Over the past 30 years, there has been a tremendous amount of research to identify and describe effective substance abuse treatment models and strategies to treat individuals addicted to methamphetamine. Although no single treatment model works for all, a growing research base shows promising treatment models provide high-intensity, coordinated treatment and recovery services for an extended period of time.

The Dodge-Fillmore-Olmsted Methamphetamine Program (DFO Meth Program) and Anoka Enhanced Treatment Program (Anoka ETP) were awarded grants through the Minnesota Department of Public Safety, Office of Justice Program, to develop a coordinated, high-intensity approach to providing treatment and recovery services to adults experiencing methamphetamine addiction. The DFO Meth Program is a corrections-focused program, with a jail-based pretreatment component followed by gender-specific outpatient services, while the Anoka ETP is an outpatient program aimed at women who are involved in the criminal justice system or have children in the Child Protection System.

Wilder Research conducted an evaluation of both programs to identify common treatment strategies and program outcomes, compare them to effective evidence-based models, and estimate the long-term financial benefits of using these strategies. The evaluation included a literature review of the most promising practices, key informant interviews and data gathered by each program, and the development of a framework to estimate the return on investment of the programs.

**Program Treatment Models and strategies**

Despite differences in the program structure and target treatment population, the DFO Meth and Anoka ETP programs share similar holistic treatment philosophies that stress the importance of coordinated, multi-disciplinary treatment teams and the use of these treatment elements:

- A range of individualized treatment and recovery services for at least 90 days
- Frequent, random drug testing
- Cognitive-behavioral therapy and relapse prevention
- Use of modest incentives to encourage positive behaviors during treatment (contingency management)
- Recognition and referrals for supports and services to address the participant’s housing, employment, education, financial, and medical needs
- Service coordination through frequent communication between treatment staff and agency representatives

**Promising program outcomes**

The outcomes data were gathered by each program during their first 12 to 18 months of implementation (June 2006 through December 2007). During this period, the DFO Meth Program served 162 participants; Anoka ETP served 51. Although these data are preliminary, they indicate positive program outcomes in a number of key areas:

**Nearly half of all participants successfully completed treatment.** In both programs, just under half of the participants discharged from treatment during the first 18 months of the program successfully completed outpatient treatment.
It is important to note that outpatient treatment participants may be enrolled in services for one year or more before successfully completing the program. As a result, unsuccessful completions are identified earlier in the evaluation and the overall completion rates for the outpatient treatment programs may underestimate program retention and completion rates.

Most program participants avoided drug use during treatment. Drug tests are conducted randomly throughout the participant’s involvement in outpatient treatment in both programs. A total of 1,875 drug tests have been submitted by 84 DFO program participants since the evaluation began, and the vast majority of these drug tests (98%) have been negative. The 11 successful Anoka ETP graduates had between 11 and 17 months continuous time clean and sober at the time they exited the program, averaging slightly over 12 months. Among the 20 unsuccessful participants, half had been drug-free 1 to 11 months prior to leaving the program, and most had been sober between one and five months at program exit.

Few parents involved with child protection lost custody of their children while participating in treatment. A total of 23 DFO participants were involved with child protection or child welfare at intake, most of whom (74%) were still working towards resolution at discharge. Positive resolutions were reached on all six child protection cases that ended while the participant was enrolled in treatment. At intake, 26 ETP participants were involved with child protection and did not have physical custody of their child. No participant lost custody of her child while involved in the program. Eight of the eleven successful or provisional program graduates (73%) were reunified with their child at discharge, with the remaining 18 provisional or unsuccessful participants (100%) working towards reunification.

Most program participants avoided criminal behavior while participating in the treatment program. Among the 55 participants discharged from outpatient treatment from DFO, 50 participants (91%) avoided criminal activity during treatment, meaning they were not arrested or charged with any new crimes while participating in outpatient treatment. Overall, 29 of 33 participants discharged from Anoka ETP (82%) avoided criminal activity during treatment.

Approximately two-thirds of all participants had stable housing when discharged from outpatient treatment. Among participants who successfully completed their most recent outpatient treatment episode, all but one DFO participant (96%) had stable housing at discharge, compared to less than 50 percent of participants discharged prior to completing the program. Similarly, 13 of the 16 ETP participants identified as “successful” or “provisional” program graduates (81%) had secured stable, positive housing at discharge.

Over half of the participants were employed when discharged from outpatient treatment. Over 80 percent of DFO participants who successfully completed outpatient treatment were employed at discharge, compared to 37 percent of participants who were discharged prior to completion. Among the 11 ETP participants who successfully completed treatment, all were working and 9 participants (82%) had secured full-time employment.

Lessons learned
Many of the lessons learned by program staff focused on balancing individualized care with consistent program expectations and coordinating cross-disciplinary services:

- In order to ensure the right services are being provided, it is essential to identify the target treatment population and their specific needs
- Although the program should provide individualized services to meet the needs of each client, all partners should have a shared, consistent response to program violations
- Cross-training is important in helping all agencies coordinate services and work together more efficiently
- Despite the quality of services provided, some individuals are not ready to pursue recovery and will not complete the program successfully
- It is important to regularly reassess the strengths of the program and identify areas where services can be further improved
Prospective benefit-cost calculations

The program costs and estimated future benefits included in this report reflect the unique aspects of each treatment approach and needs of their target population. Differences in program costs and benefits should not be compared directly to conclude one program is more effective than the other.

In addition, these benefit-cost estimates should be considered preliminary due to the newness of the programs and resulting lack of comprehensive outcomes data. These estimates are based on the available data from each program and the experience of other similar programs. Also, because long-term outcomes are projected, a range rather than a single value is used to estimate program benefits. Benefit estimates have been steeply discounted to reflect the uncertainty about intermediate and long-term outcomes.

The total costs of both programs were similar and comparable to costs reported in other studies.

In general, the costs for both programs include expenses for treatment, health care and employment services paid by the program, administrative expenses, and volunteer hours contributed to the program. When costs per day of participant treatment are calculated, the treatment costs for DFO and Anoka ETP ($15 and $31 per day, respectively) are comparable to those of other stimulut abuse programs ($6 to $46 per day).

Combining successful completers and non-completers, the average cost of services per participant in FY 2007 was estimated to be $3,555 for DFO and $7,638 for Anoka ETP. Expenses were typically higher for program completers. For DFO, the estimated cost for each successful graduate is about $5,752, compared to an average of $1,291 for individuals who did not successfully complete services. For Anoka ETP, the estimated cost for each successful completion was $11,375 on average, while each non-completion costs $3,228 on average.

The net prospective benefits for direct taxpayers and society combined were very similar across both programs. Estimated program benefits to taxpayers and society include reduced costs to the criminal justice, correction, child welfare and social assistance systems; increased income and improved physical and mental health of participants, reduced “unpaid” emergency medical care, and reduced cost to crime victims.

However, the areas with the greatest amount of potential benefits were different across the two programs, reflecting the unique components of their treatment model and target population. The largest benefits for the DFO Meth Program were in areas of reduced costs of social assistance, incarceration, and court processing for new offenses. For Anoka ETP, the greatest benefits were in areas of reduced social assistance and child protection involvement.

When combined, the total prospective social benefits from the DFO Meth Program are estimated to be $10,918 to $22,145 per participant. The total prospective social benefits for Anoka ETP are similar, an estimated $12,398 to $29,203 per participant.

### COST ESTIMATES FOR THE DFO METH PROGRAM AND ANOKA ETP

<table>
<thead>
<tr>
<th></th>
<th>DFO Meth Program</th>
<th>Anoka ETP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total program cost</td>
<td>$266,806</td>
<td>$228,187</td>
</tr>
<tr>
<td>Total participant-days</td>
<td>17,639</td>
<td>7,422</td>
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<tr>
<td>Average cost of successful completion</td>
<td>$5,752</td>
<td>$11,375</td>
</tr>
<tr>
<td>Average cost of non-completion</td>
<td>$1,291</td>
<td>$3,228</td>
</tr>
<tr>
<td>Cost per participant-day</td>
<td>$15</td>
<td>$31</td>
</tr>
<tr>
<td>Average participant days</td>
<td>235 days</td>
<td>248 days</td>
</tr>
<tr>
<td>Average cost per participant</td>
<td>$3,555</td>
<td>$7,638</td>
</tr>
</tbody>
</table>

1 A participant-day is any day that a participant is between intake and discharge. It does not mean that services were used on that day.
2 Includes successful program graduates and other non-successful program participants.
When the cost estimates and prospective benefits are combined, both programs are estimated to have positive returns, both to taxpayers and to society in general. Taxpayer benefits come from reducing tax dollars spent on public programs and various government agencies. Social benefits include benefits to taxpayers as well as the monetary values of improved health, increased employment, and other changes that benefit program participants, their families, and the general public.

Based on the values calculated for this report, the net taxpayer benefits for the DFO program are estimated to be $2,165 to $10,815 per participant, which corresponds to a $1.61 to $4.04 return to the taxpayer for every dollar invested. For Anoka ETP, net taxpayer benefits are estimated to be $813 to $9,248 per participant, which corresponds to a $1.11 to $2.21 return to the taxpayer for every dollar invested. Returns to society for every dollar invested were slightly higher for both programs, ranging from $3.07 to $6.23 for DFO and $1.62 to $3.82 for Anoka ETP.

### Benefit-Cost Estimates for the DFO Meth Program and Anoka ETP

<table>
<thead>
<tr>
<th>Return per dollar to</th>
<th>DFO Meth Program</th>
<th>Anoka ETP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxpayers</td>
<td>$1.61 to $4.04</td>
<td>$1.11 to $2.21</td>
</tr>
<tr>
<td>Society</td>
<td>$3.07 to $6.23</td>
<td>$1.62 to $3.82</td>
</tr>
</tbody>
</table>

Better benefit-cost estimates can be calculated in the future as more complete data on participant outcomes become available.

### Recommendations

Based on the information gathered throughout the course of this project, Wilder Research recommends program staff, local stakeholders, and policymakers consider the following to enhance the effectiveness of treatment programs serving individuals who abuse methamphetamine or other stimulants:

- Encourage treatment and recovery programs to expand their use of effective, evidence-based treatment approaches when providing services to populations abusing methamphetamine or other stimulants.
- Address barriers to stable housing and employment for program participants, especially those with criminal records.
- Address the unique needs of women recovering from methamphetamine and stimulant addictions.
- Work across systems and with existing community-based partners to provide an array of services to program participants.
- Regularly reassess program length in order to maximize effectiveness while avoiding the costs of unnecessary services.
- Support the strategic use of benefit-cost analyses to demonstrate program effectiveness.
- Develop a comprehensive evaluation approach to examine the long-term impact of innovative substance abuse treatment program, and capture data necessary for long-term outcome and benefit-cost studies.
- Establish comparable control groups that can be used in future evaluation and benefit-cost studies.

For more information

This summary presents highlights of the Effective Stimulant Abuse Treatment Strategies. For more information about this report, contact Melanie Ferris at Wilder Research, 651-280-2660. Authors: Melanie Ferris, Allen Burns, Paul Anton

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