Assisted Outpatient Treatment: The Data and the Controversy

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Support from: National Institute of Mental Health
MacArthur Research Network on Mandated Community Treatment

Questions

• CAN Assisted Outpatient Treatment (AOT) be effective and under what conditions?
• What is the nature of the controversy about AOT?
• Is it cost effective?

Assisted Outpatient Treatment (AOT)

• Permitted in all but a few states
• Explicitly permitted by 44 states and the District of Columbia
• Despite statutory support, used inconsistently
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**VARIANTS OF AOT**

- Conditional release for involuntarily hospitalized patients
- Alternative to hospitalization for patients who meet inpatient commitment criteria
- Alternative status for patients who do not meet inpatient criteria
- All based on state statutes

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**Controversies about AOT**

- Availability of appropriate services with aggressive outreach might obviate the need
- Should not be used as a substitute for inadequacies in service systems
- Applying coercion to patient blames the victim for service deficiencies.
- Systems of care should be held accountable for gaps in care.

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**Views of AOT**

“Today, the forced drugging common inside of institutions has climbed over the walls and is now out in our communities. Citizens in the USA & parts of the world, living peacefully at home, are now court ordered to take powerful psychiatric drugs against their will. Typically these are "neuroleptic drugs" that can cause structural brain damage and even kill.”

David Oaks
MindFreedom
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**Views of AOT**

“Civil libertarians have made it almost impossible to treat psychotic individuals who refuse care. These misguided activists have created a morass of legal obstacles that prevents us from helping many psychotic individuals until they have a finger on a trigger...It's time to reverse course. Mandatory treatment for those too ill to recognize they need help is far more humane than our present mandatory nontreatment.”

— E. Fuller Torrey

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**Views of AOT**

“Laws change for a single reason, in reaction to highly publicized incidents of violence. People care about public safety. I am not saying it is right; I am saying this is the reality... So if you're changing [AOT] laws in your state, you have to understand that. You have to take the debate out of the mental health arena and put it in the criminal justice/public safety arena.”

— D. J. Jaffe

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**Criteria for AOT in N.C.**

- Presence of a serious mental illness
- Capacity to survive in the community with available supports
- Clinical history indicating a need for treatment to prevent deterioration that would predictably result in dangerousness
- Mental status that limits or negates the individual's ability to make informed decisions to seek or comply voluntarily with recommended treatment
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**Odds ratio for hospital readmission during any given month of 1-year trial**

<table>
<thead>
<tr>
<th>Odds Ratio</th>
<th>95% CI</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control group</td>
<td>[1.00]</td>
<td></td>
</tr>
<tr>
<td>OPC group</td>
<td>0.64</td>
<td>(0.46 – 0.88)</td>
</tr>
</tbody>
</table>

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**Involuntary Outpatient Commitment (OPC): Percent Subjects With Any Psychiatric Hospital Admissions by Days of OPC**

![Graph illustrating percent admitted by days of OPC](image)
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Mean Psychiatric Hospital Days by Days of OPC

<table>
<thead>
<tr>
<th>OPC Period</th>
<th>Hospital Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Controls</td>
<td>27.9</td>
</tr>
<tr>
<td>&lt;180 days OPC</td>
<td>37.7</td>
</tr>
<tr>
<td>180+ days OPC</td>
<td>7.51</td>
</tr>
</tbody>
</table>

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Summary of NC OPC Study

- OPC can reduce hospital recidivism
- However:
  - OPC must be applied for an extended period
  - It is only effective when delivered in combination with frequent mental health services.

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Summary (continued)

- Other findings:
  - OPC can reduce violence, victimization, family strain, arrests and improve medication adherence and quality of life.
- However:
  - To be effective, it must be delivered for an extended period AND in combination with regular mental health services.
  - Limitations: the ‘dose’ of OPC and service intensity could not be controlled.
Assisted Outpatient Treatment (AOT) in NYC: Summary of Pilot Study

- New York enacted a pilot statute to be tested in NYC
- Bellevue Hospital Study of pilot NYC Law (pre-Kendra’s Law)—by order of Legislature.
- Consumers randomly received AOT + Enhanced Services vs. Enhanced Services Alone.
- Findings: No differences between AOT vs. Enhanced Services
- Limitations: Law was in start-up and sample was small.
- Accompanied by fierce opposition the law was headed to sunset.

January 1999: In an incident that has gnawed at New Yorkers’ sense of security, Kendra Webdale was killed in January 1999 when Andrew Goldstein, a 30-year-old schizophrenic, picked her up on the platform of a 23rd Street subway station and threw her into the path of an oncoming train.

New York passed preventive OPC statute in 1999. Statute was named “Kendra’s Law.”

The Carrot: NY Kendra’s Law Fiscal Changes

- $32 million directly allocated yearly in support of the OPC program
  - $15 million — medication grant program
  - $4.4 million — prison and jail discharge managers
  - $2.4 million — oversight programs
  - $9.55 million — new case management slots
  - $0.65 million — drug monitoring

- $125 million yearly for enhanced community services
  - Used to increase ICM and ACT
  - Used to develop Single Point of Access Program (SPOA)
Preventive AOT laws named for victims of homicides by people with schizophrenia

New York
• Kendra’s Law (1999)

California
• Laura’s Law (2003)

Michigan
• Kevin’s Law (2005)

Recipient Outcomes During AOT: Findings
• Substantial reduction in psychiatric hospitalizations and in days in the hospital
• Modest evidence that AOT reduces arrests
• Substantial increases in receipt of intensive case management services
• More likely to adhere to psychotropic medications
• Subjective improvements in personal functioning.
## Exhibit 3.8 Adjusted percent* with psychiatric inpatient admission in month, by AOT status

<table>
<thead>
<tr>
<th>AOT Status</th>
<th>Pre-AOT</th>
<th>AOT 1-6 months</th>
<th>AOT 7-12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted percent* with psychiatric inpatient admission in month</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Adjusted probability estimates were generated from repeated measures regression models controlled for time, region, race, age, sex, diagnosis, and co-insurance status. Models were also weighted for propensity to initially receive AOT and to receive more than 6 months of AOT.

Source: Medicaid claims and OMH admissions data.

## Exhibit 3.9 Adjusted* average inpatient days during any 6 month period, by AOT status

<table>
<thead>
<tr>
<th>AOT Status</th>
<th>Pre-AOT</th>
<th>AOT 1-6 months</th>
<th>AOT 7-12 months</th>
</tr>
</thead>
</table>
| Adjusted mean estimates were generated from repeated measures regression models controlled for time, region, race, age, sex, diagnosis, and co-insurance status. Models were also weighted for propensity to initially receive AOT and to receive more than 6 months of AOT.

Source: Medicaid claims and AOT Evaluation database.

## Exhibit 3.10 Adjusted percent* with at least 80% medication possession in month by AOT status

<table>
<thead>
<tr>
<th>AOT Status</th>
<th>Pre-AOT</th>
<th>AOT 1-6 months</th>
<th>AOT 7-12 months</th>
</tr>
</thead>
</table>
| Adjusted probability estimates were generated from repeated measures regression models controlled for time, region, race, age, sex, diagnosis, and co-insurance status. Models were also weighted for propensity to initially receive AOT and to receive more than 6 months of AOT.

Source: Medicaid and OMH records.
Exhibit 3.2 Adjusted* percent arrested in month by current receipt of AOT and EVS

*Adjusted arrest rate estimates were produced using multivariable time-series regression analysis, controlling for time, region, age, sex, race, education, and diagnosis. Months spent in hospital are excluded from analysis.
Source: 6-county interviews and Division of Criminal Justice Services.

Overall Summary of Findings (1)
• New York State’s AOT Program improves a range of important outcomes for its recipients.
• The increased services available under AOT clearly improve recipient outcomes, however, the AOT court order and its monitoring do appear to offer additional benefits in improving outcomes.
• 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.

Overall Summary of Findings (2)
• Improvements are more likely sustained post-AOT among those who receive intensive treatment services or had longer periods of AOT—especially 6 months or longer.
• In its early years the AOT Program did appear to reduce access to services for non-AOT recipients, but in recent years the reduction in new AOT cases has attenuated this effect.
• Lack of continued growth of new service dollars will likely increase competition for access to services once again.
Cost Impact of Assisted Outpatient Treatment (AOT) in New York and Outpatient Commitment (OPC) in North Carolina

- Joint project goal: Estimate net cost impact of AOT and OPC
  - New York: Compare AOT and non-AOT Enhanced Services (ES) recipients on total costs over three years
  - North Carolina: Compare OPC and non-OPC controls on total costs over study year
  - Compare costs between AOT in NY and OPC in NC

- New York Sponsor: NY State Office of Mental Health and the John D. and Catherine T. MacArthur Foundation Research Network on Mandated Community Treatment
- North Carolina Sponsor: Stanley Research Foundation

Summary and Conclusions: North Carolina

- Outpatient commitment in North Carolina appears to be cost neutral when comparing relevant costs for outpatient committed individuals and randomized controls.
- Extended (more than 6 months) outpatient commitment appears to result in a substantial cost offset, with overall costs declining primarily via a shift from inpatient to outpatient services.
Distribution of Annual Costs by Group and Time: New York City

Summary and Conclusions

- Conclusions about the cost impact of outpatient commitment depend on comparison group.
  - In New York, AOT appears to be more costly when comparing AOT to ES, but less costly when comparing AOT to pre-AOT for the same people.
  - Large decrease in both inpatient treatment and criminal justice costs moving from pre-AOT to first year of AOT.
- In North Carolina, OPC appears to be more costly when compared to controls in a straight RCT, but less costly when comparing short vs. long-term OPC.
- AOT in New York is more slightly more costly than OPC in North Carolina.
- Program costs in New York higher than in North Carolina, but these costs are relatively small in either case relative to mental health treatment costs.

That's all, folks!