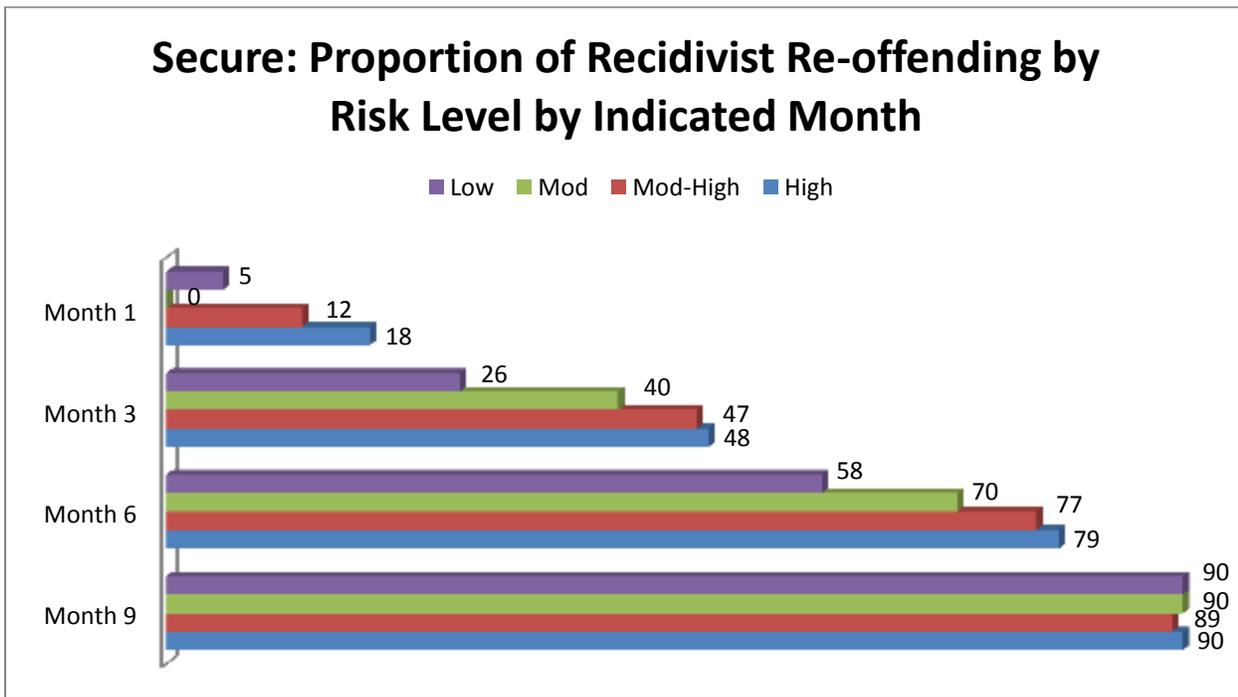
FIGURE 9.



Secure Residential-

340 youth who completed secure residential placement in fiscal year 2011-12 re-offended, for a recidivism rate of 44.4%. The average time to failure for those youth was 122 days, or during the very beginning of the 5th month post-completion. **Of the youth who recidivated, 60% had re-offended by the end of the 4th month post-completion.** While there was variation between risk levels in time to failure (up to 40 days difference), those variations were not statistically significant ($F=1.629$; $p=.182$). Figure 10 presents the time to failure by risk level, though, again, the differences observed were not significant.

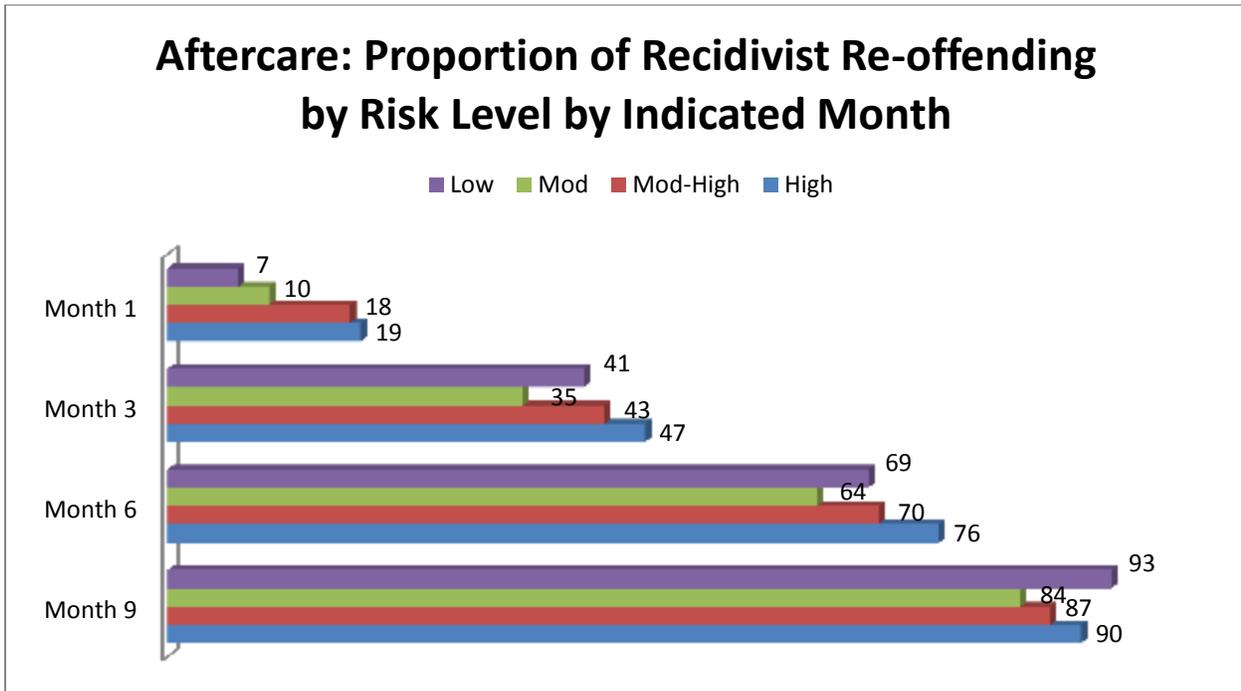
FIGURE 10.



Aftercare-

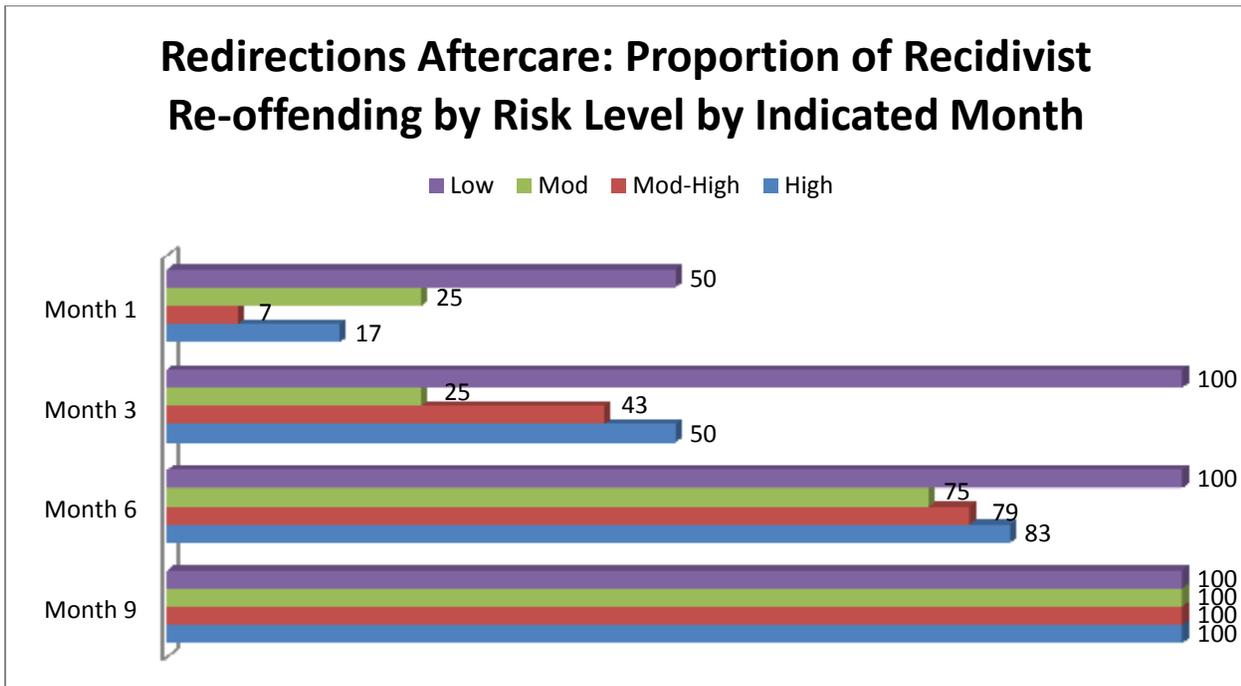
Of the 882 youth completing aftercare services post-residential placement that re-offended, the average time to failure was 131 days, meaning during the 5th month post-completion of aftercare (note: this does not include aftercare youth who received Redirections services during aftercare, as they are examined separately below). While differences in time to failure between risk levels ranged from an average of 8 to 28 days apart, differences between risk levels in time to failure were not significant ($F=2.39$; $p=.067$). **Of the aftercare youth that re-offended, 54% had recidivated by the end of the 4th month post-completion.** Though differences are not significant, Figure 11 presents the time to failure by risk level for youth re-offending post aftercare completion.

FIGURE 11.



Redirections Aftercare-

FIGURE 12.



Only 32 youth successfully completed Redirections aftercare services and subsequently re-offended (the recidivism rate was 34.4%, see Figure 1). The average time to failure for the 32 Redirections Aftercare recidivists was 102 days, during the 4th month post-completion. **47% of the Redirections Aftercare recidivists had re-offended by the end of the 3rd month post-completion.** The low sample size makes statistical differences between risk levels difficult to achieve. Of the 32 Redirections aftercare recidivists, 2 were low risk, 4 were moderate risk to re-offend, 14 youth mod-high risk, and 12 were high risk. ANOVA comparisons of means found no statistically significant differences between risk levels in time to failure ($F=.820$; $p=.494$). Though not statistically significant, Figure 12 shows the time to failure by risk level for Redirections aftercare recidivists. Of note, 100% of all youth in each risk level that re-offended had recidivated by the end of the 9th month. No other placement type saw 100% of the recidivists re-offend by the end of the 9th month, regardless of risk level.

Predictors of Time to Failure

The final step of the analysis is to examine what factors are predictive of shorter time to failure among the group of youth who recidivated. This analysis is different from predicting re-offending, as all of the youth in the sample have re-offended. Instead, we are examining factors to see which are predictive of who re-offends the fastest post-completion of FDJJ services. For this analysis we used gender, being Black, being Hispanic, PACT risk level, whether the youth completed probation, day treatment, Redirection, Non-secure, Secure, aftercare, or Redirection aftercare as predictors. Table 4 presents the results of the regression model.

Interpretation of Table 4 is as follows: Measures in **Bold** have significance reported, and these are the only measures that predicted days to failure. The non-bold measures did not matter in the prediction of days to failure (again, we are predicting time to failure among youth who have all failed, we are not predicting failure). The Beta column tells which measure is the strongest of the significant measures. We see that the absolute value of the PACT risk level is the largest (-.162) **indicating the PACT is the best predictor of days to failure in the model. As the PACT score increases, the time to failure decreases** (indicated by the negative sign in front of the PACT values). The second strongest predictor is whether the youth completed probation (completed probation= longer time to failure as the value is positive). Completing non-secure residential and completing aftercare services are the next two strongest predictors (completing either is associated with a longer time to failure). Completing secure placement is also associated with a longer time to failure. Completing Day treatment is associated with a shorter time to failure, and is significant. Completing Redirections or Redirections Aftercare is not a significant predictor of days to failure. The only other significant predictor of days to failure was gender indicating males have shorter time to failure than females. Being Black and being Hispanic are not significant predictors of time to failure. The “Unstandardized B” column tells you the change in days to failure for every one unit change in the measure, *holding all other variables constant*. **For example, for every 1 unit change in PACT risk level (ex. moving from low to moderate risk) is associated with a 13.5 day decrease in time to failure (two weeks faster).** Being male is associated with a week faster time to failure (Unstandardized B= 6.9 days). Youth who complete probation, non-secure residential, secure residential, or aftercare have over a two-week longer time to failure (Unstandardized B’s between 13.5 and 17.8). Youth completing day treatment have a 17 day shorter time to failure.

TABLE 4. Predicting Days to Failure Post-Completion of Services

Measure	Unstandardized B	Beta	t-value	Significance
PACT Risk Level	-13.5	-.16	-10.9	.000**
Gender	-6.9	-.03	-2.4	.015*
Black	-2.6	-.01	-1.1	
Hispanic	-1.1	-.00	-0.3	
Completed Probation	16.2	.07	5.7	.000**
Completed Day Treatment	-16.6	-.04	-3.2	.001**
Completed Redirection	-11.8	-.02	-1.9	
Completed Non-Secure	17.8	.07	4.4	.000**
Completed Secure	13.5	.03	2.2	.029*
Completed Aftercare	18.0	.06	4.1	.000**
Completed Redirections Aftercare	-9.9	-.01	-0.6	

Note: Significant differences in Bold; *=Significant at $p < .05$; **=Significant at $p < .01$.

TABLE 5. Dynamic Predictors of Days to Failure

Measure	Unstandardized B	Beta	t-value	Significance
Age at 1st Arrest	-9.2	-.04	-3.8	.000**
Run Away History	-9.2	-.03	-2.6	.009**
Current Alcohol Use	-4.7	-.02	-1.4	
Current Drug Use	-6.2	-.03	-2.1	.033*
Physical Abuse	-5.6	-.02	-1.7	
Sexual Abuse	6.1	.01	1.1	
Mental Health	-5.2	-.02	-1.96	.05
Expelled/Dropped Out	-4.8	-.02	-1.3	
Antisocial Peers	-10.8	-.03	-2.9	.004**
Family Jail History	-4.9	-.03	-2.2	.026*

Note: Significant differences in Bold; *=Significant at $p < .05$; **=Significant at $p < .01$.

The final predictive model examined individual measures within the C-PACT (measures that could be changed through either prevention or intervention). Days to failure was predicted using the following measures: having an age at first arrest of 12 or under, having 4 or more instances of running away, current alcohol use, current drug use, physical abuse history, sexual abuse history, mental health problem history, being expelled or dropped out of school, having exclusively antisocial or gang member peers, and having any family member with a jail or prison history as predictors of days to failure. Table 5 displays the results, and is interpreted the same as Table 4. The strongest predictor was age at 1st arrest occurring when the youth was 12 or under (Beta=-.04). Youth who were 12 or under at age of 1st arrest had a time to failure of 9.2 days faster than youth who were older at 1st arrest, holding all other measures constant. Youth with a history of 4 or more instances of running, youth with current drug use, youth who associate with exclusively antisocial peers or are gang members, and youth with family members that have a jail/prison history all have shorter times to

failure than youth without those risk factors. Age at first arrest, extensive history of running away, and family member jail/prison history can only be addressed through prevention (once a youth has those risks, the risks are static), while intervention efforts can address current drug use and peer associations at any stage of graduated sanction (prevention through aftercare).

Implications:

The purpose of this brief was to examine the latest recidivism data for time to failure of youth re-offending post-completion of FDJJ services. These results may help assist the Department with resource allocation and placement efforts by demonstrating the time to failure by risk level for each FDJJ placement type. **Differences in time to failure were found across risk levels, with higher risk youth re-offending faster post-completion of services.** Time to failure differed by risk level for each placement type except secure commitment, aftercare, and Redirections aftercare. However, those services are arguably inappropriate for lower risk youth in light of a plethora of national as well as FDJJ-specific research, as per the Risk Principle (Andrews & Bonta, 2003; Andrews & Kiessling, 1980; Andrews, Zinger, Baglivio, 2014; Hoge, Bonta, Gendreau, & Cullen, 1990; Lipsey, 2009; Lipsey, Howell, Kelly, Chapman, & Carver, 2010). Matching youth to effective services is critical for success. Examining not only recidivism rates, by how quickly youth re-offend post-service completion is essential for understanding which youth perform best when matched to which services. In the predictive model, common risk factors of offending/re-offending behavior were included in our model. The strongest predictor of days to failure was the overall risk to re-offend level of the validated C-PACT assessment. This means that the PACT is a useful tool for not only classifying youth with respect to likelihood of offending, but of giving a measure of time to failure as well. Consistent with decades of research, high risk youth evidence larger recidivism rates, and of youth that fail, those higher risk recidivists do so faster than lower risk recidivists. Examining which individual factors measured by the C-PACT predict time to failure shows earlier age at first arrest, extensive history of running away, current drug use, antisocial/gang peer associations, and a family member with jail/prison history lead to shorter days to re-offending among recidivist youth. These results may assist the Department with targeted prevention and intervention efforts to keep youth crime-free, even after entering the juvenile justice system. **Overall, 52% of youth who will recidivate according to the FDJJ definition of recidivism will do so within the first 4 months post-completion of services. However, this figure differs not only by placement type (diversion, probation, etc.) but by risk to re-offend as assessed by the C-PACT as well.**

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