Main Findings from the Florida Cost Analysis of Addiction Programs (FCAAP)

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Introduction

- Substance abuse treatment is an expanding industry in the U.S. with total annual expenditures reported at nearly $21 billion (Mark et al., 2007)

- Majority (81%) of the industry is financed by federal, state, and local governments (SAMHSA, 2003)

- State governments face difficult decisions regarding which treatment programs to fund and where to set service reimbursement rates

- Little guidance exists on how service reimbursement rates should be calculated for treatment programs
Introduction (cont.)

• The University of Miami partnered with the Florida Department of Children and Families (DCF) to determine the economic cost of substance abuse treatment in Florida.

• A key aim of this investigation was to estimate modality-specific costs for both a typical week and an average episode of treatment.

• Another objective was to identify client and program characteristics that were significant predictors of treatment cost.
Methods

• Recruited 247 programs (84 agencies) throughout entire state
  – 175 programs (58 agencies) agreed to participate in the study (71% response rate)
• 16 different “modalities” initially represented
  – Outpatient (OP); Intensive OP; Residential, Methadone Maintenance; Criminal Justice including Drug Court; Day Treatment; Detox, Case Management, Outreach, Prevention, Intervention, Day/Night
• Core analysis focused on 7 modalities
  – Adult and Adolescent OP; Adult and Adolescent Residential; Intensive OP; Detoxification; Methadone Maintenance

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Methods (cont.)

• Administered the Drug Abuse Treatment Cost Analysis Program (DATCAP) along with a newly developed DATCAP Operations Module

• Calculated total annual program cost, annual cost per client, weekly cost per client, and cost per average treatment episode

• Modality-specific cost bands

• Also conducted sensitivity analyses to address outliers
RESULTS

Following tables and figures summarize main findings
### Distribution of Programs and Total Annual Economic Cost, by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of Programs</th>
<th>Percentage of All Programs</th>
<th>Total Annual Economic Cost</th>
<th>Percentage of Total Annual Economic Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>40</td>
<td>23%</td>
<td>$33,401,249</td>
<td>18%</td>
</tr>
<tr>
<td>Northeast</td>
<td>24</td>
<td>14%</td>
<td>$20,192,808</td>
<td>11%</td>
</tr>
<tr>
<td>Northwest</td>
<td>32</td>
<td>18%</td>
<td>$25,814,519</td>
<td>14%</td>
</tr>
<tr>
<td>Suncoast</td>
<td>32</td>
<td>18%</td>
<td>$45,548,121</td>
<td>25%</td>
</tr>
<tr>
<td>Southern</td>
<td>33</td>
<td>19%</td>
<td>$35,274,207</td>
<td>19%</td>
</tr>
<tr>
<td>Southeast</td>
<td>14</td>
<td>8%</td>
<td>$23,776,319</td>
<td>13%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>175</strong></td>
<td><strong>100%</strong></td>
<td><strong>$184,007,222</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
Distribution of Programs by Modality

- Adolescent Outpatient (N=18): 9%
- Adolescent Residential (N=18): 8%
- Adult Outpatient (N=60): 29%
- Adult Residential (N=46): 22%
- Detoxification (N=17): 8%
- Intensive Outpatient (N=14): 7%
- Methadone Maintenance (N=3): 1%
# Statewide Summary of Economic Costs

<table>
<thead>
<tr>
<th>Modality</th>
<th>Average Annual Cost</th>
<th>Average Annual Cost Per Client(^1)</th>
<th>Average Weekly Cost Per Client(^2)</th>
<th>Average Length of Stay (Weeks)</th>
<th>Cost Per Client for an Average Treatment Episode(^3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescent Outpatient (n=18)(^4)</td>
<td>$272,351</td>
<td>$18,521</td>
<td>$355</td>
<td>19.9</td>
<td>$8,690</td>
</tr>
<tr>
<td>Adolescent Residential (n=17)</td>
<td>$1,738,070</td>
<td>$70,606</td>
<td>$1,354</td>
<td>20.3</td>
<td>$24,286</td>
</tr>
<tr>
<td>Detoxification (n=17)</td>
<td>$1,430,306</td>
<td>$112,509</td>
<td>$2,158</td>
<td>1.1</td>
<td>$2,303</td>
</tr>
<tr>
<td>Intensive Outpatient (n=14)(^4)</td>
<td>$540,578</td>
<td>$23,069</td>
<td>$442</td>
<td>36.7</td>
<td>$23,775</td>
</tr>
<tr>
<td>Methadone Maintenance (n=3)</td>
<td>$1,213,097</td>
<td>$4,670</td>
<td>$90</td>
<td>92</td>
<td>$8,624</td>
</tr>
<tr>
<td>Adult Outpatient (n=60)(^4)</td>
<td>$761,587</td>
<td>$18,754</td>
<td>$360</td>
<td>49.1</td>
<td>$27,356</td>
</tr>
<tr>
<td>Adult Residential (n=46)</td>
<td>$1,485,651</td>
<td>$59,163</td>
<td>$1,135</td>
<td>18.4</td>
<td>$18,469</td>
</tr>
</tbody>
</table>
## Annual, Weekly, and Episode Cost Bands, by Modality

<table>
<thead>
<tr>
<th>Modality</th>
<th>Average Annual Cost</th>
<th>Average Weekly Cost per Client&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Cost per Client for an Average Treatment Episode&lt;sup&gt;2&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescent Outpatient</td>
<td>$88,312– $315,504</td>
<td>$88 – $314</td>
<td>$1,396 – $4,731</td>
</tr>
<tr>
<td>Adolescent Residential</td>
<td>$1,114,073– $1,876,869</td>
<td>$1,033 – $1,504</td>
<td>$8,675 – $31,579</td>
</tr>
<tr>
<td>Adult Outpatient</td>
<td>$193,907 – $1,101,986</td>
<td>$107 – $607</td>
<td>$1,519 – $11,378</td>
</tr>
<tr>
<td>Adult Residential</td>
<td>$546,395 – $1,736,892</td>
<td>$597 – $1,444</td>
<td>$6,839 – $26,016</td>
</tr>
<tr>
<td>Detoxification</td>
<td>$521,719 – $1,864,324</td>
<td>$1,460 – $2,392</td>
<td>$1,134 – $2,093</td>
</tr>
<tr>
<td>Intensive Outpatient</td>
<td>$199,640 – $811,637</td>
<td>$224 – $663</td>
<td>$2,064 – $13,775</td>
</tr>
</tbody>
</table>
Discussion

• Results show sizeable variations in weekly and episode costs within and across modalities.
• The average weekly cost per client for methadone maintenance ($90) is considerably below that for standard ($360) and intensive outpatient ($442).
• Detoxification has the highest weekly cost per client ($2,158), which is nearly double that for adult residential ($1,135).
Discussion

• The ordering across modalities changes somewhat when comparing the average cost per treatment episode.
• With an average length of stay of 92 weeks, methadone maintenance now has a higher episode cost ($8,624) than detoxification ($2,303).
• Adult outpatient programs have the highest average episode cost ($27,356), followed by adolescent residential programs ($24,286).
Discussion

• The cost bands of average weekly cost for adult residential ($597-$1,444) and detoxification ($1,460-$2,392) fairly wide relative to other modalities

• The cost bands for average episode cost show even more variability
  • Adolescent and adult residential programs have widest range (~$20,000); Adult OP and IOP (~$10,000)

• Findings reflect differences in types of populations served, therapeutic approach, range and intensity of services provided, types of substance abuse problems addressed, and location of the treatment programs

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Conclusion

• This study provides the most current estimates of the economic cost of substance abuse treatment in Florida.
• Cost estimates reflect “true” (opportunity) cost of service delivery including value of donated or subsidized resources.
• Study procedures and empirical findings useful for developing service reimbursement algorithms and initiating more extensive evaluations of publicly-funded substance abuse treatment programs.
• Policy lessons and implications will be presented shortly.

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