

Appendix: Studies on Assisted Outpatient Treatment (AOT) in New York and elsewhere

Study/Source	Findings
<p>Bruce Link, Matthew Epperson, Brian Perron, Dorothy Castille, Lawrence Yang. "Arrest outcomes associated with outpatient commitment in New York State." <i>Psychiatric Services</i> 62, no. 5 (2011): 504–508.</p> <p>Available at http://deepblue.lib.umich.edu/bitstream/handle/2027.42/84915/LinkEpperson_2010.pdf (Accessed 2/8/15).</p>	<p>"For those who received AOT, the odds of any arrest were 2.66 times greater ($p < .01$) and the odds of arrest for a violent offense 8.61 times greater ($p < .05$) before AOT than they were in the period during and shortly after AOT. The group never receiving AOT had nearly double the odds (1.91, $p < .05$) of arrest compared with the AOT group in the period during and shortly after assignment."</p>
<p>Allison Gilbert, Lorna Mower, Richard Van Dorn, Jeffrey Swanson, Christine Wilder, Pamela Clark Robbins, Karli Keator, Henry Steadman, Marvin Swartz. "Reductions in arrest under assisted outpatient treatment in New York." <i>Psychiatric Services</i> 61, no. 10 (2010): 996–999.</p> <p>Available at http://dhs.iowa.gov/sites/default/files/GilbertReductionsInArrestUnderAOT_083012.pdf (Accessed 2/8/15).</p>	<p>"The odds of arrest for participants currently receiving AOT were nearly two-thirds lower (OR=.39, $p < .01$) than for individuals who had not yet initiated AOT or signed a voluntary service agreement."</p>
<p>Marvin Swartz, Christine Wilder, Jeffrey Swanson, Richard Van Dorn, Pamela Clark Robbins, Henry Steadman, Lorna Moser, Allison Gilbert, John Monahan. "Assessing outcomes for consumers in New York's assisted outpatient treatment program." <i>Psychiatric Services</i> 61, no. 10 (2010): 976–981.</p> <p>Available at http://mentalillnesspolicy.org/kendras-law/research/aot-reduces-hospital-admission-swartz.pdf (Accessed 2/8/15).</p>	<p>"The likelihood of psychiatric hospital admission was significantly reduced by approximately 25% during the initial six-month court order...and by over one-third during a subsequent six-month renewal of the order.... Similar significant reductions in days of hospitalization were evident during initial court orders and subsequent renewals.... Improvements were also evident in receipt of psychotropic medications and intensive case management services. Analysis of data from case manager reports showed similar reductions in hospital admissions and improved engagement in services."</p>
<p>Jo Phelan, Marilyn Sinkewicz, Dorothy Castille, Steven Huz, Bruce Link. "Effectiveness and outcomes of assisted outpatient treatment in New York State." <i>Psychiatric Services</i> 61, no. 2 (2010): 137–143.</p> <p>Available at http://ps.psychiatryonline.org/doi/pdf/10.1176/ps.2010.61.2.137 (Accessed 2/8/15).</p>	<p>Kendra's Law has lowered risk of violent behaviors, reduced thoughts about suicide, and enhanced capacity to function despite problems with mental illness. <i>Patients given mandatory outpatient treatment—who were more violent to begin with—were nevertheless four times less likely than members of the control group to perpetrate serious violence after undergoing treatment. Patients who underwent mandatory treatment reported higher social functioning and slightly less stigma, rebutting claims that mandatory outpatient care is a threat to self-esteem.</i></p>
<p>New York State Office of Mental Health. <i>Kendra's Law: Final Report on the Status of Assisted Outpatient Treatment</i>. Report to Legislature, Albany: New York State, 2005, 60.</p> <p>Available at http://mentalillnesspolicy.org/kendras-law/research/kendras-law-study-2005.pdf (Accessed 2/8/15).</p>	<p>Danger and violence reduced</p> <ul style="list-style-type: none"> • 55% fewer recipients engaged in suicide attempts or physical harm to self • 47% fewer physically harmed others • 46% fewer damaged or destroyed property • 43% fewer threatened physical harm to others • Overall, the average decrease in harmful behaviors was 44% <p>Consumer outcomes improved</p> <ul style="list-style-type: none"> • 74% fewer participants experienced homelessness • 77% fewer experienced psychiatric hospitalization • 56% reduction in length of hospitalization. • 83% fewer experienced arrest • 87% fewer experienced incarceration • 49% fewer abused alcohol

Comment [J1]: DJ—I added quote marks to some other studies under Findings when I could determine the wording was from the article. It looks like this is you talking, summarizing the study. If that's right, then ignore the comment below asking if you need to add "emphasis added."

Comment [J2]: (emphasis added) (?)

	<ul style="list-style-type: none"> • 48% fewer abused drugs <p>Consumer participation and medication compliance improved</p> <ul style="list-style-type: none"> • The number of individuals exhibiting good adherence to meds increased 51% • The number of individuals exhibiting good service engagement increased 103% <p>Consumer perceptions were positive</p> <ul style="list-style-type: none"> • 75% reported that AOT helped them gain control over their lives • 81% said AOT helped them get and stay well • 90% said AOT made them more likely to keep appointments and take meds • 87% of participants said they were confident in their case manager's ability • 88% said they and their case manager agreed on what was important to work on <p>Effect on mental illness system</p> <p>"Improved access to services. AOT has been instrumental in increasing accountability at all system levels regarding delivery of services to high need individuals. Community awareness of AOT has resulted in increased outreach to individuals who had previously presented engagement challenges to mental health service providers."</p> <p>"Improved treatment plan development, discharge planning, and coordination of service planning. Processes and structures developed for AOT have resulted in improvements to treatment plans that more appropriately match the needs of individuals who have had difficulties using mental health services in the past."</p> <p>"Improved collaboration between mental health and court systems. As AOT processes have matured, professionals from the two systems have improved their working relationships, resulting in greater efficiencies, and ultimately, the conservation of judicial, clinical, and administrative resources.</p> <ul style="list-style-type: none"> • There is now an organized process to prioritize and monitor individuals with the greatest need; • AOT ensures greater access to services for individuals whom providers have previously been reluctant to serve; • There is now increased collaboration between inpatient and community-based providers."
<p>Jeffrey Swanson, Richard Van Dorn, Marvin Swartz, Pamela Clark Robbins, Henry Steadman, Thomas McGuire, John Monahan. "The cost of assisted outpatient treatment: can it save states money?" <i>American Journal of Psychiatry</i> 170 (2013): 1423–1432.</p> <p>Available at http://ajp.psychiatryonline.org/doi/pdf/10.1176/appi.ajp.2013.12091152 (Accessed 2/8/15).</p>	<p>In New York City net costs declined 50% in the first year after assisted outpatient treatment began and an additional 13% in the second year. In non-NYC counties, costs declined 62% in the first year and an additional 27% in the second year. This was in spite of the fact that psychotropic drug costs increased during the first year after initiation of assisted outpatient treatment, by 40% and 44% in the city and five-county samples, respectively. The increased community-based mental health costs were more than offset by the reduction in inpatient and incarceration costs. Cost declines associated with assisted outpatient treatment were about twice as large as those seen for voluntary services.¹</p>

Comment [J3]: Bold face or italics, as above, for emphasis. Add (emphasis added) (?)

Comment [J4]: Ditto above. Is this your summary, and so it doesn't need quote marks?

¹ Various opponents of Assisted Outpatient Treatment claimed that New York State invested millions of dollars in increased services before implementing AOT. When Kendra's Law was passed in New York, funding for other programs not related to Kendra's Law were attached to the bill. Of the \$132 million, only \$6.62 million (after Medicaid match) was for Kendra's Law. (data on file with author).

<p>Alisa Busch, Christine Wilder, Richard Van Dorn, Marvin Swartz, Jeffrey Swanson. "Changes in guideline-recommended medication possession after implementing Kendra's Law in New York." <i>Psychiatric Services</i> 61, no. 10 (2010): 1000–1005.</p> <p>Available at http://ps.psychiatryonline.org/doi/full/10.1176/ps.2010.61.10.1000 (Accessed 2/8/15).</p>	<p>"In all three regions, for all three groups, the predicted probability of an M(edication) P(ossession) R(atio) ≥80% improved over time (AOT improved by 31–40 percentage points, followed by enhanced services, which improved by 15–22 points, and 'neither treatment,' improving 8–19 points). Some regional differences in MPR trajectories were observed."</p>
<p>Jeffrey Swanson, Richard Van Dorn, Marvin Swartz, Andrew Cislo, Christine Wilder, Lorna Moser, Allison Gilbert, Thomas McGuire. "Robbing Peter to pay Paul: did New York State's outpatient commitment program crowd out voluntary service recipients?" <i>Psychiatric Services</i> 61, no. 10 (2010): 988–995.</p> <p>Available at http://ps.psychiatryonline.org/doi/full/10.1176/ps.2010.61.10.988 (Accessed 2/8/15).</p>	<p>"In tandem with New York's AOT program, enhanced services increased among involuntary recipients, whereas no corresponding increase was initially seen for voluntary recipients. In the long run, however, overall service capacity was increased, and the focus on enhanced services for AOT participants appears to have led to greater access to enhanced services for both voluntary and involuntary recipients."</p>
<p>Marvin Swartz, Christine Wilder, Jeffrey Swanson, Richard Van Dorn, Pamela Clark Robbins, Henry Steadman, Lorna Moser, Allison Gilbert, John Monahan. "Assessing outcomes for consumers in New York's assisted outpatient treatment program." <i>Psychiatric Services</i> 61, no. 10 (2010): 976–981. Available at http://ps.psychiatryonline.org/doi/pdf/10.1176/ps.2010.61.10.976 (Accessed 2/8/15).</p> <p>Marvin Swartz, Jeffrey Swanson, Henry Steadman, Pamela Clark Robbins, John Monahan. "New York State assisted outpatient treatment program evaluation." Duke University School of Medicine, Durham, NC, 2009.</p> <p>Available at https://www.omh.ny.gov/omhweb/resources/publications/aot_program_evaluation/ (Accessed 2/8/15).</p>	<p>"We find that New York State's AOT Program improves a range of important outcomes for its recipients, apparently without feared negative consequences to recipients."</p> <ul style="list-style-type: none"> • Racial neutrality: "We find no evidence that the AOT Program is disproportionately selecting African Americans for court orders, nor is there evidence of a disproportionate effect on other minority populations. Our interviews with key stakeholders across the state corroborate these findings." • Court orders add value: "The increased services available under AOT clearly improve recipient outcomes, however, the AOT court order, itself, and its monitoring do appear to offer additional benefits in improving outcomes." • AOT improves the likelihood that providers will serve seriously mentally ill: "It is also important to recognize that the AOT order exerts a critical effect on service providers stimulating their efforts to prioritize care for AOT recipients." • AOT improves service engagement: "After 12 months or more on AOT, service engagement increased such that AOT recipients were judged to be more engaged than voluntary patients. This suggests that after 12 months or more, when combined with intensive services, AOT increases service engagement compared to voluntary treatment alone." • Consumers Approve: "Despite being under a court order to participate in treatment, current AOT recipients feel neither more positive nor more negative about their treatment experiences than comparable individuals who are not under AOT."
<p>Richard Van Dorn, Jeffrey Swanson, Marvin Swartz, Christine Wilder, Lorna Moser, Allison Gilbert, Andrew Cislo, Pamela Clark Robbins. "Continuing medication and hospitalization outcomes after assisted outpatient treatment in New York" <i>Psychiatric Services</i> 61, no. 10 (2010): 982–987.</p> <p>Available at http://ps.psychiatryonline.org/doi/full/10.1176/ps.2010.61.10.982 (Accessed 2/8/15).</p>	<p>Individuals in AOT stay in treatment after AOT ends. "When the court order was for seven months or more, improved medication possession rates and reduced hospitalization outcomes were sustained even when the former AOT recipients were no longer receiving intensive case coordination services."</p>

<p>Michael Heggarty. "The Nevada County Laura's Law experience." Behavioral Health Department, Nevada County, Nevada County, CA, November 15, 2011.</p> <p>Available at http://lauras-law.org/states/california/nevada-aot-heggarty-8.pptx.pdf (Accessed 9/25/14).</p>	<p>In Nevada County, CA, AOT ("Laura's Law") decreased the number of Psychiatric Hospital Days 46.7%, the number of Incarceration Days 65.1%, the number of Homeless Days 61.9%, and the number of Emergency Interventions 44.1%. Laura's Law implementation saved \$1.81–\$2.52 for every dollar spent, and receiving services under Laura's Law caused a "reduction in <i>actual</i> hospital costs of \$213,300" and a "reduction in <i>actual</i> incarceration costs of \$75,600."</p>
<p>Marvin Southard. "Assisted Outpatient Treatment Program Outcomes Report." Department of Mental Health, Los Angeles County, Los Angeles, CA, February 24, 2011.</p> <p>Available at http://lauras-law.org/states/california/lalauraslawstudy.pdf (Accessed 9/24/2014)</p>	<p>In Los Angeles, CA, the AOT pilot program reduced incarceration 78%, hospitalization 86%, hospitalization after discharge from the program 77%, and cut taxpayer costs 40%.</p>
<p>Virginia Hiday, and Teresa Scheid-Cook. "The North Carolina experience with outpatient commitment: a critical appraisal." <i>International Journal of Law and Psychiatry</i> 10, no. 3 (1987): 215–232.</p> <p>Available at http://www.sciencedirect.com/science/article/pii/0160252787900264 (Accessed 9/24/14).</p>	<p>In North Carolina, AOT reduced the percentage of persons refusing medications to 30%, compared to 66% of patients not under AOT.</p>
<p>Mark Munetz, Thomas Grande, Jeffrey Kleist, Gregory Peterson. "The effectiveness of outpatient civil commitment." <i>Psychiatric Services</i> 47, no. 11 (1996): 1251–1253.</p> <p>Abstract available at http://ps.psychiatryonline.org/article.aspx?articleID=79783 (Accessed 9/25/14).</p>	<p>In Ohio, AOT increased attendance at outpatient psychiatric appointments from 5.7 to 13.0 per year. It increased attendance at day treatment sessions from 23 to 60 per year. "During the first 12 months of outpatient commitment, patients experienced significant reductions in visits to the psychiatric emergency service, hospital admissions, and lengths of stay compared with the 12 months before commitment."</p>
<p>Robert Van Putten, Jose Santiago, Michael Berren. "Involuntary outpatient commitment in Arizona: a retrospective study." <i>Hospital and Community Psychiatry</i> 39, no. 9 (1988): 953–958.</p> <p>Abstract available at http://www.ncbi.nlm.nih.gov/pubmed/3215643 (Accessed 9/25/14).</p>	<p>In Arizona, "71% [of AOT patients] . . . voluntarily maintained treatment contacts six months after their orders expired" compared with "almost no patients" who were not court-ordered to outpatient treatment.</p>
<p>Barbara Rohland. "The role of outpatient commitment in the management of persons with schizophrenia." Iowa Consortium for Mental Health Services, Training and Research, 1998.</p> <p>Available at http://www.healthcare.uiowa.edu/icmh/archives/reports/finalrpt.pdf (Accessed 9/25/14)</p>	<p>In Iowa, "it appears as though outpatient commitment promotes treatment compliance in about 80% of patients... After commitment is terminated, about 3/4 of that group remain in treatment on a voluntary basis."</p>
<p>Treatment Advocacy Center. "Success of AOT in New Jersey 'Beyond Wildest Dreams.'" Treatment Advocacy Center. September 2, 2014.</p>	<p>In New Jersey, Kim Veith, director of clinical services at Ocean Mental Health Services, noted the AOT pilot program performed "beyond wildest expectations." AOT reduced hospitalizations,</p>

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<p>Available at http://www.treatmentadvocacycenter.org/about-us/our-blog/110-nj/2625-success-of-aot-in-new-jersey-beyond-wildest-dreams (Accessed September 25, 2014).</p>	<p>shortened inpatient stays, reduced crime and incarceration, stabilized housing, and reduced homelessness. Of clients who were homeless, 20% are now in supportive housing, 40% are in boarding homes, and 20% are living successfully with family members.</p>
<p>Virginia Hiday, Marvin Swartz, Jeffrey Swanson, Randy Borum, H. Ryan Wagner. "Impact of outpatient commitment on victimization of people with severe mental illness." <i>American Journal of Psychiatry</i> 159, no. 8 (2002): 1403–1411.</p> <p>Available at http://ajp.psychiatryonline.org/article.aspx?articleID=175700 (Accessed 12/30/13).</p>	<p>"Subjects who were ordered to outpatient commitment were less likely to be criminally victimized than those who were released without outpatient commitment."</p>
<p>Department of Justice. "Crime solutions: assisted outpatient treatment." <i>Crime Solutions.gov</i>. 2012.</p> <p>Available at https://www.crimesolutions.gov/ProgramDetails.aspx?ID=228 (Accessed 9/25/14).</p>	<p>Assisted outpatient treatment is an effective crime prevention program.</p>
<p>Jeffrey Swanson, Marvin Swartz, Richard Van Dorn, John Monahan, Thomas McGuire, Henry Steadman, Pamela Clark Robbins. "Racial disparities in involuntary outpatient commitment: are they real?" <i>Health Affairs</i> 28, no. 3 (2009): 816–826.</p> <p>Available at http://content.healthaffairs.org/content/28/3/816.full.pdf (Accessed 1/5/15).</p>	<p>"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."</p>

