State Policy Impact on Adoption of Buprenorphine in Community Treatment Programs

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Buprenorphine: A new pharmacotherapy for opiate dependence treatment

- FDA approved buprenorphine in 2002
  - For the treatment of opiate dependence
  - Available as a sublingual tablet; can be taken less than daily by patients in maintenance phase
  - Provides a viable non-methadone option for opiate dependence treatment outside the OTP system; largely targeted to office-based physician practice settings
  - Available in two formulations: Subutex® contains only buprenorphine; Suboxone® contains 2 parts buprenorphine per 1 part naloxone
  - Suboxone formulation yields a ceiling effect, and is designed to minimize diversion/abuse potential
  - Most community treatment programs will be using Suboxone – here abbreviated as “bup/nx”
Diffusion of buprenorphine (bup/nx) for opiate addiction treatment

- Community treatment programs can encounter bup/nx in three ways:
  - OTPs can dispense bup/nx under same conditions as methadone
  - Non-OTPs can prescribe bup/nx to clients via credentialed physician on program’s staff
  - Non-OTPs can provide counseling/wraparound services for clients receiving bup/nx from physicians in office-based settings

- This project focused on community treatment programs other than OTPs
  - Project did not examine use by office-based physicians
General trends in medication adoption

- UGA studies indicate private-sector programs are disproportionately more likely to adopt pharmacotherapies
  - Naltrexone (Roman & Johnson, 2002)
  - Disulfiram (Knudsen et al., 2005)
  - SSRIs (Knudsen et al., 2007)
  - Acamprosate (Ducharme et al., 2006)
  - Buprenorphine (Knudsen et al., 2006)
- Other predictors include availability of physicians, % opiate-dependent clients, counselor credentials, hospital affiliation, provision of detox services
- As-yet unmeasured: What role does state policy play in the adoption of meds, especially in the public sector?
Early Buprenorphine Adoption
percent of programs reporting any use

Source: NSSATS (SAMHSA)
Variation in Adoption Rates
percent of programs reporting any use, by sector

Source: NSSATS (SAMHSA)
State Policies and Innovation Adoption

- Relatively little attention paid to the broader environmental context in which treatment programs make decisions about adoption of new technologies
- State regulatory and funding environments can provide incentives/disincentives for adopting new practices:
  - Mandates for “evidence-based practices”
  - Provide/promote training & educational activities
  - Funding (e.g., Medicaid) may or may not cover costs of medications or other treatment services
  - Regulations may favor adoption in some sectors but not others
  - Program/staff licensure/credentialing requirements may embed incentives for education in, or use of, new technologies
  - Rules about billable physician services & limits on use of pharmacotherapies by treatment modality
Study Objectives

- Assess impact of state policies/funding on adoption of bup/nx in community-based treatment settings
  - Not examining OBOT or OTPs
- Reviews of SSA and Medicaid rules for each state regarding addiction treatment and bup/nx
- Interviews with SSAs regarding efforts to promote bup/nx, Medicaid coverage, and other relevant policies
- Secondary analyses of NSSATS data on program-level adoption of bup/nx
  - NSSATS provides an overview of the population of community treatment programs in the US
State Activities on Buprenorphine
SSA Interviews, N=49

- N=25 offered clinician training events
  - All of these offered “introductory” training coinciding with FDA approval of bup/nx
  - Most of these offer some type of ongoing training above & beyond physician “waiver courses”
- Did SSA distribute TIP 43 (SAMHSA’s clinical guidelines for medication-assisted opioid treatment)?
  - 11 no action or unfamiliar with TIP 43
  - 23 distributed TIP 43 to programs
  - 15 did not distribute, but encouraged use
- Only handful of SSAs anticipated any regulatory changes re: bup/nx
  - Changes generally to clarify payment & approval procedures (e.g., role of pharmacy boards)
State Guidance to Programs

- While this project was not focused on OTPs, SSA behavior toward OTPs regarding bup/nx was informative
  - 7 states required OTPs to advise clients about the availability of bup
  - 14 encouraged OTPs to advise clients about the availability of bup
  - 28 provided no such guidance (including states with no OTPs)

- When asked to describe state’s overall approach for all addiction treatment facilities:
  - 23 said they “actively encourage” the use of bup/nx
  - 26 said they had “no real position” on bup/nx
Medicaid Coverage for Buprenorphine

- Buprenorphine was a covered Medicaid benefit in only 26 states
  - While states that “actively encouraged” the use of bup/nx were more likely to have Medicaid coverage, this was not uniform -- 1/3 of these states had no Medicaid coverage for bup/nx

- Counseling/wraparound services for OBOT clients is generally covered under Medicaid’s existing addiction treatment benefits
  - States regard community tx programs as primary providers of physician support services
  - Program exposure to bup/nx clients may increase likelihood of eventual medication adoption / increase receptivity
### Inconsistent State Approaches

<table>
<thead>
<tr>
<th></th>
<th>Total States</th>
<th>State sponsors clinician trainings</th>
<th>Medicaid coverage for bup</th>
</tr>
</thead>
<tbody>
<tr>
<td>OTPs required to advise clients about bup</td>
<td>7</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>OTPs encouraged to advise clients that bup is available</td>
<td>14</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>State has no position on advising OTP clients about bup</td>
<td>28</td>
<td>12</td>
<td>15</td>
</tr>
</tbody>
</table>
Medicaid and Bup/Nx Adoption
percent of programs adopting, by state Medicaid availability

NSSATS 2005 data

Programs in states with Medicaid coverage for bup are more likely to have adopted it than programs in states without Medicaid coverage (p<.01) – but the difference, while statistically significant, is not large
Predicting adoption using NSSATS data
national “inventory” of treatment programs

Characteristics of treatment programs in 2005 NSSATS
(N=10,593 in analysis):

- 15.2% gov’t owned
- 61.2% nonprofit
- 23.6% for profit
- 7.8% OTPs
- 55.6% accept Medicaid
- 67.2% receive govt $
- 43.4% have MC contract(s)

- 50.7% accredited
- 90.9% in metro areas
- Mean=297 admits/yr
- Mean=68% of clients treated in OP modality
- 20.5% use other meds
- 8.9% use bup/nx
## Predicting Buprenorphine Adoption

Logistic regression (use bup/nx), NSSATS 2005

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>Odds ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government owned (vs for-profit)</td>
<td>-.72</td>
<td>0.49</td>
</tr>
<tr>
<td>Nonprofit (vs. for-profit)</td>
<td>-.67</td>
<td>0.51</td>
</tr>
<tr>
<td>SA Tx is org’s primary focus</td>
<td>.30</td>
<td>1.35</td>
</tr>
<tr>
<td>OTP</td>
<td>.53</td>
<td>1.69</td>
</tr>
<tr>
<td>Detox</td>
<td>1.68</td>
<td>5.39</td>
</tr>
<tr>
<td>% of clients in OP level of care</td>
<td>-.003</td>
<td>0.99</td>
</tr>
<tr>
<td>Accredited</td>
<td>.37</td>
<td>1.45</td>
</tr>
<tr>
<td>Admissions in past year</td>
<td>.0003</td>
<td>1.00</td>
</tr>
<tr>
<td>Use other medications</td>
<td>2.21</td>
<td>9.10</td>
</tr>
<tr>
<td>Receive gov’t funds</td>
<td>-.33</td>
<td>0.72</td>
</tr>
<tr>
<td>Accept Medicaid payments</td>
<td>.04</td>
<td>n.s.</td>
</tr>
<tr>
<td>Have managed care contract(s)</td>
<td>.19</td>
<td>n.s.</td>
</tr>
<tr>
<td>Located in metro area</td>
<td>.34</td>
<td>n.s.</td>
</tr>
<tr>
<td>SSA encourages use of bup/nx</td>
<td>-.16</td>
<td>n.s.</td>
</tr>
<tr>
<td>Medicaid covers bup/nx</td>
<td>.55</td>
<td>1.73</td>
</tr>
</tbody>
</table>

ORs shown if p<.05. Analysis utilized STATA’s “cluster” syntax to produce appropriate standard errors with state-clustered data.
Conclusions

- NSSATS data suggest that states’ merely “encouraging” the use of bup/nx is insufficient to increase its adoption.
- Net of other structural characteristics, availability of Medicaid coverage for bup/nx was significantly associated with adoption by community treatment programs.
- Most SSAs had no plans to engage in activities specific to bup diffusion beyond changing Medicaid formulary and supporting physician trainings.
- While many states actively provided trainings for clinicians, disseminated information about bup/nx, and encouraged its use, there were few signs of systems change to facilitate its adoption.
- Knowing that adoption is higher in the private sector, a comparison of sectors may yield important insights into systems-level barriers
- Other system-level issues should also be considered:
  - Barriers to prescribing any meds (physicians, billing, lab work) – how can these be addressed at the state policy level?
  - Bup/nx highlights (exacerbates?) lack of integration in segments of the treatment system – OTPs, psychosocial programs, office-based practice.
  - Are clients adequately informed about treatment options and how they can be accessed?