

METHADONE AND LAAM:

**An Analysis of the Cost of Treatment
Using Alternative Medications for
Opiate Addiction**

October 31, 1996

Contract Number SAMHSA 270-91-8327

Prepared for:

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Subject: Methadone and LAAM: An Analysis of the Cost of Treatment Using Alternative Medications for Opiate Addiction

Reference: Contract Number 270-91-8327

Dear Dr. Smith and Mr. Kanuck:

Under CSAT's Contract 270-91-8327, "Assessment and Measurement of Costs in Drug Treatment Settings" with Capital Consulting Corporation (CCC), we are submitting a special study entitled Methadone and LAAM: An Analysis of the Cost of Treatment Using Alternative Medications for Opiate Addiction.

CCC was tasked by the Center for Substance Abuse Treatment (CSAT) to estimate the cost of treatment for opiate addiction for treatment using LAAM and for treatment using methadone. CCC selected and visited seven treatment providers, each with operational experience using LAAM and methadone. Using the unit cost methodology that CCC developed under contract with CSAT for substance abuse treatment programs, CCC staff first documented all costs associated with treatment, then allocated these costs between the LAAM and methadone system delivery units.

Subsequent to CCC's development of the 14 cost profiles (i.e., seven for LAAM and seven for methadone) for the seven substance abuse treatment centers, The Lewin Group performed an analysis of the cost profiles.

Dr. Smith and Mr. Kanuck
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The Lewin Group's analysis of cost of treatment using alternative medications for opiate addiction and the cost profiles developed by CCC for the seven LAAM and seven Methadone system delivery units are incorporated into this report.

If you have any questions, please contact me at (703) 356-7722.

Sincerely,

Capital Consulting Corporation

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Methadone and LAAM:

*An analysis of the cost of treatment using alternative medications
for opiate addiction*

Executive Summary

The Capital Consulting Corporation (CCC) was tasked by the Center for Substance Abuse Treatment to estimate the cost of treatment for opiate addiction for treatment using LAAM and treatment using methadone. CCC first selected and then visited 7 treatment providers, each with operational experience using LAAM and methadone. Using a unit cost methodology that was developed for substance abuse treatment programs, CCC staff first documented all costs associated with treatment, then allocated these costs between LAAM and methadone conditions. This report analyzes and summarizes the allocated data from all seven providers as reported by CCC.

Comparison of the costs of treatment that uses LAAM and treatment that uses methadone suggest costs are generally similar. Across the providers studied several associate very modest cost increases with LAAM, and several actually associate modest cost reductions with LAAM relative to methadone. Exhibit I displays the average daily census of LAAM and methadone clients in each of the providers, and the average cost per client year of treatment (or slot cost) for each condition. LAAM clients comprised 6 percent of the treatment population on average across each of the providers. The cost of LAAM treatment ranged from \$803 to \$3930 for LAAM clients in six of the seven programs while the cost of methadone treatment ranged from \$838 to \$3804 in all seven programs. Costs for LAAM treatment in Cleveland were determined to be twice as high as the cost of methadone treatment, most likely due to (1) the costs allocated to assessing clients who transfer from methadone to LAAM, and (2) substantial ramp-up in the number of LAAM clients over a six month period.

Exhibit 1. Average Daily Census of Clients and Cost per Client Year for Treatment Using LAAM and Treatment Using Methadone

	LAAM		Methadone	
	Clients	Cost Per Year	Clients	Cost Per Year
Tempe	14	\$1,756	128	\$1,978
Reno	8	\$803	170	\$838
Las Vegas	3	\$1,457	124	\$1,479
Seattle	17	\$3,930	352	\$3,804
Indianapolis	47	\$2,667	209	\$2,625
Cleveland	10	\$5,215	383	\$2,560
San Antonio	17	\$2,916	378	\$2,585

Note: Cleveland's higher cost of LAAM treatment relative to methadone most likely results from (1) additional examination and assessments conducted when clients transfer to LAAM from methadone, and (2) substantial ramp-up in the number of LAAM clients over a six month period.

A rather material caveat to this study is that it is difficult after the fact to develop rigorously comparable unit cost estimates due to major differences across providers in what data they maintain, and how they collect it. This is true for both the data on expenses, where providers tend to lump different types of staff and costs together, and data on services. The consequence of this fact is that it is somewhat more meaningful to make comparisons within the same provider of the costs allocated to LAAM and methadone, respectively, than to make such comparisons across providers. In fact, this study demonstrates graphically that there is a great deal of variation across providers in terms of intensity and costs of services.

Also note that this Summary Report adjusts various of the initial Unit Cost estimates to a client-year or client-day basis. The field has used measures such as these for a number of years, and translating unit cost estimates into these units makes the findings easier to understand and interpret for managers in the field. Clearly, an important advance of the Unit Cost methodology is generating data on the costs of units of service that might be used as the basis for reimbursement. Selected Unit Cost estimates are presented in this Summary Report in order to advance the field beyond the more aggregated client-day and client-year costs.

Fundamental to explaining the similarity in costs of LAAM and methadone treatment is the finding that providers give these two sets of clients almost identical mixes of services, beyond the explicit differences in medication and associated dispensing. Moreover, in the 7 providers studied, all LAAM clients had been initially admitted to methadone treatment, and switched to LAAM after some period of time. Only one provider conducted additional medical examinations prior to moving patients from methadone to LAAM. Otherwise, all intake costs attributed to LAAM treatment are actually incurred while clients are on methadone. For comparison purposes, the per client costs reported in Exhibit I include intake costs allocated to both LAAM and methadone. It should also be noted that two of the programs (Cleveland and Indianapolis) had recently implemented their LAAM projects and limited start-up costs were experienced during the study period.

Costs estimated for clinical services beyond intake (excluding medical care/dispensing) did not differ between LAAM and methadone treatment in 6 of the 7 providers, even though there is evidence to suggest that some difference in the type or amount of services may have existed. This set of estimates bundles together costs of individual and group counseling, and case management services.

The cost of dispensing LAAM per patient year was about 30 to 35 percent lower than the cost of methadone for 6 projects, but almost identical in the seventh. It is expected that costs would be lower due to less frequent dispensing with LAAM. This was partially offset because the actual cost of the medication was two to 4 times greater per client year for LAAM.

Introduction

The Federal Drug Administration approved Levo-alpha-acetyl-methadol (LAAM) in 1993 for use in the treatment of opiate addiction. LAAM is quite similar to methadone in that it blocks withdrawal from addiction to other opiates such as heroin, and allows a client to be maintained on a stable dose over extended time periods. LAAM is different from methadone, however, in that it metabolizes over a 72 hour period rather than 48 hours as is the case with methadone.

The duration of LAAM in a client's system means that clients can take LAAM every *other* day, whereas clients must take methadone every day. Daily attendance required for methadone treatment is difficult, particularly if patients either have restricted mobility (due to disability or illness), live a long distance from the program, or work. It is hoped that reductions in dosing frequency through conversion to LAAM will enhance retention in treatment. While "takehome" doses of methadone are allowed (for up to 6 days per week), only long-term clients who show no evidence of substance use in their urinalysis may receive such liberal takehomes; moreover, diversion of takehome doses from intended clients to the street market has led to the desire for other longer-acting medications with less stringent attendance requirements.

It is also hoped that less frequent dosing will reduce costs. Policymakers, researchers, and treatment providers have asked whether there are real reductions in operating costs when programs treat clients with LAAM rather than methadone. Among the factors that may make treatment with methadone more or less expensive relative to LAAM are:

- LAAM clients are dosed every other day
- LAAM (marketed as Orlaam) is more expensive to purchase than methadone
- Differences in clients' characteristics or severity of problems may lead to different levels of services and, accordingly, costs
- Takehome doses are available for methadone but are not available presently for LAAM (meaning that some methadone clients may pick up doses as infrequently as once per week, even though they must take the medication each day).
- LAAM requires additional, separate systems for maintenance, storage, and dosing (through the need for separate dispensing equipment), as well as for establishing the schedule for dosing clients (a daily routine may be harder for a client to forget than every other day).

Other programmatic factors may mitigate differences in costs. For example, there are no differences in requirements concerning client assessment, urinalysis, and mandated services. If the costs of treatment under LAAM are in fact lower than the costs of treatment under methadone, conversion of a methadone treatment population to LAAM would either (1) result in lowered treatment expenditures, or (2) allow more people to receive treatment.

This study responds to important questions concerning the relative costs associated with treating patients using methadone or LAAM. This study provides descriptive data on the monetary cost of providing treatment. It was not the purpose of this study to explore the benefits or relative effectiveness of LAAM and methadone, though such studies are an important--if not essential-counterpart to this investigation, and have been done and are ongoing.

The next section describes the methods employed in this study, including (1) an overview of the general cost assessment approach developed by the Capital Consulting Corporation, and (2) general methods employed in allocating program costs to methadone or LAAM. Results obtained using this methodology are then presented and discussed.

Methodology

This section outlines the general methodology developed by the Capital Consulting Corporation to estimate unit costs of substance abuse treatment, and explains how this methodology was adapted to ascertain the distinct costs of treatment using methadone and costs of treatment using LAAM. The interested reader is referred to the Manual for the Uniform System of Accounts for more detailed descriptions of the methodology.

The Center for Substance Abuse Treatment and the Office of Applied Studies contracted with Capital Consulting Corporation (CCC) to develop a unit cost protocol for collecting substance abuse treatment cost data that is based on rigorous cost accounting methods and standards. The primary intent in this original contract was to develop and pilot test the methodology.

The CCC approach entails sending trained cost analysts on-site to treatment programs to review financial and other records. There are two fundamental steps in the on-site process: (1) identify total costs of all types, including the market value of in-kind or donated services and goods, and (2) allocating total costs to 13 standard service categories. To do this allocation, CCC staff first go input by input to identify the costs that can unambiguously be allocated to a category. For example, physician salary for time spent conducting medical exams goes to the Medical Exam category. Other costs, such as administrative and overhead costs, are allocated using a “step-down” methodology across the service types. What results is a “fully loaded” total of expenditures for each service type, that, when totaled across all service types, sums to the program's actual expense for the period being examined (typically a year). Exhibit 2 identifies and briefly defines the 13 service types used in the CCC methodology.

Exhibit 2. Service Types for Which Cost Data Was Collected

Service Type	Units	Definition
Initial Assessment	assessments	pre-admittance interview/screening of social history, abuse profile, and other problems
Medical Exam	exams	initial medical exam including medical history, vital signs, and laboratory testing
Psychosocial Evaluation	evaluations	more extensive evaluation typically performed by mental health professional
Individual Counseling	hours	one-on-one meeting with counselor; review treatment plan progress and discuss client specific problems
Group Counseling	hours	facilitated sessions presented to multiple clients with lectures, discussion, and visual aids focusing on disease progression, denial, recovery, attitudes, spirituality, relaxation, coping, and support
HIV Counseling, Testing	clients	counseling on, and voluntary testing for, HIV/AIDS
Medical & Diagnostic Services	clients	medical services such as urinalysis, other laboratory services, medical supplies and medicines (including methadone), and medical staff labor costs
Housing and Food	days	cost to house the clients, including dietary, housekeeping, utilities, laundry, and maintenance
Clinical Case Management	clients	chart review, collateral contacts, treatment plan writing, and clinical staffings
Networking, Outreach	clients	helping clients access help for housing, legal, education, medical, income, and other problems
Child Care Services	clients	provision of day care services to children of treatment clients while the clients receive treatment
Staff Education	hours/client	includes cost of staff training and education
Client Education	hours/client	remedial education, GED preparation, job training, and other services
Client Transportation	clients	transportation for medical care, education, vocational assistance, and other needs

In 1995, recognizing the need to explore the cost of pharmacological interventions in the treatment of opiate addiction in approved narcotic treatment programs, CSAT tasked Capital Consulting Corporation with collecting and analyzing data from a number of providers around the nation. Seven providers were selected, each with experience using both LAAM and methadone in operational circumstances (other than under FDA Investigational New Drug application research). These 7 providers were visited in 1995-1996, and detailed reports were prepared for each site. Exhibit 3 indicates the location of each provider and whether 6-month or 12-month data were available from each provider.

**Exhibit 3. Location and Data Period for LAAM and Methadone
Providers Visited in Study**

Location	Data Period for:	
	LAAM	Methadone
Tempe, AZ	Jan.-Dec., 1995	Jan.-Dec., 1995
Las Vegas, NV	Jan.-Dec., 1995	Jan.-Dec., 1995
Reno, NV	Jan.-Dec., 1995	Jan.-Dec., 1995
Indianapolis, IN	July-Dec., 1995	July-Dec., 1995
Seattle, WA	July 1994-June, 1995	July 1994-June, 1995
Cleveland, OH	Jan.-June, 1995	July 1994-June, 1995
San Antonio, TX	July-Dec., 1994	July-Dec., 1994

Three providers (in Tempe, Las Vegas, and Reno) have a common owner: the Las Vegas and Reno providers are directed by the same individual, and the Tempe provider has its own director. Incomplete or inconsistent data from 2 providers were reconciled with further input from the provider agencies, and cost data from all 7 providers are included in this report.

Results

This section presents findings obtained from analysis of data collected by the Capital Consulting Corporation during their site visits to narcotic treatment programs that used both methadone and LAAM. Exhibits 4 through 8 present data that describe the services of the treatment providers studied. Comparisons of the cost of treatment with LAAM and methadone are presented in Exhibits 9-13. Exhibit 9 compares the total cost per client/year; Exhibits 10 through 13 present the costs associated with intake, non-medical clinical services, medication, and dispensing, respectively.

It is worth noting that the providers visited in this study maintain records that allowed CCC staff to ascertain total costs and, generally, milligrams of medications dispensed. Because, however, the projects themselves have not put much effort into allocating total costs (1) across service categories or (2) between methadone and LAAM, the study required the combined judgment of CCC and program staff to allocate expenses.

The seven providers ranged in total annualized operating costs from just under \$150,000 to over \$1.4 million (Exhibit 4). Operating costs included not only cash outlays for staff and other expenditures, but the imputed value of buildings and equipment, and the market value of donated goods and services. Dividing total annual operating cost by the average daily census yields the annual cost per current client, or the annual “slot” cost. Except for Reno (which costs \$836), the slot cost of the providers visited ranges from under \$1,316 to \$3,809.

Exhibit 4 demonstrates that this study has selected quite divergent providers to study, giving the rather wide variation in annual cost per client. This is a meaningful comparison to undertake, under the premise that costs for LAAM and methadone clients do not differ greatly (which is supported later in this report).

Exhibit 4. Total Cost, Total Clients, and Cost per Current Client

	Total Operating Cost	Average Daily Census	Cost per Current Client (slot)
Tempe	\$277,763	142	\$1,956
Reno	\$148,798	178	\$836
Las Vegas	\$187,802	127	\$1,479
Seattle	\$1,405,672	369	\$3,809
Indianapolis	\$674,044	256	\$2,633
Cleveland	\$1,030,212	393	\$2,625
San Antonio	\$1,026,756	395	\$2,599

Exhibit 5 presents the average number of clients in treatment on a given day. The providers studied included medium (127 or more clients) to large size (369 or more clients) treatment providers. All providers were private corporations, of which four (Tempe, Reno, Las Vegas, and San Antonio) were for-profit and three (Seattle, Indianapolis, and Cleveland) were non-profit. Overall, LAAM clients comprised only 6% of the treatment populations.

Exhibit 5. Average Daily Census receiving LAAM or Methadone

	LAAM Clients	Methadone Clients	Total Clients
Tempe	14	128	142
Reno	8	170	178
Las Vegas	3	124	127
Seattle	17	352	369
Indianapolis	47	209	256
Cleveland	10	383	393
San Antonio	17	378	395
Total	116	1744	1860
Proportion of Total	6%	94%	100%

Exhibit 6 summarizes four elements of clinical (non-medical) services offered by the providers--individual counseling, group counseling, clinical case management, and networking/outreach. Individual and group counseling are self-explanatory. Clinical Case Management includes time spent documenting services and updating clinical records, participating in team meetings, etc. Networking/Outreach includes some "case finding"

activities, such as street outreach, but also includes calls placed on behalf of specific clients to other service providers to facilitate access to needed services. Of the providers for which services data were available, only three provided group counseling (Seattle, Indianapolis, and Cleveland) and three provided networking/outreach (Cleveland, Indianapolis, and San Antonio).

The amount of individual and group counseling did differ somewhat between LAAM and methadone treatment conditions in 3 of the 7 providers, but was identical in the others. Cleveland in particular reported providing fewer hours of group and individual hours to LAAM patients than to methadone patients. San Antonio provides 12 hours per year of individual counseling; Tempe, Reno, Las Vegas, Seattle, and Indianapolis each provide between 6 and 8.6 hours per year of individual counseling. Five of the seven programs provide about 0.5 hours of clinical case management per client month; Cleveland provides about 1 hour per month and San Antonio provides 2 hours and 40 minutes of case management per client. Networking/outreach was only provided by 3 programs, offering between 1 and 6 hours per year.

Exhibit 6. Actual or Estimated Actual Clinical Services

	Tempe	Reno	Las Vegas	Seattle	Indiana- polis	Cleveland	San Antonio
	Hours	Hours	Hours	Hours	Hours	Hours	Hours
Individual Counseling							
LAAM	8.6/yr	6/yr	6/yr	8.6/yr	6/ 6 mos.	2/?	12/yr
Methadone	8.6/yr	8.6/yr	8.6/yr	8.6/yr	6/ 6 mos.	4/?	12/yr
Group Counseling							
LAAM	n/a	n/a	n/a	8.8	1/ 6 mos.	2	n/a
Methadone	n/a	n/a	n/a	8.8	1/ 6 mos.	9	n/a
Clinical Case Management							
LAAM	0.5/mo	6/yr	6/yr	6/yr	0.5/ mo.	1/?	2.6/client
Methadone	0.5/mo	6/yr	6/yr	6/yr	0.5/ mo.	1/?	2.6/client
Networking/ Outreach							
LAAM	n/a	n/a	n/a	n/a	0.25/ mo.	6	1
Methadone	n/a	n/a	n/a	n/a	0.25/ mo.	6	1

The ratio of clients to staff ranged from about 14 to over 35 clients per staff member (Exhibit 7). There were considerably fewer clinical staff relative to clients in the Tempe and Reno (135 and 178, respectively) compared to the other programs, which ranged from about 36 to 63.5 clients per clinical staff FTE. The number of medical staff also ranged from about 49 to about 99 clients per staff FTE.

Exhibit 7. Client to Staff Ratios (Staff measured in FTEs)

	Administ. Staff	Medical Staff	Clinical Staff	Total Staff	Salary per FTE
Tempe	44.4	71.0	135.2	22.7	\$22,904
Reno	178.0	59.3	178.0	35.6	\$17,650
Las Vegas	127.0	84.7	63.5	28.2	\$20,953
Seattle	73.8	49.2	38.8	16.8	\$35,282
Indianapolis	85.3	85.3	56.9	24.4	\$29,732
Cleveland	43.6	54.5	35.7	14.4	\$26,278
San Antonio	65.8	98.8	49.4	21.9	\$37,191

Average methadone dose ranged from 52.3 to 85.5 milligrams in six of the seven providers-consistent with other studies of average dose levels in methadone treatment programs (Exhibit 8). The seventh program--Reno--had an abnormally low average dose level, even compared with the other providers with the same owner. It is unclear from the data collected if this provider offers more detoxification-oriented services than maintenance-oriented services. Average dose is calculated by dividing total milligrams dispensed by the number of doses dispensed (calculated as the number of clients multiplied by the number of dosing events per client per year).

In the case of LAAM, clients were assumed to have received 3.5 doses per week (Monday, Wednesday, and Friday with a 50% increment on Friday for the weekend). Methadone frequency is simply the number of clients multiplied by 365. The average quantity of LAAM dispensed three times a week (factoring in the additional amount provided on Fridays) ranged from 27.1 to 92.1 milligrams in all seven providers. LAAM dosing guidelines suggest that the milligram dose level for LAAM should be about 1.3 times that for methadone. LAAM doses are in fact not systematically higher than methadone doses--however, the relatively small number of clients who receive LAAM may bias these comparisons.

Exhibit 8. Average Dose of LAAM and Methadone Provided Each Day Doses Are Given

	LAAM	Methadone
Tempe	35.2	52.3
Reno	27.1	20.0
Las Vegas	40.1	74.5
Seattle	69.7	58.6
Indianapolis	92.1	54.5
Cleveland	70.4	53.1
San Antonio	85.4	85.5

Note: Average dose assumes 3 dispensings and 3.5 equivalent doses of LAAM each week, which would be the case if LAAM is dispensed Monday, Wednesday, and Friday with a 50% increase on Friday over Monday and Wednesday.

Total costs were allocated to either LAAM or methadone treatment conditions. Analysis of these allocations are equivocal--treatment with LAAM cost somewhat less in I program, cost virtually the same in 3 programs, and cost more in 3 programs. Exhibit 9 presents the per day and per year costs of treatment using either LAAM or methadone. This is calculated by taking total operating costs in each provider, and dividing by the number of clients in treatment on an average day to obtain the “per slot” cost. Per day costs are simply the per slot costs divided by 365. The cost of treatment ranged from \$803 to \$3930 for LAAM clients in six of the seven programs and from \$838 to \$3804 for methadone clients. Cleveland is an anomaly among the LAAM programs: staff conduct medical examinations and additional assessments on clients prior to switching them from methadone to LAAM. Moreover, there was substantial ramp-up in the number of clients on LAAM over a six month period, resulting in a relatively high number of “intakes” to LAAM. These factors appear to cause the LAAM cost in Cleveland to be twice as high as the methadone cost.

Exhibit 9. Per Day and Per Year Costs of Treatment Using LAAM and Treatment Using Methadone

	Per Year		Per Day	
	LAAM	Methadone	LAAM	Methadone
Tempe	\$1,756	\$1,978	\$4.81	\$5.42
Reno	\$803	\$838	\$2.20	\$2.29
Las Vegas	\$1,457	\$1,479	\$3.99	\$4.05
Seattle	\$3,930	\$3,804	\$10.77	\$10.42
Indianapolis	\$2,667	\$2,625	\$7.31	\$7.19
Cleveland	\$5,215	\$2,560	\$14.29	\$7.02
San Antonio	\$2,916	\$2,585	\$7.99	\$7.08

Note: Cleveland’s higher cost of LAAM treatment relative to methadone most likely results from (1) additional examination and assessments conducted when clients transfer to LAAM from methadone, and (2) substantial ramp-up in the number of LAAM clients over a six month period.

The methodology developed by the Capital Consulting Corporation allows for estimates of costs for different categories of services. In order to better understand differences in the component costs of treatment using LAAM and treatment using methadone, the data were analyzed separately for intakes, clinical (non-medical services), medication, and dispensing.

Data presented in Exhibit 9 allocated expenses associated with intakes across all current clients, regardless of whether the clients were receiving LAAM or methadone. In reality, all clients in each program studied initially received methadone. For six of the seven programs, this means their intake assessments, medical examination, and psychosocial assessment were all conducted while they received methadone. In one program, additional medical examinations were conducted for patients wishing to be transferred to LAAM. Otherwise, there is no distinct intake process for LAAM clients that is different than for methadone clients. Moreover, a more accurate summary of intake expenses divides expenditures by the number of admissions during the period rather than the number of current clients enrolled on a given day.

Exhibit 10 shows, for the four providers for which the number of admissions was collected, the combined costs (per admission) of intake assessment, medical examination, and psychosocial assessment. Expenditures on the admission process ranged from about \$400 per admission to over \$1924 per admission. The program in San Antonio appears to spend around three times as much on this process than the other providers. Again, since there is no distinct intake/admission process for LAAM clients in these providers, there is no utility in separately summarizing the costs.

Exhibit 10. Costs of Conducting Intakes, per Admission

	Initial Assessment	Medical Examination	Psychosocial Evaluation	Total Cost
Tempe	\$15.52	\$353.17	\$31.02	\$399.71
Reno	not avail.	not avail.	not avail.	not avail.
Las Vegas	not avail.	not avail.	not avail.	not avail.
Seattle	\$153.06	\$327.82	\$269.86	\$750.74
Indianapolis	\$8.60	\$300.29	\$117.67	\$426.56
Cleveland	\$91.14	\$386.36	\$62.39	\$539.89
San Antonio	\$241.72	\$1440.84	\$241.72	\$1924.28

Note: Data on admissions were incomplete in Reno and Las Vegas.

Expenditures on clinical (non-medical) services provided after clients were admitted and assessed were virtually identical for LAAM and methadone clients in each of the seven programs (Exhibit 11). The most significant portion of these costs are for individual and group counseling; networking/outreach, HIV testing/counseling, and clinical case management also accounted for some of the costs. While costs for non-medical services for LAAM and methadone clients are identical, modest differences in services provided to LAAM patients and methadone patients (discussed in Exhibit 6) would suggest that costs should be different. It is also clearly plausible that the type, intensity, and duration of services for LAAM clients may differ from methadone clients in these programs simply because LAAM and methadone clients differ in severity or other factors.

Exhibit 11. Average Cost of Ongoing Psychosocial and Ancillary Services per Client Per Year for LAAM and Methadone Clients

	LAAM	Methadone
Tempe	\$692.14	\$690.36
Reno	\$213.88	\$213.97
Las Vegas	\$656.33	\$656.16
Seattle	\$1,629.47	\$1,628.95
Indianapolis	\$517.70	\$518.16
Cleveland	\$1,076.00	\$1,075.69
San Antonio	\$854.35	\$854.29

Exhibit 12 presents the cost of medicating LAAM and methadone clients, and the cost per milligram borne by the treatment providers studied. The seven providers studied each paid

between \$.031 and \$.044 for a milligram of LAAM, and around \$.006 for a milligram of methadone. The fact that LAAM costs six or seven times than would be the same quantity of methadone is accentuated by the fact that it takes 1.3 times as much LAAM as methadone to treat an individual client; it is substantially mitigated, however, by the fact that LAAM is administered only every other day rather than every day. Therefore, the medication cost per client per year (focusing only on the purchase price of the medication) is only 1.5 to four times the cost of methadone.

Exhibit 12. LAAM and Methadone Purchase Cost Per Client/Year and Per Milligram

	Medication Cost Per Client/Year		Cost per Milligram	
	LAAM	Methadone	LAAM	Methadone
Tempe	\$270.43	\$116.34	\$.042	\$.006
Reno	\$197.38	\$42.37	\$.040	\$.006
Las Vegas	\$291.67	\$157.48	\$.040	\$.006
Seattle	\$557.94	\$150.43	\$.044	\$.007
Indianapolis	\$512.85	\$145.70	\$.031	\$.007
Cleveland	\$432.21	\$123.00	\$.034	\$.006
San Antonio	\$508.47	\$199.41	\$.033	\$.006

Note. This excludes any dispensing, testing, and dose regulation activities.

Finally, Exhibit 13 presents the average cost of dispensing medications to LAAM and methadone clients. This includes the costs associated with preparing and delivering the medication, and testing and regulating the dose levels provided; it does not include the purchase cost that was reported in Exhibit 12. Not surprisingly, the expense allocated to delivering LAAM were lower than the costs associated with delivering methadone. LAAM, which is dispensed every other day, in fact costs about one third less to deliver than methadone in six of the seven programs. San Antonio, the one anomaly to this, faced roughly identical costs for delivering both medications.

Exhibit 13. Average Cost per Client/Year of Dispensing, Testing, and Regulating LAAM and Methadone doses

	LAAM	Methadone
Tempe	\$647.14	\$1,024.88
Reno	\$329.88	\$519.58
Las Vegas	\$356.00	\$512.53
Seattle	\$1,020.71	\$1,301.93
Indianapolis	\$953.15	\$1,256.05
Cleveland	\$693.89	\$1,071.44
San Antonio	\$714.71	\$693.55

Discussion

While the relative costs of treatment using LAAM and treatment using methadone play a role in determining which treatment should be provided, it is not the only factor that these providers or other providers must consider. A prior analysis of demand for LAAM by providers suggests that LAAM would not replace methadone for all, or even very many, clients. A series of focus groups conducted with dozens of providers--some who have provided LAAM, and others who have not revealed that LAAM would not be appropriate for individuals who need the daily contact with program staff, particularly patients who are not yet stabilized. LAAM is viewed as an alternative medication for:

- stabilized patients who otherwise do not qualify for methadone “takehomes”
- patients with restricted mobility, due to disability or illness--particularly AIDS
- patients whose work schedule conflicts with dosing hours
- patients who live a long distance from the program or for whom transportation is a barrier

It is unclear whether the services planned versus those actually provided differ between LAAM and methadone conditions. Further reflection on the differences in characteristics and needs between LAAM and methadone clients is needed, and more full documentation of the differences in services actually provided to the two groups would be useful. It is also important to remember that all patients treated with LAAM in by these providers were first admitted to methadone and then switched over. Many were also switched back to methadone again. There is no unique admission process for LAAM in these providers.

Several caveats need to be made to the use of this data.

1. The study did not examine differences in the characteristics of LAAM and methadone patients. For example, clients could have differed in their severity of current or prior addiction history or other problems such as employment. Clients generally need different levels or types of services depending on their severity or specific problems. Even though the programs did not necessarily plan different levels or types of services, differences may have existed. This is particularly the case when patients initiate treatment on methadone and only switch to LAAM later--perhaps when they are more stable. There was no ascertainment of the characteristics or rationale underlying switching a client from methadone to LAAM.
2. Data collected using the current protocol, which was based on standard accounting principles, provide important and new insights into the costs of treatment. However, as is evident in the current data, the nature, content, and intensity of specific service units vary across SDUs. Additional information is required before the relative costs of service units can be compared across SDUs and generalized beyond the pilot sites.
3. The study did not document characteristics of the treatment episode, such as the amount of time spent by patients on methadone and/or LAAM, or the percent of clients who transfer from methadone to LAAM, or vice versa.

4. The providers selected for this study include those with early experience using LAAM, and may not represent the range of costs or operating systems found nationwide. A third of the nation's licensed methadone treatment providers are located in New York and California; and many northeast treatment programs are located within hospital-administered substance abuse treatment programs. Overhead rates and certain administrative costs may be different in such programs.

Next Steps for Research

There are at least three priorities for further investigation and exploration.

1. Develop or expand upon the CCC methodology for ascertaining descriptive information about the services provided, differences in services across salient subgroups within a provider (e.g., LAAM and methadone clients in narcotic treatment programs).
2. Time series data or data gathered through a clinical experiment would allow analysts to determine whether real program operating budgets change or whether the types and numbers of clients treated changes with the introduction of LAAM.
3. An evaluation of the relative effectiveness and benefits derived from treatment using LAAM and treatment using methadone are also a necessary adjunct to this type of cost analysis. These studies are ongoing; cost analysis should be linked to these efforts. In the absence of data on effectiveness, decisionmakers tend to prefer the least cost alternative. Additional insights into the impacts of LAAM on treatment enrollment, retention, and outcomes are important.

Name: For Profit - Tempe, Arizona (029)
Location: Metropolitan Area
FYE: December 31, 1995

**Outpatient - LAAM
Program Cost Profile**

Units of Service	Unit Measurement	Program Costs	Units	Unit Costs	Per Patient Average
Initial Assessment	No. of Assessments	\$80	14	\$5.71	\$5.71
Medical Examination	No. of Patients	\$1,811	14	\$129.36	\$129.36
Psychosocial Evaluation	No. of Patients	\$159	14	\$11.36	\$11.36
Individual Counseling	No. of Counseling Hours	\$8,098	121	\$66.93	\$578.43
Group Counseling	No. of Counseling Hours	\$0	0	\$0.00	\$0.00
HIV Testing/Counseling	No. of Patients	\$266	14	\$19.00	\$19.00
Medical/Diagnostic Services	No. of Medical Services	\$12,846	141	\$91.11	\$917.57
Housing	Inpatient Days	\$0	0	\$0.00	\$0.00
Clinical Case Management	No. of Patients	\$1,272	14	\$90.86	\$90.86
Networking/Outreach	No. of Contacts	\$0	0	\$0.00	\$0.00
Child Care Service	No. of Children	\$0	0	\$0.00	\$0.00
Staff Education	No. of Patients	\$54	14	\$3.86	\$3.86
Client Education	No. of Cases	\$0	0	\$0.00	\$0.00
Client Transportation	No. of Trips	\$0	0	\$0.00	\$0.00
Total		\$24,586			\$1,756.15

The clients in the LAAM SDU are transitioned into this program from the Methadone SDU. The primary goal of this program is to improve the quality of life and health of clients who have experienced long term addiction to heroin or morphine-like drugs. This SDU averaged 14 active clients during the fiscal year.

This program includes the following units of service:

- Initial Assessment (Averaged 15 minutes by a Counselor);
- Medical Examination (Averaged 20 minutes by a Physician Assistant and 15 minutes by a Nurse);
- Psychosocial Evaluation (Averaged 30 minutes by a Counselor);
- Individual Counseling (Averaged 8.6 hours per year by a Counselor);
- HIV Testing and Counseling Services (A requirement for participation. The center has a contract with an outside laboratory for the testing of blood samples. A Counselor averaged 20 minutes per client to provide HIV awareness counseling, post testing, and referral services);
- Medical/Diagnostic Services (Clients receive an annual physical. Additionally, random or suspicion based drug testing is performed monthly. Initially, clients see a physician for dosage regulation. All child bearing aged female clients are required to take a pregnancy test. LAAM is dispensed every three days by a Nurse. The average dosage is 66.70 milligrams);
- Clinical Case Management (Averaged ½ hour per month by a Counselor); and,
- Staff Education (Provided by purchased services such as class education or attendance at seminars and conferences).

Name: For Profit - Tempe, Arizona (029)
Location: Metropolitan Area
FYE: December 31, 1995

**Outpatient - Methadone
Program Cost Profile**

Units of Service	Unit Measurement	Program Costs	Units	Unit Costs	Per Patient Average
Initial Assessment	No. of Assessments	\$727	128	\$5.68	\$5.68
Medical Examination	No. of Patients	\$16,554	128	\$129.33	\$129.33
Psychosocial Evaluation	No. of Patients	\$1,454	128	\$11.36	\$11.36
Individual Counseling	No. of Counseling Hours	\$73,815	1103	\$66.92	\$576.68
Group Counseling	No. of Counseling Hours	\$0	0	\$0.00	\$0.00
HIV Testing/Counseling	No. of Patients	\$2,427	128	\$18.96	\$18.96
Medical/Diagnostic Services	No. of Medical Services	\$146,076	1642	\$88.96	\$1,141.22
Housing	Inpatient Days	\$0	0	\$0.00	\$0.00
Clinical Case Management	No. of Patients	\$11,633	128	\$90.88	\$90.88
Networking/Outreach	No. of Contacts	\$0	0	\$0.00	\$0.00
Child Care Service	No. of Children	\$0	0	\$0.00	\$0.00
Staff Education	No. of Patients	\$491	128	\$3.84	\$3.84
Client Education	No. of Cases	\$0	0	\$0.00	\$0.00
Client Transportation	No. of Trips	\$0	0	\$0.00	\$0.00
Total		\$253,177			\$1,977.95

The primary goal of this program is to improve the quality of life and health of clients who have experienced long term addiction to heroin or morphine-like drugs. Individual treatment may for a few months or many years. This SDU averaged 128 active clients during the fiscal year.

This program includes the following units of service:

- Initial Assessment (Averaged 15 minutes by a Counselor);
- Medical Examination (Averaged 20 minutes by a Physician Assistant and 15 minutes by a Nurse);
- Psychosocial Evaluation (Averaged 30 minutes by a Counselor);
- Individual Counseling (Averaged 8.6 hours per year by a Counselor);
- HIV Testing and Counseling Services (A requirement for participation. The center has a contract with an outside laboratory for the testing of blood samples. A Counselor averaged 20 minutes per client to provide HIV awareness counseling, post testing, and referral services);
- Medical/Diagnostic Services (Clients receive an annual physical. Additionally, random or suspicion based drug testing is performed monthly. Initially, clients see a physician for dosage regulation. Methadone is dispensed every day by a Nurse. The average dosage is 52.40 milligrams);
- Clinical Case Management (Averaged ½ hour per month by a Counselor); and,
- Staff Education (Provided by purchased services such as class education or attendance at seminars and conferences).

Name: For Profit - Reno, Nevada (030)
Location: Metropolitan Area
FYE: December 31, 1995

**Outpatient - LAAM
Program Cost Profile**

Units of Service	Unit Measurement	Program Costs	Units	Unit Costs	Per Patient Average
Initial Assessment	No. of Assessments	\$41	8	\$5.13	\$5.13
Medical Examination	No. of Patients	\$369	8	\$46.13	\$46.13
Psychosocial Evaluation	No. of Patients	\$83	8	\$10.38	\$10.38
Individual Counseling	No. of Counseling Hours	\$990	48	\$20.63	\$123.75
Group Counseling	No. of Counseling Hours	\$0	0	\$0.00	\$0.00
HIV Testing/Counseling	No. of Patients	\$82	8	\$10.25	\$10.25
Medical/Diagnostic Services	No. of Medical Services	\$4,218	56.4	\$74.79	\$527.25
Housing	Inpatient Days	\$0	0	\$0.00	\$0.00
Clinical Case Management	No. of Patients	\$495	8	\$61.88	\$61.88
Networking/Outreach	No. of Contacts	\$0	0	\$0.00	\$0.00
Child Care Service	No. of Children	\$0	0	\$0.00	\$0.00
Staff Education	No. of Patients	\$144	8	\$18.00	\$18.00
Client Education	No. of Cases	\$0	0	\$0.00	\$0.00
Client Transportation	No. of Trips	\$0	0	\$0.00	\$0.00
Total		\$6,422			\$802.75

The clients in the LAAM SDU are transitioned into this program from the Methadone SDU. The primary goal of this program is to improve the quality of life and health of clients who have experienced long term addiction to heroin or morphine-like drugs. This SDU averaged eight active clients during the fiscal year.

This program includes the following units of service:

- Initial Assessment (Averaged 15 minutes by a Counselor);
- Medical Examination (Averaged 20 minutes by a Physician Assistant and 15 minutes by a Nurse);
- Psychosocial Evaluation (Averaged 30 minutes by a Counselor);
- Individual Counseling (Averaged six hours per year by a Counselor);
- HIV Testing and Counseling Services (A requirement for participation. The center has a contract with an outside laboratory for the testing of blood samples. A Counselor averaged 20 minutes per client to provide HIV awareness counseling, post testing, and referral services);
- Medical/Diagnostic Services (Clients receive an annual physical. Additionally, random or suspicion based drug testing is performed monthly. Initially, clients see a physician for dosage regulation. All child bearing aged female clients are required to take a pregnancy test. LAAM is dispensed every three days by a Nurse. The average dosage is 80.24 milligrams);
- Clinical Case Management (Averaged ½ hour per month by a Counselor); and,
- Staff Education (Provided by purchased services such as class education or attendance at seminars and conferences).

Name: For Profit - Reno, Nevada (030)
Location: Metropolitan Area
FYE: December 31, 1995

**Outpatient - Methadone
Program Cost Profile**

Units of Service	Unit Measurement	Program Costs	Units	Unit Costs	Per Patient Average
Initial Assessment	No. of Assessments	\$877	170	\$5.16	\$5.16
Medical Examination	No. of Patients	\$7,839	170	\$46.11	\$46.11
Psychosocial Evaluation	No. of Patients	\$1,753	170	\$10.31	\$10.31
Individual Counseling	No. of Counseling Hours	\$21,040	1020	\$20.63	\$123.76
Group Counseling	No. of Counseling Hours	\$0	0	\$0.00	\$0.00
HIV Testing/Counseling	No. of Patients	\$1,744	170	\$10.26	\$10.26
Medical/Diagnostic Services	No. of Medical Services	\$95,532	2334.6	\$40.92	\$561.95
Housing	Inpatient Days	\$0	0	\$0.00	\$0.00
Clinical Case Management	No. of Patients	\$10,520	170	\$61.88	\$61.88
Networking/Outreach	No. of Contacts	\$0	0	\$0.00	\$0.00
Child Care Service	No. of Children	\$0	0	\$0.00	\$0.00
Staff Education	No. of Patients	\$3,071	170	\$18.06	\$18.06
Client Education	No. of Cases	\$0	0	\$0.00	\$0.00
Client Transportation	No. of Trips	\$0	0	\$0.00	\$0.00
Total		\$142,376			\$837.51

The primary goal of this program is to improve the quality of life and health of clients who have experienced long term addiction to heroin or morphine-like drugs. Individual treatment may be for a few months or many years. This SDU averaged 170 active clients during the fiscal year.

This program includes the following units of service:

- Initial Assessment (Averaged 15 minutes by a Counselor);
- Medical Examination (Averaged 20 minutes by a Physician Assistant and 15 minutes by a Nurse);
- Psychosocial Evaluation (Averaged 30 minutes by a Counselor);
- Individual Counseling (Averaged 8.6 hours per year by a Counselor);
- HIV Testing and Counseling Services (A requirement for participation. The center has a contract with an outside laboratory for the testing of blood samples. A Counselor averaged 20 minutes per client to provide HIV awareness counseling, post testing, and referral services);
- Medical/Diagnostic Services (Clients receive an annual physical. Additionally, random or suspicion based drug testing is performed monthly. Initially, clients see a physician for dosage regulation. Methadone is dispensed every day by a Nurse. The average dosage is 20.04 milligrams);
- Clinical Case Management (Averaged ½ hour per month by a Counselor); and,
- Staff Education (Provided by purchased services such as class education or attendance at seminars and conferences).

Name: For Profit - Las Vegas, Nevada (031)
Location: Metropolitan Area
FYE: December 31, 1995

**Outpatient - LAAM
Program Cost Profile**

Units of Service	Unit Measurement	Program Costs	Units	Unit Costs	Per Patient Average
Initial Assessment	No. of Assessments	\$52	3	\$17.33	\$17.33
Medical Examination	No. of Patients	\$304	3	\$101.33	\$101.33
Psychosocial Evaluation	No. of Patients	\$103	3	\$34.33	\$34.33
Individual Counseling	No. of Counseling Hours	\$1,241	18	\$68.94	\$413.67
Group Counseling	No. of Counseling Hours	\$0	0	\$0.00	\$0.00
HIV Testing/Counseling	No. of Patients	\$26	3	\$8.67	\$8.67
Medical/Diagnostic Services	No. of Medical Services	\$1,943	21.15	\$91.87	\$647.67
Housing	Inpatient Days	\$0	0	\$0.00	\$0.00
Clinical Case Management	No. of Patients	\$621	3	\$207.00	\$207.00
Networking/Outreach	No. of Contacts	\$0	0	\$0.00	\$0.00
Child Care Service	No. of Children	\$0	0	\$0.00	\$0.00
Staff Education	No. of Patients	\$81	3	\$27.00	\$27.00
Client Education	No. of Cases	\$0	0	\$0.00	\$0.00
Client Transportation	No. of Trips	\$0	0	\$0.00	\$0.00
Total		\$4,371			\$1,457.00

The clients in the LAAM SDU are transitioned into this program from the Methadone SDU. The primary goal of this program is to improve the quality of life and health of clients who have experienced long term addiction to heroin or morphine-like drugs. This SDU averaged three active clients during the fiscal year.

This program includes the following units of service:

- Initial Assessment (Averaged 15 minutes by a Counselor);
- Medical Examination (Averaged 20 minutes by a Physician Assistant and 15 minutes by a Nurse);
- Psychosocial Evaluation (Averaged 30 minutes by a Counselor);
- Individual Counseling (Averaged 6 hours per year by a Counselor);
- HIV Testing and Counseling Services (A requirement for participation. The center has a contract with an outside laboratory for the testing of blood samples. A Counselor averaged 20 minutes per client to provide HIV awareness counseling, post testing, and referral services);
- Medical/Diagnostic Services (Clients receive an annual physical. Additionally, random or suspicion based drug testing is performed monthly. Initially, clients see a physician for dosage regulation. All child bearing aged female clients are required to take a pregnancy test. LAAM is dispensed every three days by a Nurse. The average dosage is 77.03 milligrams);
- Clinical Case Management (Averaged ½ hour per month by a Counselor); and,
- Staff Education (Provided by purchased services such as class education or attendance at seminars and conferences).

Name: For Profit - Las Vegas, Nevada (031)
Location: Metropolitan Area
FYE: December 31, 1995

**Outpatient - Methadone
Program Cost Profile**

Units of Service	Unit Measurement	Program Costs	Units	Unit Costs	Per Patient Average
Initial Assessment	No. of Assessments	\$2,137	124	\$17.23	\$17.23
Medical Examination	No. of Patients	\$12,574	124	\$101.40	\$101.40
Psychosocial Evaluation	No. of Patients	\$4,275	124	\$34.48	\$34.48
Individual Counseling	No. of Counseling Hours	\$51,295	744	\$68.94	\$413.67
Group Counseling	No. of Counseling Hours	\$0	0	\$0.00	\$0.00
HIV Testing/Counseling	No. of Patients	\$1,057	124	\$8.52	\$8.52
Medical/Diagnostic Services	No. of Medical Services	\$83,081	1631.2	\$50.93	\$670.01
Housing	Inpatient Days	\$0	0	\$0.00	\$0.00
Clinical Case Management	No. of Patients	\$25,647	124	\$206.83	\$206.83
Networking/Outreach	No. of Contacts	\$0	0	\$0.00	\$0.00
Child Care Service	No. of Children	\$0	0	\$0.00	\$0.00
Staff Education	No. of Patients	\$3,365	124	\$27.14	\$27.14
Client Education	No. of Cases	\$0	0	\$0.00	\$0.00
Client Transportation	No. of Trips	\$0	0	\$0.00	\$0.00
Total		\$183,431			\$1,479.28

The primary goal of this program is to improve the quality of life and health of clients who have experienced long term addiction to heroin or morphine-like drugs. Individual treatment may be for a few months or many years. This SDU averaged 124 active clients during the fiscal year.

This program includes the following units of service:

- Initial Assessment (Averaged 15 minutes by a Counselor);
- Medical Examination (Averaged 20 minutes by a Physician Assistant and 15 minutes by a Nurse);
- Psychosocial Evaluation (Averaged 30 minutes by a Counselor);
- Individual Counseling (Averaged 8.6 hours per year by a Counselor);
- HIV Testing and Counseling Services (A requirement for participation. The center has a contract with an outside laboratory for the testing of blood samples. A Counselor averaged 20 minutes per client to provide HIV awareness counseling, post testing, and referral services);
- Medical/Diagnostic Services (Clients receive an annual physical. Additionally, random or suspicion based drug testing is performed monthly. Initially, clients see a physician for dosage regulation. Methadone is dispensed every day by a Nurse. The average dosage is 89.69 milligrams);
- Clinical Case Management (Averaged ½ hour per month by a Counselor); and,
- Staff Education (Provided by purchased services such as class education or attendance at seminars and conferences).

Name: Non Profit - Seattle, Washington (028)
Location: Metropolitan Area
FYE: June 30, 1995

**Outpatient - LAAM
Program Cost Profile**

Units of Service	Unit Measurement	Program Costs	Units	Unit Costs	Per Patient Average
Initial Assessment	No. of Assessments	\$2,503	17	\$147.24	\$147.24
Medical Examination	No. of Patients	\$5,361	17	\$315.35	\$315.35
Psychosocial Evaluation	No. of Patients	\$4,414	17	\$259.65	\$259.65
Individual Counseling	No. of Counseling Hours	\$12,802	194	\$65.99	\$753.06
Group Counseling	No. of Counseling Hours	\$4,550	68	\$66.91	\$267.65
HIV Testing/Counseling	No. of Patients	\$508	17	\$29.88	\$29.88
Medical/Diagnostic Services	No. of Medical Services	\$26,837	17	\$1578.65	\$1,578.65
Housing	Inpatient Days	\$0	0	\$0.00	\$0.00
Clinical Case Management	No. of Patients	\$4,729	17	\$278.18	\$278.18
Networking/Outreach	No. of Contacts	\$4,729	17	\$278.18	\$278.18
Child Care Service	No. of Children	\$144	17	\$8.47	\$8.47
Staff Education	No. of Patients	\$239	17	\$14.06	\$14.06
Client Education	No. of Cases	\$0	0	\$0.00	\$0.00
Client Transportation	No. of Trips	\$0	0	\$0.00	\$0.00
Total		\$66,816			\$3,930.35

The clients in the LAAM SDU are transitioned into this program from the Methadone SDU. The primary goal of this program is to improve the quality of life and health of clients who have experienced long term addiction to heroin or morphine-like drugs. This SDU averaged 17 active clients during the fiscal year.

This program includes the following units of service:

- Initial Assessment (Averaged 1½ hours by a Social Worker);
- Medical Examination (Averaged 30 minutes by a Physician Assistant and 30 minutes by a Nurse; and 5 minutes by the Medical Director);
- Psychosocial Evaluation (Averaged 90 minutes by a Counselor);
- Individual Counseling (Averaged 8.6 hours per year by a Counselor);
- Group Counseling (Averaged 8.8 hours per year by a Counselor);
- Medical/Diagnostic Services (Clients receive an annual physical. Additionally, random or suspicion based drug testing is performed monthly. Initially, clients see a physician for dosage regulation. All child bearing aged female clients are required to take a pregnancy test. LAAM is dispensed every two days by a Nurse, with the approximate dispensing time of two minutes. The average dosage is 69.72 milligrams);
- HIV Testing and Counseling Services (A requirement for participation. The center has a contract with an outside laboratory for the testing of blood samples. A Counselor provides HIV awareness counseling, post testing, and referral services);
- Clinical Case Management (Averaged ½ hour per month by a Counselor);
- Networking/Outreach (Averaged ½ hour per month by a Counselor); and,
- Staff Education (Provided by purchased services such as class education or attendance at seminars and conferences).

Name: Non Profit - Seattle, Washington (028)
Location: Metropolitan Area
FYE: June 30, 1995

**Outpatient - Methadone
Program Cost Profile**

Units of Service	Unit Measurement	Program Costs	Units	Unit Costs	Per Patient Average
Initial Assessment	No. of Assessments	\$51,833	352	\$147.25	\$147.25
Medical Examination	No. of Patients	\$111,015	352	\$315.38	\$315.38
Psychosocial Evaluation	No. of Patients	\$91,385	352	\$259.62	\$259.62
Individual Counseling	No. of Counseling Hours	\$264,674	4011	\$65.99	\$751.91
Group Counseling	No. of Counseling Hours	\$94,415	1411	\$66.91	\$268.22
HIV Testing/Counseling	No. of Patients	\$10,527	352	\$29.91	\$29.91
Medical/Diagnostic Services	No. of Medical Services	\$511,233	352	\$1452.37	\$1,452.37
Housing	Inpatient Days	\$0	0	\$0.00	\$0.00
Clinical Case Management	No. of Patients	\$97,919	352	\$278.18	\$278.18
Networking/Outreach	No. of Contacts	\$97,919	352	\$278.18	\$278.18
Child Care Service	No. of Children	\$2,988	352	\$8.49	\$8.49
Staff Education	No. of Patients	\$4,948	352	\$14.06	\$14.06
Client Education	No. of Cases	\$0	0	\$0.00	\$0.00
Client Transportation	No. of Trips	\$0	0	\$0.00	\$0.00
Total		\$1,338,856			\$3,803.57

The primary goal of this program is to improve the quality of life and health of clients who have experienced long term addiction to heroin or morphine-like drugs. Individual treatment may for a few months or many years. This SDU averaged 352 active clients during the fiscal year.

This program includes the following units of service:

- Initial Assessment (Averaged 1½ hours by a Social Worker);
- Medical Examination (Averaged 30 minutes by a Physician Assistant; 30 minutes by a Nurse; and 5 minutes by the Medical Director);
- Psychosocial Evaluation (Averaged 90 minutes by a Counselor);
- Individual Counseling (Averaged 8.6 hours per year by a Counselor);
- Group Counseling (Averaged 8.8 hours per year by a Counselor);
- Medical/Diagnostic Services (Clients receive an annual physical. Additionally, random or suspicion based drug testing is performed monthly. Initially, clients see a physician for dosage regulation. All child bearing aged female clients are required to take a pregnancy test. Methadone is dispensed every seven days by a Nurse, with approximate dispensing time of one minute. The average dosage is 60.47 milligrams);
- HIV Testing and Counseling Services (A requirement for participation. The center has a contract with an outside laboratory for the testing of blood samples. A Counselor averaged 20 minutes per client to provide HIV awareness counseling, post testing, and referral services);
- Clinical Case Management (Averaged ½ hour per month by a Counselor);
- Networking/Outreach (Averaged ½ hour per month by a Counselor); and,
- Staff Education (Provided by purchased services such as class education or attendance at seminars and conferences).

Name: Non Profit - Indianapolis, Indiana (032)
Location: Metropolitan Area
FYE: Six Months Ended December 31, 1995

**Outpatient - LAAM
Program Cost Profile**

Units of Service	Unit Measurement	Program Costs	Units	Unit Costs	Per Patient Average
Initial Assessment	No. of Assessments	\$86	10	\$8.60	\$8.60
Medical Examination	No. of Patients	\$2,719	24	\$113.29	\$113.29
Psychosocial Evaluation	No. of Patients	\$1,177	10	\$117.70	\$117.70
Individual Counseling	No. of Counseling Hours	\$11,657	268	\$43.50	\$248.02
Group Counseling	No. of Counseling Hours	\$3,075	47	\$65.43	\$65.43
HIV Testing/Counseling	No. of Patients	\$0	0	\$0.00	\$0.00
Medical/Diagnostic Services	No. of Medical Services	\$34,791	47	\$740.23	\$740.23
Housing	Inpatient Days	\$0	0	\$0.00	\$0.00
Clinical Case Management	No. of Patients	\$5,509	47	\$117.21	\$117.21
Networking/Outreach	No. of Contacts	\$2,754	47	\$58.60	\$58.60
Child Care Service	No. of Children	\$0	0	\$0.00	\$0.00
Staff Education	No. of Patients	\$1,337	47	\$28.45	\$28.45
Client Education	No. of Cases	\$0	0	\$0.00	\$0.00
Client Transportation	No. of Trips	\$0	0	\$0.00	\$0.00
Total		\$63,105			\$1,497.53

The clients in the LAAM SDU are transitioned into this program from the Methadone SDU. The primary goal of this program is to improve the quality of life and health of clients who have experienced long term addiction to heroin or morphine-like drugs. This SDU had 47 active clients during the period, including ten newly enrolled clients. The cost profile reflects the average cost for the ten newly enrolled clients.

This program includes the following units of service:

- Initial Assessment (Averaged 30 minutes by a Secretary);
- Medical Examination (Averaged 40 minutes by a Physician and 30 minutes by a Nurse);
- Psychosocial Evaluation (Averaged three hours by a Counselor);
- Individual Counseling (Averaged six hours for the six months by a Counselor);
- Group Counseling (Averaged one hour for the six months by a Counselor);
- Medical/Diagnostic Services (Clients receive an annual physical. Additionally, random or suspicion based drug testing is performed monthly. Physician spent two hours per week at the clinic for dosage regulation. LAAM is dispensed every two days by a Nurse. The average dosage is 92.12 milligrams);
- Clinical Case Management (Averaged 30 minutes per month by a Counselor);
- Networking/Outreach (Averaged 15 minutes per month by a Counselor); and,
- Staff Education (Provided by purchased services such as class education or attendance at seminars and conferences).

Name: Non Profit - Indianapolis, Indiana (032)
Location: Metropolitan Area
FYE: Six Months Ended December 31, 1995

**Outpatient - Methadone
Program Cost Profile**

Units of Service	Unit Measurement	Program Costs	Units	Unit Costs	Per Patient Average
Initial Assessment	No. of Assessments	\$387	45	\$8.60	\$8.60
Medical Examination	No. of Patients	\$11,898	105	\$113.31	\$113.31
Psychosocial Evaluation	No. of Patients	\$5,295	45	\$117.67	\$117.67
Individual Counseling	No. of Counseling Hours	\$51,802	1191	\$43.49	\$247.86
Group Counseling	No. of Counseling Hours	\$13,802	209	\$66.04	\$66.04
HIV Testing/Counseling	No. of Patients	\$0	0	\$0.00	\$0.00
Medical/Diagnostic Services	No. of Medical Services	\$148,042	209	\$708.33	\$708.33
Housing	Inpatient Days	\$0	0	\$0.00	\$0.00
Clinical Case Management	No. of Patients	\$24,496	209	\$117.21	\$117.21
Networking/Outreach	No. of Contacts	\$12,248	209	\$58.60	\$58.60
Child Care Service	No. of Children	\$0	0	\$0.00	\$0.00
Staff Education	No. of Patients	\$5,947	209	\$28.45	\$28.45
Client Education	No. of Cases	\$0	0	\$0.00	\$0.00
Client Transportation	No. of Trips	\$0	0	\$0.00	\$0.00
Total		\$273,917			\$1,466.07

The primary goal of this program is to improve the quality of life and health of clients who have experienced long term addiction to heroin or morphine-like drugs. Individual treatment may be for a few months or many years. This SDU had 209 active clients during the period, including 45 newly enrolled clients. The cost profile reflects the average cost for the 45 newly enrolled clients.

This program includes the following units of service:

- Initial Assessment (Averaged 30 minutes by a Secretary);
- Medical Examination (Averaged 40 minutes by a Physician and 30 minutes by a Nurse);
- Psychosocial Evaluation (Averaged 3 hours by a Counselor);
- Individual Counseling (Averaged six hours for the six months by a Counselor);
- Group Counseling (Averaged one hour for the six months by a Counselor);
- Medical/Diagnostic Services (Clients receive an annual physical. Additionally, random or suspicion based drug testing is performed monthly. Physician spent six hours per week at the clinic for dosage regulation. Methadone is dispensed every day by a Nurse. The average dosage is 55.29 milligrams);
- Clinical Case Management (Averaged 30 minutes per month by a Counselor);
- Networking/Outreach (Averaged 15 minutes per month by a Counselor); and,
- Staff Education (Provided by purchased services such as class education or attendance at seminars and conferences).

Name: Non Profit - Cleveland, Ohio (027)
Location: Metropolitan Area
FYE: June 30, 1995 (Six Months)

Outpatient - LAAM
Program Cost Profile

Units of Service	Unit Measurement	Program Costs	Units	Unit Costs	Per Patient Average
Initial Assessment	No. of Assessments	\$5,562	22	\$252.83	\$252.83
Medical Examination	No. of Patients	\$12,378	22	\$562.64	\$562.64
Psychosocial Evaluation	No. of Patients	\$2,705	22	\$122.95	\$122.95
Individual Counseling	No. of Counseling Hours	\$4,587	43	\$106.67	\$208.50
Group Counseling	No. of Counseling Hours	\$4,034	43	\$93.81	\$183.36
HIV Testing/Counseling	No. of Patients	\$0	0	\$0.00	\$0.00
Medical/Diagnostic Services	No. of Medical Services	\$8,522	132	\$64.56	\$387.36
Housing	Inpatient Days	\$0	0	\$0.00	\$0.00
Clinical Case Management	No. of Patients	\$3,778	22	\$171.73	\$171.73
Networking/Outreach	No. of Contacts	\$0	0	\$0.00	\$0.00
Child Care Service	No. of Children	\$0	0	\$0.00	\$0.00
Staff Education	No. of Patients	\$0	0	\$0.00	\$0.00
Client Education	No. of Cases	\$0	0	\$0.00	\$0.00
Client Transportation	No. of Trips	\$862	22	\$39.18	\$39.18
Total		\$42,428			\$1,928.55

The primary goal of this program, which started in January 1995, is to improve the quality of life and health of clients who have experienced long term addiction to heroin or morphine-like drugs. Clients are transitioned into this program from the methadone program. Thus, the services and costs associated with the original Initial Assessment (\$114.65), Medical Examination (\$312.07), and Psychosocial Evaluation (\$122.74) are included in this SDU's cost profile for comparison purposes. During the six month period, January 1 through June 30, 1995, there were 22 clients in the SDU for a total of 57 months for an average of 2.6 months per client. This program includes the following units of service:

- Initial Assessment (Averaged 75 minutes by a Caseworker/Counselor for entrance to the methadone SDU; averaged 90 minutes by a Caseworker/Counselor for transition to the LAAM SDU);
- Medical Examination (Entrance into the methadone SDU includes a medical history and is conducted by a Physician and Nurse whose combined time is one hour and 15 minutes. The transition into the LAAM SDU includes pre-acceptance interviews with a Physician and the Medical Director to determine if the client meets the criteria for the LAAM program. Once accepted, the client is observed for a six hour period by a Nurse. The Physician time for interview and screening is one hour. The Nurse, while observing the client, does handle other assignments. Aproximately one hour is dedicated to the initial dosage observation);
- Psychosocial Evaluation (Entrance into the methadone SDU includes psychological evaluation; A.S.I.; and treatment plan. Averaged one hour by a Counselor. There are no additional services provided when transitioned into the LAAM SDU.);
- Individual Counseling (Averaged two hours by a Counselor);
- Group Counseling (Averaged two hours by a Counselor);
- Medical/Diagnostic Services (Clients receive an annual physical. Additionally, random or suspicion based drug testing is performed monthly for the first three months, and at least once every quarter thereafter. LAAM is dispensed every three days by a Nurse.);
- Clinical Case Management (Averaged one hour by a Caseworker/Counselor); and,
- Client Transportation (Provided to pregnant clients).

Name: Non Profit - Cleveland, Ohio (027)
Location: Metropolitan Area
FYE: June 30, 1995

**Outpatient - Methadone
Program Cost Profile**

Units of Service	Unit Measurement	Program Costs	Units	Unit Costs	Per Patient Average
Initial Assessment	No. of Assessments	\$27,235	237	\$114.92	\$114.92
Medical Examination	No. of Patients	\$77,197	237	\$325.73	\$325.73
Psychosocial Evaluation	No. of Patients	\$29,139	237	\$122.95	\$122.95
Individual Counseling	No. of Counseling Hours	\$98,242	921	\$106.67	\$414.52
Group Counseling	No. of Counseling Hours	197,767	2108	\$93.82	\$834.46
HIV Testing/Counseling	No. of Patients	0	0	\$0.00	\$0.00
Medical/Diagnostic Services	No. of Medical Services	\$395,324	2844	\$139.00	\$1,668.03
Housing	Inpatient Days	\$0	0	\$0.00	\$0.00
Clinical Case Management	No. of Patients	\$40,703	237	\$171.74	\$171.74
Networking/Outreach	No. of Contacts	\$0	0	\$0.00	\$0.00
Child Care Service	No. of Children	\$0	0	\$0.00	\$0.00
Staff Education	No. of Patients	\$0	0	\$0.00	\$0.00
Client Education	No. of Cases	\$0	0	\$0.00	\$0.00
Client Transportation	No. of Trips	\$9,289	237	\$39.19	\$39.19
Total		\$874,896			\$3,691.54

The primary goal of this program is to improve the quality of life and health of clients who have experienced long term addiction to heroin or morphine-like drugs. Individual treatment may be for a few months or many years. The average daily number of clients in the program was 237. Individual dosages were dispensed seven days per week.

This program includes the following units of service:

- Initial Assessment (Averaged 75 minutes by a Caseworker/Counselor);
- Medical Examination (Includes a medical history and is conducted by a Physician and a Nurse. The combined time of the Physician and Nurse is approximately one hour and 15 minutes);
- Psychosocial Evaluation (Includes psychological evaluation; A.S.I.; and treatment plan. Averaged one hour by a Counselor);
- Individual Counseling (Averaged four hours by a Counselor);
- Group Counseling (Averaged nine hours by a Counselor);
- Medical/Diagnostic Services (Clients receive an annual physical. Additionally, random or suspicion based drug testing is performed monthly for the first three months, and at least once every quarter thereafter. Methadone is dispensed daily by a Nurse.);
- Clinical Case Management (Averaged one hour by a Caseworker/Counselor); and,
- Client Transportation (Provided to pregnant clients).

Name: For Profit - San Antonio, Texas (026)
Location: Metropolitan Area
FYE: Six Months Ending December 31, 1994

**Outpatient - LAAM
Program Cost Profile**

Units of Service	Unit Measurement	Program Costs	Units	Unit Costs	Per Patient Average
Initial Assessment	No. of Assessments	\$895	17	\$52.65	\$52.65
Medical Examination	No. of Patients	\$5,333	17	\$313.71	\$313.71
Psychosocial Evaluation	No. of Patients	\$895	17	\$52.65	\$52.65
Individual Counseling	No. of Counseling Hours	\$4,630	102	\$45.39	\$272.35
Group Counseling	No. of Counseling Hours	\$0	0	\$0.00	\$0.00
HIV Testing/Counseling	No. of Patients	\$203	17	\$11.94	\$11.94
Medical/Diagnostic Services	No. of Medical Services	\$10,397	17	\$611.59	\$611.59
Housing	Inpatient Days	\$0	0	\$0.00	\$0.00
Clinical Case Management	No. of Patients	\$1,569	17	\$92.29	\$92.29
Networking/Outreach	No. of Contacts	\$578	17	\$34.00	\$34.00
Child Care Service	No. of Children	\$0	0	\$0.00	\$0.00
Staff Education	No. of Patients	\$282	17	\$16.59	\$16.59
Client Education	No. of Cases	\$0	0	\$0.00	\$0.00
Client Transportation	No. of Trips	\$0	0	\$0.00	\$0.00
Total		\$24,782			\$1,457.76

The primary goal of this program is to improve the quality of life and health of clients who have experienced long term addiction to heroin or morphine-like drugs. Individual treatment may be for a few months or many years.

This program includes the following units of service:

- Initial Assessment (Averaged 90 minutes by a Caseworker/Counselor);
- Medical Examination (Includes a medical history and full physical including cardiovascular; X-rays; and blood, including tuberculosis. One hour by both a M.D. and a Nurse);
- Psychosocial Evaluation (Includes psychological evaluation; A.S.I. completion of METQAS; and treatment plan. averaged 90 minutes by a Counselor);
- Individual Counseling (Scheduled for one hour per month; averaged six hours per patient by a Counselor);
- HIV Testing/Counseling (Voluntary consent obtained for testing and one post test session; averaged 30 minutes by a Nurse. On-going counseling provided by other agencies);
- Medical/Diagnostic Services (\$223.60 represents a \$20 per patient State tax, basic services for scheduled and random drug screens, and medical services, as needed, by a Physician and a Nurse; \$107.59 is the cost of the dispensing unit - an average of 13.5 visits per patient per month; and \$254.24 is the cost of the methadone - \$3.14 per patient per visit; and \$26.18 is the cost for the Texas mandated once a month pregnancy test);
- Clinical Case Management (Averaged 2 hours and 40 minutes by a Counselor);
- Networking and Outreach (Averaged 60 minutes by a Counselor); and,
- Staff Education.

Name: For Profit - San Antonio, Texas (026)
Location: Metropolitan Area
FYE: Six Months Ending December 31, 1994

**Outpatient - Methadone
Program Cost Profile**

Units of Service	Unit Measurement	Program Costs	Units	Unit Costs	Per Patient Average
Initial Assessment	No. of Assessments	\$19,893	378	\$52.63	\$52.63
Medical Examination	No. of Patients	\$118,579	378	\$313.70	\$313.70
Psychosocial Evaluation	No. of Patients	\$19,893	378	\$52.63	\$52.63
Individual Counseling	No. of Counseling Hours	\$102,943	2268	\$45.39	\$272.34
Group Counseling	No. of Counseling Hours	\$0	0	\$0.00	\$0.00
HIV Testing/Counseling	No. of Patients	\$4,520	378	\$11.96	\$11.96
Medical/Diagnostic Services	No. of Medical Services	\$168,770	378	\$446.48	\$446.48
Housing	Inpatient Days	\$0	0	\$0.00	\$0.00
Clinical Case Management	No. of Patients	\$34,890	378	\$92.30	\$92.30
Networking/Outreach	No. of Contacts	\$12,849	378	\$33.99	\$33.99
Child Care Service	No. of Children	\$0	0	\$0.00	\$0.00
Staff Education	No. of Patients	\$6,259	378	\$16.56	\$16.56
Client Education	No. of Cases	\$0	0	\$0.00	\$0.00
Client Transportation	No. of Trips	\$0	0	\$0.00	\$0.00
Total		\$488,596			\$1,292.58

The primary goal of this program is to improve the quality of life and health of clients who have experienced long term addiction to heroin or morphine-like drugs. Individual treatment may be for a few months or many years.

This program includes the following units of service:

- Initial Assessment (Averaged 90 minutes by a Caseworker/Counselor);
- Medical Examination (Includes a medical history and full physical including cardiovascular; X-rays; and blood, including tuberculosis. One hour by both a M.D. and a Nurse);
- Psychosocial Evaluation (Includes psychological evaluation; A.S.I.; completion of METQAS; and treatment plan. Averaged 90 minutes by a Counselor);
- Individual Counseling (Scheduled for one hour per month; averaged six hours per patient by a Counselor);
- HIV Testing and Counseling Services (Voluntary consent obtained for testing and one post test session; averaged 30 minutes by a Nurse. On-going counseling provided by other agencies);
- Medical/Diagnostic Services (\$223.60 represents a \$20 per patient State tax, basic services for scheduled and random drug screens, and medical services, as needed, by a Physician and a Nurse; \$123.97 is the cost of the dispensing unit - an average of 15.6 visits per patient per month; and \$98.91 is the cost of the methadone - \$1.06 per patient per visit);
- Clinical Case Management (Averaged 2 hours and 40 minutes by a Counselor);
- Networking and Outreach (Averaged 60 minutes by a Counselor); and,
- Staff Education.

The perspective offered in this document is solely that of the author(s) and does not reflect the policies or views of the Federal government, or any of its Departments or Agencies.