

# **Drug Offender Reform Act: DORA Statewide Report**

**November 1, 2013  
Final Report**



THE UNIVERSITY OF UTAH

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*Utah Criminal Justice Center*

COLLEGE OF SOCIAL WORK  
COLLEGE OF SOCIAL & BEHAVIORAL SCIENCES  
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**Drug Offender Reform Act:  
DORA Statewide Report  
Final Report**

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## Background

### Statewide DORA History

Statewide DORA began with the passage of S.B. 50 during the 2007 Utah Legislative General Session. Effective July 1, 2007, offenders convicted of a felony offense or granted parole for the first time after incarceration for a felony offense were to be screened and assessed for substance abuse treatment, followed by treatment where appropriate. Statewide DORA offenders had to meet the following criteria:

- Convicted of a felony offense on or after July 1, 2007 (cannot be pled to a misdemeanor); or granted parole for the first time on or after July 1, 2007, after incarceration for a felony offense<sup>1</sup>
- Total score on the Level of Service Inventory-Revised (LSI-R) must fall within the range of 16 to 35 (originally 16 to 40)
- Substance Abuse Assessment must indicate that treatment is needed

### Statewide DORA Findings from Previous Years' Reports

The original Statewide DORA Report, from November 2009, describing the foundations of DORA, study methodology (including DORA Statewide sample selection), and complete process and initial outcome results can be found on the UCJC website at: <http://ucjc.utah.edu/>. Subsequent annual reports, from 2010 through 2012, are also posted on the website.

The Statewide Study sample was selected based on the following criteria:

- “DORA” offender in Utah Department of Corrections (UDC) records (N = 1,419) from July 1, 2007 to June 30, 2009 (Fiscal Years 2008 and 2009),
- had a match in Division of Substance Abuse and Mental Health (DSAMH) records (N = 1,359), and
- had either DORA-indicated treatment in DSAMH records or DSAMH treatment that overlapped with time on DORA supervision (N = 1,336; Probation = 929; Parole = 407)<sup>2</sup>.

### Supervision and Treatment

The data from the 2009 report indicated that Statewide DORA offenders received a level of supervision intensity (e.g., days between probation officer (PO) to offender contacts, frequency of community-based contacts) and treatment access that was comparable to the pilot study and in line with the model's goals. The DORA model included specific treatment funding for eligible offenders and changes in supervision and treatment coordination such as: a hand-off meeting with the offender, assessor, AP&P agent, and treatment provider to discuss the treatment plan and consequences for program failure; regular communication between the AP&P agent and treatment provider(s); and pre-release planning for aftercare and living arrangements. The goal of Statewide DORA, similar to the DORA Pilot, was to reduce the impact – and related costs – of substance abusing offenders on the criminal justice and treatment systems through decreasing the (1) substance abuse/use and (2) criminal activity of offenders served through this innovative process.

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<sup>1</sup> Beginning July 1, 2009, parolees were no longer eligible for DORA, due to limited funding

<sup>2</sup> One probationer from the original reports was dropped in the 2011 report because the case was not classified as DORA in UDC records.

## Key Findings

In previous years' reports, the key findings demonstrated that the foundations of DORA (e.g., intensive supervision, treatment access and completion) were related to positive criminal justice outcomes (e.g., supervision completion, treatment completion). When compared to lower risk offenders, higher risk offenders (e.g., parolees vs. probationers, those with higher Level of Service Inventory (LSI) scores, those requiring higher levels of treatment) had worse outcomes. However, treatment completers, both probation and parole, did significantly better than non-completers on post-DORA criminal justice outcomes.

## Methods

### Data Sources

Descriptive process and outcome analyses for the DORA probationers and parolees are updated in this report. For previous years' methods and results, see the DORA Statewide reports posted at <http://ucjc.utah.edu/>. For this final Statewide DORA report, data on during- and post-DORA outcomes was provided by the Utah Department of Corrections (UDC) and Utah Division of Substance Abuse and Mental Health (DSAMH) (see Table 1).

**Table 1** Data Sources

Data Table	Brief Description
<b>Utah Department of Corrections (UDC)</b>	
Referred Offense	History of convictions referred to UDC by charge type, severity, and conviction date
Legal Status	History of legal status changes while under UDC jurisdiction (e.g., unsentenced, felony probation, inmate, parole, discharged) by start and end dates and reason
Body Location	History of body location while under UDC jurisdiction (e.g., Salt Lake AP&P, Orange Street CCC, Fugitive) by start and end dates and reason
Demographics	Gender, race, ethnicity, and date of birth
Level of Service Inventory (LSI)	LSI risk assessment item scores by date (to examine individual risk factors and compute domain and total scores)
<b>Utah Division of Substance Abuse and Mental Health (DSAMH)</b>	
Treatment (Tx) Admissions	Tx Admissions by start, last contact, and discharge dates. Includes ASAM level of service (e.g., outpatient, residential), discharge reason, and National Outcome Measures (NOMs, items on substance use and life stability) at intake/exit.

## **Comparison Group Selection<sup>3</sup>**

For the current report, Utah Department of Corrections (UDC) staff created a matched comparison group that was used to analyze the impact of DORA participation on offenders. This section describes the process used to identify and select the sample.

### **Selection Bias**

To fairly evaluate DORA one must compare outcomes between those who participated and a group of offenders who did not. However, there are inherent differences between participants and non-participants because of how offenders are selected to participate—this is called selection bias. For example, younger offenders may be more willing to participate in DORA, resulting in differing ages between those who participated and those who did not. This becomes a problem if younger offenders are also less likely to recidivate because an observed treatment effect may be the result of differing ages rather than DORA participation. To account for selection bias, it is crucial to identify biasing factors, and then measure and statistically control for them so any difference in outcome can be attributed to treatment.

### **Matching**

Propensity Score Matching (PSM) and Genetic Matching (GM) are widely accepted quasi-experimental methodologies. Because they control for differences between treatment and comparison groups, such methods serve to isolate a treatment effect as the likely cause of any observed difference in outcomes (Caliendo & Kopeinig, 2008; Dehejia & Wahba, 2002; Diamond & Sekhon, 2012; Heinrich, Maffioli, & Vazquez, 2010; Sekhon, 2011). GM is typically more effective in reducing bias (Diamond & Sekhon, 2012) and was the preferred method in the present study.

GM uses information about the treatment group to systematically find the most appropriate sub-sample of non-participants to be used as a fair comparison group. It does this by finding a match for each participant from a pool of non-participants that minimizes the difference of all biasing factors between a matched pair; in other words, GM tries to maximize p-values on biasing factors between each group. If a test between two groups indicates a p-value of less than .05, it indicates the groups have a 1 in 20 (i.e., 5%) chance of being from the same population. In the case of GM, the researcher seeks to maximize p-values, which would indicate the two groups are as similar as possible (in a statistical sense) prior to treatment, and thereby provide a balanced post-treatment comparison. GM uses several tests to maximize p-values, including T-tests for mean and proportion differences, and Kolmogorov-Smirnov (K-S) tests to measure differences in distributions. The same tests are used to assess bias after matching. Assuming all relevant factors have been controlled for by achieving statistically similar samples post-matching, and that there were enough similar non-participants to do so, any observed effect is likely attributed to participation in treatment (Heinrich, Maffioli, & Vazquez, 2010). All matching was performed using the Match package in R (Sekhon, 2011).

### **Comparison Pools**

A comparison pool from which to find matches was identified for parolees and another for probationers using the following DORA inclusion criteria: 1) qualifying conviction was a felony;

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<sup>3</sup>This section was written by Taylor Snarr, Research Consultant, Utah Department of Corrections

2) no immigration holds; 3) not a sex offender; 4) no prior paroles on current case(s) for parolees OR one or no prior paroles for probationers; 5) never in DORA; 6) LSI score between 10 and 40<sup>4</sup>; and 7) had a likely drug or alcohol problem (identified by either an Offender Management Plan (OMP)/Case Action Plan (CAP) priority for substance abuse treatment, an LSI flag indicating current drug or alcohol problems, or special conditions of parole related to drug or alcohol). The comparison pools were also restricted to those who paroled or started probation from 2007 to 2009.

### **Matching Method**

Matching was done separately for parolees and probationers. Using logistic regression, researchers identified a host of factors that had a biasing influence on likelihood of program participation. Those that were found to differentiate participants from non-participants for each sample were included in the final matching models.

Genetic Matching was performed 1:1 and without replacement, meaning a unique offender from the comparison pool was matched only once to a unique DORA participant. Bias was measured after matching to assess the quality of the matches.

### **Matching Results**

**Probation Sample.** There were 930 Statewide DORA participants who started probation between FY 2008 and 2009.<sup>5</sup> Seven offenders were removed because of missing data, resulting in 923 DORA participants included in the analysis. A comparison pool of 4,460 probationers was identified from which to select matches.

The identified biasing factors that were matched on for the probation sample were: presenting offense type and degree, number of prior incarcerations, LSI score, age, minority, gender, drug offense category on presenting offense(s) (drug only, drug plus other, other only), and Adult Probation and Parole region. The resulting matched data sets included 923 unique DORA participants and 923 similar non-participants.

The minimum p-value of all variables before matching was nearly zero; after matching the minimum p-value was 0.047. Although this value is within the typical p-value of < .05 for assessing statistical significance, the goal of matching is not to achieve non-significance, but rather to maximize p-values. The average p-value of the possible biasing factors was 0.15 before matching and 0.49 after. It was concluded that bias was minimized and the matched sample was sufficient for a comparison to be made.

**Parole Sample.** There were 407 Statewide DORA participants who were paroled between FY 2008 and 2009. One offender did not have an LSI score and was dropped from the analysis. A comparison pool of 2,048 parolees was identified from which to select matches.

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<sup>4</sup>The selection range for comparison pool was opened to 10-40 rather than the 16-40 that was the original DORA guideline, as some DORA participants' scores were outside of the 16-40 parameters.

<sup>5</sup> Matching began on the original DORA probationer group that had 1 more individual than the final one reported from 2011 forward

The identified biasing factors that were matched on for the parole sample were: presenting offense type, number of prior incarcerations, number of prior felonies, past guilty disciplinary, LSI score, age, gender, drug offense category on presenting offense(s) (drug only, drug plus other, other only), and Adult Probation and Parole region. The resulting matched data set included 406 unique DORA participants and 406 similar non-participants.

The minimum p-value of all variables before matching was nearly zero; after matching the minimum p-value was 0.15, meaning there were no significant differences on all variables between the treatment and matched comparison groups. The average p-value of the possible biasing factors was 0.22 before matching and 0.67 after. It was concluded that bias was minimized and the matched sample was sufficient for a comparison to be made.

## Results

### Sample Characteristics

Table 2, below, summarizes the DORA participants' characteristics at DORA start. Most of these figures have been summarized in previous years' reports as well. The criminal history variables reported in Table 2 are new ones that were computed for both DORA statewide participants and the Matched Comparison group (their descriptives are presented in Table 6). These variables are slightly different than ones reported in previous years. The prior convictions represent lifetime prior convictions (misdemeanor and felony) reported to Utah Department of Corrections that preceded the DORA supervision start date (including those convictions that were associated with the DORA qualifying referral). The qualifying conviction type (drug only, drug and other, or other only) now examines only the last conviction immediately preceding DORA start.<sup>6</sup> The LSI risk score at intake also varies slightly from previous years' reports as some data correction for inconsistent item-level responses was conducted.<sup>7</sup>

**Table 2** Statewide DORA Sample Characteristics

	Probation n = 929	Parole n = 407
<b>Demographics</b>		
Age at Start (Mn)	30.4	33.9
Minority (%)	16.7	23.1
Female (%)	30.5	31.4
Years Education (Mn)	11.6	11.9
Unemployed (%)	45.9	48.6
<b>At Treatment Intake</b>		
Prior Treatment (Tx) Episode(s) (%)	55.0	76.7
DSM-IV Axis I or II Disorder (%)	22.0	29.7
Methamphetamine <sup>1</sup> as Primary Drug of Choice (%)	29.4	50.4

<sup>6</sup> In previous years' reports the qualifying conviction was identified by Chris Mitchell, former Research Director of CCJJ. Because her methodology could not be replicated on the comparison group, the new methodology of most recent conviction prior to supervision start was selected.

<sup>7</sup> A concurrent LSI validation study being conducted by UCJC identified data quality issues to be addressed. In the past, the LSI total scores that were reported in DORA studies were those that were system computed at UDC. The UCJC LSI validation report will be available at the end of 2013 at [www.ucjc.utah.edu](http://www.ucjc.utah.edu)

	Probation n = 929	Parole n = 407
Therapeutic Community (TC) participation in Prison	--	62.4
Of those, Days in TC (Mn)	--	264
Of those, Successful Exit (%)	--	33.1
<b>Criminal History and Risk</b>		
Misdemeanor Prior Convictions (Mn)	1.1	2.1
Felony Prior Convictions (Mn)	1.6	2.9
LSI risk score at Intake (Mn)	21.6	23.5
<b>Qualifying Convictions for DORA Sentence</b>		
Drug Offense(s) Only (%)	39.1	29.0
Drug and Other Offenses (%)	17.7	14.7
Other Offense(s) Only (%)	43.2	56.3

<sup>1</sup>Methamphetamines were the most commonly reported drug of choice for both probationers and parolees

### Treatment Completion

As a requirement of being in the study sample, all offenders had substance abuse treatment admissions during supervision. Because very few participants remained active in DORA during the last year, the average number of treatment admissions did not change from the previous year's report. The percent that completed at least one treatment admission during supervision increased slightly for both groups, with nearly two-thirds of both groups having completed at least one admission during DORA.

**Table 3 Treatment Services**

	Probation					Parole				
	'09	'10 <sup>1</sup>	'11 <sup>2</sup>	'12 <sup>3</sup>	'13 <sup>4</sup>	'09	'10 <sup>1</sup>	'11 <sup>2</sup>	'12 <sup>3</sup>	'13 <sup>4</sup>
Treatment Admissions (Mn)	2.1	2.4	2.5	2.6	2.6	1.7	1.8	1.8	1.8	1.8
Completed Treatment (%)	53.2	64.1	66.1	66.7	67.0	54.3	60.5	61.7	62.1	62.5

<sup>1</sup> DSAMH data for 2010 update N = 1330, Prob = 925, Parole = 405; <sup>2</sup> DSAMH data for 2011 update N = 1329, Prob = 924, Parole = 405; <sup>3</sup> DSAMH data for 2012 update N = 1325, Prob = 921, Parole = 404; <sup>4</sup> DSAMH data for 2013 update N = 1324, Prob = 921, Parole = 403

*DSAMH staff indicated that the treatment providers may have removed those records that were unavailable in the 2013 download from the statewide repository.*

### DORA Supervision Completion

Additional DORA probationers exited supervision this year (see Table 4), so that nearly all DORA statewide participants from this FY08-09 cohort have exited probation or parole. The successful probation completion rate dropped slightly (44.4% to 43.5%) because of the number of probationers who exited on a negative status (e.g., prison, unsuccessful discharge) in the past year. In comparison to the 2012 report, parole exit status rates remained the same, because no additional parolees exited supervision in the past year. Combined successful supervision and treatment (one or more admissions during DORA) was 37% for probationers and 31% for parolees. Far more probationers (67%) and parolees (62%) completed at least one treatment admission successfully during DORA than the number that successfully exited supervision.

**Table 4 DORA Outcomes**

	Probation	Parole
Exited probation/parole at study end (%)	97.1	99.8
Of those who Exited:		
Exit Status (%)		
Successfully Completed Probation/Parole	43.5	34.2
Unsuccessful	43.2	60.6
Prison – New Offense	4.2	13.3
Prison – Technical Violation	13.7	45.3
Unsuccessfully Discharged	24.6	2.0
Fugitive for 1 year or greater	0.7	0
Other Exit	13.4	5.2
Neutral Discharge	12.0	4.7
Died	1.4	0.5
Probation/Parole and Tx Outcomes Combined		
Successfully Completed Probation/Parole and 1+ Tx Admission During Supervision (%)	36.8	31.3

### Post-Exit Recidivism

Recidivism was calculated up to three years after supervision exit for those who had the full follow-up periods (see Table 5). As more people have accrued the full 24-month follow-up period, the new conviction rate during that time period has decreased slightly from what was reported in 2012 for DORA participants. The most common offense types (drug for probationers and property for parolees) and degrees (3<sup>rd</sup> Degree Felony for both) remained the same as was reported in 2012 for DORA participants. The 8% of DORA probationers who had a subsequent person conviction represents 15 offenders. The 16% of DORA parolees who had a person conviction after exiting DORA supervision represents 24 individuals.

New to this report is the inclusion of a Matched Comparison group. The recidivism rates and types for both the DORA and Match Comparison groups are presented in Table 5 for descriptive purposes. The next section (*Predictors of Time to Post-Exit Recidivism*) compares the DORA participants to their Matched Comparison group for statistical significance on post-exit recidivism and the factors related to it.

**Table 5 Post-Exit Recidivism**

	Probation		Parole	
	DORA	Comparison	DORA	Comparison
Exited probation/parole at study end (%)	97.1	94.2	99.8	98.7
Of those Exited, had full Follow-Up period (%)				
12 months Post-Exit	93.4	88.2	99.8	95.7
24 months Post-Exit	83.9	73.8	97.5	87.7
36 months Post-Exit	60.9	52.6	88.2	66.8
New Convictions (%), of those with full Follow-Up period				
12 months Post-Exit	6.8	5.8	10.1	5.8
24 months Post-Exit	15.4	13.7	22.6	16.3
36 months Post-Exit	27.0	25.0	34.3	30.9

	Probation		Parole	
	DORA	Comparison	DORA	Comparison
Of those with new convictions, most severe (%):				
Class A Misdemeanor	18.2	20.0	20.5	17.6
3 <sup>rd</sup> Degree Felony	67.9	67.9	61.6	69.7
2 <sup>nd</sup> Degree Felony	13.4	11.5	15.1	12.6
Of those with new convictions, types (%):				
Drug	60.0	46.1	47.9	51.3
Person	7.9	15.8	16.4	12.6
Property	37.9	48.5	53.4	47.9
DUI	15.8	17.0	15.8	17.6

### Predictors of Time to Post-Exit Recidivism

Both between- and within-group analyses were conducted; results are reported separately in the following sections. The first section compares DORA group participants with the aforementioned Matched Comparison group participants using Cox Regression survival analyses to examine time to recidivism (defined as a new conviction post-exit from supervision) and other factors related to quicker time to re-offense. Time to recidivism was defined as days from supervision exit date to the first offense date that was associated with a subsequent conviction. Group membership was also included as a predictor in the first section (see *DORA vs. Matched Comparison*) to determine if there was a significant treatment effect of DORA participation while controlling for other covariates. The second set of analyses were within-group (see the *Within DORA* section of this report), which examined the relationship between factors that were only available for the DORA participants (e.g., variables from treatment records) and time to recidivism post-exit.

### DORA vs. Matched Comparison

The following factors (see Table 6) were included as potential covariates in the Cox Regression survival analyses to examine time to post-exit recidivism. Analyses were restricted to those matched pairs from DORA and comparison groups that had exited supervision.<sup>8</sup> Attrition analyses were conducted to determine if the matched pairs that remained in the following survival analyses differed significantly from removed cases on potential covariates. The DORA cases that remained (n = 1170) were significantly more likely to include individuals who had drug only offenses at their qualifying conviction, as well as those with slightly more prior felony convictions. The same pattern was observed within the comparison group cases that were selected for inclusion in the post-exit survival analyses (n = 1170). Because matching was conducted 1:1 (i.e., person to person), the removal of these cases does not alter the balance (or concomitant appropriateness) achieved by matching, but results are limited in generalizability by the characteristics of the remaining sample.

<sup>8</sup> 151 pairs were removed for the following non-mutually exclusive reasons: (1) at least one person in the pair still being active on his or her DORA/qualifying supervision, (2) being matched on a supervision start date that was more than 90 days from the “real legal date” used for DORA start classification (generally these cases occurred when an individual who was already on Class A probation was “stepped-up” to Felony Probation at their DORA screening), and/or (3) an offender was in more than one group (e.g., DORA probation and comparison parole). Selection logic prioritized DORA group membership over comparison and parole membership over probation for inclusion of cases in final analyses.

As shown in Table 6, LSI risk score at intake was the only variable on which DORA and comparison probationers significantly differed. However, their means differed by only 1.1 points, indicating a small practical difference. For the parolees included in the recidivism analyses, DORA and comparison cases differed significantly on both LSI risk score at intake and average number of prior misdemeanor convictions (see Table 6). These differences, however, were practically small.

**Table 6** Factors Examined as Potential Predictors of Post-Exit Recidivism

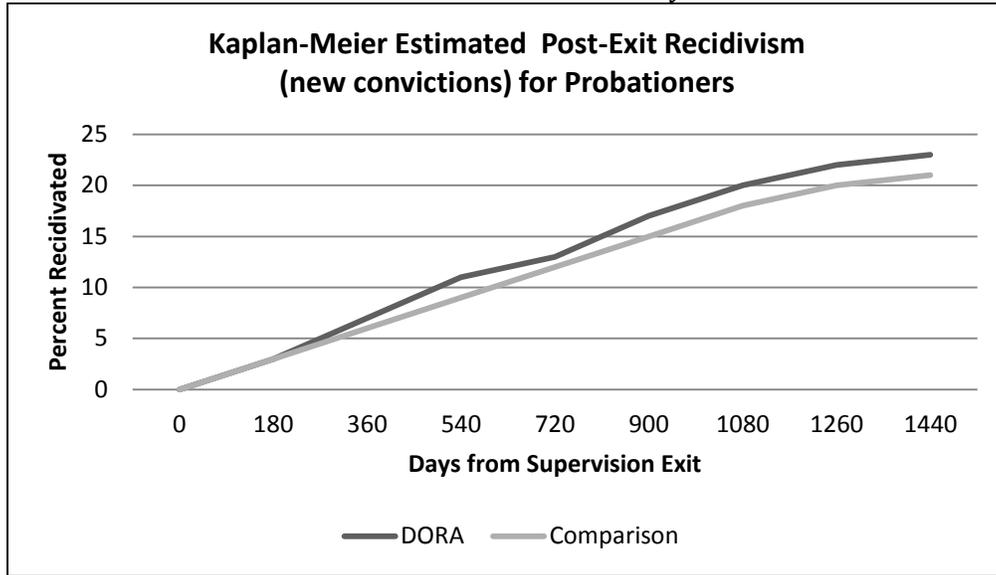
	Probation		Parole	
	DORA	Comparison	DORA	Comparison
Sample Size (n)	779	779	391	391
<b>Demographics</b>				
Age at Start (Mn)	30.7	30.5	33.9	34.0
Minority (%)	16	17	23	29
Female (%)	30	30	32	32
<b>Criminal History and Risk</b>				
Misdemeanor Prior Convictions (Mn) <sup>2</sup>	1.0	1.0	2.1	1.8
Felony Prior Convictions (Mn)	1.6	1.5	2.9	2.9
LSI risk score at Intake (Mn) <sup>1,2</sup>	21.4	20.3	23.6	24.6
<b>Qualifying Convictions for DORA Sentence</b>				
Drug Offense(s) Only (%)	41	41	29	33
Drug and Other Offenses (%)	17	15	15	12
Other Offense(s) Only (%)	42	44	56	55

<sup>1</sup>DORA vs. Comparison Probation group difference statistically sig. at p < .05  
<sup>2</sup>DORA vs. Comparison Parole group difference statistically sig. at p < .05

**Probationers.** The seven covariates from Table 6 were entered into a survival analysis for probationers; group membership (DORA vs. Matched Comparison) was also included as a potential predictor. Three of the factors were significantly related to quicker time to recidivism: more prior misdemeanor convictions, more prior felony convictions, and younger age at supervision start. After controlling for these three significant covariates, group membership (DORA vs. Matched Comparison) was not significantly related to time to recidivism. This indicates that there was no measurable treatment effect of DORA group membership within this FY08-09 cohort when compared to their matched controls.

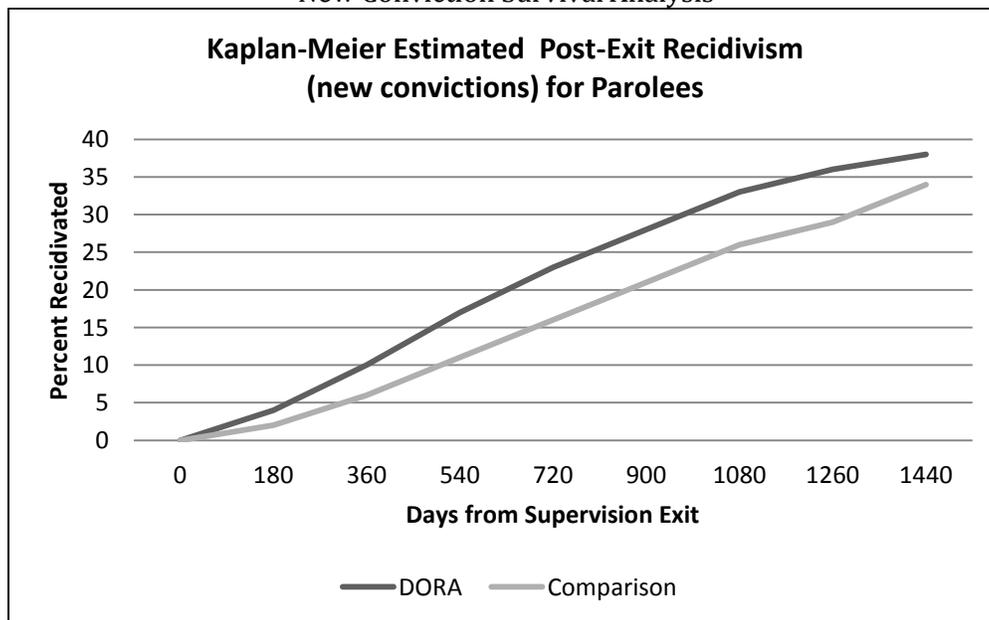
Survival analysis provides estimated recidivism through four years post-exit follow-up (see Figure 1 on the following page). The procedure corrects for varying lengths of follow-up time post-exit (i.e., right censored events) and provides estimated recidivism rates based on actual recidivism events and follow-up data. As shown in Figure 1, the DORA and comparison probationers had nearly identical predicted recidivism rates, and did not differ significantly from one another even at the bivariate level (i.e., prior to controlling for other covariates).

**Figure 1** Estimated Time to Recidivism for Probationers:  
New Conviction Survival Analysis



**Parolees.** The seven covariates from Table 6 (see pg. 9) were entered into a survival analysis for parolees; group membership (DORA vs. Matched Comparison) was included as a potential predictor. Two factors were significantly related to faster time to recidivism: higher LSI risk score at intake and younger age at supervision start. After controlling for these two significant covariates, group membership (DORA vs. Matched Comparison) was not significantly related to time to recidivism for parolees. This indicates that there was no measurable treatment effect of DORA group membership when comparing DORA participants to their matched parolees. Figure 2 displays the results of the survival analysis for parolees at the bivariate level, and highlights the lack of a significant difference between the DORA and comparison groups.

**Figure 2** Estimated Time to Recidivism for Parolees:  
New Conviction Survival Analysis



## Within DORA

Additional data were available for the DORA sample regarding treatment involvement. For this reason, separate survival analyses were conducted to determine what specific factors were related to longer time to recidivism just for the DORA participants. These analyses expand upon previous DORA reports that examined length of time to *post-start* recidivism. However, the following analyses examine the factors related to *post-exit* new convictions.

**DORA Probationers.** The seven covariates from Table 6 (see pg. 9) were entered into a survival analysis for DORA probationers who had exited supervision, with three additional treatment factors included: total days in substance abuse (SA) treatment during DORA supervision, highest level of SA treatment received (e.g., residential, IOP, outpatient), and successful completion of SA treatment admission during DORA supervision. Four factors were significantly related to longer time to recidivism (see Table 7, below). Three of the four factors were related to individual probationer risk: prior misdemeanors, age, and requiring more intensive SA treatment. A single DORA model factor, length of time in treatment, was associated with time to recidivism, with those who had more days in treatment also having a longer time to recidivism after exiting supervision.

**Table 7** Factors Significantly Related to Longer Time to Recidivism for DORA Probationers

Fewer misdemeanor convictions prior to DORA start
Older age at DORA start
Requiring less intensive treatment (e.g., outpatient instead of IOP)
More days in treatment during DORA

**DORA Parolees.** The seven covariates from Table 6 (see pg. 9) were entered into a survival analysis for DORA parolees who had exited supervision, with three additional treatment factors included: total days in substance abuse (SA) treatment during DORA supervision, highest level of SA treatment received (e.g., residential, IOP, outpatient), and successful completion of any SA treatment admission during DORA supervision. Three factors were significantly related to longer time to recidivism (see Table 8, below). Two of the three factors were related to individual parolee risk: age and LSI risk score at intake. A single DORA model factor, SA treatment completion, was associated with longer time to recidivism after exiting supervision for DORA parolees.

**Table 8** Factors Significantly Related to Longer Time to Recidivism for DORA Parolees

Older age at DORA start
Lower LSI risk score at Intake
Completing any Treatment admission during DORA

## Discussion and Conclusion

Statewide DORA participants were compared to a matched group to examine the impact of DORA on criminal justice outcomes. Results of the post-exit recidivism analyses suggested that DORA participants' outcomes were *not* significantly different from those of the Matched Comparison group. The findings show that, after controlling for covariates, DORA did not have a significant impact on participants when compared to similar offenders on traditional probation and parole. When the DORA groups were examined independently, a single treatment factor for each group was significantly related to increased time to post-exit recidivism: more days in treatment (for probation) and completing a treatment admission (parole). While the overall DORA participation

results were not significant, these results indicate some positive relationship between treatment duration, treatment completion, and post-exit recidivism for DORA participants.

Overwhelmingly, the variance in offender outcomes can be attributed to individual offender risk factors rather than DORA participation. Younger age at supervision start was significantly related to shorter time to post-exit recidivism for probationers and parolees, both in the DORA vs. Matched Comparison and within DORA analyses. Having more prior misdemeanor convictions was associated with shorter time to recidivism for probationers (both in the DORA vs. Matched Comparison and in the within DORA analyses), while higher LSI risk scores at supervision start were associated with faster time to recidivism for parolees (both in the DORA vs. Matched Comparison and in the within DORA analyses). Within the DORA probation group, those who required more intensive levels of SA treatment during DORA (e.g., IOP instead of outpatient) also had shorter times to post-exit recidivism. Requiring higher levels of treatment is an additional measure of pre-program risk.

There are additional programmatic- and study-related factors, which are outside the scope of the current study, which provide an important context for interpreting these results. Several of those factors are discussed below.

### **Implementation of DORA**

Statewide DORA was implemented as a legislative and policy change, rather than a discrete criminal justice program. As such, it may be difficult to implement the model with fidelity and/or limit the diffusion of its treatment effects. For example, AP&P refers many of their supervisees to community-based treatment providers and resources. As such, it is possible that the comparison group received similar types and levels of treatment and services as the DORA group. While data on access to substance abuse (SA) treatment and additional services were not available for the Matched Comparison group, the DORA Pilot study indicated that DORA pilot probationers received increased access to treatment relative to the comparison groups. However, those study groups were not statistically matched for comparability and subsequent analyses demonstrated that the groups were quantitatively different (DORA pilot reports are available at: <http://ucjc.utah.edu>). Initial analyses of DORA Statewide participants' data suggested that the program was expanded as intended with participants receiving similar levels of supervision and access to treatment as the pilot participants. However, the fidelity of the DORA model may have diminished over time. Additionally, the introduction of DORA may itself have had an impact on the way that AP&P agents worked with all supervisees, not just DORA participants. It is also possible that AP&P practices in general have evolved to be more in line with the evidence-based principles of DORA as agents and treatment providers anecdotally shared experiences on what practices worked.

While such phenomena are not possible to measure with the current data, this diffusion of intervention characteristics through the supervision and treatment agencies may have reduced the ability to discern differential treatment effects for DORA compared to standard supervision. It is possible that both groups benefited from DORA legislation and subsequent changes in policy and practices, as DORA did not operate in a vacuum and general AP&P and treatment practices could have been impacted by the many changes.

### **DORA and the Risk, Need, and Responsivity (RNR) Model**

The findings of the current report confirm those from previous years, and show that higher risk participants demonstrated worse outcomes than lower risk ones. The risk principle of criminal

justice research indicates that intensive programs should be targeted toward higher risk individuals, even if those individuals have less relative success than their low risk counterparts, because the absolute decrease in recidivism due to programming is greater for higher risk individuals (Andrews & Dowden, 2006; Bonta, Wallace-Capretta, & Rooney, 2000). In previous year’s reports, it was recommended that DORA continue to target high risk individuals, but that the program intensify services and target additional criminogenic needs to improve outcomes. As shown in Table 9, substance abuse is merely one of the four “moderate” risk/need areas. When compared to programs that target a single criminogenic need, programs that target multiple criminogenic needs are more effective in reducing recidivism (Gendreau, French, & Taylor, 2002). Furthermore, the “Big Four” are prioritized over the moderate risk/need areas due to their stronger relationship with continued criminal offending (Andrews & Bonta, 2006)

**Table 9** The “Central Eight” Criminogenic Needs

<b>The Big Four risk/need areas:</b>
Antisocial Cognition (attitudes)
Antisocial Associates (peers)
History of Antisocial Behavior (criminal history)
Antisocial Personality Pattern (personality)
<b>The moderate risk/need areas:</b>
Substance Abuse
Family/Marital Circumstances
School/Work
Leisure/Recreation
Source: Andrews & Bonta, 2006

As currently implemented, DORA may not have sufficient intensity or breadth of treatment targets to adequately address the dynamic needs of the high risk population it serves. DORA’s exclusive focus on substance abuse, to the exclusion of other criminogenic risk factors, may be insufficient to reduce recidivism among a high-need group of offenders.

The current report does not include an evaluation of program (either treatment agencies or AP&P offices) adherence to the principles of risk, need, and responsivity (RNR). Structuring services and supervision according to the principles of RNR, however, can directly and positively affect the impact of those services on offender outcomes. Programs that deliver interventions that adhere to two or three of the principles of risk, need, *and* responsivity have bigger impacts on recidivism (Andrews & Bonta, 2010; Andrews & Dowden, 2007; Gendreau, Smith, & French, 2006; Lowenkamp, Flores, Holsinger, Makarios, & Latessa, 2010; Lowenkamp, Latessa, & Smith, 2006), when compared to programs that adhere to one or none of the RNR principles (Latessa, Lowenkamp, & Bechtel, 2009).

**Implications**

The current report provides an overview of the impact of DORA, which is a statewide policy initiative. As such, the analysis does not shed light on differential offender outcomes as a result of program-level differences by treatment provider and AP&P agency. Future analyses should consider the impact of program-level factors on offender outcomes, including: staff training, program philosophy, treatment fidelity, and targeting appropriate and sufficient criminogenic needs.

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