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Disparities in Criminal Court Referrals to Drug Treatment and Prison for Minority Men

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The prison population in the United States increased nearly 5-fold between 1980 and 2009.1 This growth has had a disparate impact on minorities. An estimated 38% of state and federal prison inmates in 2009 were Blacka staggering share when we consider that Blacks comprise only 13% of the US population.² By age 30 years, approximately 21% of Black males will serve a prison sentence compared with only 2.5% of White males.³ The lifetime probability of spending time in prison is now greater for young Black males than the probability of attending college.⁴ It has been demonstrated that this disparity is at least partially a product of the "War on Drugs" and sentencing policies that require longer mandatory minimum stays in prison for lowlevel, drug-related offenses and offenses committed while under the influence of drugs or alcohol.4-6

Given the increased focus on drug-related crimes spurred by the War on Drugs, it is not surprising that drug offenders now constitute the largest share of new commitments to prison and that the criminal justice system has become the largest source of referrals to drug treatment. Criminal justice referrals accounted for 37% of drug treatment admissions in 2008.⁷ Despite substantial evidence that minorities are overrepresented in the drug arrestee population, they remain a relatively large share of prison commitments and a relatively small share of criminal justice referrals to treatment. Hispanics and Blacks contributed to roughly 60% of prison admissions² in 2006 compared with only 35% of drug and alcohol treatment admissions.⁷ Disparities in criminal justice referrals to drug treatment potentially affect access to treatment of hundreds of thousands of individuals arrested for drug offenses each year. If racial/ethnic disparities exist in incarceration and diversion rates, then these disparities are likely to reinforce current imbalances in the criminal justice system and impose substantial economic costs on minorities, such

Objectives. We investigated the extent to which racial/ethnic disparities in prison and diversion to drug treatment were explained by current arrest and criminal history characteristics among drug-involved offenders, and whether those disparities decreased after California's Proposition 36, which mandated first- and second-time nonviolent drug offenders drug treatment instead of prison.

Methods. We analyzed administrative data on approximately 170 000 drug-involved arrests in California between 1995 and 2005. We examined odds ratios from logistic regressions for prison and diversion across racial/ethnic groups before and after Proposition 36.

Results. We found significant disparities in prison and diversion for Blacks and Hispanics relative to Whites. These disparities decreased after controlling for current arrest and criminal history characteristics for Blacks. Proposition 36 was also associated with a reduction in disparities, but more so for Hispanics than Blacks.

Conclusions. Disparities in prison and diversion to drug treatment among drug-involved offenders affect hundreds of thousands of citizens and might reinforce imbalances in criminal justice and health outcomes. Our study indicated that standardized criminal justice policies that improved access to drug treatment might contribute to alleviating some share of these disparities. (*Am J Public Health.* 2013;103:e77–e84. doi:10.2105/AJPH.2013.301222)

as the loss of future employment opportunities and poor health outcomes.⁸

Previous empirical efforts using aggregate data to explain disparities in incarceration rates among Blacks focused on differential involvement at the arrest stage. Some of the most widely cited studies were those conducted by Blumstein. 9,10 Blumstein used aggregate US data to determine whether differential incarceration rates could be explained by differential arrest rates. For 3 different years between 1974 and 1991, Blumstein found that 76% to 86% of the difference in national imprisonment rates between Blacks and Whites could be explained by differential criminal involvement at the arrest stage. However, when the analysis focused exclusively on drug offenders, only about 50% of the disparity was explained. Crutchfield et al.¹¹ argued that aggregating national data likely missed significant differences across states and counties. Austin and Allen,¹² for example, found that only 26% of disparities in drug-related incarcerations in

Pennsylvania were because of differences in arrest rates. Others also contended that the results were very different for individual states.¹³

Although these aggregate-level analyses found that the majority of the disparity in incarceration rates among drug offenders could not be explained by differential arrest rates, other potential explanations were also put forward. Individual factors, such as more serious criminal offense charges associated with the current arrest or more serious criminal histories, could increase the probability of incarceration and make individuals less eligible for drug treatment in lieu of incarceration. Alternatively, contextual factors might also play a role. Minorities are more likely to live in high-crime urban areas with a greater allocation of law enforcement resources, which might make them more prone to apprehension for drug possession crimes.¹⁴ Furthermore, courts located in urban areas might be more likely to incarcerate a drug offender because of greater

caseloads, limited treatment capacity, or a greater reliance among judges on mandatory penalties that more directly affect minorities.¹⁵

There were a number of important limitations with the previous aggregate studies of disparities among drug-involved offenders. Few aggregate studies of racial disparities in criminal justice outcomes for drug-involved offenders differentiated the severity of the drug offenses in the current arrest, such as whether minorities were more likely than Whites to commit felony offenses that are prison-eligible. These studies also provided no information on the criminal history of arrestees. More serious criminal histories could also contribute to disparities in incarceration rates. A metaanalysis of individual-level analyses showed that the size of the observed disparity declined significantly after controlling for offense severity, other case characteristics, and previous criminal record.16 Another limitation was that the aggregate studies relied on arrest and incarceration data from different sources, making it unclear what share of the incarcerations originated in the arrest population versus other sources, like revocations from parole or probation violations. Finally, few studies examined White-Hispanic disparities.¹⁷ For policymakers, it is clearly important to document whether Hispanics experience similar disparities as Blacks. By ignoring ethnic differences, previous research often included Hispanics as Whites in their comparisons, thereby potentially masking important differences.¹⁸

Using a sample of males arrested for drug offenses in California, we investigated whether there were racial/ethnic disparities in the rate of incarceration and the rate of diversion to drug treatment. The study relied on administrative records that tracked the same individuals from their arrest to corresponding criminal court disposition. We examined whether observed disparities remained after statistically controlling for similar current arrest, criminal history, and demographic characteristics. We also examined whether these disparities were affected by changes in the sentencing regime that occurred in July 2001 with the implementation of California's Proposition 36 (Prop36). Prop36 represents a potentially critical change in the sentencing regime. The proposition mandated that individuals with less than 3 previous drug convictions and no

violent convictions be offered drug treatment in lieu of incarceration. The mandate was well funded during our analysis period, with approximately \$120 million dollars annually from 2001 to 2005. 19

METHODS

This study used administrative data from California's Automated Criminal History System, which provided us with criminal history records for a random sample of approximately 200 000 individuals with a drug-related offense on their record between 1980 and 2009. This sample generated nearly 1.4 million arrests for drug and nondrug offenses over their observed lifetime. From this sample, we identified arrests for the 611 felony and misdemeanor offenses that qualified under California's health and safety codes as being drug- or alcohol-related (hereafter, drug-involved). Drug-involved offenses ranged from misdemeanor offenses of being under the influence of illicit drugs (e.g., under influence of hashish) to felony offenses of possession and transportation or sales of illicit drugs (e.g., possess hashish; possess hashish for sale). Because we observed all previous arrest charges and dispositions regardless of whether drugs or alcohol were involved, the data set allowed us to construct measures of each arrestee's complete criminal history. We transformed these criminal history records into an arrest-level analytic file with variables that measured the severity of offenses in the current arrest and all previous criminal involvement. To generate a more comparable sample with complete criminal histories, we focused on male offenders whose criminal activity was confined to California. We retained male offenders classified as White, Black, or Hispanic so that we could draw comparisons between Whites and each minority group. We analyzed those arrests that included at least 1 of the 611 drug-involved offenses committed from 1995 to 2005. The restriction ensured that the only major change in sentencing regime was the implementation of Prop36 in 2001. In 1994, for example, California voters passed the Three Strikes Law, which represented another important change in sentencing regime. Of the 611 relevant offenses, 106 were eligible for drug treatment under Prop36. However, we included all

drug-involved arrests in our analysis sample to guard against the potential for charge switching after the implementation of the law. The final analytic database consisted of 172 512 felony and misdemeanor drug-related arrests among White, Black, and Hispanic male offenders committed during the 11-year period.

Outcome Measures

Our outcome measures were based on the final disposition for each arrest. Dichotomous variables were constructed to indicate whether (= 1) or not (= 0) an arrestee received a court disposition for prison and whether an arrestee received a court disposition of diversion to drug treatment.

Statistical Methods

For Blacks and Hispanics, we estimated the odds of receiving each disposition relative to Whites using logistic regression to determine whether the groups differed significantly during the pre-Prop36 (January 1995–June 2001) and post-Prop36 (July 2001-December 2005) periods. In these models, an odds ratio (OR) greater than 1 indicated that Blacks (or Hispanics) were more likely than Whites to receive a particular disposition, whereas an OR less than 1 indicated that Blacks (or Hispanics) were less likely to receive a particular disposition. Because individuals might have more than 1 drug-involved arrest in the analysis sample, we clustered the standard errors at the individual level. The models were estimated separately for the pre- and post-Prop36 periods under the assumption that race/ethnicity might be differentially associated with dispositions under the 2 sentencing regimes. Therefore, we also calculated a difference of coefficients test to examine whether the ORs for each minority group changed significantly after Prop36 was implemented.²⁰ The differences of coefficients test provides a straightforward assessment of the interaction effects between race and time period from the logistic regression models and does not require the assumption of linearity. A P value of < .05 indicated a significant finding. Models were estimated using Stata version $10.1.^{21}$

We started with a basic model that controlled only for demographic characteristic factors in the pre- and post-Prop36 periods. This model included dichotomous variables for

race/ethnicity, age, and the urbanicity of the county where the arrest occurred. The age indicator variables controlled for age profiles that might differ by racial/ethnic groups. Urbanicity of the county was included as a potential confounder of racial/ethnic disparities in court dispositions for drug cases. Urbanicity was based on the 2003 Office of Management and Budget Urban/Rural Continuum Codes. Because of the small number of arrests in nonmetropolitan areas, the nonmetropolitan categories were collapsed into a single category. The second model attempted to reduce confounders of disparities related to the seriousness of current charges by adding controls for the number of felony drug, violent, property, other offenses, and the number of corresponding misdemeanor offenses by type. Our third model attempted to further reduce confounding because of criminal history by adding the following covariates: number of arrests (all priors and including the current arrest); dichotomous indicators for any previous drug, violent, property, and other felony arrests; and dichotomous indicator variables for any prior conviction and any prior prison sentence. Our fourth model added county-fixed effects to control for time-invariant differences across counties that were not observable.

RESULTS

Table 1 presents descriptive statistics first for the dependent variables by race/ethnicity and time period, and then for the independent variables, including demographic characteristics, current arrest characteristics, and criminal history characteristics by race/ethnicity.

The mean proportions for whether an arrestee received a prison disposition showed substantial differences between Blacks and Whites in the pre-Prop36 period (0.088 Black vs 0.045 White; P<.01). The mean proportions receiving a prison disposition were lower in the post-Prop36 period for both groups, but Blacks were still about twice as likely to receive a prison disposition (0.050 Black vs 0.024 White; P<.01). There was a smaller, but still statistically significant, disparity in prison dispositions between Hispanics and Whites in the pre-Prop36 period (0.053 Hispanic vs 0.045 White; P<.01), but the difference in the post-Prop36 period was not significant at the

5% level (0.022 Hispanic vs 0.024 White; P=.06).

Dispositions for diversion to drug treatment were significantly less common among Blacks relative to Whites in the pre-Prop36 period (0.040 Black vs 0.079 White; P<.01), and to a lesser extent, in the post-Prop36 period (0.043 Black vs 0.064 White; P<.01). Diversion among Hispanics was also significantly less common than among Whites in the pre-Prop36 period (0.065 Hispanic vs 0.079 White; P<.01) and post-Prop36 period (0.054 Hispanic vs 0.064 White; P<.01).

Although a larger number of independent variables are shown in Table 1, we highlighted only a few key differences here. The current arrest characteristics showed that Blacks had significantly more felony drug offenses on the current arrest (0.72 Black vs 0.51 White; P < .01), whereas Whites had significantly more misdemeanor drug offenses (0.53 Black vs 0.85 White; P < .01). Blacks also had a higher prevalence of violent felony offenses on the current arrest (0.03 Black vs 0.02 White; P < .01), but Whites had a higher prevalence of property felony offenses (0.04 Black vs 0.06 White; P < .01). On average, Blacks were arrested nearly twice as often (12.1 Black vs 6.6 White; P < .01), were more likely to have a previous violent felony offense (0.54 Black vs 0.25 White; P < .01), weremore likely to have a previous conviction (0.82 Black vs 0.65 White; P < .01), and were more likely to have a previous prison sentence (0.30 Black vs 0.11 White; P < .01).

By contrast, Hispanics resembled Whites more closely in terms of their current arrest characteristics and their criminal histories. Although the differences between Hispanics and Whites were also statistically significant (likely due in part to our large sample), those differences were generally smaller than those observed when comparing Blacks and Whites.

The significant differences in current arrest and criminal history characteristics across race/ethnicity affirmed the need for a regression framework in analyzing racial/ethnic disparities in court dispositions to prison and diversion to drug treatment.

Models of Disparities in Prison

Table 2 presents the results from the logistic regression models of Black–White and

Hispanic-White disparities in prison dispositions. Model 1 confirmed that the odds of a prison sentence among Blacks were more than double those among Whites in the pre-Prop36 period (OR = 2.125; P < .01) even after controlling for demographic characteristic factors of age and urbanicity. The OR for Blacks remained relatively unchanged in the post-Prop36 period (OR = 2.088; P < .01). In model 2, which included current arrest characteristics, the odds of a prison sentence among Blacks remained significantly higher than those among Whites in the pre-Prop36 period (OR = 1.763; P < .01) and in the post-Prop36 period (OR = 1.573; P < .01). However, the Black-White disparity in prison dispositions was no longer significant in either period once we included controls for criminal history (model 3). To control for differences across counties beyond urbanicity, which might include differences in the implementation of Prop36, we added county-fixed effects in model 4. Again, the model suggested no significant disparities between Blacks and Whites. For Blacks, the tests for differences in the ORs between the pre- and post-Prop36 period did not identify significant differences between periods in any of the models.

Model 1 indicated that the odds of a prison sentence among Hispanics were 21% higher than among Whites in the pre-Prop36 period (OR = 1.210; P < .01). Disparities in prison dispositions between Hispanics and Whites in the pre-Prop 36 period did not decline as the models added controls for current arrest (OR = 1.244; P < .01), criminal history characteristics (OR = 1.309; P < .01), and county-fixed effects (OR = 1.201; P < .01). By contrast, during the post-Prop36 period, there were no significant differences between Hispanics and Whites in any of the models. The test for differences in ORs between the pre- and post-Prop36 periods demonstrated statistical significance for all models, indicating a significant reduction in disparities in prison occurred after the change in sentencing.

Models of Disparities in Diversion to Drug Treatment

Table 3 presents the results from the logistic regression models of Black–White and Hispanic–White disparities in diversion dispositions. Model 1 indicated that the odds of

TABLE 1-Descriptive Statistics for Drug-Involved Male Arrests: California, 1995-2005

Variables	White	Black	Hispanic
Dependent variabl	es		
Prison disposition			
Pre-Proposition 36	0.045	0.088**	0.053**
Post-Proposition 36	0.024	0.050**	0.022^{a}
Diversion disposition			
Pre-Proposition 36	0.079	0.040**	0.065**
Post-Proposition 36	0.064	0.043**	0.054**
Independent variab	les		
Age, y			
18-<21	11.64	10.55**	13.95**
21- < 25	16.58	14.97	22.40
25- < 30	15.76	15.90	21.18
30- < 35	15.90	16.02	15.66
35- < 40	16.04	16.52	12.05
40- < 45	12.36	13.33	8.21
45- < 50	6.38	7.68	3.90
50- < 55	2.87	3.24	1.56
55-<60	1.38	1.10	0.61
60-<65	0.53	0.45	0.27
≥ 65	0.55	0.24	0.21
Urbanicity of the county of the arrest			
County in metropolitan area with ≥ 1 million population	67.44	87.99**	72.54**
County in metropolitan area of 250 000-1 million population	20.05	10.03	21.64
County in metropolitan area of < 250 000 population	7.54	1.56	4.88
Nonmetropolitan county ^b	4.98	0.42	0.93
Current arrest characteristics			
Drug felony count	0.51	0.72**	0.47**
Drug misdemeanor count	0.85	0.53**	0.80**
Violent felony count	0.02	0.03**	0.03**
Violent misdemeanor count	0.01	0.01**	0.01
Property felony count	0.06	0.04**	0.04**
Property misdemeanor count	0.02	0.02**	0.02**
Other felony count	0.06	0.11**	0.06 ^a
Other misdemeanor count	0.25	0.27**	0.31**
Criminal history	0.20	0.21	0.01
No. of arrests	6.58	12.11**	5.65**
Prior drug felony arrest	0.46	0.69**	0.37**
Prior violent felony arrest	0.25	0.54**	0.26**
Prior property felony arrest	0.23	0.56**	0.26**
Prior other felony arrest	0.33	0.56**	0.20**
Prior conviction	0.24	0.41**	0.20**
	0.65	0.82**	0.58**
Prior prison			
Sample	70 830	25 612	76 070

^aProportion approached statistical significance (P < .1).

receiving diversion to drug treatment among Blacks were 53% lower than among Whites (OR = 0.47; P < .01) in the pre-Prop36 period and 32% lower in the post-Prop 36 period (OR = 0.68; P < .01). The inclusion of current arrest characteristics variables did not shrink the observed Black-White disparities in the odds of diversion in either the pre-Prop36 period (OR = 0.41; P < .01) or post-Prop36 period (OR = 0.63; P < .01). However, the observed Black-White disparity did decrease when model 3 added controls for criminal history characteristics in the pre- (OR = 0.67); P < .01), and to a lesser extent, in the post-Prop36 periods (OR = 0.74; P < .01). The addition of county-fixed effects in model 4 did little to change the results further in the pre-Prop36 (OR = 0.68; P < .01) and post-Prop36 periods (OR = 0.73; P < .01). The ORs were significantly different between time periods for the first 2 models, but the differences were no longer statistically significant in models 3 and 4.

In Table 3, the models for Hispanic-White disparities show a significantly different likelihood of receiving diversion to drug treatment in the pre-Prop36 period. Disparities persisted even in models that included controls for current arrest, criminal history characteristics, and county-fixed effects. The ORs of diversion to drug treatment among Hispanics relative to Whites ranged from 0.63 to 0.76 (all P < .01). The observed disparities decreased somewhat in the post-Prop36 period, with the ORs for Hispanics ranging from 0.74 to 0.84, but remaining statistically significant across all models (P < .01). The tests for differences in ORs showed significant reductions between time periods for models 2, 3, and 4, indicating that Hispanic-White disparities in diversions to drug treatment decreased in the post-Prop36 period, even after taking confounders into account.

DISCUSSION

This study presented an analysis of prison and diversion to drug treatment dispositions in California criminal courts for drug-involved offenders. We improved on previous studies by following the same individuals from arrest to final court disposition, controlling for detailed current arrest and criminal history

^bUrban location based on Office of Management and Budget Urban/Rural Continuum Codes with nonmetropolitan codes collapsed into 1 category.

^{*}P < .05; **P < .01 for t-test differences between Blacks (Hispanics) and Whites for dichotomous variables and χ^2 for categorical variables.

TABLE 2-Probability of Prison for Drug-Involved Male Arrests: California, 1995-2005

Standards Fine-Prop.36 Fine-Prop.36 <th></th> <th>Model 1</th> <th>91</th> <th>Model 2</th> <th>el 2</th> <th>Model 3</th> <th>13</th> <th>Model</th> <th>1 4</th>		Model 1	91	Model 2	el 2	Model 3	13	Model	1 4
error 0.125** (1.926, 2.344) 2.088** (1.856, 2.350) 1.763** (1.591, 1.954) error 0.107 0.126 0.093 (1.954) (1.955) (1.	Variable	Pre-Prop36	Post-Prop36	Pre-Prop36	Post-Prop36	Pre-Prop36	Post-Prop36	Pre-Prop36	Post-Prop36
error 0.105** (1.926, 2.344) 2.088** (1856, 2.350) 1.763** (1.591, 1.954) error 7.0107 0.126 0.093 0.093 0.106 0.093 0.106 0.093 0.106 0.093 0.106 0.093 0.106 0.106 0.093 0.106 0.1	Blacks vs Whites								
Fired Pick No. 126 0.093 Fittes No.	OR (95% CI)	2.125** (1.926, 2.344)	2.088** (1.856, 2.350)	1.763** (1.591, 1.954)	1.573** (1.385, 1.787)	0.967 (0.867, 1.078)	0.953 (0.834, 1.090)	1.060 (0.948, 1.185)	1.067 (0.928, 1.226)
fics Yes Yes Alton No Yes Advors No No Advors 52.363 Advors Advors 26.353 21.941 Advors Advors Advors Advors Advors <	Robust standard error	0.107	0.126	0.093	0.102	0.054	0.065	090'0	0.076
ho h	Demographics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ho h	Arrest characteristics	No	No	Yes	Yes	Yes	Yes	Yes	Yes
1.210*** (1.10)** (1.210***) (1.2	Criminal history	No	No	No	No	Yes	Yes	Yes	Yes
### 44 079 52 363 44 079 51 363 44 079 21 941 26 353 21 941 1.31 efficients: #### 1.210** (1.112, 1.316) 0.921 (0.833, 1.018) 1.244** (1.139, 1.359) error 0.052 0.047 0.056	County-fixed effects ^a	No	No	No	No	No	No	Yes	Yes
efficients: p36 ^b error 0.052 0.024 0.024 0.025 1.359) error 0.052 0.047 0.056 tics No	Sample, no.	44 079	52 363	44 079	52 363	44 079	52 363	44 062	51 845
### Or 222 1.33	Clusters, no.	21 941	26 353	21 941	26 353	21 941	26 353	21 933	26 062
efficients: p36 ^b 1.210** (1.112, 1.316) 0.921 (0.833, 1.018) 1.244** (1.139, 1.359) error 0.052 0.047 0.056 Ves Yes Yes tics No No No No No ts³ No No No No 4.134** (1.139, 1.359) 2.62' efficients:	Test statistic for	0.22	22	1.3	75	0.15	9	-0.0	57
Hp36b error 0.052 0.047 0.056 0.056 0.047 0.056 0.056 0.047 0.056 0.056 0.047 0.056 0.056 0.047 0.056 0.056 0.057 0.056	difference in coefficient	:							
1.210** (1.112, 1.316) 0.921 (0.833, 1.018) 1.244** (1.139, 1.359) error 0.052 0.047 0.056	pre- vs post-Prop36 ^b								
1.210** (1.112, 1.316) 0.921 (0.833, 1.018) 1.244** (1.139, 1.359) 0.052 0.047 0.055 0.056	Hispanics vs Whites								
Ves Ves <td>OR (95% CI)</td> <td>1.210** (1.112, 1.316)</td> <td>0.921 (0.833, 1.018)</td> <td>1.244** (1.139, 1.359)</td> <td>1.034 (0.927, 1.153)</td> <td>1.309** (1.196, 1.421)</td> <td>1.063 (0.954, 1.180)</td> <td>1.201*** (1.097, 1.314)</td> <td>1.001 (0.896, 1.118)</td>	OR (95% CI)	1.210** (1.112, 1.316)	0.921 (0.833, 1.018)	1.244** (1.139, 1.359)	1.034 (0.927, 1.153)	1.309** (1.196, 1.421)	1.063 (0.954, 1.180)	1.201*** (1.097, 1.314)	1.001 (0.896, 1.118)
Yes Yes <td>Robust standard error</td> <td>0.052</td> <td>0.047</td> <td>0.056</td> <td>0.057</td> <td>0.058</td> <td>0.058</td> <td>0.055</td> <td>0.057</td>	Robust standard error	0.052	0.047	0.056	0.057	0.058	0.058	0.055	0.057
No No Yes	Demographics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ony No No No Yes Yes Yes effects ^a No No No No Yes 61395 61395 85 505 61395 85 505 61316 for 4.134** 33 600 45 538 33 611 coefficients: 2.627** 3.024** 5.520**	Arrest characteristics	No	No	Yes	Yes	Yes	Yes	Yes	Yes
effects ^a No No No No Yes 61395 85 505 61395 85 505 61316 for 45 538 33 660 45 538 33 611 n coefficients: 2.627** 3.024** 2.520**	Criminal history	No	No	No	No	Yes	Yes	Yes	Yes
for 4.134** 4.134** 2.627** 85 505 61 395 85 505 61 316 for 4.134** 4.134** 2.627** 3.024** 4.5 538 33 611	County-fixed effects ^a	No	No	No	No	No	No	Yes	Yes
33 660 45 538 33 660 45 538 33 660 45 538 33 611 4.134** 2.627** 3.024** 2.520**	Sample, no.	61 395	85 505	61 395	85 505	61 395	85 505	61 316	84 656
4.134** 2.627** 3.024** 9p36 ^b	Cluster, no.	33 660	45 538	33 660	45 538	33 660	45 538	33 611	45 076
difference in coefficients: pre- vs post-Prop36 ^b	Test statistic for	4.134	* * *	2.62	**/	3.024	*	2.520	*
pre- is post-Prop36 ^b	difference in coefficient	:5							
	pre- vs post-Prop36 ^b								

Note. G = confidence interval; OR = odds ratio.

*Models with county-fixed effects have a slightly smaller sample size because counties with no variation dropped out of the regression.

*P_test statistic for comparison of coefficients.

*P < .05; **P < .01; ***P < .01; ***P < .001.

TABLE 3—Probability of Diversion to Treatment of Drug-Involved Male Arrests: California, 1995-2005

	Mo	Model 1	Mod	Model 2	Mo	Model 3	PoM	Model 4
Variable	Pre-Prop36	Post-Prop36	Pre-Prop36	Post-Prop36	Pre-Prop36	Post-Prop36	Pre-Prop36	Post-Prop36
Blacks vs Whites								
OR (95% CI)	0.469** (0.423, 0.521)	0.469** (0.423, 0.521) 0.684** (0.617, 0.758)		0.632** (0.569, 0.702)	0.673** (0.603, 0.751)	0.410** (0.369, 0.456) 0.632** (0.569, 0.702) 0.673** (0.603, 0.751) 0.741** (0.665, 0.826)	0.681*** (0.606, 0.765)	0.727*** (0.648, 0.816)
Robust standard error	0.025	0.036	0.022	0.034	0.038	0.041	0.041	0.043
Demographics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Arrest characteristics	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Criminal history	No	No	No	No	Yes	Yes	Yes	Yes
County-fixed effects ^a	No	No	No	No	No	No	Yes	Yes
Sample, no.	44 079	52 363	44 079	52 363	44 079	52 363	44 062	52 363
Cluster, no.	21941	26 353	21941	26 353	21 941	26 353	21 933	26 353
Test statistic for	-4.5	-4.930**	-5.4	-5.473**	-1	-1.228		-0.790
difference in coefficients:	7.5							
pre- vs post-Prop36 ^b								
Hispanics vs Whites								
OR (95% CI)	0.761** (0.713, 0.811)	0.761^{**} $(0.713, 0.811)$ 0.809^{**} $(0.760, 0.861)$ 0.747^{**} $(0.699, 0.797)$ 0.839^{**} $(0.787, 0.894)$ 0.655^{**} $(0.613, 0.701)$ 0.828^{**} $(0.776, 0.884)$ 0.628^{***} $(0.586, 0.674)$ 0.742^{***} $(0.694, 0.793)$	0.747** (0.699, 0.797)	0.839** (0.787, 0.894)	0.655** (0.613, 0.701)	0.828** (0.776, 0.884)	0.628*** (0.586, 0.674)	0.742*** (0.694, 0.793)
Robust standard error	0.025	0.026	0.025	0.027	0.022	0.027	0.022	0.025
Demographics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Arrest characteristics	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Criminal history	No	No	No	No	Yes	Yes	Yes	Yes
County-fixed effects ^a	No	No	No	No	No	No	Yes	Yes
Sample, no.	61 395	85 505	61 395	85 505	61 395	85 505	61376	85 042
Cluster, no.	33 660	45 538	33 660	45 538	33 660	45 538	33 650	45 272
Test statistic for	-1	-1.336	-2.4	-2,486**	-4.8	-4.895**	-3.38	-3.356**
difference in coefficients:	7.0							
pre- vs post-Prop36 ^b								

characteristics, and examining the influence of a change in sentencing policy that mandated diversion to drug treatment for nonviolent drug offenders.

Using administrative records from the California Department of Justice on more than 170 000 drug-involved arrests between 1995 and 2005, we initially documented evidence of significant racial/ethnic disparities in the unadjusted comparisons in the proportion of prison and diversion to drug treatment dispositions for Blacks and Hispanics relative to Whites. Blacks were significantly more likely to receive a prison disposition and less likely to receive a diversion to drug treatment disposition. Disparities were also present for Hispanics, albeit to a smaller extent. Significant differences in current and previous criminal involvement, however, demonstrated the need for a regression framework to adjust for these potential confounders.

The addition of covariates measuring current arrest and criminal history characteristics as well as county-fixed effects reduced Black-White disparities in prison dispositions to statistically insignificant levels. The passage of Prop36, however, appeared to have little influence on changing Black-White disparities in prison dispositions. In contrast, Hispanic-White disparities in prison dispositions were largely unaffected by the inclusion of these controls in the pre-Prop36 period, perhaps because those underlying characteristics were more similar. This finding suggested that different factors might influence dispositions for Hispanics. However, in the period after the passage of Prop36, the Hispanic-White disparities in prison dispositions were no longer significantly different. These findings suggested that the law had little impact on reducing Black-White disparities in prison dispositions in this sample, but did influence Hispanic-White differences.

The disparities in diversions to drug treatment dispositions did not change as materially as disparities in prison after including control variables. Both Blacks and Hispanics remained significantly less likely to receive such a disposition. The findings generally suggested that the passage of Prop36 might be associated with a significant reduction in the disparities to drug treatment among Hispanics, but did not eliminate them.

Our goal was only to show that even a simple analysis could help us understand the nature of disparities and identify some individual and environmental factors that were associated with those differences. However, our results also highlighted the complexity inherent in analyzing the criminal court process. Although current arrest characteristics and criminal histories explained much of the Black-White disparities in prison dispositions, they did not do as good a job of explaining disparities in diversions to drug treatment. A different set of factors might account for the apparent racial/ethnic disparity in drug treatment diversions for drug-involved offenders that go beyond comparing current arrest and criminal histories. For example, we did not control for wealth or income, which could influence the quality of legal representation, and consequently, court dispositions. Likewise, the factors associated with disparities between Whites and Blacks appeared to be different from those associated with disparities between Whites and Hispanics.

Although the data and analysis period allowed us to provide some unique insights, the analysis did have some additional limitations typical in this literature and analytic framework. As with any regression framework, we were concerned about unobservable characteristics that might be related to race/ethnicity and confounded with the court outcomes. We also acknowledged that even well-specified logistic regression models could be poor predictors of rare events such as prison and diversion, and our models were no exception. Finally, although Prop36 was intended to be implemented state-wide in July 2001, there was likely variation in the timing and fidelity across counties that might not have been entirely captured by county-fixed effects.

Nevertheless, one of the most salient results from this analysis was that Prop36 was associated with some reductions in disparities for minorities relative to Whites. This suggested that more standardized sentencing regimes could help reduce disparities and potentially reverse the effects of previous drug laws that disproportionately affected minorities. Scholars noted that the War on Drugs and subsequent prison growth fueled by a focus on arrests and prosecutions for misdemeanor and felony drug possession offenses had a disparate impact on

minorities. Our study suggested that policies like Prop36, which standardized and refocused sentencing toward treatment and away from incarceration, might help reverse some share of the criminal justice disparities, and consequently, health disparities.

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Contributors

N. Nicosia was the study principal investigator, organized the data in the analytic database, and performed all analyses. J. M. MacDonald conceptualized the study questions and led the writing of the article. J. Arkes contributed to the writing of the article. All authors helped to conceptualize ideas, interpret findings, and review drafts of the article.

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Human Participant Protection

This study was approved by the RAND Corporation's institutional review board.

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