

Racial Disparities In Involuntary Outpatient Commitment: Are They Real?

Disparities in outpatient commitment must be understood through the settings where commitment is initially considered.

by Jeffrey Swanson, Marvin Swartz, Richard A. Van Dorn, John Monahan, Thomas G. McGuire, Henry J. Steadman, and Pamela Clark Robbins

ABSTRACT: In this paper we explore racial disparities in outpatient civil commitment, using data from Kendra's Law in New York State. Overall, African Americans are more likely than whites to be involuntarily committed for outpatient psychiatric care in New York. However, candidates for outpatient commitment are largely drawn from a population in which blacks are overrepresented: psychiatric patients with multiple involuntary hospitalizations in public facilities. Whether this overrepresentation under court-ordered outpatient treatment is unfair depends on one's view: is it access to treatment and a less restrictive alternative to hospitalization, or a coercive deprivation of personal liberty? [*Health Affairs* 28, no. 3 (2009): 816–826; 10.1377/hlthaff.28.3.816]

OVER THE PAST THREE DECADES, arguments over involuntary psychiatric intervention versus the liberty interests of people with mental illnesses have followed the path of deinstitutionalization into community care. Whether or not it is legitimate and effective to extend the state's civil commitment authority into outpatient treatment—applying it to people who would not meet the more stringent criteria for compulsory inpatient confinement—has become one of the most contentious issues in mental health law and policy.

Critics of outpatient commitment allege that historically oppressed racial minority groups are being singled out disproportionately for court-ordered treatment, and this has become a focal point for the larger debate over the policy's basic function—whether it represents a pathway to voluntary treatment and recovery, or a mechanism of social control masquerading as mental health care.¹ We explore

Jeffrey Swanson (jeffrey.swanson@duke.edu) and Marvin Swartz are professors, Psychiatry and Behavioral Sciences, at the Duke University School of Medicine in Durham, North Carolina. Richard Van Dorn is an assistant professor at the Florida Mental Health Institute, University of South Florida, in Tampa. John Monahan is the John S. Shannon Distinguished Professor at the University of Virginia School of Law in Charlottesville. Thomas McGuire is a professor, Health Care Policy, at Harvard Medical School in Boston, Massachusetts. Henry Steadman is president and Pamela Robbins is vice president of Policy Research Associates in Delmar, New York.

racial differences in rates of outpatient commitment and present empirical data to help interpret those differences: Do they likely result from discrimination in applying the law to individuals, or from social and economic factors that affect the racial composition of the service populations where the law is applied?

■ **Criteria for outpatient commitment.** Virtually all U.S. states permit some form of outpatient commitment, but its use and enforcement vary widely. The legal criteria typically include having a severe mental illness that limits a person's ability to comply voluntarily with recommended treatment, a history of nonadherence to treatment resulting in a pattern of multiple hospitalizations, and a likely risk of becoming dangerous in the future if treatment is forgone.

New York State's legal eligibility criteria for outpatient commitment, known as Assisted Outpatient Treatment (AOT), are as follows.² A person may be placed in AOT only if, after a hearing, the court finds that all of the following have been met: the person must (1) be age eighteen or older; (2) suffer from a mental illness; (3) be unlikely to survive safely in the community without supervision, based on a clinical determination; (4) have a history of nonadherence to treatment that has been a significant factor in his or her being in a hospital, prison, or jail at least twice within the past thirty-six months or has resulted in one or more acts, attempts, or threats of serious violent behavior toward self or others within the past forty-eight months; (5) be unlikely to voluntarily participate in treatment; (6) be, in view of his or her treatment history and current behavior, in need of AOT to prevent a relapse or deterioration, which would likely result in serious harm to the person or others; and (7) be likely to benefit from AOT. The court-ordered treatment must be the least restrictive alternative that will allow the person to live safely in the community.

■ **Treatment requirements under outpatient commitment.** Outpatient commitment orders require compliance with recommended outpatient treatment, but they stop short of permitting forced medication of legally competent people in outpatient treatment settings. Typically, these orders are given initially for three to six months, renewable with a court hearing. When a person under outpatient commitment fails to adhere to the recommended treatment plan, the clinician may request that the police transport the person to a facility to remedy the nonadherence and potentially be evaluated for inpatient commitment. A recent study of more than 1,000 psychiatric outpatients in public mental health systems in five U.S. cities found that 12–20 percent of these patients had, at some point, been placed in outpatient commitment or a related order for community treatment.³

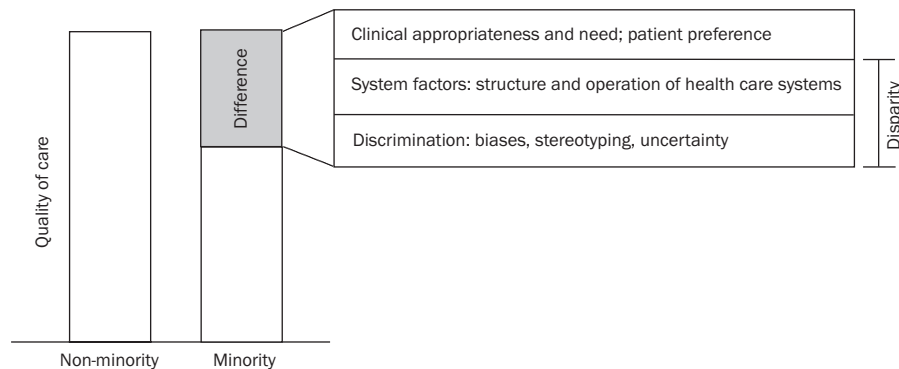
■ **Coercion and treatment.** Outpatient commitment combines coercion and treatment; herein lies the key difference between opposing camps. Opponents are primarily concerned with coercion, seeing outpatient commitment as a deprivation of liberty and a mechanism of social control. Advocates are primarily concerned with treatment, viewing outpatient commitment as a form of access to health care for people who won't get it on their own.

■ **Allegations of racial bias.** An allegation of racial bias in New York State’s outpatient commitment program—called “Kendra’s Law” in memory of a woman pushed in front of a subway train by a person with untreated schizophrenia—has intensified the debate. New York’s program is the largest, best-funded, and most carefully scrutinized exemplar of outpatient commitment. Between 1999 and 2008, 35 percent of those with outpatient commitment orders have been African Americans, who make up 17 percent of the state’s population, while 33 percent of the people on outpatient commitment have been whites, who make up 61 percent of the population.⁴ This has raised difficult questions: Does black New Yorkers’ substantial overrepresentation amount to a true “disparity”? Is outpatient commitment being applied fairly?

■ **IOM framework.** The most comprehensive review of disproportionality in U.S. health care remains the 2002 Institute of Medicine (IOM) report, *Unequal Treatment*.⁵ One of its most important contributions was to frame health care disparities conceptually and place them in a larger context. In exploring racial disparities and ways to eliminate them, the IOM framework makes important distinctions among “difference,” “disparity,” and “discrimination.” The report argues that “disparity” should be reserved for that portion of the difference in health care quality that is attributable to (1) systemic, legal, and regulatory factors that treat minorities differently than their nonminority counterparts; or (2) discrimination, bias, stereotyping, and clinical uncertainty within the system. That portion of the difference that is attributable to variation in need, clinically appropriate decisions, and patients’ preferences should be factored out and not be considered a “disparity” (Exhibit 1).⁶

■ **Difference versus disparity.** Applying the IOM paradigm to outpatient commitment policy, and to Kendra’s Law in New York, is there a disparity? A comparison of the racial distribution of outpatient commitment cases to the general population

EXHIBIT 1
Difference Versus Disparity In The Health Care System



SOURCE: Adapted from T.G. McGuire et al., “Implementing the Institute of Medicine Definition of Disparities: An Application to Mental Health Care,” *Health Services Research* 41, no. 5 (2006): 1979–2005 (reprinted with permission).

merely shows a difference. To demonstrate disparity, we would need to consider whether the underlying clinical need was the same in the two groups; the extent to which clinical decisions were appropriate in both groups; whether structural or systemic features of outpatient commitment selection (such as its being situated in the public system of care) might affect groups differently; and how much the groups differed in subjective preferences for treatment.

In the case of outpatient commitment, however, any finding of disparity would also raise this question: is disparity a disadvantage? Do the benefits of outpatient commitment outweigh its drawbacks to recipients—or is the treatment received worth the coercion required to get it?⁷

■ **Effectiveness of outpatient commitment.** Empirical evidence for the effectiveness of outpatient commitment is arguably mixed, and certainly contested. Proponents point to a randomized clinical trial in North Carolina that found that it reduces hospitalizations.⁸ Opponents find the evidence inconclusive.⁹

Secondary analyses from the same North Carolina study showed that outpatient commitment lasting six months or longer was associated with more frequent use of mental health services and that when such services were combined with outpatient commitment, medication adherence improved, risk of violent behavior and victimization declined, and subjective quality of life increased. Outpatient commitment also tended to increase perceived coercion.¹⁰ However, studies of stakeholders' opinions about outpatient commitment have shown that many people in the target populations consider its benefits to exceed its costs.¹¹

If one were to assume that outpatient commitment equates to receiving community-based mental health care that is needed, beneficial, of high quality, and even preferred by its recipients over the long run, then the initial premise of disparity would be undermined. Under such an assumption, it is whites who might be considered to be the disadvantaged group relative to African Americans, insofar as whites are underrepresented among recipients of outpatient commitment and thus receive proportionately fewer of whatever resources and benefits such programs might provide.

In contrast, to understand how differences in rates of outpatient commitment could disadvantage African Americans, we need to go beyond the “more is better” perspective that underlies much of the health care disparities literature. Rather, we should see these differences against the historical backdrop of long-term institutional confinement of people with mental illnesses—blacks in greater proportions than whites—and the subsequent “revolving door” syndrome of involuntary hospital readmissions. We should also consider the segregating effects of a de facto two-tier system of care: a private system of care for people with employer-based insurance; and a public system of care for people who are poor, unemployed, and uninsured or who have public, entitlement-based insurance.¹²

■ **Our task here.** In this paper we examine potential racial differences and disparities in outpatient commitment, using data from the implementation of Kendra's

Law in New York. Our analysis compares rates of outpatient commitment for African Americans and whites both from a total-population perspective and within the narrower context of the relevant clinical populations from which outpatient commitment cases are drawn.

Starting from the total population perspective of the IOM framework and assuming that outpatient commitment represents undesirable coercion, large racial disparities may indeed exist. Such disparities could result from social, economic, and systemic factors that interact to produce higher base rates of involuntary hospitalization among blacks than among whites. However, starting from the narrower perspective of the most relevant target populations for outpatient commitment—and taking the mental health system as it is—there may be minimal differences between black and white patients in rates of applying outpatient commitment; without basic differences, the question of disparities becomes moot.

Moreover, if one assumes that outpatient commitment might provide beneficial and ultimately desirable treatment—a less restrictive alternative to, or a remedy for, involuntary hospitalization—it may have minimal disadvantages; without basic disadvantages, the question of difference itself becomes moot. We discuss the implications of our empirical findings in light of our conceptual framing of outpatient commitment as a policy that may provide both desirable resources and undesirable coercion.

Data And Methods

To examine potential racial differences and disparities in the use of outpatient commitment, we carried out two sets of statistical analyses. First, we estimated and compared rates of outpatient commitment in New York for blacks and whites, using several alternative denominators. These denominators can be thought of as a series of concentric circles encompassing relevant target populations, from the broadest to the narrowest definitions of who is “at risk” for receiving outpatient commitment: the general population, those with severe mental illnesses in the community, those with severe mental illnesses receiving mental health services, the public mental health system’s adult services recipient population, those with severe mental illnesses who have been hospitalized during a given year, and those who have been involuntarily committed to inpatient facilities more than once in the previous year. Second, we present a multivariable analysis of the association between race and outpatient commitment at the county level, to see whether the relationship may be accounted for by other factors that may vary along with race and outpatient commitment.

■ **Data sources.** *New York State Office of Mental Health (OMH) administrative and clinical records on people receiving court-ordered treatment under Kendra’s Law.* The state maintains an electronic data system that records and monitors the status of all outpatient commitment orders, including dates of initiation, expiration, and renewal. Information is also collected on the personal characteristics of those receiving outpatient

commitment, including their race and ethnicity.¹³

New York State OMH data on patient characteristics and hospital admissions. The state conducts a survey every two years to collect information on the population being served in the state's mental health care system and what kinds of services they are receiving. The OMH also tracks hospital admissions and the numbers of people being involuntarily committed to state psychiatric hospitals each year.¹⁴

U.S. census online database. We used this database to provide estimates of county population by race and poverty status.¹⁵

County estimates of the prevalence of severe mental illness. Estimates were available that apply epidemiological survey data to the demographic profile of each county.¹⁶ These estimates were obtained for the total number of blacks and whites with severe mental illnesses in each county, whether or not they were in treatment.

■ **Outpatient commitment rates.** Using these data, we calculated rates of outpatient commitment per 10,000 population in 2003 for blacks and whites. To capture regional variation in the relationship between race and outpatient commitment, we calculated race-specific rates of commitment within New York regions—Western, Central, Hudson River, New York City, and Long Island—and also in six representative index counties—Albany, Erie, Monroe, Nassau, New York, and Queens. Next, we divided each of the rates for blacks by the corresponding rate for whites to obtain a ratio of comparison, the “parity index.” If the commitment case rate was the same in both groups, the parity index was equal to 1. If the rate for blacks was higher than that for whites, the parity index was higher than 1.

■ **Outpatient commitment and race.** For the second analysis, we conducted a multivariable, longitudinal regression analysis to assess the relationship between outpatient commitment and race at the county level and to investigate whether that relationship might result from the prior correlation of race with other factors linked to commitment. Initially, we calculated the simple association between two variables: the counties' outpatient commitment rate and the racial composition of the counties' severely mentally ill population. Then we calculated an adjusted association between outpatient commitment and race, controlling for several county characteristics that could be linked to both outpatient commitment and race: the counties' poverty rate, total severe mental illness prevalence, the percentage of people with severe mental illnesses who were in treatment, the involuntary and voluntary hospitalization rate, and the rate of outpatient mental health services use.

Study Results

Rates of outpatient commitment per 10,000 were higher for blacks than for whites at every level (Exhibit 2). A broad application of the IOM framework would identify and further explore these as racial disparities in health and health care access affecting the system in which outpatient commitment is used. However, the rates converge—that is, the relative difference between blacks' and whites' outpatient commitment rates diminishes—when moving from the total

EXHIBIT 2
Outpatient Commitment (OPC) Rates, By Region And Race, New York State, Using
Alternative Population Denominators

Region/race	No. of people with OPC orders in 2003	County population in 2003 (OPC rate/10,000)	Estimated no. of SMI cases ^a (OPC rate/10,000)	OMH service recipients (OPC rate/10,000)	Hospitalized OMH service recipients (OPC rate/10,000)	OMH service recipients with >2 involuntary admissions in year ^b (OPC rate/10,000)
New York City						
White	192	2,345,564 (0.82)	91,670 (20.94)	28,046 (68.46)	1,962 (978.59)	611 (3,143.99)
Black	416	1,393,859 (2.98)	72,345 (57.50)	27,994 (148.60)	2,628 (1,582.95)	1,140 (3,649.59)
Long Island						
White	94	1,607,625 (0.58)	51,600 (18.22)	10,541 (89.18)	923 (1,018.42)	432 (2,175.71)
Black	43	153,532 (2.80)	5,966 (72.08)	2,492 (172.55)	267 (1,610.49)	138 (3,105.94)
Hudson River						
White	63	1,931,196 (0.33)	74,851 (8.42)	16,415 (38.38)	1,200 (525.00)	375 (1,681.94)
Black	24	196,197 (1.22)	11,722 (20.47)	4,592 (52.26)	370 (648.65)	96 (2,501.93)
Central						
White	22	1,204,855 (0.18)	59,391 (3.70)	10,615 (20.73)	791 (278.13)	390 (564.44)
Black	3	58,004 (0.52)	5,669 (5.29)	1,216 (24.67)	99 (303.03)	31 (959.60)
Western						
White	18	1,817,497 (0.10)	79,607 (2.26)	16,741 (10.75)	957 (188.09)	405 (444.01)
Black	18	172,625 (1.04)	12,333 (14.59)	4,679 (38.47)	338 (532.54)	138 (1,301.78)

SOURCE: Original data analysis by authors.

NOTES: SMI is serious mental illness. OMH is Office of Mental Health (New York State).

^a Estimates from epidemiological survey data applied to local county demographic characteristics.

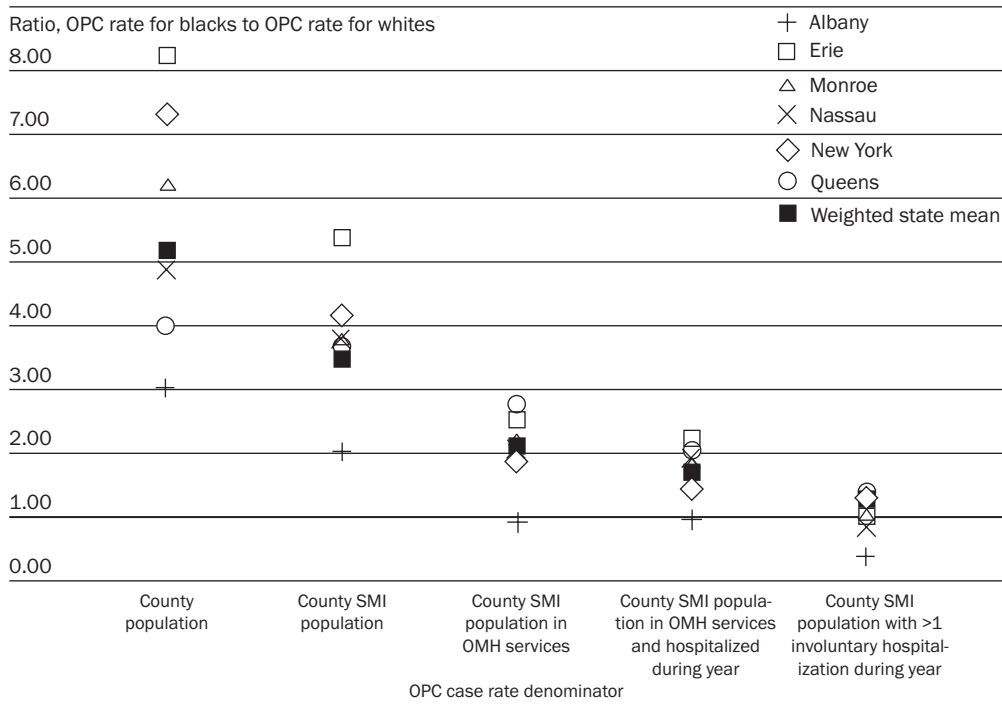
^b Estimates based on extrapolation from involuntary admission rates in OMH-licensed facilities.

population level to increasingly restricted definitions of the target population.

■ **Outpatient commitment rates at the county and state levels.** Outpatient commitment indices for six New York counties and the state show that when considered for the total population, outpatient commitment affects African Americans three to eight times more frequently than it affects whites—about five times more frequently, on average, statewide (Exhibit 3). Put simply, a black New Yorker chosen at random from the community would have about a five times greater chance of being placed in outpatient commitment than a white New Yorker chosen at random.

However, the analysis also shows that these differences are dependent on context; when considered for the most relevant target populations, the parity index moves closer to 1. The ratio is greatly reduced when the denominators used are the numbers of blacks and whites who are estimated to have a severe mental illness.

EXHIBIT 3
Outpatient Commitment (OPC) Racial Parity Indices In Six Representative New York Counties And Statewide: Black-To-White Ratios Of OPC Case Rates In 2003 Using Alternative Denominators



SOURCE: Original data analysis by the authors.

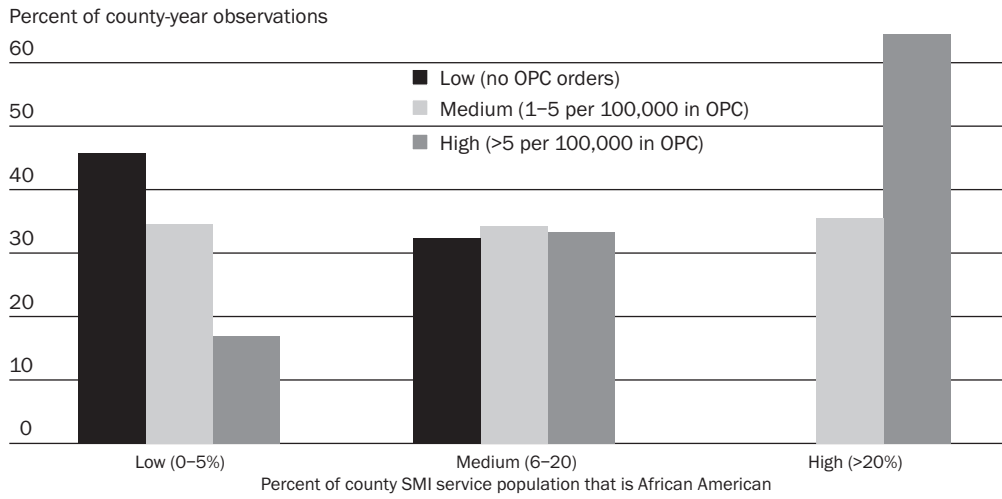
NOTES: Period prevalence of outpatient commitment cases active in 2003, by selected denominators. SMI is serious mental illness. Parity line ratio = 1.00. OMH is Office of Mental Health (New York State).

These county illness estimates incorporate poverty status, which is statistically associated with both severe mental illness and African American race.¹⁷ The parity index declines even further when public-sector service recipients are used as the denominator. Finally, there is no difference in blacks' and whites' rates of outpatient commitment among those who have been involuntarily hospitalized at least twice.

■ **Is the racial difference in outpatient commitment really about race?** We addressed this question with a county-level analysis in two stages. Exhibit 4 displays the initial results, showing that counties with a higher proportion of African Americans among people with severe mental illnesses in the public mental health system also tend to have markedly higher rates of outpatient commitment.

We then examined the significance of this association in a multivariable, longitudinal regression analysis. Without adjusting for other county-level factors, county-years with a high proportion of black service recipients who had severe mental illnesses were more than nine times as likely to have a high rate of outpatient commitment, compared to county-years with a lower proportion of such recipients. However, the net association between race and outpatient commitment

EXHIBIT 4
County Outpatient Commitment (OPC) Rate Distribution, By Percentage African Americans With Severe Mental Illnesses In The Public Mental Health System



SOURCE: Original data analysis by the authors.

rate was not statistically significant when other factors including poverty, the prevalence of mentally ill people in the community, and rates of hospitalization and outpatient mental health services use were controlled for (Exhibit 5). This analysis implies that the outpatient commitment rate is influenced by a number of “upstream” social and systemic variables that may correlate with race.

Discussion

Involuntary outpatient commitment is one of the most controversial issues in mental health law today. We propose that disparities in outpatient commitment must be understood through the social, clinical, and institutional settings where it is initially considered. In addition to the formal legal criteria for applying outpatient commitment in any given case, there are upstream factors—such as poverty and the organization and financing of public mental health care—that bring some people into target populations.

Our analysis allowed us to address empirically the questions bearing on the fairness of outpatient commitment’s application. We found no evidence of racial bias. Defining the target population as public-system clients with multiple hospitalizations, the rate of application to white and black clients approaches parity.

As the literature on disparities emphasizes, and we underline, absence of racial bias does not equate to absence of disparity. Our data show disproportionality in the application of outpatient commitment to the black population overall. But the underlying facts are that in comparison to whites in the same county, blacks are more likely to suffer from severe mental illnesses and, conditional on illness, are

EXHIBIT 5
Logistic Regression Time-Series Analysis Of High County Outpatient Commitment (OPC) Rate By Proportion Of African Americans In The Severe Mental Illness (SMI) Service Recipient Population, Unadjusted And Adjusted For Relevant Covariates

Independent variables	Odds ratio for high OPC rates (>5 per 100,000)			
	Unadjusted		Adjusted ^a	
	OR	95% confidence interval	OR	95% confidence interval
African American SMI population				
Low (0–5%) [reference]	[1.00]			
Medium (6–20%)	2.08	(0.83–5.21)	0.85	(0.34–2.14)
High (>20%)	9.64	(3.33–27.89)****	1.62	(0.41–6.36)

SOURCE: Original data analysis by authors.

NOTE: Analytic N = 305 county-year observations for 62 counties in 2000–2006.

^a Controlling for (county-level) year, population, poverty rate, SMI prevalence, SMI in treatment, involuntary and voluntary hospitalization rate, Assertive Community Treatment (ACT) rate, and intensive case management (ICM) rate.

****p < 0.0001

more likely to be served in the public system. This could reflect both a health disparity between whites and blacks and a disparity in where people get care. What also deserves emphasis is that these differences are “upstream” from outpatient commitment itself. The factors that lead to higher rates of serious mental illness among blacks are various and poorly understood, but they certainly do not include outpatient commitment. Likewise, the determinants of social position that impede blacks’ access to private health insurance and private services do not implicate outpatient commitment. Thus, our data are consistent with an outpatient commitment program that treats clients equally with respect to race.

OUTPATIENT COMMITMENT IS A HUGE NATURAL EXPERIMENT, and the jury is still out on whether its potential benefits outweigh its social and human costs for people with serious mental illnesses. However, we found no evidence that would suggest that the observed correlation between race and outpatient commitment in New York State results from bias on the part of outpatient commitment petitioners and legal decisionmakers; rather, within the narrow population from which candidates come, rates of outpatient commitment for blacks and whites were very similar. Insofar as outpatient commitment by statute targets a “revolving door” population of involuntarily hospitalized patients who are concentrated in the public mental health system, it will inevitably select a greater proportion of African Americans than their share in the general population, because that is the racial distribution of the target population—for historical reasons unrelated to outpatient commitment. Whether that is good or bad, on balance, for the population disproportionately affected remains to be seen.

Portions of the study results were presented to a scientific audience at the annual meeting of the American Psychology–Law Society Meeting in Jacksonville, Florida, 7 March 2008. The authors are conducting a legislatively mandated, independent evaluation of the impact of Kendra’s Law in New York, otherwise known as Assisted Outpatient Treatment (AOT). The study is funded by the New York State Office of Mental Health through a competitive bid, with additional support from the John D. and Catherine T. MacArthur Foundation through its Research Network on Mandated Community Treatment.

NOTES

1. New York Lawyers for the Public Interest, “Implementation of ‘Kendra’s Law’ Is Severely Biased,” 7 April 2007, <http://www.nylpi.org/images/FE/chain234siteType8/site203/client/DLC%20-%20Report%20on%20Kendra’s%20Law.pdf> (accessed 20 February 2009); and M. Cooper, “Racial Disproportion Seen in Applying ‘Kendra’s Law,’” *New York Times*, 7 April 2005.
2. New York State Office of Mental Health, “Eligibility Criteria for AOT,” <http://bi.omh.state.ny.us/aot/about?p=eligibility> (accessed 19 February 2009).
3. J. Monahan et al., “Use of Leverage to Improve Adherence to Psychiatric Treatment in the Community,” *Psychiatric Services* 56, no. 1 (2005): 37–44.
4. New York State OMH, “Assisted Outpatient Treatment Reports: Characteristics of Recipients,” <http://bi.omh.state.ny.us/aot/characteristics?p=demographics-race> (accessed 20 February 2009).
5. B.D. Smedley, A.Y. Stith, and A.R. Nelson, eds., *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care* (Washington: National Academies Press, 2002).
6. T.G. McGuire et al., “Implementing the Institute of Medicine Definition of Disparities: An Application to Mental Health Care,” *Health Services Research* 41, no. 5 (2006): 1979–2005.
7. J.W. Swanson et al., “Effects of Involuntary Outpatient Commitment on Subjective Quality of Life in Persons with Severe Mental Illness,” *Behavioral Sciences and the Law* 21, no. 4 (2003): 473–491.
8. M.S. Swartz et al., “Can Involuntary Outpatient Commitment Reduce Hospital Recidivism? Findings from a Randomized Trial with Severely Mentally Ill Individuals,” *American Journal of Psychiatry* 156, no. 12 (1999): 1968–1975.
9. S. Kisely et al., “Randomized and Non-randomized Evidence for the Effect of Compulsory Community and Involuntary Out-Patient Treatment on Health Service Use: Systematic Review and Meta-Analysis,” *Psychological Medicine* 37, no. 1 (2007): 3–14.
10. M.S. Swartz et al., “A Randomized Controlled Trial of Outpatient Commitment in North Carolina,” *Psychiatric Services* 52, no. 3 (2001): 325–329.
11. M.S. Swartz et al., “Assessment of Four Stakeholder Groups’ Preferences concerning Outpatient Commitment for Persons with Schizophrenia,” *American Journal of Psychiatry* 160, no. 6 (2003): 1139–1146.
12. M.S. Swartz et al., “Administrative Update, Utilization of Services, I. Comparing Use of Public and Private Mental Health Services: The Enduring Barriers of Race and Age,” *Community Mental Health Journal* 34, no. 2 (1998): 133–144.
13. New York State OMH, “About AOT,” <http://bi.omh.state.ny.us/aot/about> (accessed 19 February 2009).
14. New York State OMH, *Patient Characteristics Survey*, June 2008, <http://www.omh.state.ny.us/omhweb/pcs/pcsmain.htm> (accessed 19 February 2009).
15. U.S. Census Bureau, “Population Estimates,” <http://www.census.gov/popest/estimates.php> (accessed 26 January 2009).
16. C.E. Holzer III, *Estimation of Need for Mental Health Services*, <http://psy.utmb.edu/estimation/estimation.htm> (accessed 20 February 2009); and R.C. Kessler et al., “The U.S. National Comorbidity Survey Replication (NCS-R): Design and Field Procedures,” *International Journal of Methods in Psychiatric Research* 13, no. 2 (2004): 69–92.
17. E. Silver, E.P. Mulvey, and J.W. Swanson, “Neighborhood Structural Characteristics and Mental Disorder: Faris and Dunham Revisited,” *Social Science and Medicine* 55, no. 8 (2002): 1457–1470; and C.E. Holzer et al., “Ethnicity, Social Status, and Psychiatric Disorder: Evidence from the Epidemiologic Catchment Area Survey,” in *Social Psychiatry Across Perspectives*, ed. R. Price, B. Shea, and H. Mookherjee (New York: Plenum, 1995), 93–104.