

# Forecasting the Cost of Chemical Dependency Treatment Under Managed Care

## The Washington State Study

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# 15

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## Preface

This document was commissioned by the Center for Substance Abuse Treatment to provide State alcohol and other drug agencies with background information and advice in using actuarial studies to predict the costs of contracting with managed-care organizations to provide publicly funded chemical dependency treatment services.

Actuarial studies similar to the one described in this report should also be useful to States that are planning changes in funding chemical dependency treatment, including health care reform, expansion of medicaid benefits, and changing mandated insurance coverage for chemical dependency treatment. With a few adjustments, the approaches described herein could be useful for estimating the costs of mental health services as well.

This report relates the experience of one State, Washington, in conducting an actuarial estimate of the cost of chemical dependency treatment. It describes both the basic lessons that the State learned about actuaries and actuarial studies and the policy debates and analysis problems that the State encountered. The report includes a description of actuarial studies in general and Washington's in particular, including the data and calculations used to obtain actuarial estimates and how and when assumptions are employed. The final chapter discusses options and considerations for States that plan to procure such studies themselves.

Included as appendixes are two relevant documents from Washington's experience: the description of the benefit package that the State desired and the final report of the actuary.

*Chapter 1 of TAP 15: Forecasting the Cost of Chemical Dependency Treatment Under Managed Care: The Washington State Study*

## **Chapter 1—The Washington Study**

In 1993, the Washington State Legislature passed and Governor Mike Lowry signed the Health Care Reform Act, the first State legislation in the Nation mandating universal coverage and minimum benefits for all State residents through an employer mandate. Rather than specify the covered illnesses and procedures in statute, the act set up a Health Services Commission and gave it 2 years to decide which benefits should be included and at what cost, what caps ought to be placed on benefits, and what copayments should be charged. Following approval of the Health Services Commission's plan by the legislature, the plan has been mandated for the largest employers starting July 1995. Smaller employers, medicaid and medicare recipients, and uninsured individuals would be phased in over the next 4 years.

Under the plan, all employers must offer a choice of health care plans, including health maintenance organizations and managed-care approaches, that include at least the minimum benefits. The Health Services Commission will regulate rates. "Health care purchasing cooperatives" will be created so that smaller employers can join together and bargain with health insurers for lower rates.

The general guidance provided by the legislature mandated that "case managed chemical dependency and mental health services" must be part of the proposed coverage. Details about what services would be included, what caps or limits would be placed on the number of days or counseling sessions, and how much patients would pay was left to the Health Services Commission. The legislature clearly intended to cover chemical dependency—addiction to alcohol or other drugs—but it was not clear whether nicotine dependence was included. The choice of the term "chemical dependency" was intended to exclude nondependent use of alcohol or other drugs. The critical term "case management" was left undefined.

Washington State's Division of Alcohol and Substance Abuse determined that the Health Services Commission was not going to give early or close attention to chemical dependency treatment coverage. The task of designing a politically acceptable and clinically sound package of health benefits

was enormous, and chemical dependency issues were fairly far down the commission's list. The division took the initiative to convene a Chemical Dependency Issue Investigation Group to recommend to the commission what a comprehensive chemical dependency treatment benefit ought to include. Since the total cost of the health care reform package was destined to be a major concern, the division hired a consulting actuary to calculate the cost of the recommended benefit package. If the cost of the recommended benefit package turned out too high, the division could suggest reductions, limits, or copayments to get the cost down.

Even though the Health Care Reform Act had been adopted with coverage for chemical dependency treatment, there was a possibility that the Health Services Commission and the legislature might remove chemical dependency treatment coverage before implementation if coverage turned out to be too expensive. The division expected that it would have to "sell" the chemical dependency treatment benefit. It had three strong arguments:

1. Chemical dependency treatment is relatively inexpensive. To keep this selling point, it was necessary to design a benefit package that would cost less than \$2 per person covered per month.
2. Exclusion of chemical dependency treatment from the benefit package would encourage chemically dependent persons to postpone treatment, allowing their condition to deteriorate progressively until they are jobless or incarcerated, or they otherwise qualify for publicly supported treatment.
3. Chemical dependency treatment will pay back the health insurer in reduced future health care costs, particularly from reduced hospitalization rates. This feature is known as cost offset in the evaluation literature.

The first issue went to the heart of the actuarial study. The matter of excess public burden was essentially a policy argument, and one that the division did not ask the actuary to address. The cost offset argument was one that the division expected the actuary to be capable of making, but there was surprising reluctance. It turns out that such analysis is extremely rare in actuarial work. The State therefore turned to a health economist, Tom Wickeiser, to review the available literature on cost offset and estimate the probable savings. His paper is included as section 4 of the actuarial study appended to this report (Appendix B).

*Chapter 2 of TAP 15: Forecasting the Cost of Chemical Dependency Treatment Under Managed Care: The Washington State Study*

## **Chapter 2—Overview of Actuarial Studies**

Before delving into the details of the Washington State plan, it may help to describe actuarial studies in general and define a few key concepts. An "actuarial study" is an estimate of the cost of providing a specific package of insurance benefits to a defined group of individuals. It is the basic tool used by insurance firms to determine the amount of a premium— that is, how much to charge per individual for a policy that would provide such benefits.

Actuarial studies can estimate costs for many kinds of insurance benefits: life, fire, malpractice, or other risks for which one can buy insurance. Chemical dependency treatment falls within the domain of health insurance, so actuarial studies of the cost of chemical dependency treatment follow the

methods used to estimate health policies in general. In this report, "actuarial studies" are health studies—in particular, those that estimate the cost of chemical dependency treatment services.

The professional who conducts an actuarial study is an "actuary." The persons defined in the study as the group eligible for services may be referred to individually as "insureds" or "insured lives"; this report refers to them collectively as the "covered population." The covered population may also be referred to as "enrollees" or "members." Note that the covered population includes anyone who is eligible to use the services, not just those who will actually use those services. The specific services that the covered population may receive are "benefits," and the whole collection of services is the "benefit package." "Eligible providers" are the organizations or individuals who may provide one or more benefits to the covered population. Together, the benefit package, eligible providers, and covered population may be called a "plan."

For reasons of cost and expertise, specifying the plan is the task of the client (in this case, the State). The actuary's main job is to estimate the cost of the plan that the State has defined. An actuary may assist the State in defining the covered population and the benefit package, mostly by clarifying the exact extent of the covered population, eligible providers, and benefits.

## **Chapter 3—Washington State's Plan**

In Washington State's case, the legislature determined the covered population: all State residents were to be covered by July 1, 1999. As noted in Chapter 1, however, the legislature provided only general guidance regarding the benefit package and eligible providers. The State Division of Alcohol and Substance Abuse's Chemical Dependency Issue Investigation Group (CDIIG) undertook the task of formulating recommendations for chemical dependency treatment benefits and providers (the CDIIG's report is included as Appendix A). The CDIIG addressed four main questions:

1. What chemical dependency treatment modalities should be included in the benefit package?

The CDIIG recommended residential and outpatient treatment modalities—with various degrees of intensity and duration and chemotherapies, such as methadone treatment—for inclusion in the benefit package. The group recommended coverage for detoxification, but as part of emergency medical care rather than as part of treatment. It also recommended long-term residential care (up to 1 year). The Health Services Commission is being pressured from other quarters to exclude all long-term health care services. This pressure, which is directed principally at nursing-home care, may eventually result in exclusion of long-term substance abuse treatment as well.

2. What caps or limits ought to be placed on chemical dependency treatment benefits?

The CDIIG argued against caps or limits on the duration of total benefits, although it did consider limits on certain expensive modalities. The group concluded that case management is more effective than overall limits in controlling costs and that caps or limits may be counterproductive because they deny adequate treatment to the more severely addicted patients.

Despite the CDIIG's recommendation, it became apparent that the Health Services Commission might insist on caps anyway. The State modified its actuarial study to include an analysis of the effect of caps on rates.

3. What organizations and individuals should be eligible providers?

The CDIIG argued that the State should certify eligible providers, as it currently does for most non-medically directed programs. The most contentious issue was whether hospitals should be excluded altogether as chemical dependency treatment providers because of their high cost. The plan that CDIIG finally recommended retained hospital-based providers, assuming that case management would limit their use.

4. How much should patients be required to pay?

The CDIIG recommended that copayments for chemical dependency treatment benefits be the same as those for medical/surgical benefits.

*Chapter 4 of TAP 15: Forecasting the Cost of Chemical Dependency Treatment Under Managed Care: The Washington State Study*

## **Chapter 4—Major Elements of an Actuarial Study**

As noted in Chapter 2, an actuarial study is an estimate of the cost of a specific plan. An actuarial estimate is usually expressed in terms of cost of a specified package of benefits per covered person per month, or "net cost per member per month" (PMPM). This form of the estimate is traditional for insurance companies, since it translates directly into a monthly premium, which is how insurance companies typically charge their enrollees. This estimate may also be referred to as a "premium" or "capitation," although these terms are more properly applied to the purchase price for actual plans, not the actuarial estimated cost to the plan maker. An insurer or a health maintenance organization might set a premium or capitation higher or lower than the actuarial estimated PMPM, based on marketing judgments.

In creating the PMPM estimate for a plan, an actuary first estimates separately the cost of each service in the benefit package. For example, if the chemical dependency treatment benefit is to include inpatient treatment and outpatient treatment, the actuary first estimates a PMPM for inpatient treatment and a separate estimate for outpatient treatment and then combines the two estimates with appropriate weightings to get a final single PMPM. (Washington State's actuarial study had six separate covered treatment services: hospital-based inpatient, freestanding short-term residential, long-term residential, regular outpatient, intensive outpatient, and methadone treatment.) Separate estimates may also be needed for various segments of the population, depending on what is known about the population segments' use of services. As with the various benefits, a final analysis weights all the separate estimates and combines them into a single PMPM estimate for the entire covered population.

### **Actuarial Data**

Actuarial estimates are based on empirical data wherever possible. The data in an actuarial study typically include payment and enrollment figures that the actuary has obtained from insurers and medicaid and medicare data obtained from State government or the Federal Government.

The Washington State study used both national and statewide data. Less confidence was placed in the national data, because national data may reflect factors not relevant to individual States. For example, State poverty rates may be significantly lower than the national norm. National data also may not

reflect influences that are of great local importance, such as the collapse of a particular industry or local laws prohibiting alcohol possession or sales. In some situations, State data were unavailable or were based on too few covered lives to be reliable, making national data, despite the drawbacks, the best available.

An actuarial estimate requires data about three factors: the annual utilization of each service in the benefit package by the covered population, the duration of each service (the average number of units used per admission), and the average cost per unit for each service. The basic actuarial formula is as follows (its terms are defined below):

$$\frac{\text{annual utilization rate} \times \text{average units per admission} \times \text{average cost per unit}}{12} = \text{PMPM}$$

## Utilization

"Utilization" means the frequency of admission to treatment service by the covered population (or a particular covered population segment). This usage of the term is different than the typical sense found in chemical dependency treatment, where it means the percentage of capacity of a program that is actually delivering services or occupied by patients. The actuarial sense of "utilization" is the proportion of a covered population that will use a particular service during a specified period (usually 1 year). Utilization is computed by dividing the total number of admissions expected from the covered population by the size of the covered population. Utilization is usually expressed in terms of the number of admissions per 1,000 insured lives (covered persons) per year.

Utilization is different for each service in a benefit package. Some covered individuals are admitted only for outpatient care, some are admitted only for inpatient care, and some are admitted only for detoxification; many are admitted to multiple modalities. This service mix varies from State to State, depending on therapeutic traditions and facilities available. For example, most detoxification and short-term "in-patient" treatment in Washington is done in freestanding residential facilities rather than in hospitals. Washington's utilization patterns are different from those of the rest of the country, and they probably will remain so after the implementation of health care reform.

Washington needed its actuary to use local practices and data to estimate a separate utilization rate for each modality of service in the benefit package. Washington's actuary calculated separate utilization estimates for six modalities (Table 4-A): medically managed inpatient (meaning hospital-based detoxification and treatment), nonmedically managed 30-day residential treatment (in non-hospital-based facilities), non-medically managed long-term residential treatment (over 30 days), intensive outpatient treatment (including "day treatment" and "partial hospitalization"), regular outpatient treatment, and methadone treatment (including both detoxification and maintenance; methadone treatment is referred to as "opiate dependency treatment" in Appendix B, to incorporate other approved substitute chemotherapies that may be used in the future).

Utilization data are typically derived from historical admission patterns from a known population. Insurance payment records, medicaid records, and medicare records are typical sources. Of these, insurance records are typically the most numerous and most complete. Since insurance records are maintained by organizations that historically have relied heavily on actuarial studies and know that they will need them in the future, they are reliable, complete, and numerous enough to generate estimates that are likely to prove accurate.

Washington has a large and fairly detailed set of data from its computerized client information system. The State hoped to use these data in determining actuarial costs, but in practice, this system provided little of value. In general, State and local substance abuse management information systems are weak

data sources for deriving utilization estimates. These systems may record the number of admissions (plus detailed data regarding persons admitted), but they cannot record data on the eligible members of the covered population who have not been admitted. The size and composition of the population from which these admissions are drawn can only be roughly estimated. This lack of "denominator" data means there is too much uncertainty regarding the *rate* of admissions. If State substance abuse management information systems are to be used to estimate utilization, an additional data source must be available from which accurate denominators can be drawn.

## Duration of Service

In actuarial studies, "duration of service" is a consistent measure of service intensity and answers the question, How many units of service does the average patient receive per admission? For residential and inpatient modalities, duration of service is expressed as days of treatment. For outpatient services, duration is expressed in terms of number of events, meaning individual or group counseling events. (The analysis assumes that the ratio of individual counseling to group counseling does not change. Such an assumption may be challenged, particularly where the plan anticipates strong cost containment measures.) Methadone treatment may be measured in events or days. Washington State chose days for methadone, because the data on "days" were considered more accurate than the data on "events," and choosing days avoided the need to assume minimal variation in the ratio between individual counseling and group counseling.

Table 4-A.—Washington State Utilization by Insured Population

Prevalence category	Number per 1,000
Lifetime prevalence of chemical dependency	94.9
Annual need (17% of prevalence)	16.6
Annual utilization (73% of need)	12.1
Total inpatient admissions (21.5% of utilization)	2.6
Hospital inpatient (4% of all inpatient)	0.1
30-day residential nonhospital	2.5
Long-term residential	0.0
Total outpatient admissions	1.2
Intensive outpatient (80% of all outpatient)	1.0
Regular outpatient	0.2
Methadone	0.0

Insurance payment data bases typically include duration-of-service data, as do medicaid data bases at the State level. Washington was able to use encounter data from its substance abuse management information system (the problem of inadequate data on the covered population does not affect estimates of duration, because the duration calculation is the number of events divided by the number of admissions).

## Cost of Care

Actuarial "cost of care" is the average amount paid per unit of service by the patient or third-party payer. It is not the same as an average treatment program's cost of providing care; rather, the actuarial cost is the average amount that the insurance company or other payer has to pay to obtain

the care from the treatment provider. Because insurers like to negotiate discounts, the actuarial cost is typically less than the treatment program's usual and customary charge for a unit of care. The actuarial cost in many cases may be lower than a treatment facility's average cost of providing care. Facilities must make up for such below-average payments by overcharging other patients.

Actuaries prefer using insurance payments as the basis for estimating cost of care because they are trying to forecast payments for specified periods. From the point of view of an insurer, a treatment provider's average costs or usual and customary charges are only of concern insofar as they affect the amounts that the insurer has to pay.

Provider average costs and usual and customary charges are clearly critical to consider: driving providers into bankruptcy is in no one's best interest. Still, there were compelling arguments that payment data were the best to use. Insurance payment data are easier to obtain and more reliable than data on provider average costs or usual and customary charges, and there are drawbacks (described below) to both provider charges and provider costs as measures of the cost of care.

Usual and customary charges of providers are a function more of marketing judgments than of clinical or economic judgments. For example, a treatment facility may establish a usual and customary charge much in excess of costs, competitive rates, or actual collections simply to leave open the possibility of collecting a large fee if anyone is willing to pay it. Actual provider costs would be free of such marketing influence, but these data are difficult to obtain. Questions about reasonableness, necessity, allowability and allocation of costs, return on investment, marginal versus average costs, and other cost accounting issues can make it very hard to estimate actual cost.

Finally, there is reason to believe that provider costs are determined more by available revenue than by anything else. To a point, providers can accommodate reduced revenues by being more efficient—trimming overhead and reducing profit margins. Once these efficiencies are reached, providers can only respond to lower revenues by reducing the amount of patient services or the quality of care, or both. Higher revenues produce the opposite effect. If providers are efficient, they are probably providing the best quality of care possible for the amount of revenue they have. If the current level of quality is acceptable, revenue should be a good proxy measure of the cost of providing treatment.

The distinction between actuarial costs and provider average costs proved nettlesome in discussions between the State and service providers concerning the Washington study. Many service providers were angered and disheartened by an estimate of actuarial costs for insured and Medicaid populations that was clearly below their own facility operating costs. To some extent, these concerns were reiterations of complaints about inadequate reimbursement under current reimbursement mechanisms. Providers were suspicious that the actuarial study was just another way for State government to cut provider payments.

Health care reform introduced some circumstances where these concerns have a new urgency. Chemical dependency treatment experiences a common health care phenomenon known as cost shifting, where some patients (or their insurers) pay more for a particular service and others pay less, depending on the market "muscle" of the payer. The cost-of-care data that Washington obtained from insurance payment data bases, Medicaid data bases, contract and budget documents, rate studies, and other sources yielded sharply different average costs for different portions of the covered population, reflecting this cost shifting. Washington's Health Care Reform Act, however, called for universal coverage, with everyone paying a single "community rate." The problem was, Which rate should the State use? If the lower rate were chosen, providers would go broke; if a higher rate were chosen, plans would be paying for shifted costs that would no longer occur.

The State's actuary developed a model to combine all these different sources and estimates into a PMPM estimate that compensated for the end of cost shifting. First, the actuary adjusted the best sources into the same time period, using data on medical inflation rates. Next, the actuary weighted each rate or cost estimate, based on the number of admissions expected at each rate during each year of implementation, in order to arrive at an average cost estimate. Since Washington's health care reform phases in various groups over a 4-year period, the weightings are different for each year.

Washington's actuarial cost-of-care estimate included a few items in addition to the payment to the treatment provider. Allowances for the insurer's administrative costs, the cost of the managed-care organization, and profits were factored in. For simplicity, Washington did this with an across-the-board marginal overhead factor. The Washington study assumed a rather low, 15-percent overhead factor, anticipating that other aspects of State health care reform would contain overhead costs.

Inflationary increases must be loaded into the cost-of-care formula to bring historical data (usually at least 1 year old) into the forecasting period (usually at least 1 year into the future). For Washington, there was some concern over which inflation rate to use. Actuaries normally use only the medical component of the Consumer Price Index when estimating inflation for health care costs. In the past, Washington's legislature had used the whole Consumer Price Index, which reflects changes in the general cost of living, for budgeting increases in rates for chemical dependency treatment facilities. Increases in the cost of medical care historically have exceeded increases in the general cost of living by about a factor of 2. Except for medically managed programs such as hospital-based inpatient treatment or detoxification, chemical dependency treatment costs are not increasing faster than the general rate of inflation. However, Washington chose to estimate conservatively, using the medical component of the Consumer Price Index, which averaged a 5-percent increase in costs each year (Table 4-B).

Population subgroup	Enrolled (effective date):									
	7/1/95		7/1/96		7/1/97		7/1/98		7/1/99	
	% of pop.	PMPM	% of pop.	PMPM <sup>a</sup>						
All subgroups	17	\$1.18	27	\$1.25	62	\$1.30	62	\$1.32	100	\$1.34
Insured	16	\$1.13	25	\$1.19	46	\$1.25	46	\$1.31	70	\$1.38
Uninsured	1	1.97	2	2.07	6	2.11	6	2.21	10	2.30
Medicaid	0	.91	0	.96	10	1.01	10	1.06	10	1.11
Medicare	0	.29	0	.30	0	.32	0	.33	10	.35

*PMPM<sup>a</sup> Includes a 5-percent increase from the preceding year for inflation.*

*Chapter 5 of TAP 15: Forecasting the Cost of Chemical Dependency Treatment Under Managed Care: The Washington State Study*

## **Chapter 5—Assumptions in Substance Abuse Actuarial Studies**

Actuarial data are rarely perfect. Often, data are missing, incomplete, or believed to be inaccurate. Some subgroups of the covered population may not be adequately represented in the data, or some services in the benefit package may be unique. In such cases, the actuary needs to make assumptions. The Washington State study provides several good examples.

### **Currently Uninsured Families**

Under the Washington health care reform plan, coverage is to be extended to currently uninsured low-income families. Little is known regarding utilization by this group, since there is no insurance company to keep track of billings and these families are not eligible for medicaid. Their lack of current health insurance coverage probably discourages them from seeking care, so any data from other sources are suspect. In this case, the State's actuary initially proposed assuming that utilization will be 15 percent higher than the rate for currently insured families, because uninsured families are younger (hence closer to the mean age of chemical dependency patients), poorer (hence more likely to be chemically dependent), and more likely to postpone seeking admission because of cost (hence creating pent-up demand) than currently insured populations are. Washington State officials were very concerned that the assumed 15-percent increase might be too low. If the State adopted a plan based on such an assumption and utilization was dramatically higher than the forecast, the legislature might terminate chemical dependency coverage to control costs. The State and its actuary needed as accurate an estimate as possible for utilization by currently uninsured persons.

Also of concern was the possibility that currently uninsured persons may have been postponing needed treatment, but would suddenly show up once coverage is extended. This pent-up demand, or "woodwork effect," could raise treatment admissions dramatically, particularly over the short term.

Washington had received a contract from the Center for Substance Abuse Treatment to conduct a prevalence study statewide. Part of that study was a household survey of adults, which included a chemical dependency scale. The State also asked respondents whether they were currently insured and whether they had entered chemical dependency treatment in the past year. With these data, the State could estimate prevalence of chemical dependency among currently uninsured families and could compare that figure with estimated prevalence among insured families. Although prevalence (the rate of chemical dependency) is different from utilization (the rate of admission to treatment), it is reasonable to assume that the number of persons who enter treatment from any group (utilization) is a constant proportion of the number of persons who need treatment (prevalence). This implies that the ratio of utilization by uninsured to utilization by insureds would be about the same as the ratio of prevalence among uninsured to prevalence among insureds. Washington could replace the 15-percent assumption about increased utilization with the following formula:

$$\frac{\text{uninsured prevalence}}{\text{insured prevalence}} \times \text{insured utilization} = \text{uninsured utilization}$$

The State hoped to use the prior treatment data to refine its assumptions about pent-up demand among the currently uninsured group. Pent-up demand is created by lack of access, and the household survey's measurement of different rates of access to treatment over the past year by insured and uninsured groups could help the State infer the rate at which persons in the uninsured group might have wanted treatment but have been unable to access it. Unfortunately, the number of completed surveys was too small at the time to measure differences in prior-year utilization between chemically dependent insureds and chemically dependent uninsureds. The State and the actuary still needed to guess at the rate of pent-up demand. The final loading factor chosen for pent-up demand was 25 percent for each of the first 2 years, with no load thereafter. Since the prevalence survey had already included pent-up demand as "current need," the 25-percent loading factor was converted into a reduction in demand after the exhaustion of pent-up demand (after 2 years). The computed equivalent reduction is 20 percent.

Washington's final utilization estimates for the currently uninsured group were 6.7 admissions per 1,000 uninsureds per year for the first 2 years and 5.4 per 1,000 thereafter (Table 5-A). The estimate for the first 2 years was 53 percent higher than the actuary's initial proposal of 115 percent of the utilization rate for insureds.

## Medicaid Enrollees

Medicaid posed different problems. The Washington Medicaid Management Information System has demographic data on each medicaid enrollee, whether he or she seeks chemical dependency treatment or not. Medicaid data bases are very similar in design and function to insurance company data bases, so reliability, completeness, and validity are comparable. Utilization rates for medicaid enrollees can be reliably calculated for any services included in (and billed separately in) the medicaid benefit package. In short, medicaid offers what seems to be an ideal data base.

The drawbacks came from restrictions on medicaid benefits. Medicaid pays for hospital-based care and for outpatient treatment, but not for nonhospital residential care. This posed problems if residential care was to be part of the benefit package under health care reform.

In Washington, hospital-based substance abuse treatment is available only to pregnant chemically dependent women. Under managed care, nonpregnant persons could be admitted to hospital-based substance abuse treatment services, but it seemed reasonable to assume that cost containment concerns would hold overall hospital utilization to about the same level.

Medicaid data for outpatient treatment utilization could not be accepted with the same confidence. Due to funding limitations, the State instituted policies restricting access to medicaid-funded outpatient treatment. Although the level of funding changed nearly 2 years before the actuarial study was initiated, lags in implementation and in billing for medicaid services resulted in incomplete data reflecting the cost controls being available for actuarial analysis.

Use of the medicaid data base for the actuarial study was precluded when the State's medicaid program managers reported that it would take several months to generate the necessary reports. Such a delay would mean that the Health Services Commission would have to make its decision without the actuarial study. The combination of questionable data and delayed availability led the State to look for other means of generating net-cost-per-person-per-month estimates for the medicaid population. The State decided to use the method outlined above for the uninsured population to generate estimates for the medicaid population.

## Medicare Patients

Medicare posed still different problems. Prevalence of chemical dependency in the medicare population is low, and Washington State had completed too few surveys in the household study to get a reliable estimate. Medicare utilization data are available in insurance data bases, but reported admission rates are extremely low. The State believed the low reported utilization was due to lower need for chemical dependency treatment compared with younger adults, to poor diagnoses by practitioners, and to a desire to shield elderly patients and their families from a chemical dependency diagnosis. Prevalence studies from other States provided an estimated prevalence of chemical dependency in the elderly population of between 25 and 60 percent of the rate among the general adult population.<sup>1</sup> Taking the upper prevalence estimate and assuming that the ratio of utilization to need is the same as that for insured adults generally, Washington would expect a utilization rate of 1.7 per 1,000, or about 45 percent of the general utilization rate. Expecting that some of the misdiagnosis and reluctance to refer would still remain despite health care reform, the State and the actuary reduced the assumed utilization for medicare-aged population to 1.5 per 1,000, equal to 40 percent of the rate for the entire insured population.

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Table 5–A.—Current and Projected Utilization by Insureds and Uninsureds

Utilization category	Number per 1,000	
	Insured	Uninsured

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Current need (from prevalence study)	16.6	29.1
Initial utilization (from insurance data)	3.8	6.7
Long-term utilization (pent-up demand backed out)	3.8	5.4

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## Note

<sup>1</sup> The Epidemiologic Catchment Area study (see Norman S. Miller, Beth M. Belkin, and Mark S. Gold, "Alcohol and Drug Dependence Among the Elderly: Epidemiology, Diagnosis and Treatment," *Comprehensive Psychiatry* 32, No. 2 (1991): 153–65). Although the study did not include a Washington site, a similar study in Spokane, found a prevalence rate equal to 60 percent of the general population rate (see Martin J. Jinks and Raymond Raschko, "A Profile of Alcohol and Prescription Drug Abuse in a High Risk Community Based Elderly Population," *DICP, The Annals of Pharmacotherapy* 24, No. 10 (1990): 971–75).

*Chapter 6 of TAP 15: Forecasting the Cost of Chemical Dependency Treatment Under Managed Care: The Washington State Study*

## Chapter 6—Estimating the Effects of Managing Care

Managed care achieves savings by reducing utilization, duration of treatment, and costs. All three variables in the actuarial calculation could change when managed care is introduced into a plan. Different organizations and philosophies of managing care will achieve different levels of savings, so changing managed-care organizations or concepts will affect the actuarial cost. A managed-care organization will also achieve different levels of savings for different populations, so experience with one covered population does not necessarily transfer directly to another.

Essential to an accurate estimate of the effect of managing care on services and insureds not previously managed is to find data from a program that is as similar as possible in managed-care style, covered population, and benefit package to the plan under study. For policy reasons, Washington State wished to use the American Society of Addiction Medicine criteria as the basis for managing care. Unfortunately, there are few large data bases that reflect the society's criteria, and all of them are outside Washington.

Washington currently uses less inpatient hospital care (the most expensive modality) without managed care than managed-care firms have achieved nationally, primarily because nonhospital treatment is more widely available in the State than it is nationally. The State and its actuary decided against using data from national managed-care organizations to estimate utilization distribution. Although data bases restricted to in-state insured lives are much smaller and therefore less reliable, the State decided that they would be superior to the national data in their ability to reflect the distribution of modalities likely under the State's Health Care Reform Act.

Washington and its actuary concluded that overall admission rates for chemical dependency treatment would not change when managed care is introduced, but the distribution of these admissions between modalities or services would shift somewhat to favor less expensive care. This conclusion allowed the

actuary to modify the utilization calculation, using a two-step model. First, a utilization rate was determined for all chemical dependency services taken together. Since managed care was not expected to alter the overall utilization rate, the actuary could use data from both managed-care and non-managed-care plans for this step, reducing reliance on the small data bases. Second, a distribution of admissions among the various services was determined for the subgroups for which the State had adequate data. The data for this step were from two managed-care organizations whose styles were close to the policy ideal. Multiplying the first factor by the second created utilization rates for each service, using overall utilization predictions from large data bases and deriving the effects of managed-care on modality utilization distribution from appropriate managed-care plans. The actuary used similar techniques to estimate duration of service.

For the uninsured and medicaid populations, there were no local or national data on the effects of managed care. The severity of dependence among poorer populations might be greater due to previous lack of treatment, which would result in more frequent utilization of residential modalities for the uninsured and medicaid populations, and longer durations. On the other hand, younger populations have less time to develop severe disease stages, so medicaid and uninsured groups could include fewer severely dependent persons. Given that the use of some form of managed care is widespread for insured patients and virtually absent for uninsured and medicaid patients, it is impossible to verify either conjecture. There is more use of residential treatment and there are longer stays among medicaid and uninsured patients than among insured patients (Table 6–A), but these differences could be due to managed care or to greater severity. Lacking better data about severity among uninsured and medicaid subgroups, the State assumed the same distribution of utilization among modalities for all groups; that is, it assumed that managed care would affect all groups equally. The only differences in utilization were due to differences in prevalence.

## Cost Shifting

Effects of managed care on cost-of-care data are complicated by cost shifting. Managed-care firms achieve part of their cost savings by forcing service providers to accept lower payments, sometimes even below the average cost of care. Providers may accept these arrangements because they can fill otherwise empty beds or slots, enabling them to spread fixed overhead over a larger base and thus reduce their average cost. Even if the low payments are insufficient to cover the variable, marginal costs, providers may still accept the arrangement. They can compensate for the below-cost payments by raising charges to plans or individuals who are able and willing to pay more than their share. This amounts to an in-direct subsidy of managed-care patients by non-managed-care patients. The public sector also pays less than provider cost, taking advantage of the fact that the provider can raise fees to non-publicly supported patients.

As more and more plans switch to managed care and seek to have costs shifted elsewhere, there are fewer and fewer nonmanaged plans and individuals to whom costs can be shifted. Unless providers can find previously undiscovered efficiencies, they eventually must either refuse to accept patients in the plans or go bankrupt. If the plans cover enough individuals, there are virtually no patients outside managed care who are paying the shifted costs. At this point, cost shifting ends and the actuarial cost rises.

The Washington State study was part of a health care reform effort that was aimed at universal coverage. Under the State's plan, all patients statewide would be under managed care. Once the plan was fully implemented, no cost shifting would be possible. Washington therefore needed to calculate net-cost-per-person-per-month (PMPM) estimates that had no cost shifting while using data from environments where cost shifting is rampant.

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Table 6–A.—Washington State Actuarial Study Utilization Differences  
Among Population Subgroups

Number per 1,000

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Utilization category	Insured	Uninsured	Medicaid
Hospital based	0.1	0.2	0.7
Residential	2.5	4.4	3.8
Intensive outpatient	0.9	1.6	1.6
Regular outpatient	0.2	0.4	0.4
Methadone	0.0	0.0	0.4

## Phase-In

In Washington's case, the estimate was further complicated by the fact that coverage was to be phased in over 4 years, so the ratio of various groups would change from year to year. This meant that some cost shifting would still occur during phase-in and that the amount of cost shifting would vary, depending on which subpopulations were added each year. Cost shifting would reach zero only when all subgroups were included in the plan.

The State's actuary came up with a methodology for estimating the changes in cost per unit that would result from the additions of various populations to the plan. The actuary first assumed that the chemical dependency treatment system is currently efficient (that is, that any cuts in payments would have proportionate effects on quality or quantity of treatment) and that total current provider profits are reasonable. These assumptions meant that the average current payment should not change as the plan is implemented, although payments for individuals might increase or decrease as they are added to the plan and cost-shifting factors change. Thus, the absorption into the plan of a group that had previously borne the burden of cost sharing would result in a decrease in the group's payment and an increase in the payments for everyone else, but the net revenue to the providers would be the same.

The actuarial cost of the plan thus becomes a weighted average of the actuarial costs for all the subgroups in the covered population. The weighting has to take into account the size of each subgroup and its utilization and duration of stay. Washington's actuary achieved this by estimating a PMPM for each subgroup separately, at the subgroup's current average cost; this step weighted properly for utilization and duration. The actuary then averaged PMPM's, weighting them by group size (this weighted average PMPM is called a community rate). Since the groups were to be phased in over 4 years, the actuary used different population sizes for each phase-in year. The result was a PMPM estimate (before inflation) that increased by 1 percent from the first to the second year, decreased 1 percent for the third year, stayed flat for the fourth year, and then decreased 2 percent for the fifth year. Table 4-B displays the community rate for each year of implementation, after the effects of 5-percent annual inflation are included.

## Copayments and Deductibles

Actuarial costs are affected by patient participation requirements, such as copayments and deductibles. Copayments (or simply "copays") are fees paid by patients for each service they receive under a plan. Deductibles are minimum payments that patients must make, above which the plan makes all payments. Usually, the deductible is renewed annually; the patient starts each year at zero and pays for services until he or she reaches the deductible limit, at which point the plan kicks in.

Copays and deductibles reduce the amount that a plan pays for services that it covers. The effect is computed in a straightforward fashion: copays are applied to the average cost per unit, and deductibles are applied to the total annual cost. To return to our actuarial equation, copays are incorporated as follows:

$$\text{annual utilization rate} \quad \times \quad \text{average units per admission} \quad \times \quad (\text{average cost per unit} \quad - \quad \text{copay})$$

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To apply a deductible to a single service in the plan, the equation is modified as follows:

$$\text{annual utilization rate} \quad \times \quad \text{average units per admission} \quad \times \quad (\text{average cost per unit} \quad - \quad \text{deductible})$$


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12

= PMPM

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Most plans apply deductibles to all services simultaneously, so payments made toward one service apply to the deductible for the whole. The actuarial effect of deductibles in such cases is computed at the end of the process, when the weighted community rate for all services is computed.

Washington wanted copays and deductibles as a means of sharing the cost of services with the patient, provided that the copays were not greater than those charged for general medical care. It was not essential to determine in advance of the study whether a copay or a deductible would be employed and at what level; this was one factor whose effect on PMPM the actuary could easily estimate.

For Washington, the more difficult issue was trying to determine the income level below which copays would be reduced or waived. No policy decision had been made regarding copay waiver income levels for general medical care, and none seemed likely in the near future. Sensitivity analysis indicated that this would not be a trivial assumption. To complete the study, the State assumed that medicaid and low-income patients would have no copay, knowing that some of them would pay at least a partial copay, and that uninsured persons would have full copay, although some would be entitled to free care.

## Elasticity of Demand

Copays and deductibles can also affect utilization and duration of services. If patients have to pay part of the cost of treatment, they tend to use it less, and the more they have to pay, the less inclined they are to use it. The degree to which utilization and duration of a treatment service respond to the amount of copay or deductible is called the elasticity of demand for the service. Services that are very sensitive to the amount of patient participation in payment are called elastic, and those that respond only slightly to changes in patient participation are termed inelastic.

Washington did not change its estimates for utilization and duration of treatment services for its calculation of the effects of different copays. The Washington study relied on a review of socioeconomic studies by the Rutgers University Center of Alcohol Studies for information on elasticity of demand for chemical dependency treatment services.<sup>1</sup> This review concluded that for dependencies other than alcohol, demand for treatment is highly inelastic: no matter what the patient has to pay, demand for treatment remains roughly the same. Lacking any similar studies on alcohol utilization, Washington assumed that demand for treatment of alcohol dependencies would be similarly inelastic.

This is an important assumption, for many legislators and policymakers believe that demand for chemical dependency treatment services is in fact very elastic. They think that many patients of chemical dependency treatment centers are really not very sick and are happy at an insurer's (or the government's) expense. The data contradict this view. The fact that demand for services is highly inelastic indicates that those individuals who have decided to seek treatment are in fact so desperate that high costs do not deter them.

## Sensitivity Analysis

It is not always necessary to pursue additional data or more sophisticated synthetic estimates in order to eliminate or improve assumptions. Some assumptions are not worth the time and expense to improve because they affect the PMPM estimate very little. For such assumptions, a good ballpark guess is sufficient.

Once the basic estimating model is built, the actuary can estimate the sensitivity of any assumption simply by varying the assumption over the probable range of values and observing the change in the PMPM. When Washington State and its actuary were debating an estimate of the duration of hospital-based inpatient treatment for the medicaid population, the actuary calculated PMPM estimates for three values for duration of treatment: a "shortest likely" average stay, a "most probable" average stay, and a "longest likely" average stay. The actuary found that the differences in PMPM were a matter of only a few cents and that it matters very little which estimate for duration by medicaid populations the State prefers to use. The impact of variations in duration of hospital-based inpatient care for medicaid patients of PMPM is small because of the small population eligible for medicaid (about 10 percent) and the low use of this modality by the plan (about 10 percent). Because of this low sensitivity, doubling the length of stay for hospital-based care for medicaid recipients increased the community PMPM by only 1 percent.

## Note

<sup>1</sup> See James W. Langenbucher, Barbara S. McCrady, John Brick, and Richard Esterly, 1994, *Socioeconomic Evaluation of Addictions Treatment*, pp. 3-10. The authors cite Hallen (1981), but do not include a complete reference.

*Chapter 7 of TAP 15: Forecasting the Cost of Chemical Dependency Treatment Under Managed Care: The Washington State Study*

## Chapter 7—Procuring an Actuarial Study

There were two tasks that Washington State undertook in order to hire an actuary: (1) specifying the plan, setting forth in detail the benefit package and the covered population, and (2) choosing an actuary.

### Defining the Benefit Package

Defining the package of benefits to be offered under the plan was the task of the State. The actuaries who competed for the contract had some knowledge of chemical dependency treatment, but knew very little about the desirability of including various kinds of services or about the persons and situations for which each service is appropriate. The State chose to make these determinations before the actuary was retained so that the actuary's time would not be spent on tasks for which he or she was not well trained and so that the actuary could provide an accurate bid for the study. After the actuary was hired, there was considerable fine-tuning of the benefit package as questions arose in the course of the study.

Although Washington initially prepared one benefit package for the actuary to estimate, the State later concluded that it needed to evaluate the effect of optional benefits on the net cost per person per

month (PMPM) before it could recommend a benefit package to the Health Services Commission. This turned out to be one of the major strengths of an actuarial study: the actuary could separately estimate PMPM's for various optional benefits so that the State could evaluate whether it could afford to expand coverage. In the Washington State study, tobacco cessation benefits were treated as such an option. The actuary also evaluated alternative limits or caps on benefits for their effects on PMPM.

## Scope of Services

### Treatment

The first questions raised were: Which basic chemical dependency treatment services would be included in the plan? Will outpatient services be included? Hospital-based inpatient services? Non-hospital-based residential care? Partial hospitalization, day treatment, or intensive outpatient treatment? Opiate substitution treatment? Detoxification? Washington State considered whether to exclude services for policy reasons (for example, methadone treatment, toward which some policymakers have declared their antipathy) or for cost reasons (for example, hospital-based care). Other States may find it necessary to exclude services in order to obtain financing (for example, non-hospital residential care for medicaid populations).

Washington State considered whether certain modalities should be available to everyone. Currently, publicly financed hospital-based treatment in Washington is available only to pregnant women, and hospital detoxification is limited to rural areas where no non-hospital-based detox center is available. Washington also limited all modalities to chemically dependent persons only. Except for adolescents and pregnant women, persons who are abusing or misusing substances would not be covered for any treatment. Limiting services to a particular population meant that the actuary needed to generate a separate PMPM estimate for that subgroup, which increased the cost of the study.

### Prevention

Prevention services were a major consideration. A health plan can be designed to include coverage for prevention, and it is easily argued that it is cost-effective for a plan to do so. Generally speaking, preventive services oriented toward the individual, rather than the community as a whole or some specific population, are consistent with a health plan's notion of "benefits" for a "covered person." Thus, screening and early intervention types of preventive services are easier to sell to policymakers and managed-care networks. Washington recommended that the chemical dependency *treatment* benefit include only screening and relapse prevention services.

Actuarial estimation for preventive benefits can be difficult. For secondary prevention (also known as early intervention or indicated prevention) benefits, data on cost, duration, and utilization may be hard to find. For "primary" or "universal" prevention, the basic actuarial model breaks down. "Utilization" and "duration" cannot have the same meaning for primary prevention activities as they do for treatment services. There is no one "patient" who has been "admitted" and will eventually finish the service and be "discharged." These services could still be estimated by determining and mandating a total budget for such activities, which the insurer would treat as an overhead cost to be prorated over the size of the covered population to determine the PMPM.

### Outreach

Outreach services pose dilemmas similar to those posed by primary prevention services. They are not "demanded" by patients, so utilization is a function more of supply than of demand. If the State chooses to include outreach services to increase treatment admissions by, say, injecting drug users or pregnant women, estimation probably would follow the "overhead" method described for primary prevention services: determine the total budgeted level of effort, and divide by the covered population.

## **Tobacco Cessation**

Even though it is viewed by many as prevention, tobacco cessation has the characteristics of a chemical dependency treatment service. There is an identifiable "patient" and a beginning and end to the services. Since most data bases track tobacco cessation services separately, Washington's actuary study estimated tobacco cessation separately from other outpatient treatment. Because there are no standards for tobacco cessation programs, Washington's actuary found widely varying practices and costs. The State therefore developed a tobacco cessation protocol, specifying the number and length of visits, techniques used, group versus individual sessions, and the inclusion of nicotine transdermal patches and gum. The actuary then used this protocol to screen tobacco cessation data until appropriate costs could be determined.

## **Chemical Dependency Benefits Versus Behavioral Health Benefits**

Chemical dependency treatment has enjoyed or suffered its sibling relationship with mental health for decades, depending on issues and local personalities. Currently the movement for closer ties between the fields is characterized as "the behavioral health model." The two fields are inevitably joined on issues of managed care and health care reform as well. Policymakers are likely to hold the view that whatever is true for one is true for the other. Since mental health is financially more significant than substance abuse, the fate of managed care or health care reform for chemical dependency often hangs on how sanguine the policymakers are about including mental health.

For the mental health field, health care reform questions often hinge on what policymakers call the "worried well," or people who have no serious pathology but who still access mental health services. There is widespread concern that these individuals are numerous enough and will demand enough services that utilization and duration will increase dramatically. Considerable attention is therefore paid to controlling mental health utilization, including such measures as case management, utilization review, prior authorization of admissions, and, ultimately, caps on benefits.

Chemical dependency benefits typically come under whatever cost controls are deemed necessary for mental health. Policymakers view chemical dependency as a variation of mental health, so they presume that demand for chemical dependency treatment behaves like demand for mental health services and therefore requires similar cost controls. Since mental health costs about four times as much as chemical dependency, chemical dependency policy is often subsumed.

The case for separate consideration of chemical dependency should be presented, however, for two reasons. One is the elasticity of demand, discussed in Chapter 6. There is no evidence that copays affect the utilization or duration of chemical dependency treatment, and one study affirms that demand for chemical dependency treatment is highly inelastic and does not change much in response to copays. Mental health services, on the other hand, do seem to be utilized less when copays are increased. The other reason is the effect of caps on total benefits. If chemical dependency treatment does not have a population of worried well individuals, who would seek treatment when it is not needed or is inappropriate, then caps on benefits serve only to deny adequate care to those who need the most treatment. Since most patients in chemical dependency treatment seek care only after some form of external pressure is exerted (such as being arrested for driving under the influence, being disciplined at work, or being heavily persuaded by family, friends, or health care providers), it seems likely that admissions of persons who do not need chemical dependency treatment will be very few.

## **Covered Populations**

Washington State did not need to make any decision about its covered population: the legislature had already decided on the goal of universal coverage. Other States, particularly those looking to managed-care contracts for their current publicly funded populations, need to decide on the scope of their covered population in advance of any actuarial studies. Will all residents be covered, or just those meeting certain income requirements? Will there be restrictions regarding age or residency?

The State must also decide whether everyone will be covered at the same time or whether the plan will add new groups to the covered population over time, as Washington did. If the covered population is to grow, the schedule for including each new group is important. Any assumptions regarding the schedule could have a great impact on the PMPM estimate as cost shifting is reduced or eliminated.

The State must also decide if it wants a single premium for all participants in the plan (a community rate) or separate rates for various groups, depending on their expected costs. Community rating has the advantage of impartiality and predictability. If coverage is voluntary, however, those with relatively low expected costs may consider purchasing coverage to be a waste of money and may not buy the plan. This "adverse selection" effect would increase the community-rated premium for those who stay in the plan, which in turn would discourage even more low-cost members from joining or staying in the plan. Furthermore, if the plan is a complete health care plan that includes chemical dependency treatment benefits, young adults are the group most likely to opt out of the plan. Young adults, unfortunately, are the ones who most heavily utilize substance abuse treatment. For these reasons, community rating is rarely used, except where coverage is mandated.

## Procuring an Actuary

"Procurement" means any solicitation by the State for proposals or bids, whether they are called a request for proposals or an invitation for bids or any other name. A State's procurement of an actuarial study likely will focus on three issues: the experience of the primary actuary, the quality of the data bases owned or available to the actuary, and the cost of the study.

### Qualifications

Washington State wanted a lead actuary who was a specialist in health care, who understood the basic services included in the proposed benefit package and who could at least consult with a staff actuary experienced in dealing with chemical dependency treatment issues. Actuaries with strong chemical dependency treatment experience are rare; except in the largest States, it may be too much to expect direct experience by the lead actuary in producing estimates for chemical dependency treatment. Washington determined that it was not essential; the State staff had more than enough expertise to guide the actuary.

Actuaries are credentialed through the American Society of Actuaries; "fellow" is the highest ranking credential bestowed. The lead actuary typically would be an American Society of Actuaries fellow. Like virtually all consulting businesses, actuaries will lead and direct less skilled staff—ranging from other, less senior, actuaries to clerks—who do much of the detail work.

### Data

Actuaries work primarily from their proprietary data bases; thus the data vary from one actuary to the next. Most of the data in actuaries' data bases are from other clients, primarily insurance companies. Unless the actuary has done a study for a State medicaid project in the past, he or she will not have those data. The actuary may have the Federal medicaid data, but this is a limited data set and it is somewhat dated. It also does not cover all States. The State may have to supply raw data or statistics from its medicaid management information system regarding that population. Because medicaid data bases meet the same standards as insurance data bases, Washington officials did not consider previous experience dealing with medicaid to be a critical evaluation criterion.

Washington did not do a detailed evaluation of the proprietary data bases offered by the actuaries—a decision that the State might make differently if called upon to repeat the exercise. If the actuary's data are from plans that are very much like the one that the State is proposing, fewer assumptions are required and the amount of data modeling is minimized. For example, an actuary with a data base that includes data from a managed-care plan that uses the same principles and practices envisioned for the State project would not need to make assumptions about the cost impact of the State's proposed method of managing care, nor or would he or she have to undertake the complex modeling

of aggregate demand for treatment followed by determination of the effect of managed care on modality utilization distributions. Similarly, the actuarial data that include the populations to be covered by the plan and the various services in the benefit package would minimize the number of assumptions required.

## **Costs**

Costs of actuarial studies can vary widely. The Health Services Commission staff advised Washington State to set aside \$100,000 for its actuarial study and that fellows of the American Society of Actuaries can charge \$500 an hour. Washington State's actual cost was considerably less, about \$9,500. The amount of the winning bid did not differ greatly from the second bidder. It may be that the competing firms believed that the experience to be gained in doing this study would be useful to market other studies, for other benefit packages under Washington's health care reform plan or for other States contemplating similar efforts.

States can control the costs of actuarial studies with careful planning. the biggest driver of costs in such studies is complexity, which is in turn a function of the number of separate PMPM net cost estimates that must be made. To the extent that the benefit package and the covered populations require these separate PMPM net cost estimates, study costs cannot be controlled without making some rather risky assumptions. It may be that separate estimates are required because the State wants to evaluate options for persons or benefits to be covered in the plan or because it has failed to anticipate plan details requiring revisions in estimates. These causes can be minimized if the State carefully spells out the plan (or plan options) in advance of the procurement.

## **Selection**

Washington's health care reform required many actuarial studies for many different health care benefits, ranging from small to massive. To accomplish all this, the Health Services Commission first held a formal competition, from which three firms were selected as well qualified with fair rates. The State's Division of Alcohol and Substance Abuse could then select an actuary for its chemical dependency study from the group of three firms, using an informal procurement. This removed much of the tedium of interviewing and reviewing qualifications and data bases.

Other States may be able to piggy-back chemical dependency actuarial studies onto large-scale procurements. Since States contract for actuarial studies (although typically not for chemical dependency treatment and usually only for State employees as the covered population), most States should at least have a procurement document to use as a model. The State's pension authority or employee benefits authority is the agency most likely to have procurement documents, and it may be a good source of advice on selecting actuaries and drafting contract instruments.

One final note: Washington State hired an independent consultant for "quality control." The consultant's task was to help State officials understand the implications of the decisions they were making and to judge the quality and appropriateness of the actuary's services. In retrospect, this was a very valuable step. The State officials had an independent source of counsel for controversial issues, they felt less vulnerable to the risk of poor advice, and they were able to communicate more effectively with the actuary. As a result, the State was able to provide better direction to the actuary and got more of what it wanted than might otherwise have been the case.

# **Appendix A—Report to the Washington Health Services Commission: Benefit Recommendations for Chemical Dependency Treatment**

**from the Chemical Dependency Issues Investigation Group**

**Linda Grant, M.S., Executive Director, Washington Association of Alcoholism and Addictions Programs - Chair**

## **INTRODUCTION**

Over 80 individuals were involved either as advisors or participants in the meetings. They represented health insurance plans, managed care companies, chemical dependency providers, advocacy groups, physicians, and county and state government. This report reflects the conclusions of the group, in which there was a high level of consensus throughout. A list of participants and description of process is outlined in Appendix A.

The Issues Investigation Group, in developing its recommendations, followed the seven criteria developed by the Health Services Effectiveness Committee: (1) equity, (2) access, (3) personal choice, (4) medical necessity, (5) preventive, (6) cost benefit, and (7) based on services not providers. Encompassing these considerations as well as keeping in mind the language of the Health Services Act and current mandates, the Group set forth the following objectives:

- 1. Define "case-managed chemical dependency services" and any other critical terms.**
- 2. Identify which services are currently available through most comprehensive, reasonable, cost-effective benefit plans.**
- 3. Examine which benefit limits and cost control mechanisms are most efficient and applicable to case managed chemical dependency treatment services.**
- 4. Identify the elements and clinical criteria are necessary to provide clinically appropriate, effective chemical dependency treatment based on the patient's needs, access, choice and services.**
- 5. Present a summary of the costs associated with chemical dependency and its treatment as well as the cost-offsets, particularly reducing "inappropriate utilization of more intensive or less efficacious medical services."**
- 6. Prepare a benefit recommendation and rationale.**

## **1. DEFINITION OF CASE-MANAGED CHEMICAL DEPENDENCY SERVICES AND OTHER TERMS**

To meet the challenges of providing universal access to health care at an affordable price, health plans will need flexibility and benefits that can be efficiently administered. Case management should be a tool to assist health plans to accomplish these goals, not add new layers of administration. Because treatment episodes for chemical dependency tend to be relatively short in duration, case management with chemical dependency services is primarily concerned with determining appropriate level of care and ongoing clinical review and does not imply added casework activity:

Case-managed chemical dependency services involves the provision of quality, clinically appropriate and cost-effective chemical dependency treatment for a given patient and/or their family applying professional chemical dependency placement, continuing care, and discharge standards administered by state-approved chemical dependency treatment programs.

It is expected that case-management will take place at the last level of contracted risk. Staff model HMOs and capitated providers will perform case-management at the service level. Preferred provider plans will either employ internal utilization review, contract with third-parties to conduct case management independent of ongoing case management at the service level, or contract with providers on a capitated basis. Regardless of administrative structure, the role of case-management is to apply uniform clinical criteria in making decisions around access and coverage.

A small minority of individuals with severe and persistent alcohol and drug addiction may require more intensive casework in relation to long-term care services. This is different from managed care and case-management and would be an additional service, apart from case management, and most likely performed in conjunction with long-term care benefits.

**Chemical dependency, alcoholism, other drug addiction:** Research often refers to these diseases as "**substance abuse.**" However, "**substance abuse,**" "**alcohol abuse**" or "**drug abuse,**" as clinically defined in the American Psychiatric Association Diagnostic and Statistical Manual (DSMIIIIR or DSMV), are not intended to be covered under the chemical dependency treatment benefit.

"**Nicotine dependence**" is a substance use disorder under the DSM but the benefit developed herein has not been designed with specific nicotine services in mind. **For purposes of pricing this benefit, nicotine dependence will be excluded.** However, it would seem appropriate to include smoking cessation services somewhere in the UBP, and it might best fit under the chemical dependency benefit.

## **2. CURRENT BENEFIT PLANS AND PUBLIC SERVICES**

### **Mandates and Laws Governing Chemical Dependency Coverage**

It was agreed that the Uniform Benefit Package (UBP) should not offer less than the coverage for chemical dependency that has been mandated in Washington law for 20 years. RCW 48.21, originally enacted in 1974, mandates treating chemical dependency with parity:

The legislature recognizes that chemical dependency is a disease and, as such, warrants the same attention from the health care industry as other similarly serious diseases warrant...."

In 1986 the Insurance Commissioner adopted **WAC 284-53-010** to clarify that intent by defining the comprehensive continuum of services which health plans in Washington State must cover, within medical necessity. These regulations also established **a minimum coverage per person of \$5,000 every two years; \$10,000 lifetime** (1986 dollars that have not been adjusted for inflation).

Among the chemical dependency treatment services WAC 284-53-010 requires be covered are medically necessary treatment and supporting services, including **medical evaluations, psychiatric evaluations, room and board (inpatient only), psychotherapy (individual and group), counseling (individual and group), behavior therapy, recreation therapy, family therapy**

**(individual and group), and prescription drugs and supplies prescribed by a treatment facility.**

HMOs must additionally comply with the federal HMO Act of 1973. Under this law (P.L. 93-222 and its subsequent amendments) **HMOs are required to provide medical treatment and referral services for abuse and/or addiction to alcohol and drugs.** HMOs typically cover inpatient and outpatient treatment, but virtually all exclude methadone and long-term inpatient chemical dependency treatment.<sup>1</sup>

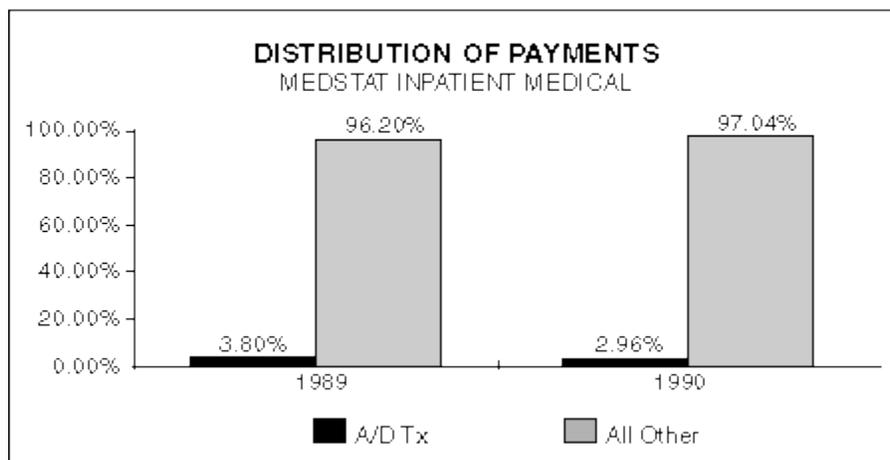
**Typical Benefits for Chemical Dependency**

A survey of case-managed chemical dependency and mental health benefits conducted by William M. Mercer<sup>2</sup> revealed plans now typically provide comprehensive coverage for chemical dependency treatment. Table 1 outlines their findings:

Table 1	
Chemical Dependency Benefit	Plan Coverage
Residential treatment (CD)	\$15,000-\$20,000/35-40 days
Structured outpatient	\$ 4,000 to \$9,000*
Individual/group outpatient	\$ 1,300 to \$1,500
Lifetime maximum (combined CD/MH)	\$45,000-\$50,000**/2 episodes
* recommended raising to \$6,000 to \$12,000	
** recommended raising to at least \$125,000.	

Chemical dependency treatment makes up a very small portion of the overall health care premium. Prior to case management, 80% of employees were able to access their inpatient chemical dependency treatment benefit with no limitations.<sup>34</sup> In a study of over 3,000,000 lives, **MEDSTAT found that chemical dependency payments were under 3.8% of inpatient medical payments, even at its peak of utilization.<sup>5</sup>**

Table 2



**In a 1990 study, MEDSTAT<sup>6</sup> found over a single year a 22.59% reduction in admissions to inpatient chemical dependency treatment and a 20.34% decrease in payments** per capita on those treatments. Table 3 shows these changes in relation to other medical benefits.

Table 3

ADMISSION RATES AND INPATIENT PAYMENTS PER CAPITA FOR SELECTED MAJOR DISORDERS						
DIAGNOSIS	ADMISSION PER 1,000			PAYMENTS PER CAPITA		
	1989	1990	%ΔM	1989	1990	%ΔM
Nervous	3.73	3.57	-4.29	\$39.42	\$41.48	5.23
Respiratory	5.71	5.64	-1.23	42.12	45.13	7.15
Circulatory	9.53	9.37	-1.66	108.42	115.41	6.46
Pregnancy	12.71	13.03	2.52	55.25	61.47	11.24
Musculoskeletal	7.15	6.82	-7.41	60.44	61.52	1.79
Mental Disorder	5.3	5.22	-1.51	69.83	71.69	2.66
<b>SUBSTANCE ABUSE</b>	<b>3.01</b>	<b>2.33</b>	<b>-22.59</b>	<b>25.50</b>	<b>20.33</b>	<b>-20.34</b>
<b>TOTAL</b>	<b>67.47</b>	<b>64.99</b>	<b>-2.64</b>	<b>\$655.65</b>	<b>\$686.46</b>	<b>4.70</b>

1989 Total Covered Lives = 3.1 Million  
1990 Total Covered Lives = 3.6 Million

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## Public Services

Within the publicly funded sector, services are broader in range of intensity and duration than those common to private treatment. In addition to intensive outpatient and short-term intensive inpatient, public treatment includes transitional care (recovery houses) of 30–60 days, and long-term treatment of 90 days or longer. In addition, hospital stabilization programs for pregnant addicted women provide hospital inpatient care for several weeks, and some residential programs designed to take women with their infant or young children are also available. DSHS also funds a residential facility to provide treatment for persons involuntarily committed. Finally, "ADATSA," a public program utilized by all persons initially needing residential treatment, provides up to three months residential treatment and three months outpatient.

## 3. BENEFIT LIMITS AND OTHER COST CONTROL MECHANISMS

**The National Academy of Sciences' Institute of Medicine** has recommended alcoholism and drug addiction be treated as other chronic, relapsing problems such as diabetes and hypertension, with no prespecified day or visit limits. 7 8, 9 Members of the Institute of Medicine, in a subsequent meeting to address health reform, took the position:

**A benefit package that prescribes an arbitrary number of inpatient days and/or outpatient visits in order to control costs is most likely to lead to inappropriate utilization in settings and intensity of care, and hinder the flexibility needed to achieve cost effective outcomes<sup>10</sup>**

## Case Management as a Cost Control Mechanism

Case-management has become the preferred method for controlling behavioral health care costs.<sup>11</sup> Managed behavioral healthcare companies, generally operating under capitated carve-out contracts, have reported savings to health plans from 23-50% in the first year.<sup>12</sup> One large employer reduced costs for chemical dependency coverage from \$85 to \$19 per capita per year.<sup>13</sup> Once established, claims increases have been held to 1% for HMO/PPO coverages and 9.5% for indemnity plans.<sup>14 15,16</sup>

State health reform is moving to case-management and uniform clinical criteria in place of restrictive limits. Table 4 outlines the chemical dependency benefit structures in five states undergoing reform:

Table 4

CHEMICAL DEPENDENCY TREATMENT COVERAGE IN STATE HEALTH REFORM					
	MINNESOTA	TEXAS	VERMONT	COLORADO	NEW MEXICO
Removed limits?	NA	Yes	Yes	No	Yes
Case-managed?	Yes			Yes-Prepaid	Yes
Placement Criteria	Yes	Yes	Yes	Yes	Yes
Inpatient Treatment	\$10,000/yr. (MNCare) 73 days/yr. (StateEmploy)	Unlimited Hospital	Unlimited	40 days Hosp Unlimited Res. (CD/MH)	Unlimited
Outpatient	Unlimited	Unlimited	Unlimited	30 visits yr	Unlimited

The Washington State Board of Health is among those locally that have recommended against placing limits on chemical dependency treatment under health reform.<sup>17</sup>

### Minnesota's Experience with Using Case Management for Cost Control

Minnesota's basic health plan for low income, Medicaid and uninsured, Minnesota Care, has a \$10,000 a year limit on combined mental health and chemical dependency intensive inpatient treatment. and no limit on outpatient. The actual cost per episode of treatment has been held to \$3,000 through use of uniform criteria to make individual case decisions about level of care and duration of treatment. After five years of experience, Minnesota's data provide strong support for using case management in lieu of traditional benefit limits:<sup>18</sup>

- Utilization initially increased only 9%, then tapered off.
- Over the five years, the cost of treatment rose less than 7%, compared to 28% for other medical services.
- Fewer than half of all patients repeated treatment within 4 years. - Only 3% received 6 or more placements in 5 year period.
- Treatment costs averaged \$3,000 per client for a treatment episode.

### Estimates of the Cost of Case-Managed Chemical Dependency Benefits

No studies or research were found that showed limits on benefits to be superior to case management for cost control.

Local chemical dependency case management firms working with the Issues Investigation Group indicated that utilization for inpatient and residential treatment under case management can be kept to a small portion of the total population served.

Lewin-VHI, Inc. recently completed a national actuarial study on four different chemical dependency benefits.<sup>19</sup> **The estimate for a plan similar to the one conceived by the Issues Investigation Group of limited residential and short-term, was around \$2 per person per month, which would be less than 2% of the premium of the Uniform Benefit Package.** The highest estimated cost in this study was \$3.75 per person per month for a benefit that included long-term residential,

unlimited outpatient, higher utilization and longer duration residential/inpatient, and full drug prevention and education activities.

**Based on current market contracts in the Puget Sound area, and on existing data, it would appear that the proposed benefit will capitate under \$2 per person per month. The Department of Social and Health Services is working with the Health Services Commission to obtain an actuarial analysis of this proposal, and this data will be available after June 10, 1994.**

Appendix B provides more information on Minnesota and the executive summary of the Lewin-VHI analysis.

#### **4. ELEMENTS OF AN EFFECTIVE CHEMICAL DEPENDENCY BENEFIT**

Such diverse groups as the American Society of Addiction Medicine, President Clinton's Commission on Model State Drug Laws, the Legal Action Center, the American Managed Behavioral Healthcare Association, and the Washington Business Group (190 of the nation's largest employers) have all called for comprehensive coverage for chemical dependency in health reform, managed like any other medical condition.<sup>20</sup> The elements common to all proposals for chemical dependency coverage are:

- Providing a full continuum of care, ranging from low to high intensity, so that patients can be matched through the initial diagnostic evaluation to the lowest cost level of care appropriate to the severity of the condition, and taking into consideration social and clinical factors impacting clinical outcomes.
- Utilizing well established, uniform criteria to standardize placement and length of stay decisions while also providing baseline data for ongoing case management, quality assurance and outcomes monitoring.
- Habilitative, social and support services are funded outside the health plan but patients are linked to these through case management.

#### **Comprehensive Coverage**

**A cornerstone of this benefit recommendation is to use less restrictive alternatives as the mainstay of delivery. However, it is essential that those few who need more intense forms of treatment also are able to receive appropriate, effective care.**

Chemical dependency benefits must address the needs of a wide range of individuals of all ages, receiving treatment at different points in the progression, and experiencing different levels of physical, mental, or social impairment as a result of the disease.

Severity of addiction plays a great role in placement determinations: 60% of inpatients are at the high end of severity of addiction, and 60% of outpatients are at the low end of severity<sup>21</sup> (see Appendix C for full research summary from CATOR). A 21-day residential intensive inpatient treatment in Washington State can be obtained for as little as \$2520 for adults, and a 28-day residential adolescent program can cost as little as \$3920. If unable to receive effective levels of treatment, individuals only end up revolving in an out of detox, emergency rooms, mental health facilities, and physicians' offices at far greater expense than the cost of appropriate chemical dependency treatment.

Some individuals cannot be treated in outpatient settings. For example, a pregnant addicted woman may require medically managed chemical dependency treatment to complete safe withdrawal from drugs for herself and the unborn baby.

**Making the coverage available does not imply that patients will utilize each coverage, or have unlimited access to that modality of care.** Intensity of care and duration will be determined on a case by case basis, based on clinical indicators and examination of "appropriate" and "effective" in the case management process. Increasingly services are "blending" inpatient and outpatient programs for patients who live in areas where inpatient facilities are available.

Since the Uniform Benefit Package is intended to provide a benefit floor, basic and affordable while meeting the **health needs** of most citizens of this state, the benefit herein is also a basic one that will effectively treat the disease. The long-term services needed by the minority may either be provided within the scope of long-term care benefits or funded through another service system altogether.

## **Medical Necessity**

For consistency, the Issues Investigation Group required that **every included service must be medically necessary and directly linked to treating the disease of chemical dependency.** It also treats chemical dependency as a primary disease, consistent with research that has identified that chemically dependent persons have no greater incidence of mental disorder than the population in general.<sup>22, 23, 24</sup>

In the context of chemical dependency, medical necessity is used in a broader sense, as defined by the Health Services Commission, to mean "clinical necessity" as well. References to "medical necessity" herein include "clinical necessity."

**This UBP recommendation deliberately does not attempt to cover all the psycho-socio-economic needs of individuals and their families presenting for treatment.** However, this exclusion should not be interpreted as a denial of the value of support services or the role they may play in facilitating access, outcome, or prevention. As is stated throughout this paper, it is possible that some of these services will be covered under other benefits; if not, they will need continuation under supplemental systems. The group simply determined early that this must be a conservative package that does not create concerns for cost that might lead to excluding chemical dependency treatment altogether.

Likewise, the Issues Investigation Group conceded that it was not realistic to expect that health plans to cover the cost of a full two-year court-ordered chemical dependency treatment program, regardless of the initial medical need of the patient. Therefore, the Uniform Benefit Package would not cover monitoring or treatment required after the person no longer meets clinical criteria for medical necessity. The reverse of this is also important: Individuals should not be denied access to treatment by virtue of court involvement. **Medical necessity determinations should be based on clinical criteria, regardless of legal involvements, as regulations now require.**

## **Uniform Placement, Continuing Stay and Discharge Criteria**

As case management has become the preferred mode for administering chemical dependency benefits, health policy experts are moving toward national adoption of uniform criteria to guide the medical necessity decisions of case managers.<sup>25, 26, 27, 28, 29</sup>

**President Clinton's Commission on Drug Laws has prepared the Model Managed Care Consumer Protection Act, based on adoption of uniform clinical criteria, to provide reasonable protections to policyholders that they can access the benefits they have paid for.** Oregon, Minnesota, Texas, Colorado, New Mexico, Vermont, Iowa, and Massachusetts are among those that have adopted, or are in the process of adopting, standard practice guidelines for chemical dependency.

The American Society of Addiction Medicine, a national group of physicians with specialized education and experience in chemical dependency, over the past decade developed, tested and refined placement and discharge criteria for chemical dependency treatment services, referred to as "ASAM

Criteria."<sup>30</sup> These criteria are employed across Washington State and the nation, and are a component of the Model Managed Care Consumer Protection Act.

ASAM Criteria identify six primary problem areas for evaluation when making placement decisions: acute intoxication and/or withdrawal potential; biomedical conditions and complications (such as psychiatric conditions, psychological or emotional/behavioral complications of known or unknown origin, transient neuropsychiatric conditions); emotional/behavioral conditions or complications; treatment acceptance or resistance; relapse potential; and recovery environment.

Assessment of the individual's medical status and functioning in each of these areas will determine the appropriate level of care and length of time needed in treatment. Appendix D contains an overview of the ASAM placement criteria for adults and adolescents as well as their glossary of terms, including "medical necessity."

## 5. RESEARCH ON COST BENEFITS OF TREATMENT

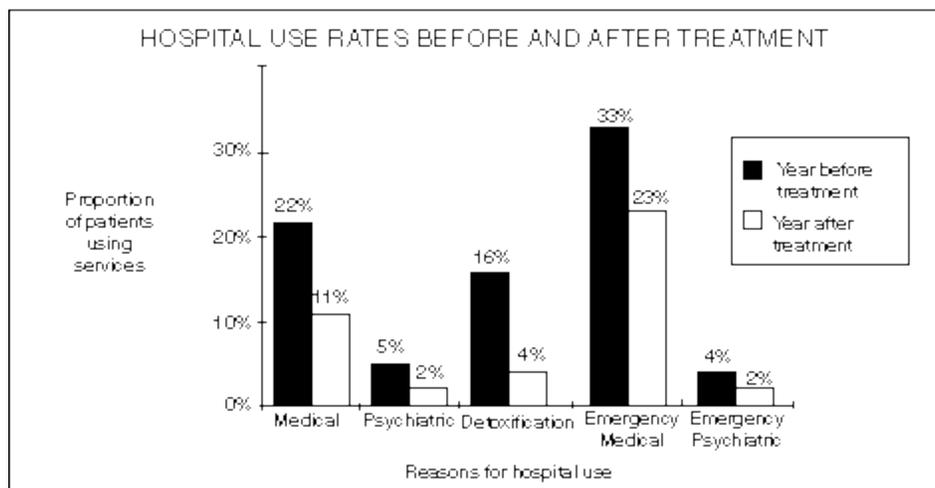
Alcohol and drug problems in 1990 cost Washington State \$1.81 billion--\$215.8 million in medical care and over \$500 million from accidents and deaths related to alcohol and drug abuse.<sup>31</sup>

### Prevalence and Cost of Alcohol and Drug Dependence

At least 13.5% of all adults will experience alcohol abuse or dependence in their lifetimes and 6.1% will experience a drug problem, exclusive of nicotine.<sup>32</sup> Over 72 illnesses and health conditions have been directly linked to alcohol and other drug abuse (see Appendix E).<sup>33</sup>

Between 20% and 40% of all hospital admissions are for conditions related to alcoholism.<sup>34, 35, 36, 37</sup> As many as 40% of all patients seen by physicians have alcohol problems.<sup>38</sup> Alcohol-related hospitalizations among elderly are as common as myocardial infarction.<sup>39</sup> Table 5 shows the use of hospitals for medical, psychiatric, and for detoxification before and after treatment for chemical dependency:<sup>40</sup>

Table 5



Source: Harrison and Hoffman, CATOR, 1989

Twenty percent of Medicaid admissions in 1990 were for conditions caused by substance abuse,<sup>41</sup> and 38% of all Medicare admissions were alcohol-related.<sup>42</sup> Substance abusers required twice the length of stay in hospitals when admitted for other conditions.<sup>43</sup>

### Research Findings on Medical Costs for Alcohol/Drug-Related Conditions

Alcoholics' medical costs were 300% higher than comparable nonalcoholics before treatment for chemical dependency.<sup>44</sup>

Children with prenatal drug exposure problems had twice the Medicaid expenditures after birth as children not exposed to drugs.<sup>45</sup>

Chemically dependent families used inpatient medical services at four times the rate of families with no chemical dependency.<sup>46</sup>

Children of alcoholics incurred medical costs 32% greater than other children.

Compared to other children, children of alcoholics:

- were admitted to hospitals at a rate 24% higher
- stayed in the hospital an average of 29% longer
- use nearly two-thirds more hospital days
- incurred 36% higher inpatient hospital costs.<sup>47</sup>

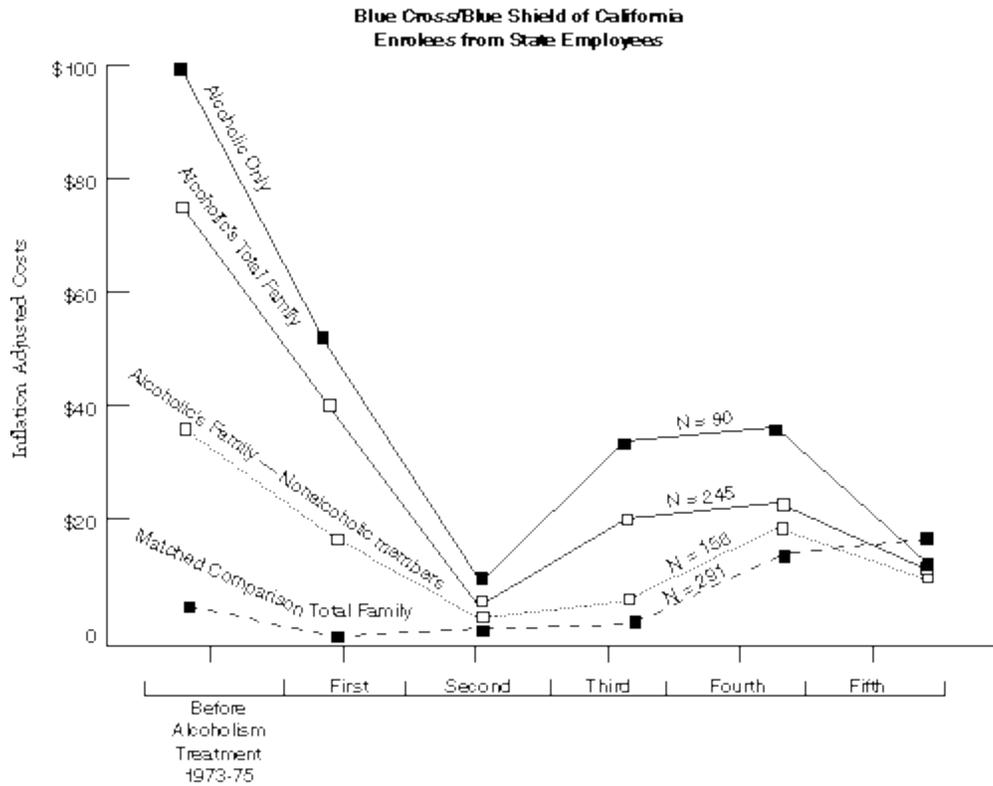
### **Cost Offsets of Chemical Dependency Treatment**

**Over two decades of data consistently show that the cost of chemical dependency treatment is recouped within two to three years of treatment through reductions in other health care services.**<sup>48 49, 50</sup>

- Aetna Federal Employees Health Benefit Plan showed overall health care costs of alcoholics rose from \$130 per month to \$1370 per month prior to treatment. Three years after treatment they were only \$190 a month.<sup>51</sup>
- A 14-year longitudinal study of 3,000 employed alcoholics found that after treatment had a 24% lower health care utilization than non-alcoholics.<sup>52</sup>
- A follow-up of 3,572 successfully treated chemically dependents showed a 61% decrease in hospital utilization one year after treatment and a 57% decrease the second year. Even treatment completers who did not remain abstinent decreased hospital use by 35% the first year and 19% the second.<sup>53</sup>
- In Washington, ADATSA clients receiving public treatment had half the hospital costs after treatment of non-treated clients.<sup>54</sup> Infants of pregnant women in public treatment had lower medical costs than babies of untreated women.<sup>55</sup>
- A study from UCLA calculated for every \$1 spent for drug treatment, \$11.54 is saved in medical and social costs.<sup>56</sup>

**Families' use of health care has been found to drop by more than 50% after treatment,<sup>57, 58</sup> with one Blue Cross/Blue Shield plan showing a reduction from \$100 a month in the two years prior to treatment to \$13.34 in the fifth year post-treatment.<sup>59</sup>**

**Average Medical Care Costs per Month per Individual, 1973-79\***

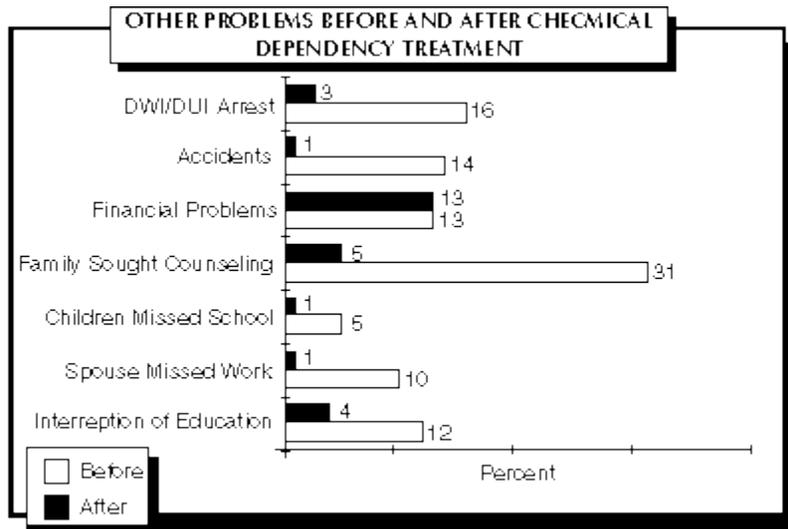


\*Inflation Adjusted to 1975 Base

Source: Holder and Hallan, *Impact of Alcoholism Treatment on Total Health Care Costs*, 1986. Reproduced with permission of Haworth Press, Inc.

**Employer and Societal Cost Benefits of Treatment**

When savings from reduction in workplace absenteeism and accidents and increases in productivity are factored in, as well as reductions in crime and violence, dollars spent on treatment are offset even more rapidly.<sup>60</sup>



Source: *Finding the Bottom Line*, Hazelden Research Service, 1985

Appendix F contains more information on cost offsets, including the executive summary of the review of all the research on treatment effectiveness and cost offsets conducted by Rutgers University for President Clinton's Commission on Drugs.

## **Preventive Services with Chemically Dependent Persons**

Courts are the primary intervention agent with chemically dependent persons, and social service agencies the next. Although chemical dependency has been recognized as a medical health problem since the 1960's, the health care system has not confronted chemical dependency as a primary problem. **Washington State health reform provides an opportunity to integrate preventive efforts with health care to identify and treat persons with chemical dependency and "reduce inappropriate utilization of more intensive or less efficacious medical services" (HSA of 1993).**

Primary Care Provider Screening and Assessment: **Only 32% of primary care physicians in a University of Washington study could effectively diagnose patients with alcoholism; one-third erroneously made psychiatric diagnoses, chiefly anxiety or depression**<sup>61</sup> (full article is in Appendix G). In order to reduce the inappropriate use of medical services by chemically dependent persons, it is essential that greater attention be given by health plans to screening and referral to case management.

Screening can be as simple as the four-question CAGE questionnaire<sup>62</sup>, which takes 30 seconds to administer. Group Health of Puget Sound has implemented full protocols for primary care providers to screen and refer patients with chemical dependency. **The Chemical Dependency Issues Investigation Group recommends the Health Services Commission, perhaps through the Quality Improvement Committee, recommend systems to improve screening for chemical dependency by primary care providers and other gatekeepers.**

## **6. SUMMARY OF BENEFIT RECOMMENDATIONS**

The examination of the previous areas, led to the following conclusions:

1. Chemical dependency treatment, by virtue of its cost-effectiveness, should be the preferred health intervention for alcoholics and addicts.
2. No single modality has been shown to be effective for all individuals, so a mix of treatment modalities must be available, utilized on the basis of clinical need.
3. Case management allows cost control while not penalizing those with the highest clinical severity, needing more intensive and longer treatment.
4. Before case management, chemical dependency treatment costs were under 4% of total inpatient claim.
5. Based on national and local experience, the cost of providing a comprehensive chemical dependency benefit in the Uniform Benefit Package, using case management and uniform placement, continuing stay and discharge criteria, can be expected to be under 2% of the total premium cost, extending current utilization levels.

### **Benefit Recommendation:**

Case-managed Chemical Dependency Treatment Services:

**Medically necessary hospital, residential, outpatient primary chemical dependency**

**treatment and collateral services** (includes triage, assessment, case management, concurrent family education and counseling services) **which are case-managed in accordance with state-recognized uniform chemical dependency placement, continuing stay and discharge criteria.**

**Deductibles and Copayments: Consistent with those applied to medical inpatient and outpatient services.**

**Benefit Limit: No specific limit, except that all services must be deemed medically necessary and approved by the Certified Health Plan through their chemical dependency case management process. Proposal does not include long-term residential and outpatient chemical dependency services except as covered under long-term care benefits.**

In addition to the specific case-managed chemical dependency benefit, other sections of the UBP appear to cover necessary services for persons with alcohol and other drug problems, and the group makes the following recommendations in this regard:

Chemical Dependency Services Covered under Other Sections of the UBP:

1. **Emergency Services Section: Include emergency alcohol and drug detoxification in acute inpatient, residential or outpatient settings.**  
Detoxification often is required in crisis situations, not as a result of preliminary case-management. Access must be possible without case-management, with referral to case-managed treatment occurring during detoxification. Utilization of less intensive forms (residential and outpatient), as dictated by the uniform clinical criteria, would be covered to encourage use of least restrictive setting.
2. **Preventive Services Section—Preventive Screening, Assessment and Interventions: Include "relapse prevention counseling" and "brief chemical dependency intervention,"** both of which are critical components of preventive services.

## **Detoxification Services**

Both clinicians and health plans wish to see detox case-managed, but it must also be immediately accessible, apart from case management, on an emergency basis. The group has recommended that:

1. The UBP should cover not only hospital detoxification but also clinically appropriate alternatives, including residential, medically-monitored detox and outpatient detox, with coverage at the least restrictive level of care in accordance with the uniform placement criteria.
2. Detoxification facilities should commence case-management upon admission to facilitate referral to treatment, but case-management should not be a prerequisite to accessing detox.
3. Detox be covered under medical/surgical coverage unless it is provided as part of a full case-managed chemical dependency treatment plan.

## **Collateral Services**

Collateral services under the case-managed chemical dependency benefit of the UBP should be covered only when provided as part of an intensive treatment program, and as medically necessary. Among services needed by some patients are urinalysis and other laboratory tests, medical consultation, medications prescribed by the physician of the chemical dependency treatment facility, psychological evaluation/consultation, and acupuncture.

## **Preventive Services**

Preventive Counseling and Intervention: It is far less costly to provide limited counseling to chemically dependent persons feeling at risk of using drugs or alcohol than to serve them after they have relapsed. To encourage preventive intervention the Preventive Services section of the UBP should specifically identify relapse prevention counseling.

Brief Intervention: One of major tools for families to deal with a chemically dependent relative is "chemical dependency intervention." This consists of a several structured sessions designed to assist families in designing a strategy to confront the dependent person and break the cycle of denial. It often results in treatment for the dependent person and usually provides strong support for the family in crisis. The Issues Investigation Group presumes this fits under "Preventive Services" and raises the issue for clarification and perhaps specification.

## **Services Not Included in Chemical Dependency Treatment Benefit**

Inclusion into the "Case-managed chemical dependency services" benefit was based on direct relationship to treating the person with the addictive disease, and direct relation to the addiction itself. It was also narrowed to exclude some publicly funded social, rehabilitative, and support services. This is not to say these services are not essential and do not need continued funding. It is simply an attempt by the Issues Investigation Group to provide the Health Services Commission with a clinically-based, consistent approach to drawing the boundaries around a service that in the public sector has become quite blurred.

Long Term Care: These recommendations have not attempted to incorporate the full range of individual and community-wide services required by a small group of chemically dependent persons who repeatedly access detoxification centers as well as emergency rooms, hospitals, and primary care physician's offices. It is important, however, to note that special long-term services must continue to be funded, whether through long-term care benefits or through supplemental delivery systems.

Support Services: Publicly funded services have encompassed an array of supportive services, such as housing, living assistance, child care, transportation, and vocational rehabilitation, which enhance the total rehabilitation of individuals with needs beyond primary chemical dependency treatment. These support and habilitative services would be funded independent of the health care system. Therapeutic child care, provided in conjunction with a parent in treatment, would also be a separately funded activity.

Chemical Dependency Family Counseling: When the chemically dependent person enters treatment, family members and other significant persons (including employers) are given ancillary education and counseling, and this is included in the UBP recommendation. However, family members often seek out counseling prior to the dependent person entering treatment. As pointed out earlier, family members are as great a source of health care utilization as the alcoholic/addict, but in order to keep a minimal service package, this was not incorporated into the "Case-Managed Chemical Dependency Services" benefit. It is possible that these services might be covered under mental health benefits and, to a limited extent, under Preventive Services.

Child Care: Neither therapeutic child care nor day care are included in this benefit recommendation. When therapy is provided to children of chemically dependent persons as an adjunct to that treatment, it is assumed that the child will have mental health benefits to cover their services. Other

forms of child care would be funded by the Department of Social and Health Services or other supplemental systems.

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