STUDY OF PROPOSED MANDATORY HEALTH INSURANCE FOR ALCOHOL AND DRUG DEPENDENCE AND MENTAL ILLNESS SERVICES

Conducted by the

Office of the Legislative Auditor

and

Peat Marwick Main & Co.

Certified Public Accountants

A Report to the Governor and the Legislature of the State of Hawaii

Submitted by the

Legislative Auditor of the State of Hawaii Honolulu, Hawaii

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FOREWORD

In 1987, the Legislature enacted Act 331 which requires the Legislative Auditor to assess the social and financial impact of measures proposing to mandate health insurance benefits. The purpose of the assessment is to provide the Legislature with a rational and objective basis for evaluating proposals that require health insurance coverage for particular health services.

This report assesses the social and financial impact of Senate Bill No. 986, S.D. 2, H.D. 1, and House Bill No. 885, H.D. 2 (1987 Regular Session) which propose to mandate health insurance coverage for alcohol and drug dependence and mental illness services. We were assisted in the preparation of this report by the certified public accounting firm of Peat Marwick Main & Co. which assessed the financial impact of the proposed measure.

We wish to express our appreciation for the cooperation and assistance extended to us by the staff of various state agencies, private insurers, and other interested organizations we contacted in the course of doing the assessment.

Clinton T. Tanimura Legislative Auditor State of Hawaii

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Chapter 1

INTRODUCTION AND BACKGROUND

Act 331, SLH 1987, states that the Legislature shall request the Legislative Auditor to assess the social and financial impact of measures proposing to mandate health insurance benefits. The purpose of the assessment is to provide the Legislature with an independent, systematic review of the ramifications of these proposals so that it can determine whether the proposed coverage would be in the public interest.

This report assesses the social and financial impact of Senate Bill No. 986, S.D. 2, H.D. 1 and House Bill No. 885, H.D. 2 (1987 Regular Session) which propose to mandate health insurance coverage for mental illness, alcohol dependence, and drug dependence. The report consists of four chapters. Chapter 1 provides background information on health insurance and some current trends and issues. Chapter 2 discusses mandated health insurance, the context in which it would operate in Hawaii, and the framework for our assessment. Chapter 3 contains background information on the proposed mandated health insurance benefit, and Chapters 4 and 5 present our assessment of the proposed measure.

Background on Health Insurance

Health insurance serves economic, medical, and social purposes. Health insurance, as we know it today, became popular during the Depression when hospitals developed Blue Cross plans to help finance their operations and to help subscribers meet the cost of hospital care. This was followed by the Blue Shield

plans which provided insurance coverage for physician services. Soon, commercial insurers also began to offer health insurance plans.

With the support of the federal government, insurance began to evolve into a financing measure to increase access to health care. During World War II, the federal government encouraged its growth by excluding employers' contributions to health insurance from wage controls and taxable income. More direct federal involvement began with the Medicare program which provides insurance for the elderly and the Medicaid program which provides payments for medical care for eligible needy and low income patients.

Today, health insurance not only finances and supports access to health care, it is used as an instrument of social policy.

In looking at state policy on health insurance, the New York State Council on Health Care Financing recently noted,

"Health insurance is not simply insurance in the conventional sense. It is fundamentally different from other types of insurance because it forms the base for allocating an essential social good and because its existence has a profound effect on the availability, costs, and use of medical services. Health insurance today is a form of social budgeting and State policy must recognize it as such in order to better guide the medical care system and to ensure an equitable health insurance system."

Private health insurance. A recent analysis of data from the 1977 National Medical Care Expenditure Survey (NMCES) found that private insurance plays a central role in financing health care in the United States, affecting both the magnitude and distribution of personal health care expenditures. Roughly four out of five Americans had some form of private coverage, with employers paying for most of the cost of coverage.²

The NMCES found that health insurance coverage varied according to whether it was group or nongroup insurance. Group insurance was generally work related

health insurance. Group members had more comprehensive coverage than those with nongroup insurance with the comprehensiveness of coverage increasing with the size of the group. Most of those receiving benefits through their employers had little choice about the benefits they received.

Those with nongroup coverage were generally the privately insured poor, the elderly, young adults, nonwhites, and female heads of households. Generally, those least able to pay for health care also had the least insurance because their lack of employment meant less income and also lack of group health insurance.

Forms of private health insurance. Private health insurance falls into three main categories: (1) the Blue Cross and Blue Shield Plans, (2) the commercial insurance companies, and (3) the independent plans such as health maintenance organizations (HMOs), self-insured plans, preferred provider organizations, and other variants of these plans.

The Blue Cross and Blue Shield are the largest and oldest private health insurers. They are the traditional fee for service plans where reimbursements are made for services provided by participating physicians and hospitals.

The commercial carriers are insurance companies such as Aetna Life, Travelers, and Prudential. Like the Blue Cross plans, they provide reimbursements for medical services.

HMOs are a more recent development. They furnish a benefit package of maintenance and treatment services for a fixed periodic fee. Their emphasis is on preventive health care.

Independent plans are the fastest growing category of health insurance, particularly self-insurance plans which have more than doubled in the past five years. Self-insurance, or more correctly noninsurance, refers to the assumption by

an employer, union, or other group of all or most of the risk of claims for a policy year. Employee claims are paid directly from an employer's bank account or a trust established for that purpose.³

Self-insurance has several advantages. It is exempt from state regulation under the federal Employee Retirement Income Security Act of 1974 (ERISA). Hence, state laws mandating coverage of specific facilities, practitioners, or therapy do not apply to these plans. Self-funded plans are also able to avoid most premium taxes. In addition, they give employers access to the claim reserves for business uses and provide tax-free interest on reserves. However, self-insurance plans are feasible primarily for employers with enough employees to create a sufficiently large risk pool.

Today, there are other variations. Many insurers provide administrative services only for self-insured employer plans without bearing any of the risk. Insurers also contract with employers for plans which are split into self-funded and insured portions, with the insurer providing partial protection that is comparable to that of a traditional insurance plan or for catastrophic levels of claims.

Another significant change is the growth in "cafeteria" plans which offer employees choices among health insurance coverages and other employee benefits, such as additional vacation days or wages.

Increasing cost of health care. The greatest concern in recent years has been the increasing cost of health care. The most significant impact has been on government expenditures for health care. The federal government, through Medicare, Medicaid, and other programs, pays for more than half of all third party reimbursements.

The amount paid by employers for health insurance has also risen sharply. In recent years, health insurance premiums have increased an average of 20 percent annually. Health benefits are now the third largest cost element after raw materials and straight time pay for most manufacturers. A recent study found that corporate expenses for health care were rising at such a rate that if unchecked, they would eliminate in eight years all profits for the average "Fortune 500" company and the largest 250 nonindustrials. 4

Health care costs are of even greater concern for small businesses which have lower and more variable profits, high turnover in employees, and more part-time, seasonal, or young workers. Their insurance is more costly, and they get less for their dollar. Data indicate that their premiums are 10 to 15 percent higher than those of large firms.⁵

Small businesses are also subject to all mandated health insurance laws since they are not in a position to self-insure. Many small businesses also suffer a tax disadvantage. Business owners who are unincorporated or individuals who have more than 5 percent ownership of a Chapter S corporation cannot take a tax deduction for their own health insurance premiums as can incorporated owners.

Current concerns. The two dominant and closely linked issues in health care today are the need to ensure access to adequate health care for the uninsured and the underinsured and the need to contain the costs of health care.

The first issue is based on social considerations such as the obligation of a just society to finance health care fairly for all its members without regard to income, race, sex, race, or individual circumstances. These social considerations underlie federal initiatives for national health insurance, catastrophic insurance, and recent

actions in many states to create statewide insurance pools and state sponsored and state subsidized health care plans.

The second issue focuses on cost containment. Much of the blame for the crisis in health costs is attributed to the prevalence and comprehensiveness of health insurance, the perverse incentives it creates, and the complex public and private third party payments system predominant today.

There is extensive evidence that insurance encourages unnecessarily high levels of utilization and expenditures. Medical economists estimate that as many as 70 percent of physician/patient contacts are for common colds, upset stomachs, and other routine ailments that do not require professional care.⁶

Health insurance allows individuals to choose their own health care but insulates them from paying for all of the cost of such care. Prior to World War II, most patients paid for their own medical care. Today, the financial responsibility for medical care has shifted from patients to third party insurers. Most of the cost of health care is paid by reimbursements made by private insurance and government.

Most of the insured have more benefits than they need. The NMECS found that the average family paid out more in premiums than was returned in benefits. It found that the current system tends to lock different groups who face predictably different risks into buying the same insurance at the same premium. As a result, better risks have more insurance than the costs and benefits warrant. However, they have every incentive to make use of the benefits since they have no reason to forego services they might want and which their insurance will finance.

Until recently, no checks were placed on services furnished by providers. The open ended fee for service reimbursement system created incentives for providers to perform more services than were necessary. Reports of unnecessary surgery and expensive tests have been commonplace.

Changes sought. There is concern that medical costs are increasing so rapidly that they endanger access to health care and conflict with other pressing social and economic priorities. The policy problem is to control medical expenditures without sacrificing adequate medical care and insurance protection.

Some current approaches are to encourage competition in the health care marketplace to limit or to provide more flexible coverage, to promote a prudent buyer approach on the part of consumers, and to place providers under more careful scrutiny and control. This has led to changes in the forms of insurance, in the kinds of benefits offered, and in the reimbursement system.

New insurance plans try to restructure benefits to neutralize the financial incentives which encourage overinsurance and to make consumers better aware of the insurance they are buying. The focus is on promoting more efficient and cost-conscious behavior on the part of patients and providers.

Employers are increasing employee payments through deductibles (the amount patients must pay before benefits begin) and copayments (the portion of the expense of a covered service for which patients are responsible). Some companies have found that they can save almost 50 percent of the cost of insurance when they increase deductibles and coinsurance provisions.

Employers are also using approaches such as offering multiple choice plans which allow employees to choose among various benefit packages; allowing employees to allocate the employer's benefit contributions among health care, vacation, or deferred compensation; or providing incentive programs where employees will receive deferred compensation if they spend less on health care.

Finally, the federal government is creating incentives for providers to keep costs down by changing its reimbursement system to a prospective payment system

that pays a fixed fee based on the patient's diagnosed illness regardless of the actual cost of care. Emphasis is also being placed on peer review and utilization review to ensure that only appropriate medical services are being provided.

Chapter 2

MANDATED HEALTH INSURANCE BENEFITS IN THE HAWAII CONTEXT

There has been a significant increase in the number and variety of mandated health insurance benefit laws across the nation. Hawaii already has some health insurance mandates, such as requiring reimbursement for dentists who perform oral surgery, for psychologists performing within their lawful scope of practice, and, most recently, for *in vitro* fertilization. However, individual mandates requiring insurers to cover specific health services are relatively new to the State. This chapter discusses mandated health insurance benefits and the Hawaii context in which a mandate would operate.

Mandated Health Insurance Benefits

Beginning in the 1960s, various states began to mandate additional health insurance benefits, such as coverage for alcohol and drug abuse treatment, maternity care, and catastrophic care. Mandated benefit laws were used to expand coverage to health professionals who had previously been excluded from reimbursement, such as psychologists, and to fill gaps in insurance coverage due to changing demands and improvements in medical technology.

There has been a significant increase in the number and variety of mandates. In 1974, there were 48 state mandated benefit laws. By 1987, there were more than 680 with an equal number reported to be pending at state legislatures. These laws take two approaches, either mandating that the benefit must be *included* in all policies issued by insurers, or mandating that it must be *offered* to anyone requesting such coverage.

The legal challenge to the right of the states to mandate health insurance benefits was resolved in June 1985 when the U. S. Supreme Court ruled in Metropolitan Life Insurance Company v. Commonwealth of Massachusetts that a Massachusetts law requiring insurers to provide minimum mental health care coverage was a valid and unexceptional use of the Commonwealth's police power. The court held that mandated insurance benefit laws are insurance laws that fall within states' regulatory authority and are not preempted by the Employees Retirement Income Security Act of 1974 (ERISA). However, the court exempted self-insured plans from mandated benefit laws based on ERISA's preemption of employee pension and welfare benefit plans. 10

Arguments for and against mandated health insurance benefits. Generally, mandated health insurance benefit laws are supported by providers and recipients of the treatment to be covered, and they are opposed by businesses and insurers. Proponents of mandated health benefits base their arguments primarily on medical and social premises. Opponents base their largely on economics and costs.

Arguments for. Those who support specific mandated benefits say that gaps in insurance coverage keep individuals from seeking or receiving much needed care.

They say that the current system is inequitable by discriminating against certain providers, such as psychologists or chiropractors, or against certain conditions, such as mental illness. This discriminatory system often prevents individuals from obtaining more efficient or more effective care.

Supporters contend that mandated benefits would support the development and maintenance of a wider range of effective treatment settings. They also say that improved health insurance coverage will lead to cost savings in the long run even

though mandated benefits might lead to increased utilization. For example, proponents for mandated benefits for the treatment of alcoholism argue that there would be offset savings from the reduction of other general medical and hospital services currently used by alcoholics. Another argument is that mandated coverage would spread costs over many people, thereby increasing the size of the risk pool and keeping costs down.

Arguments against. Employers have generally been opposed to mandated benefits since they pay most of the cost of health insurance. They say that mandated benefits add to the cost of employment and to the cost of production and that they reduce other—perhaps more vital—benefits. Small businesses complain that they are especially affected adversely by mandates because they have lower profit margins and are less able to absorb increased premium costs. Insurers oppose mandates because they create an incentive for employers to self insure, thereby reducing the risk pool and making insurance coverage more costly and insurers less competitive.

Opponents say that mandates could raise the cost of premiums beyond what employers and consumers may be willing to pay and reduce the total number of individuals to whom coverage is available. Employers could also shift more of the cost of premiums to employees.

Critics also say that financing health care through insurance mandates is highly regressive since they raise premium costs for all, resulting in a greater hardship on individuals with lower incomes. They argue that this is especially unfair when the mandates reflect the needs of only special interest groups.

Finally, there is the argument of freedom of choice. Opponents say that mandates reduce the freedom of employers, employees, and unions to tailor benefit

packages of their own choosing and that they interfere with the collective bargaining process. They also run counter to the effort to avoid overinsurance and to encourage a prudent buyer approach by consumers.

Health Insurance in Hawaii

Health care is one of Hawaii's largest industries. It is larger than the construction industry and more than three times the size of sugar and pineapple. Statistics indicate that Hawaii's population is healthier than that of the rest of the United States. Hawaii ranks first in the nation in longevity for both men and women. Hawaii also has one of the lowest death rates in the United States. 11

Hawaii's population is comparatively well insured in terms of the number covered and the breadth of coverage. The HMSA is the Blue Shield plan for Hawaii. It provided health insurance coverage to more than 60 percent of the civilian population in 1986. The second largest health insurer is the Kaiser Foundation Health Plan, a nonprofit health maintenance organization (HMO) which covers approximately 15 percent of the population. Island Care, comprised of a group of participating providers including the Honolulu Medical Group, Garden Island Medical Group, and Hilo Medical Group, is Hawaii's third largest health insurance plan.

In addition to these private programs, health insurance coverage is provided by Medicare, Medicaid, and the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) program for military dependents and military retirees.

Two important laws define and constrain health insurance in Hawaii. These are the State's Prepaid Health Care Act and the Hawaii Public Employees Trust Fund.

Prepaid Health Care Act. Hawaii is unique in health insurance coverage since it is the only state in the nation with a mandatory health insurance law. The Hawaii Prepaid Health Care Act was enacted in 1974 after a study commissioned by the Legislature found that a significant number of the State's employed were not adequately protected by health insurance. The act was intended to ensure adequate access to health services for Hawaii's working population.

All employers with one or more regular employees (those working at least 20 hours per week) must provide them with health insurance benefits. These benefits must be equal to, or "medically reasonable" substitutes for, the benefits offered by prepaid health plans which have the largest number of subscribers in the State.

The law also specifies that every plan must include the following basic benefits:

- . 120 days of hospital benefits per calendar year plus outpatient services;
- . Surgical benefits, including anesthesiologist services;
- . Medical services, including home, office, hospital visits by a licensed physician, and intensive medical care;
- . Laboratory, X-ray, and radio-therapeutic services; and
- . Maternity benefits.

Employers must submit their health insurance plans to the Director of the Department of Labor and Industrial Relations to determine if the plan meets the standards in the law.

The employer must pay at least half of the premium cost. However, the employee's contribution may not exceed 1.5 percent of the employee's monthly wages. The act exempts government employees, employees covered by a federal

program or receiving public assistance, agricultural seasonal employees, insurance and real estate salesmen, or brokers paid solely on commission.

Legal issues. In 1976, the Prepaid Health Care Act was amended to add insurance benefits for the treatment of substance abuse. Shortly thereafter, Standard Oil of California filed suit against the State on the grounds that ERISA preempted any state laws which regulate employee benefit plans. Standard Oil was particularly opposed to the amendment requiring coverage for substance abuse treatment. In a decision that was upheld by the U.S. Supreme Court in 1981, the courts found that the Hawaii Prepaid Health Care Act did constitute an employee welfare benefit plan within the definition of ERISA and was therefore preempted by ERISA. 13

In 1983, Hawaii's congressional delegation obtained an amendment exempting the Prepaid Health Care Act from ERISA. However, the exemption was limited to the law as it was enacted in 1974. ERISA would continue to preempt any amendments made to the Prepaid Health Care Act after 1974 except where the amendment was needed for more "effective administration" of the law. 14

In 1984 the Council of Hawaii Hotels brought suit against the State to prevent enforcement of a 1978 amendment to the Prepaid Health Care Act requiring plans resulting from collective bargaining to have benefits that are equivalent to those imposed by the act. The Council argued that the amendment involved more than was necessary for "effective administration" of the law. The U. S. District Court agreed, holding that the 1983 exemption to ERISA was intended to be construed narrowly and that the 1978 amendment regulating collectively bargained plans could not be interpreted as providing for more "effective administration" of the law. ¹⁵

These decisions raise questions about the legality of mandated health insurance laws in Hawaii. Although mandated insurance laws have been found to fall within the authority of states to regulate insurance, there may be a problem in Hawaii because Hawaii is the only state in the nation to also have a prepaid health insurance law. The law requires all employers to provide certain insurance benefits but limits these to those mandated in 1974 or those covered by the most prevalent health plan. Amendments made in 1976 requiring insurance coverage for substance abuse were specifically voided by the courts.

If a mandated benefit is enacted, e.g., for substance abuse, then all insurance plans, including the most prevalent plan, HMSA Plan 4, must provide the benefit. This in turn would mean that all employers must purchase the benefit in order to comply with the Prepaid Health Care Act. It is possible that any mandated benefit will be challenged as a way of bypassing the limitations placed on the Prepaid Health Care Act by ERISA.

Public Employees Health Fund. Chapter 87, HRS, creates a Public Employees Health Fund to finance health insurance benefits for state and county employees and retirees. The State and the counties are the largest purchasers of health insurance in Hawaii, currently paying out over \$70 million in premiums annually. ¹⁶

The fund is administered by a board of trustees that determines the scope of benefit plans, contracts for the plans with insurance carriers, and establishes eligibility and operating policies for the health fund.

While the scope of benefits to be provided is determined by the trustees, the amount contributed by public employers towards the premium is established through collective bargaining. Currently, the employers' portion is approximately 60

percent with employees contributing the remaining 40 percent. The employers' contribution is fixed for the duration of the collective bargaining contracts.

Unless a specific exemption is made for the State and counties, the state health fund will be subject to any mandated benefits law. Any increase in premium costs for current employees resulting from the mandate will have to be absorbed entirely by the employees since the employers' contribution has already been fixed under current collective bargaining contracts.

Another problem would be any increase in premium cost for retirees. The health fund law requires public employers to pay for the full cost of health fund benefits for retirees. This amounted to \$27.9 million in premiums in 1987. One in three enrollees in the health fund's medical plan is now a retiree. Retirees now consume a greater share of fringe benefit funds on a pro rata basis than active employees. The costs are expected to increase due to the increasing number of retirees, inflationary health care costs, and longer life expectancies.

Legislative concern about the high cost of premiums for retirees led the Legislature to adopt Senate Resolution No. 138 in 1987, asking for a study of benefit costs for retirees and alternatives that would enable the State to continue a reasonable level of funding of benefits for employees and retirees.

Assessment of Proposals for Mandated Health Insurance Benefits

Over the years, an increasing number of proposals for mandated insurance benefits have come before the Legislature. There has been concern over the cost impact of these proposals and their effect on the quality of care. Proponents and opponents of these measures seldom agreed on their costs and benefits.

Hawaii followed the solution adopted by several other states, such as Washington, Oregon, and Arizona, in enacting legislation calling for a systematic assessment of the social and financial impact of mandated health benefits and their overall effect on the health care delivery system.

Unlike some states where assessments are done by proponents of such measures, the Hawaii State Legislature was concerned with the financial burden such studies would place on health care providers and the questionable validity of assessments conducted by those other than an independent third party. Therefore, Act 331 states that before any measure proposing mandated health insurance benefits can be considered, the Legislature shall adopt concurrent resolutions requesting the Legislative Auditor to conduct an assessment of the social and financial impacts of the proposed mandated insurance coverage.

Criteria for assessments. Act 331 requires the Legislative Auditor to evaluate proposals to mandate health insurance coverage according to the following social and financial criteria:

"The social impact.

- 1. The extent to which the treatment or service is generally utilized by a significant portion of the population;
- 2. The extent to which such insurance coverage is already generally available;
- 3. If coverage is not generally available, the extent to which the lack of coverage results in persons being unable to obtain necessary health care treatment;
- 4. If the coverage is not generally available, the extent to which the lack of coverage results in unreasonable financial hardship on those persons needing treatment;
- 5. The level of public demand for the treatment or service;
- 6. The level of public demand for individual or group insurance coverage of the treatment or service; and

- 7. The level of interest of collective bargaining organizations in negotiating privately for inclusion of this coverage in group contracts; and
- 8. The impact of indirect costs which are costs other than premiums and administrative costs on the question of the costs and benefits of coverage."

"The financial impact.

- 1. The extent to which insurance coverage of the kind proposed would increase or decrease the cost of the treatment or service;
- 2. The extent to which the proposed coverage might increase the use of the treatment or service;
- 3. The extent to which the mandated treatment or service might serve as an alternative for more expensive treatment or service;
- 4. The extent to which insurance coverage of the health care service provider can be reasonably expected to increase or decrease the insurance premium and administrative expenses of policy holders; and
- 5. The impact of this coverage on the total cost of health care."

In conducting the assessment of the proposed measure, we reviewed the research literature for information on the utilization, coverage, cost, and impact of insurance coverage in other jurisdictions. We examined similar mandates in other states for their experience with the cost effectiveness of the proposed coverage. We gathered and analyzed information from insurers, providers, and other programs providing insurance coverage in Hawaii. Interviews were held with employers, unions, and other interested parties to assess public interest and demand for the proposed coverage.

The major sources of information on utilization, coverage, and costs were HMSA, Kaiser, and Island Care. We also analyzed data on the Medicare, Medicaid, and CHAMPUS programs taking into account these programs will not be affected by the proposed measures and do not serve a comparable population.

Chapter 3

BACKGROUND ON MENTAL HEALTH AND SUBSTANCE ABUSE

Senate Bill No. 986, S.D.2, H.D.1 and House Bill No. 885, H.D.2 (1987 Regular Session), would mandate health insurance benefits for mental illness, alcohol dependence, and drug dependence. This chapter provides some background on the field of mental health and substance abuse; the characteristics, prevalence rates, and costs of the health conditions; the provisions of the two measures; and the experience of other states with mandated insurance coverage in these areas.

Background

Traditionally, mental illness and substance abuse, including both alcohol and drug dependence, have been viewed differently from other illnesses. Little was known of their causes, diagnoses were difficult, and cures were rare. More often than not, treatment was directed at the many physical problems resulting from these diseases and not the underlying conditions themselves. Moreover, the social stigma attached to the illnesses further complicated the provision of appropriate care.

In recent years, federal initiatives have resulted in significant changes in the fields of mental health and substance abuse. The federal Community Mental Health Centers Act of 1963 expanded the focus from a few chronically disturbed individuals to the entire population. A hospital-based system evolved into one using an increasing number and variety of providers and treatment settings to serve the general public. Today, community-based care is the primary mode of treatment,

with most of the treatment furnished on an outpatient basis or through partial hospitalization. ¹

Hawaii began deinstitutionalizing its mental health system in 1958 and, in 1967, the Department of Health (DOH) was authorized to establish and promote community mental health programs. When Hawaii began deinstitutionalization, the Hawaii State Hospital had a total of 1,232 patients; today its total capacity is reduced to 240 beds including the children's unit at Leahi Hospital. On the other hand, the caseload of the community mental health centers and their contracted agencies grew from 2,500 in 1966 to 11,695 clients in 1985.

The establishment of the National Institute of Alcohol and Addiction and the National Institute on Drug Abuse has also expanded community based substance abuse treatment programs. In Hawaii, Act 190 in 1975 authorized DOH to coordinate the planning and delivery of substance abuse services in the state.

Defining mental illness and substance abuse. Experts have long recognized that mental illness, alcohol abuse, and drug abuse are illnesses that need specialized treatment. Although there is almost universal agreement about the nature and seriousness of these conditions, there is still debate about their definitions.

This is partly due to the overlap among them. For example, the *International Classification of Diseases* includes the addictive use of drugs and alcohol under the larger category, "mental illness." In turn, alcoholism subsumes a range of medical, psychological, and social problems which are often classified according to the forms of treatment used today—drugs and medication, treatments based on group and community efforts, psychotherapy, and so forth. With drug dependence, each of the groups involved in treatment represents a different approach and describes the illness accordingly. For example, medically oriented providers would describe drug

dependence as a change in a person's physiological state while socially oriented providers would include the social consequences of drug abuse.

Another reason for the difficulty in defining these conditions is that they are by no means clear cut. They encompass a wide range of disorders, behaviors, syndromes, and conditions, each subject to varying degrees of acuteness and duration, and each with different effects.

Mental illness is usually defined as an impairment of a person's psychobiological processes severe enough to manifest problems in social, biological, and psychological functioning. The definition usually does not include the more common "problems of living" affecting most people.

Alcohol abuse is generally defined as including both alcoholism, which is the addiction to alcohol, and problem drinking, which is a disability resulting from alcohol consumption. Similarly, drug abuse includes both addiction and the functional disabilities resulting from misuse such as poor health, economic dependency, and incompetence in discharging family responsibilities.

Prevalence of mental illness and substance abuse. The National Insitute of Mental Health recently estimated that 16 to 23 percent of the population has a diagnosible mental disorder, including substance abuse. Between 4.8 to 7.5 percent of the population suffers from alcohol and drug dependence. An earlier survey by the National Institute on Alcoholism and Alcohol Abuse reported that 3.3 million children aged 14 to 17 were problem drinkers. The National Institute on Drug Abuse estimates that over 500,000 people are known heroin addicts; 5 million use cocaine; and over 7 million regularly use prescription drugs without medical supervision.

Hawaii estimates are within the national ranges. The most recent study of prevalence rates among adults, conducted by the DOH Mental Health Division in

1983, reported that 86,101 adults, or approximately 12.6 percent of the adult population, were affected by a mental disorder. An unknown number of this group might need treatment. An estimated 19,145 individuals, or 3 percent of the adult population, had severe symptoms.⁸

The same survey reported that another 12 percent of the adult population, or 82,515 people, were heavy users of alcohol and had experienced psychosocial problems associated with its use. Chronic abusers were estimated at 43,546, or 6 percent of the adult population. Adults who had used drugs such as heroin, inhalants, and cocaine were estimated at 40,844, or 6 percent. Over 22,000, or 3 percent of the adult population, had a chronic problem and needed treatment.

Little is known about substance abuse and mental illness among children in Hawaii. Until recently, most estimates used by the DOH were dated, or based on mainland populations. The Department of Education released in January, 1988, the results of a survey of public school students which indicate that alcohol use is increasing. The survey reported that 8.7 percent of students in grades 6 through 12 can be considered heavy drinkers and about 5 percent are estimated to be serious drug users. 9

Another indicator of the extent of these conditions in the community comes from the 1986 Behavioral Risk Factor Survey by DOH which shows that 20.1 percent of Hawaii's adults are at risk from acute drinking. Hawaii had the highest rate of chronic drinking, 9.6 percent, among 25 states and the District of Columbia. 10

Treatment of mental illness and substance abuse. A multitude of approaches are used in treating mental illness. This is due in part to the broadness of the category "mental illness," as well as to the complexity of the brain itself. However, in recent years the diagnosis and treatment of many disorders have become more

standardized. Studies tend to agree that treatment is purposeful, based on scientific or conceptual principles, applied by experienced professionals, and intended to help people change what is causing the distress.

In contrast, fairly universal treatment regimes are used in alcoholism and substance abuse. Professional treatment ranges from detoxification in hospitals to lengthy additional rehabilitation in inpatient and outpatient settings. Detoxification seeks to remove the substance from the patient's body. Additional treatment or rehabilitation attempts to eliminate the patient's dependence on the addictive substance. Usually consisting of intense therapy, rehabilitation may include inpatient or residential care for patients requiring 24-hour supervision during the treatment period or it may be outatient care on a scheduled basis. Continuing support against addiction is often provided through aftercare or support groups such as Alcoholics Anonymous or Narcotics Anonymous.

Treatment approaches for substance abuse may vary depending on the medical, psychological, or sociocultural orientation of providers. Whatever the approach, providers agree that it should be timely, providing the right service at the most opportune moment, and also individualized and matched to the severity of the condition.

Costs of mental illness and substance abuse. Mental illness, alcohol dependence, and drug dependence are implicated in a host of medical, psychological, and social problems that generate enormous costs for the country. A 1980 national study estimated the combined costs of these conditions to be \$237.5 billion in 1984. Alcohol abuse contributed the largest share, \$111.5 billion, followed by mental illness at \$67.5 billion and drug abuse, \$58.4 billion. 11

Treatment costs (hospitalization and physician services) were estimated at \$39.4 billion. However, the largest share were indirect costs such as lost work time, deaths, and lost employment. Reduced productivity alone amounted to \$98.9 billion. 12

Public agencies bear the major portion of the costs of these conditions nationally. For example, in 1980, state and local governments paid for 28 percent of the costs of mental health care, and insurance companies paid 12 percent. The percentages are reversed for regular medical care, with insurance companies paying 26 percent of the total cost of medical care in general while state and local governments paid 9 percent. ¹³

Mandated Insurance for Mental Health and Substance Abuse

In the past 15 years, insurance coverage for these conditions has expanded dramatically. Recent surveys show that virtually all plans have inpatient and outpatient coverage for mental illness. Insurance benefits for substance abuse are also on the increase. However, coverage for these illnesses is not comparable to that for other medical conditions. Further, many insurers are beginning to reduce and restrict benefits because of rising utilization and costs.

State legislatures began to enact laws requiring insurers to provide or offer benefits for mental illness, alcohol abuse, and drug abuse because of the costs of these conditions and a perceived need for treatment.

As of 1986, 14 states had *mandatory* coverage statutes for mental health. Most of these statutes affected group policies and dealt with both inpatient and outpatient settings. This is important because insurance policies typically provided less coverage for outpatient treatment. Twelve states required insurance carriers

to offer coverage at the policyholder's option. Three states (Connecticut, Maryland, Virginia) combined mandatory and optional provisions. 14

As of 1987, 39 states and the District of Columbia have enacted laws requiring insurers to cover treatment for alcohol abuse, drug abuse, or both. Of these, 25 have "mandatory coverage" statutes. The legislation varies greatly with respect to treatment setting, minimum or maximum days of coverage, and treatment providers. Some states have combined mandated and optional coverage. For example, inpatient coverage may be mandated but outpatient coverage may only be offered. Thirteen states mandate coverage for both alcohol and drug abuse treatment. 15

Proposed Measures

Senate Bill 986, S.D. 2, H.D. 1 and House Bill 885, H.D. 2 mandate broad coverage for the treatment of mental illness, alcohol dependence, and drug dependence. The two bills were introduced in the 1987 Regular Session as state administration measures initiated by DOH. Both measures apply to all insurance companies, medical service plans, nonprofit mutual benefit associations, and health maintenance organizations. Group as well as individual policies are included. After amendments, the Senate and House versions differ slightly only in the extent of coverage.

The measures place insurance coverage for the treatment for these conditions on a par with other medical services. They require copayments, deductibles, and other limits to be equivalent to those placed on other medical conditions. Both measures require peer review, and they limit benefits to those services deemed

medically or psychologically necessary. They require DOH to report to the Legislature on the effectiveness of the services so provided.

Conditions covered. Mental illness. The bills define mental illness as any "clinically significant" psychological, biological, or behavioral abnormality that leads to personal distress or suffering. The definition encompasses the wide range of disorders contained in the International Classification of Diseases and the Diagnostic and Statistical Manual of the American Psychiatric Association including psychoses, neuroses, personality disorders, as well as alcoholism and drug dependence.

The benefits to be provided are: (1) hospital benefits, which include services such as room and board, physician visits, occupational therapy, and drugs; (2) partial hospitalization benefits, including psychotherapy, diagnostic services, drugs, and administration; and (3) outpatient benefits in a variety of settings. Table 3.1 summarizes the benefits for mental illness.

Table 3.1
Summary of Benefits for Mental Illness
Provided by Proposed Legislation

S.B. No. 986, S.D. 2, H.D. 1	H.B. No. 885, H.D. 2
Inpatient Treatment	
45 days per year minimum for adults.	45 days per year minimum for adults.
60 days per year minimum for children.	60 days per year minimum for children.
Partial Hospitalization	
500 hours per year minimum.	750 hours per year minimum.
Outpatient Treatment	
25 hours per year minimum.	50 hours per year minimum.

Alcoholism and drug abuse. The bills define alcohol dependence as the pathological use of alcohol which impairs a person's ability to function in a job or other social situation and produces a physiological dependency shown by physical tolerance or withdrawal. They define drug dependence as any abnormal pattern of drug use which impairs a person's social or occupational functioning, produces dependency, and is characterized by physical tolerance or withdrawal.

Both measures limit treatment settings to hospitals and licensed and accredited special treatment facilities. Patients must be "certified" as suffering from these conditions by a licensed physician or a psychologist certified as a substance abuse counselor. Any treatment in addition to detoxification must be determined by an "approved plan." The benefits are summarized in Table 3.2.

Table 3.2
Summary of Benefits for Substance Abuse
Provided by Proposed Legislation

S.B. No. 986, S.D. 2, H.D. 1	H.B. No. 885, H.D. 2
<u>Detoxification</u>	
Provided in a hospital or special treatment facility.	Provided in a hospital or special treatment facility.
Additional Treatment	
1000 hours per year minimum of services provided in a hospital or special treat-ment facility.	1500 hours per year minimum of services provided in a hospital or special treatment facility. Shall include outpatient alcohol and drug dependency services. Maximum of 1080 hours (45 days) inpatient

care for adults and 1440 hours (60 days) for

children.

Review of Testimony

Testifying against the measures were business organizations and the State's major health insurers, the Hawaii Medical Service Association (HMSA) and the Kaiser Medical Group. Testifying in favor of the measures were the DOH, patient advocacy groups, treatment providers, and their professional associations.

Opponents argued that the broad coverage offered in the bills had few controls and would increase the utilization of treatment services, raise premium rates, place an undue financial burden on employers, and increase the cost of doing business in the state. For example, HMSA testified that the coverage proposed would increase individual premiums by \$5 per month and family rates by \$15. 16 A spokesperson for one treatment facility, while agreeing with the intent of the measure, expressed concern that it contained no provision for holding down the unit costs of care. 17

Proponents questioned the evidence for high rate increases, stating that they far exceeded the average expenditure of any of the other states with mandated coverage. The DOH cited studies that showed long-range cost offset savings resulting from mandated coverage. Proponents also argued that insurance coverage for mental illness and substance abuse should be provided on an equal basis with other "physical" illnesses since these were recognized health problems that affected many people. They cited examples of patients who were unable to receive treatment because of inadequate or nonexistant coverage.

Legislative Intent

Both Senate and House Committees on Health and Consumer Protection recommended passage of their respective measures for various reasons. The Senate Committee on Health stated that the extent of coverage has "a major impact on

health care costs and on the level and type of services delivered in these fields." The Senate Committee on Consumer Protection and Commerce reported that "this measure constitutes an effective, responsible, and humane social policy and is consistent with legislative efforts to provide for the public health." 20

The House Committee on Health found existing coverage of alcoholism, drug abuse, and mental illness to be "varied and inconsistent" and noted that: "Insurance policy exclusions for these problems can force individuals into inappropriate and expensive care or even deter them from seeking any help." ²¹

The House Committee on Consumer Protection found the measure to be consistent "with a new emphasis on prevention of disease and with humane treatment of these problems." ²²

In the next chapter, we assess the social and financial impact of mandating coverage for substance abuse, and in Chapter 5, we assess the impact of coverage for mental illness. The assessments are done separately because of differences in the nature of the two conditions, differences in their current coverage, and in the coverage proposed in the bills.

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Chapter 4

SOCIAL AND FINANCIAL IMPACT OF INSURANCE COVERAGE FOR ALCOHOL AND DRUG ABUSE

This chapter assesses the impact of mandating coverage for alcohol and drug abuse according to the social and financial criteria set forth in Act 331, SLH 1987. We also assess whether the proposed legislation will accomplish the ends sought by the Legislature.

Summary of Findings

Due to limitations in the available data, it was not possible to provide definitive answers to many of the questions on the impact of the proposed measures on current and projected use and costs. However, we did find the following:

- 1. The use of alcohol and drug abuse treatment is generally low.
- 2. The proposed coverage creates new benefit levels not currently available to the insured population.
- 3. There is only anecdotal evidence that inadequate coverage has resulted in lack of treatment. However, inadequate coverage could be a barrier to timely treatment in certain settings. And because treatment is expensive, inadequate coverage could create financial hardship for those who seek care.
- 4. For a variety of reasons, the demand for substance abuse treatment and coverage is low among the general public. There is also very little interest among collective bargaining units in negotiating coverage for these conditions.

5. It is probable that use, premium costs, and overall costs of treatment will increase with mandated coverage. It is also probable that there will be offset savings when patients forego other forms of medical treatment, but the extent of such savings is uncertain.

The Social Impact

In the following sections, we assess the impact of the proposed measures on the social factors specified in Act 331, including the use and need for substance abuse services, the insurance coverage for these services, and the level of public interest in the treatment services or in insurance coverage of these services.

The extent to which treatment or service is generally utilized by a significant portion of the population. The need for mandated insurance coverage for substance abuse is related to the extent to which the general public uses the treatment or service. Nationally, the use of treatment specifically directed at substance abuse is lower than might be expected by the prevalence and costs of these conditions. In Hawaii, the use of treatment is even lower than that of mainland groups.

It appears that only a small fraction of the insured population in Hawaii seeks treatment although this statement requires qualification. There are no comprehensive statistics on the numbers who are treated by private practitioners and in outpatient and residential programs located throughout the State. In addition, an unknown number of people are treated for the medical symptoms of substance abuse and not the conditions themselves. Moreover, many people turn to self-help programs such as Alcoholics Anonymous. Thus, the information in this section provides only a partial picture of the extent of use.

We examined current use of the two treatment services for which the proposed legislation seeks mandated coverage: detoxification services in hospital and nonhospital settings, and additional rehabilitation treatment services consisting of inpatient and outpatient care in both hospital and nonhospital settings. In addition, we examined the use of treatment services provided by the State and by the Castle Alcoholism and Addictions Program (CAAP). Although the federally funded Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) and Medicaid plans will not be affected by the legislation and the plans serve dissimilar population groups, their use rates are also discussed where appropriate.

Detoxification services. Detoxification services are provided in most acute care hospitals in the State and at the Salvation Army Detoxification Unit. We were unable to determine the rate of use for detoxification care in the insured population. HMSA could not provide utilization data because they consolidate information on this service with other treatment data and could not extract it for this study. Data provided by Kaiser for 1985 show that 14 members used the service at a rate of .1 per 1000 with an average length of stay of 4.7 days.

Utilization is somewhat higher among those without private insurance. The Salvation Army had 707 admissions to its treatment unit in FY 1986-87, most of whom were not privately insured. Medicaid data indicates 230 persons received detoxification services in acute care hospitals at a rate of 2.6 per 1000, with an average length of stay of 4 days. ²

Inpatient rehabilitation. Utilization of inpatient rehabilitation treatment appears to be low among the privately insured. Here again, the data are incomplete. Table 4.1 shows the inpatient utilization data for HMSA members using CAAP and for CHAMPUS members using CAAP and other facilities. Kaiser does

not provide coverage for inpatient rehabilitation although it has paid for a few members who entered the CAAP program.

Table 4.1 Utilization of Inpatient Rehabilitation Services for Substance Abuse 1986

	HMSA	CHAMPUS	
No. Eligible	454,000	97,137	
Inpatient Use			
No. of Users	170	44	
Admissions/1000	.37	.45	
Average Length of Stay	19.2	16.2	

Sources: Hawaii Medical Services Association and CHAMPUS report URJ126.

There were 454,000 HMSA enrollees entitled to benefits for treatment in 1986 through CAAP, and 170 people, or .37 persons per 1000 actually obtained treatment. They had an average length of stay of 19.2 days. However, CAAP is the only hospital program eligible to serve this group, and this is a pilot arrangement between the insurer and the provider which is not publicized in HMSA plan brochures. Consequently, the utilization rate of .37 persons per 1000 alone should not be viewed as an indication of either need or demand for inpatient rehabilitation services.

CHAMPUS, which covers military dependents, provides some information on a group in Hawaii with more generous coverage. Inpatient services were used by .45 members for every 1000 insured.⁴

HMSA also provides rider coverage for substance abuse which was used by 11 individuals out of 78,000 for a rate of .14 per 1000. They obtained residential

treatment in 1986 at the Salvation Army Addiction Treatment Center, Hina Mauka, or St. Francis Women's Alcohol Treatment Center (WATC).

These rates are significantly lower than those of mainland groups reviewed for this study which averaged between .8 and 1.5 inpatient admissions per 1000 insured.⁵

Outpatient rehabilitation. There was no comprehensive data on utilization of outpatient rehabilitation treatment. Information on these services are consolidated with outpatient psychiatric benefits and are included in projections in the next chapter. These services are provided in a variety of facilities such as hospitals, special treatment facilities, and the offices of private physicians and psychologists. Hospital-based alcohol treatment programs such as CAAP and hospital facilities such as Kaiser also provide outpatient care. Patients who have a dual diagnosis for both substance abuse and mental illness may be treated in hospital-based programs for the mentally ill at Queen's Medical Center and at Kahi Mohala.

Groups such as Alcoholics Anonymous and Narcotics Anonymous are not affected by the legislation, but they are part of the treatment network and figure strongly in services sought by recovering patients. Alcoholics Anonymous has between 3500 and 5000 members in the State and holds about 200 meetings per week at various locations on Oahu alone.

State services. Although the State does not provide treatment services directly, state funded programs have the largest number of admissions for substance abuse treatment. The Alcohol and Drug Abuse Branch of the Department of Health (DOH) has purchases of service arrangements with many private agencies. According to DOH, it currently funds over 30 programs providing outpatient and residential treatment services.

In 1985, there were 3976 admissions for inpatient and outpatient treatment for alcohol and drug abuse in 21 state-funded programs and facilities. 6 Detoxification

was provided in nonhospital settings, and the vast majority of admissions were for outpatient treatment.

The extent to which the proposed coverage is already available. All group plans cover detoxification services under regular medical benefits. However, most plans fall short in coverage for rehabilitation, particularly inpatient rehabilitation. Limited coverage is available for outpatient treatment under psychiatric benefits.

The bills propose rehabilitation benefits of 1000 to 1500 hours or roughly 42 to 63 days. Current coverage for rehabilitation ranges from diagnosis only to 30 days. However, insurers do offer additional benefits in the form of riders to members of some group plans. The various plans are discussed below and their coverage compared with that in states with mandated substance abuse coverage. Table 4.2 summarizes the coverage provided by several plans offered by the major carriers.

Group plans. Group plans have the most extensive coverage, although coverage varies among plans. HMSA provides coverage for detoxification as it does for any condition requiring hospitalization. Its standard coverage does not specify or include substance abuse rehabilitation except for specific diagnostic and therapeutic services by a psychiatrist or psychologist which are covered under psychiatric benefits.

Since 1983, HMSA has had a pilot program arrangement with CAAP which pays benefits to some group plan members for substance abuse rehabilitation treatment. Coverage under a substance abuse "rider" is also available as an option to some groups.

The Castle Alcoholism and Addictions Program. HMSA contracts with CAAP on a capitation basis, and approximately 454,000 of its group plan members are currently eligible for benefits. The CAAP and the Alcohol and Drug Recovery

Table 4.2 SUMMARY OF HEALTH INSURANCE COVERAGE FOR ALCOHOL AND DRUG ABUSE AMONG TYPICAL GROUP, HMO, AND INDIVIDUAL PLANS

<u>PLANS</u>	DETOXIFICATION	REHABILITATION			
		Inpatient	OutPatient		
Group Plans					
. HMSA Basic Group Plans (Plan 4)	Covered	Diagnosis only.	Under psychiatric coverage; limits of \$500, \$750, \$1000, etc., depending on plan.		
- HMSA Basic Group Plans with Rider Coverage	Covered	30 days rehabilitative by contracted providers.	30 hours after initial rehabilitation care.		
. Queen's Health Plan	Covered	30 days inpatient when authorized by physician; covered under psychiatric benefits.	Under psychiatric benefits of \$750 per calendar year; copayment of \$5 or 25%.		
. Partners Program Plan A	Covered	30 days inpatient covered under psychiatric benefits; 10% copayments for partners; 30 physician visits per year.	Under psychiatric benefits \$1000 per year; copayment of 20%-50%.		
. CHAMPUS	7 days in hospital	21 days per calendar year in CHAMPUS contracted facility; limited to one admission per year; three admissions per lifetime.	60 visits per year; 15 visits per year of family therapy.		
HMO Plans					
. Kaiser Group Plans	Covered		20 visits per year under psychiatric benefits; limited to evaluation and crisis intervention; copayments of \$2-\$5; no copayments for plan C.		
. HMSA Health Plan Hawaii and Community Health Plan	Covered		20 visits per calendar year; \$10 copayment.		
. Island Care	Covered; 25% copayment.		20 visits per year covered under psychiatric benefits; \$20 copayment for individual therapy; \$10 for group therapy.		
<u>Individual Plans</u>					
. HMSA Plan 6 for self employed individuals	Covered		Under psychiatric coverage; \$750 maximum per calendar year; beginning with second session; 25%-30% copayment.		
. HMSA Plan 5, Group members converting to individual coverage	Covered				

Sources: HMSA, Kaiser Permanente, Island Care, Queen's Health Plan, Aetna Parnter's Program, and CHAMPUS.

Program at Kahi Mohala are the only hospital-based residential treatment programs in the State. The CAAP has 20 beds for inpatient care and 90 outpatient slots. It serves primarily an insured population with the majority from HMSA. In 1986 approximately 9 percent of its inpatient admissions were uninsured, paying out-of-pocket for the program.

Four treatment options are available to eligible HMSA members: (1) a 28-day inpatient program; (2) a 21-day inpatient program combined with 4 weeks of outpatient treatment; (3) a 14-day inpatient program combined with 6 weeks of outpatient care; and (4) an 8-week outpatient program. The inpatient programs include counseling, therapy, diagnostic testing, ancillary services, room, meals, and medication. The outpatient program consists of three or four weekly visits, with sessions of approximately three hours per day. With any of the treatment options, HMSA patients receive no benefits unless they complete the entire program. Copayments must be made in advance. A summary of the options is shown in Table 4.3.

Table 4.3
HMSA Member Options
for the
Castle Alcoholism and Addiction Program

Program Description		Copayment		
Option 1:	28 days inpatient	\$139 per day or \$1000 per episode		
Option 2:	21 days inpatient, 4 weeks outpatient	\$124 per day or \$890 per episode		
Option 3:	14 days inpatient, 6 weeks outpatient	\$ 99 per day or \$715 per episode		
Option 4:	8 weeks outpatient	\$ 53 per day or \$385 per episode		

Source: Hawaii Medical Service Association

Rider coverage. In addition to CAAP benefits, several employers and unions have purchased HMSA rider coverage for 78,000 employees and their dependents. Coverage under the rider consists of assessment and referral, 30 days of inpatient and outpatient rehabilitative care, and 30 hours of aftercare. Treatment is provided by five contracted providers: (1) Alcoholism Rehabilitation Services of Hawaii (Hina Mauka); (2) Anodyne Institute of Hawaii; (3) Hawaii Counseling and Education Center, Inc.; (4) St. Francis Hospital's WATC; and (5) Salvation Army Addiction Treatment Facility.

Health maintenance organization (HMO) and individual plans. Individual plans and HMO plans such as Kaiser Permanente, HMSA's Community Health Program, and Island Care do not cover rehabilitative care, but they do cover detoxification and some outpatient visits.

Kaiser has begun to offer an optional substance abuse rider to its group Plan B and federal plans. Coverage will be provided for 30 days rehabilitative care at 80 percent of the cost when prescribed by a Kaiser physician and substance abuse counselor. This benefit is to be added to the inpatient psychiatric care rider which covers approximately 56,000 members. The new combined benefit will be effective on the group's anniversary date.

Comparison with mandated coverage in other states. As of August 1987, 25 states have laws that mandate minimum levels of benefits. Because coverage varies among Hawaii plans and because descriptive terms are not consistent, it is difficult to make valid comparisons of current benefits with those required by laws in other states.

However, it is clear that the standard HMSA and Kaiser plans do not have the inpatient rehabilitation coverage provided by most mainland states with mandated

benefits. Fifteen states provide between 21 to 30 days of hospital or residential care or specify an equivalent dollar limit. Only HMSA's pilot program with CAAP and its rider coverage compare favorably with these states as does the coverage of the Queen's Health Plan, Aetna's Partner's Program, and the federal plans offered by HMSA and Kaiser. Five states require the equivalent of 45 days or more of inpatient or residential care. This would be similar to the coverage proposed by the two bills. None of the standard plans in Hawaii offer comparable coverage.

Most states provide more generous outpatient coverage for substance abuse treatment than that available in most Hawaii plans and specify a minimum of \$1000 in benefits. Ten states specify coverage of at least 20 hours or the same as for other illnesses and do not limit it to diagnosis and evaluation as do the Kaiser plans. Four of the 10 specify 60 hours or more of care. By comparison, Hawaii plans tend to cover outpatient care through psychiatric benefits. For most HMSA members, benefits are limited to between \$500 and \$750.

Oregon offers a comparative example of coverage in other states. Chapter 601, Oregon Laws of 1983, which took effect on July 1, 1984, made major changes in insurance benefit levels for mental illness and chemical dependency. It was designed to provide broad coverage to those who needed care and to encourage the use of less expensive treatment approaches. The legislation sets dollar limits on benefits paid over a 24-month period; it does not specify length of treatment. Chemical dependency benefits for adults are: \$4500 for inpatient in a hospital, \$3000 for residential treatment facility or partial hospitalization, and \$1500 for outpatient. The law decreased the benefits for inpatient care for mental illness and created new benefit levels for less expensive outpatient and partial hospitalization care. Follow-up studies have found that the law has had a cost-effective impact. ⁸

The extent to which the lack of coverage results in people being unable to obtain necessary treatment. We found no direct evidence linking the failure to receive care to the lack of coverage. Insurance appears to be only one of many variables which influence the use of treatment. However, substance abuse treatment is expensive, and inadequate coverage could serve as a barrier for those who decide to seek care.

The estimated prevalence of substance abuse and the low usage rates suggest that many people need but do not receive care. Providers gave anecdotal accounts of patients who decided against treatment because they could not afford it. Castle Hospital recorded 1712 inquiries on its program in 1986. However, we were unable to obtain quantitative data on the numbers not receiving treatment due to lack of coverage.

Research has shown that insurance coverage does influence the use of health care. The lack of coverage may affect both the accessibility of services and the willingness and ability of people to exercise choices. Certain treatment avenues are closed to those without coverage.

People whose policies do not pay benefits for rehabilitative care cannot enter hospital treatment programs such as those offered by CAAP and Kahi Mohala unless they can afford the out-of-pocket costs. People with outpatient psychiatric benefits may get some care; however, standard outpatient benefits will not adequately cover the more intense and frequent therapy required for alcohol and drug abuse. For example, CAAP's outpatient treatment program consists of an intensive primary treatment period followed by weekly aftercare sessions lasting a minimum of three months. Lack of insurance coverage may not be the *only* barrier to treatment, but it is a barrier.

Although state supported treatment programs are available for those without insurance, the lack of insurance coverage may delay timely treatment. Providers claim that people with insurance coverage are more likely to seek treatment in the early stages of the disease. There is evidence that people who turn to publicly supported programs tend to have conditions that are far more severe and long-standing. Providers maintain that many of these patients have delayed treatment until their conditions were serious enough to warrant longer term care.

We found that treatment episodes for the insured population are shorter, averaging 21 to 28 days, than programs which treat the uninsured or those requiring public support which are between 3 and 9 months. For example, Salvation Army's program for insured patients is 21 days, whereas their program for state-supported patients is usually between 3 and 9 months long.

The extent to which the lack of coverage results in unreasonable financial hardship. The average cost of substance abuse treatment is more than most people can afford without adequate coverage. For example, the average charge for the 28-day program at CAAP in 1986-87 was \$7,700. The CAAP treated 323 people in the residential program in 1986, and 29 paid out of pocket. Table 4.4 summarizes the charges per treatment episode by the residential programs entitled to reimbursement under various plans and shows the average copayment based on standard option copayments of 25 percent. Actual copayments vary depending on the coverage provided by the particular plan.

Table 4.4
Average Charges and Copayments per Treatment Episode
For Substance Abuse Coverage

	Average Treatment	Average Charge*	Patient Copayment**
<u>Facility</u>	Episode		
Hina Mauka	30 days	\$2100	\$ 525
Salvation Army ATC	21 days	\$2184	\$ 546
CAAP	28 days	\$7700	\$1925
HMSA/CAAP	28 days	*	\$1000
St. Francis WATC	90 days	\$8500	***
Kahi Mohala	28 days	\$10,080	\$2520

Source: Hawaii, Department of Health; Hawaii Medical Service Association.

*Charge will vary depending on arrangements between providers and insurers.

**Based on standard option copayments of 25 percent.

***Not available.

Results from a recent national survey found treatment costs to be higher for adolescents than for the general population. Adolescents averaged \$10,555 for 36.8 days of treatment compared to \$7,805 and 27.9 days for adults. ¹⁰

Even with coverage, copayments and deductibles make treatment expensive and also financially risky. The HMSA members who are treated in CAAP have copayments of \$1000 for the 28-day residential program, unlike other medical conditions where a major medical benefit will cover most of the copayment after the deductible is paid. In addition, HMSA pays no benefits if the patient does not

complete the treatment episode. These conditions make it financially risky for those considering treatment or for parents to place children in treatment.

The level of public demand for substance abuse treatment. We could not determine the level of public demand given the limitations in available data. Little is known about public interest in these conditions. If the use of these services is compared with estimates of prevalence, then it would appear that the demand for treatment is low.

Insurers and providers had no data on the extent of demand. Providers tend to perceive demand as high because they see a need in the community for care. Most treatment centers operate at close to full capacity; waiting lists are not uncommon. For example, CAAP, which has 20 beds and serves approximately 350 patients a year, has an average occupancy rate of 95 percent. On the other hand, insurers perceive demand to be low. For example, HMSA reported that its customer service department receives only one to two telephone inquiries per month on substance abuse treatment.

Research on demand in insured populations elsewhere also fails to provide answers. Substance abuse treatment has traditionally been a low use area. There is agreement that this is due to many factors, but it is not clear how they interact. Nationally, the utilization of alcohol treatment benefits is remarkably low, usually one-half of 1 percent. One report concluded:

"This indicates either that the number of treatable employed alcoholics is overestimated, that persons may be seeking treatment in a setting outside that provided by an employee benefit plan, or that a significant fraction of the alcoholic population is not being reached." 11

One contributing factor to Hawaii's low use may be its particular ethnic mix.

Researchers suggest that ethnic groups perceive these diseases differently and that

some groups are more likely to seek treatment than others. A series of reports based on the *Hawaii Health and Well-Being Survey* indicate that nearly three-fourths of those who abuse both alcohol and drugs in Hawaii are Caucasian or Native Hawaiian, the latter being less likely to seek professional care. ¹² Factors such as shame and embarrassment may be barriers to treatment for some ethnic groups.

Another reason may be the way insurers record and report their claims data. HMSA consolidates information on detoxification services at acute care hospitals with other utilization data. Both Kaiser and HMSA consolidate outpatient substance abuse benefits with outpatient psychiatric benefits. Thus the reported utilization rates may be understated.

The level of public demand for individual and group coverage of substance abuse. Overall demand for coverage is low. Insurers maintain that the marketplace should determine the services to be covered and that mandates deny consumers the right to choose. However, public demand may be a poor indicator of need. Most health insurance is sold to groups, with employers or unions acting on behalf of their employees. Consumers make few choices about benefits.

Insurance benefits for alcoholism are increasing nationwide, but it is not clear how much of this is due to consumer interest. Researchers have found that even when alcoholism benefits have been offered, few people select the option. For instance, when Blue Cross of Maryland offered an alcoholism benefits package to its subscribers, only 12 percent enrolled in the program over an eight-year period, and use of the services was low among those enrolled. ¹³

A few employers have begun to recognize substance abuse as a problem in the workplace. About two dozen groups have purchased rider coverage for substance

abuse from HMSA. Most covered members are federal employees. In addition, there are a small number of employee assistance programs (EAPs) developed within larger organizations or contracted out to agencies that identify employees having problems in the workplace and refer them to counseling and treatment programs.

The level of interest of collective bargaining organizations in negotiating for substance abuse coverage. We found very little interest among collective bargaining units we interviewed in negotiating for coverage for substance abuse or increasing present benefit levels. Unions, as well as employers, have become increasingly aware of the costs of coverage and they say present levels of coverage are adequate. In considering additional benefits, collective bargaining organizations would prefer such coverage as vision care, dental care, and prescription drugs.

None of the administrators of union health funds that we interviewed expressed an interest in increasing coverage for substance abuse. Their decisions about specific benefits often focus on providing a total health care package for their membership instead of meeting a specific health need. Out of more than 80 labor groups and employee organizations in the State, fewer than a dozen have purchased HMSA's rider coverage for substance abuse. Those who purchased the rider wanted the benefits to be available if members needed them, not specifically because of drug and alcohol problems in the workplace.

The impact of indirect costs on the question of the costs and benefits of coverage. While national estimates place a high price on the indirect costs of substance abuse, there is little information on how mandated insurance will reduce these costs. Consequently, the impact is speculative at best.

National estimates of the costs of alcohol and drug abuse were over \$170 billion for 1984. Alcohol abuse alone may be responsible for up to 15 percent of

the nation's health care costs. The direct costs of treating these conditions are a relatively small part of the total. Most costs are indirect, representing goods and services never produced and delivered such as reduced productivity, premature loss of life, and lost employment. The social costs of alcoholism have been well documented. It is a key factor in crime statistics; in marital and family problems, including marital violence; in fatal and nonfatal injuries of every type, including motor vehicle accidents and accidents in the home and on the job. The bulk of costs are borne by victims, their families, and the federal and state governments. ¹⁶

Proponents believe mandated insurance will reduce costs by decreasing the prevalence of alcoholism and drug abuse through effective diagnosis, early intervention, and treatment strategies. However, little information exists on the degree to which mandated insurance will reduce the aggregate costs of these conditions to society.

Financial Impact

The financial impact assessment required under Act 331, SLH 1987 focuses on the costs of treatment, whether the mandate would result in alternative less expensive treatment, the costs of premiums, and the total cost of health care. We discuss each impact in the order that it appears in the law.

The extent to which the mandated coverage would increase or decrease the costs of the treatment. It is likely that the mandates will increase the cost of treatment. New benefit levels for rehabilitation treatment for substance abuse will likely result in higher use, greater demand on a limited supply of providers, an increase in the number of providers, and potential increases in the cost of care. These increases might be offset by use of more appropriate and less expensive

treatment approaches. However, any net change in costs is difficult to quantify and the cost experiences of states with mandates vary.

Two provisions in the bills make it likely that treatment costs will increase. The first is the setting of minimum benefit levels for additional treatment in terms of hours without placing maximum dollar limits on the cost of care. Most states with mandated insurance for alcohol and drug abuse place dollar caps on benefits to control charges by providers.

The second provision is the requirement that additional treatment benefits must be provided in hospitals or special treatment facilities accredited by the Joint Commission on Accreditation of Hospitals (JCAH) or the Commission on Accreditation of Rehabilitation Facilities (CARF). Currently, only three facilities in the state are JCAH accredited: CAAP, the Alcohol and Drug Recovery Program (ADRP) at Kahi Mohala, and WATC at St. Francis Medical Center. CAAP and WATC run at close to full capacity. It should be noted that JCAH accredication is an expensive process which smaller facilities would have difficulty assuming. These costs would very likely be passed on to consumers.

In addition, the bills limit benefits to treatment provided in hospital settings and in nonhospital facilities licensed as special treatment facilities. By limiting benefits to treatment provided in residential settings, the bills may favor the expansion of settings providing more expensive care.

If the existing facilities are unable to handle increased demand, then the number of accredited facilities will probably increase to fill the demand. Nationally, the field of substance abuse is attracting entrepreneurs, with increases in for-profit facilities and a growing trend by hospitals to create new programs. 17

Current research is divided on the effect this will have on the cost of care. Some researchers find that increased competition exerts a downward pressure on costs. However, the proposed legislation favors the providers of treatment. With no dollar limits placed on benefits, there are few incentives for providers to hold down costs. Thus, increases in the cost of care are projected to be a result of the mandate.

The extent to which the proposed coverage might increase the use of the treatment. Expanded coverage can be expected to increase the use of services among people with an unmet need. However, the benefits could be designed to prevent waste and abuse.

The proposed measures were intended to increase the use of treatment services, and there is evidence that the use of a service increases with the creation of benefits. Utilization has increased in states which have mandated substance abuse benefits. One study of four states found that each state showed a marked increase in all measures of utilization including admissions, days, and average length of stay. However, the increase in use over time was not constant. In a California pilot project, for example, utilization of alcohol treatment was rather low initially, followed by a sharp increase, and an eventual leveling off. 20

It also appears that use can be controlled by having the consumers share in the cost of care. For example, one study found a marked increase in services when deductibles were reduced from 50 percent to 20 percent. The more generous allowance resulted in more claims by people already using the services. The lower out-of-pocket costs also encouraged new users to seek care.

The extent to which the proposed coverage serves as an alternative to more expensive treatment. Proponents of mandated insurance maintain that well

designed insurance coverage would encourage substance abusers to seek more appropriate and less expensive care. The costs resulting from increased use of the new service are "offset" by the decreased use of other, more expensive medical care. Alcoholics are known to be heavy and chronic users of a wide range of medical services. It has been estimated that at least 15 percent of total health care costs in the United States are due to the use of medical services by alcoholics. 22 Prompt treatment of alcholism could preempt the use of these services. Most researchers agree that better benefits could result in offset savings in other medical costs.

Recent research offers many examples of cost savings which result from early and accurate treatment of alcohol-related disorders. The disease manifests itself in severe decline of many bodily and mental functions. Often the source of these problems—alcohol abuse—goes undiagnosed, while the symptoms are treated in regular medical settings. Untreated alcoholics are greater users of all health care services, and their problems contribute to overutilization by nonalcoholic family members as well. ²³

The often-cited 1985 Aetna study of families in the Federal Employees Health Benefit Program reported that the per capita health care expenditures of the alcoholics' families were more than 100 percent greater than the expenses of comparison families. The Aetna study found that the cost of a treatment program could be recouped in approximately two to three years because of reduced use of medical services by alcoholics and their families.

The pattern of use of other medical services is important. Studies have shown that there is a gradual increase in the use of medical services in the years prior to diagnosis, followed by a rapid increase at the peak of addiction, just before

appropriate treatment is begun. Thus, the sooner appropriate treatment begins, the greater the savings.

Although cost savings are likely, their extent is uncertain. Much will depend on the design of the benefit package. For example, one review of studies on the use of alcohol treatment found that the more choices available in benefits, the lower the total benefits paid. ²⁵

One source estimated that at least 70 percent of mental health and substance abuse services are incurred in the more expensive inpatient hospital settings. 26 While inpatient services are crucial in the initial rehabilitative phase of treatment, subsequent treatment can be provided more cheaply and effectively in outpatient settings by trained substance abuse providers. The House version of the bill (H.B. No. 885, H.D. 2, 1987 Regular Session), in providing coverage for some outpatient services and placing a maximum limit on inpatient care, may achieve this effect.

The extent to which the insurance coverage will increase or decrease the insurance premiums and administration expenses of policy holders. Insurers and HMO groups claim that mandating benefits will increase premium costs. Providers concede that increased use may result in some cost increases but that these will be offset by decreased use of general medical and hospital care. The analyses in the previous sections suggest that new benefits will likely result in increases in costs but that these should be offset over time. Although increases are likely, most research suggests they will not be significantly high.

The new coverage proposed in the bills will require insurers to amend most group and individual policies and familiarize their claims personnel with the changes. The new benefit levels, the expansion in eligible programs, the institution of peer review, quality assurance, and utilization review will require expanded

resources. Claims volume and related administrative work will increase. The costs associated with all of these will be passed on to policyholders.

HMSA estimates their administrative costs will increase 10 percent in the first year and 8 percent per year thereafter. In addition, they predict that utilization review activities will increase with more intensive prepayment and postpayment reviews being required to ensure appropriate utilization.

These costs may be offset to some degree by decreases in claims for other medical services. However, we were unable to estimate what the offset would be among Hawaii's insured population.

In its testimony before the Senate Committee on Consumer Protection and Commerce, HMSA projected premium increases as follows:

"This means that the health plan rate for each employee will go up more than \$5.00 per month, every month throughout the year, and will increase every year thereafter. If the employee has a family, the increase will be \$15 per month. This is a 10 percent increase in health plan rates NOT counting inflation—with inflation the increase will probably exceed 20 percent. This is the additional burden being placed on Hawaii's individuals and employers, the very people this bill is supposed to assist." ²⁷

The DOH reviewed HMSA's projections and concluded: "Their cost factor of \$5/person/month far exceeds the average cost expenditure of any of the other 35 states that have laws relating to this coverage." ²⁸

The experience of other states which have mandated insurance for substance abuse provides mixed answers. For example, the Browne Company surveyed states with mandated coverage to determine whether any cost reductions followed the introduction of coverage for mental health and alcohol-related services. Although no states reported dramatic premium increases, the rates of increase differed among insurers in different states. ²⁹ In Connecticut, 75 percent of the insurers reported no associated increases, while in Wisconson the opposite was true with

75 percent reporting noticeable increases. Overall, about 35 percent of the insurers reported no increases while the remainder reported increases ranging between 1 and 15 percent, with the majority in the 5 to 10 percent range.

The National Institute for Alcohol Abuse and Alcoholism developed a computer simulation model in 1983 which projected premium increases to be between \$.38 and \$1.15 per member per month. Coverage included up to 60 days of inpatient care and up to 45 visits of outpatient care per year for fee-for-service and prepaid programs. Furthermore, when the cost offset was included the net decrease in premiums was seen to be between 4 and 52 cents per month. 30

Studies by insurance groups have indicated that the impact upon premiums will be slight. For example, based on the experience of several Maryland insurance carriers, the group plan premiums for substance abuse treatment in 1985 was \$2.35 per member per month for alcoholism coverage consisting of 7 days of detoxification, 30 days of residential care, and 30 outpatient visits per year, and for drug treatment of 21 inpatient days and a \$1000 benefit for outpatient care. ³¹

Impact on the total cost of health care. Because of limitations in the data, we estimated the impact of coverage on the total cost of health care under three scenarios: (1) conservative use of services based on current utilization rates; (2) medium use of services based on moderate increases in length of stay; (3) high use of services based on increases in the incidence rate and length of stay. The three scenarios provide a range of estimated additional costs that would result from a mandate.

The total cost of substance abuse treatment in each scenario is based on the numbers affected by the mandate, their estimated utilization of treatment services, and the cost of the service. It should be noted that no additional costs are projected

for detoxification since these services are already covered. The projections cover only costs for *inpatient rehabilitation* treatment; they do not include costs for outpatient rehabilitation treatments. These will be included in the next chapter since it was not possible to separate data on outpatient treatment for substance abuse from data on outpatient treatment for mental illness. A second limitation in the projection is that they do not include the offset savings that are likely to occur under a mandate.

Numbers affected. The people who would be affected by the mandate include all individuals currently enrolled in group and individual plans who lack the coverage proposed in the bills. Our estimates are based on data supplied by HMSA, Kaiser and Island Care. We also estimated the numbers who are insured by the commercial carriers since they do not maintain membership information by state. Those insured under Medicaid, Medicare, CHAMPUS, and self-insured plans were excluded as they would not be affected by the bills. The numbers affected are summarized in Table 4.5.

Table 4.5
Estimated Numbers Affected by the Mandate

Health Insurance Plans	Covered	Not Covered	Total Affected
HMSA	456,000	82,000	538,000*
Island Care		17,000	17,000
Other Commercial	40,000		40,000
Kaiser		119,000	119,000*
Total	<u>496,000</u>	218,000	<u>714,000</u>

Sources: HMSA, Kaiser, Island Care, Hawaii State Data Book, 1986.

*Does not include members of senior plans and Medicaid.

Utilization. The utilization rates of inpatient substance abuse services are based on (1) incidence, or, the number of individuals using the service; and (2) the average length of stay. The utilization rates used in the scenarios are based on experience in the CAAP program and in other programs in the State.

Cost of services. The rate of \$228 per inpatient day was chosen, based on CHAMPUS' average charge in 1986. We recognize the rate is higher than the rates of nonhospital facilities and the allowable rates negotiated between insurers and providers. However, CHAMPUS reimburses several private facilities in the State covering both inpatient rehabilitation and detoxification. The charge includes ancillary services but not visits by medical professionals.

Scenario I. This scenario assumes that the incidence and the average length of stay rates of HMSA would remain the same after the mandate. Island Care and the commercial insurance carriers were assumed to have rates similar to HMSA members. Although Kaiser has not covered its members for inpatient rehabilitation, they paid some benefits in 1987 for this care. Therefore, Kaiser's incidence and average length of stay rates were assumed to increase from current levels to that of HMSA. There would be no increase in utilization among those members who already have coverage. Additional costs would be incurred by those without coverage, and HMSA's incidence rate of 0.37 per 1000 members and the CAAP average length of stay rate of 19.2 were used. The average length of stay was based on the CAAP average for rehabilitation treatment and was felt to be a reasonable estimate since 65 percent of CAAP patients are HMSA enrollees.

Scenario II. This scenario assumes that the utilization rates would remain the same for all covered members as in Scenario I but that the average length of stay would increase to 21.7 days because of the longer length of stay allowed under the

bills and based on some research which shows that mandated coverage increases the length of stay. This new rate was based on experience in Aetna's Federal Employee Benefits Program.

Scenario III. This scenario assumes that both incidence and average length of stay would increase in all plans from their current levels. The incidence rate was increased to 0.9 based on the experience in New Jersey which mandates coverage similar to the proposed bills. The average length of stay was again increased to 21.7 days. The third scenario also assumes an increase in treatment facilities because existing facilities could not handle the projections of Scenario III.

Total estimated costs. Table 4.6 presents the three scenarios and the projected additional costs of substance abuse services under the bills. The number of members who would be affected was multiplied by the incidence rate to derive the number of new admissions. This figure was then multiplied by the average length of stay to obtain the additional number of days that would result. The cost of the additional days was calculated to obtain the total cost. (See Appendix A for calculations.) The total estimated cost ranged from \$284,088 in the conservative scenario to \$2,305,308 for inpatient residential care.

Table 4.6
A Summary of Estimated Cost Increases

	Admissions	Length of Stay	Cost Increase
Scenario I	.37	19.2	\$ 284,088
Scenario II	.37	21.7	\$ 414,048
Scenario III	. 9 0	21.7	\$2,305,308

Assessment of Senate Bill 986 and House Bill 885

We believe that the measures, in their present form, fall short of carrying out the Legislature's intent to create an "effective, responsible, and humane" social policy to provide for the public health. They expand current coverage by creating new benefits for substance abuse but do not provide adequate incentives to control the costs of treatment or the costs of insurance. Provisions relating to quality control are unrealistic and inappropriate and some of the language is unclear, particularly with respect to what constitutes "additional treatment."

The legislation was evaluated from two perspectives. First, does it have the potential to achieve effective, responsible, and humane social ends, such as protecting against financial catastrophe and promoting the use of substance abuse services by those who are truly ill? Second, does it achieve its goal in an effective and responsible manner so as to avoid unnecessarily increasing the cost of care and insurance while maintaining the quality of care?

Promote use. Both measures require new benefits to be included in all health insurance plans and should make treatment more accessible to those who seek care, particularly in the expansion of benefits for additional treatment services or rehabilitation. The Senate version provides for a minimum of 1000 hours per year of additional treatment. The House version provides for a minimum of 1500 hours of additional treatment per year, and of this total, not more than 1080 hours or 45 days for adults and 1400 hours or 60 days for children are for inpatient treatment. The House version provides for outpatient care by stipulating that it be included under additional treatment.

Hold down costs. Although the proposed measures should achieve legislative intent to increase the use services to treat substance abuse, they do not provide

adequate incentives to hold down costs. While there are provisions for peer review and for insurers to limit the number of treatment episodes to no less than two per lifetime, no dollar limits are placed on benefits paid per year.

The measures do not encourage the choice of less expensive care, e.g., nonhospital over hospital, partial hospital or nonhospital over residential. The House version specifies less expensive alternatives to residential care, but it does not contain incentives to encourage the use of these approaches. The Senate version does not specify any alternatives to inpatient care. Although it contains lower minimum benefit levels, costs are not likely to be reduced if services are provided solely in expensive settings.

Oregon's law is an example of a more cost conscious approach. The Oregon mandate states that unless otherwise warranted by the person's condition, the least costly settings for treatment should be made available and used. 33

Oregon's intent was to have more people receiving care while containing costs to insurers. The law decreased the benefits for inpatient care, increased the outpatient benefits for mental and nervous conditions, added outpatient benefits for chemical dependency, and added benefits for intensive "part-day" treatment and non-medical residential care for both conditions. It did not specify treatment lengths for these conditions but, instead, specified dollar limits per calendar year. For example, for chemical dependency, policies must include at least \$1500 in outpatient coverage and \$3000 in residential coverage and partial hospitalization coverage over a 24-month period with the same copayment as for any medical treatment.

The Oregon measure also contained a sunset provision for outpatient mental health benefits. In addition, the legislation allowed insurance companies to

implement two "cost containment methods." One option allowed insurers to provide lower copayments for residential and outpatient services than for inpatient care. The other allowed insurers to review claims for the appropriateness of both level of care and length of treatment. If the insurer found that treatment could have been provided in a less expensive setting (e.g., residential facility rather than hospital), it could reimburse at the rate of the lower cost setting.

Quality control and monitoring. Both of the proposed measures attempt to assure quality control; however, they do not clearly set forth the mechanisms to accomplish this end. Instead, the provisions may prevent timely treatment, result in unnecessary bureaucratic interference, and create more inequities in the treatment of these conditions.

The bills limit coverage for substance abuse to treatment "certified as medically or psychologically necessary" by "the insurance carrier's licensed physician or psychologist" who also shall be certified as a substance abuse counselor. The bills also provide for peer review procedures as a condition for reimbursemement. Another review requirement is that before a patient qualifies for benefits for additional treatment, a licensed physician or psychologist must "certify" that the patient suffers from alcohol and drug dependence, and the physician and psychologist making the certification must in turn be certified as a substance abuse counselor.

Thus, the proposed measures appear to contain at least three review procedures, but it is not clear how these tasks are to be carried out in a timely fashion by each insurer and facility. The measures require that the physicians and psychologists conducting the peer and utilization review for substance abuse

treatment be certified as substance abuse counselors, but only seven physicians and psychologists have been so certified in the State.

The bills require treatment facilities to be JCAH or CARF accredited. Currently, only three facilities have met the accreditation standards of a national accrediting organization. Hawaii already has a shortage of treatment facilities. If the bills were passed with the existing accreditation provisions, there would be an even more serious shortage of facilities that would be eligible for reimbursement. Moreover, as noted earlier, the JCAH accreditation process is expensive, and the costs of this process would undoubtedly be passed on to users.

Finally, while the proposed measures provide for monitoring the effects of expanded coverage, it is not clear how the necessary research will be done, what information insurers should be required to record and maintain, how the information would be collected from them.

Problems of language. The proposed measures do not clarify the nature of "additional treatment." The terms are not defined nor are the covered benefits clearly delineated. In our analysis, we interpreted them generally to mean inpatient and outpatient rehabilitation treatment. The benefits for different treatment options should be clearly set forth to conform with existing modes of treatment: inpatient services provided in a hospital, inpatient services provided in a nonhospital facility, partial hospital services, and outpatient services.

Conclusion

While many questions remain unanswered with respect to the social and financial impact of mandated insurance for substance abuse, certain conclusions can be drawn. Current coverage for substance abuse is not adequate, reflecting perhaps

prejudices that these conditions are somehow not worthy of the same care assured other illnesses. Should the Legislature decide to mandate expanded coverage, it should assure that the measure it enacts is adequately designed to provide coverage for the appropriate range of treatment for those who seek care and includes provisions to prevent unnecessary escalation in the costs of treatment and insurance.

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Chapter 5

SOCIAL AND FINANCIAL IMPACT OF INSURANCE COVERAGE FOR MENTAL ILLNESS

This chapter assesses the impact of mandating coverage for mental illness according to the social and financial criteria set forth in Act 331, SLH 1987. We also assess whether the proposed legislation, Senate Bill No. 986, S.D. 2, H.D. 1 and House Bill No. 885, H.D. 2 (1987 Regular Session), will accomplish the ends sought by the Legislature.

Summary of Findings

We find the following:

- 1. The use of mental health treatment is generally low.
- 2. Current insurance coverage for mental health treatment varies among plans. The proposed coverage exceeds that which is currently available from insurers. However, the coverage of most existing standard group plans is comparable to that provided under mandated insurance statutes in other states.
- 3. There is no evidence that inadequate coverage has resulted in lack of treatment or in financial hardship. However, inadequate treatment could be a barrier to those who wish to obtain treatment of choice in private settings, and it is clear that coverage for mental illness is poorer than coverage for physical ailments.
- 4. For a variety of reasons, demand for mental health treatment and coverage is low.
- 5. It is probable that use, premium costs, and overall costs of treatment will increase with mandated coverage. However, the extent of the increase cannot be determined.

The Social Impact

The extent to which treatment is utilized by a significant portion of the population. Nationally, use of treatment services is much lower than might be warranted by the prevalence of mental illness. In Hawaii, use of treatment is even lower than that of mainland groups.

National statistics estimate that 19 percent of the population have a mental disorder, but only about 3 percent receive treatment in any given year. The Mental Health Services Division of the Department of Health (DOH) reports that in 1985, Hawaii had fewer inpatient days per 100,000 population (9th lowest rank) and fewer inpatients per 100,000 (7th lowest rank) than the average mainland state. In addition, Hawaii was ranked 49th in the number of outpatient visits per 100,000 population.

The use of mental health treatment services was examined in the settings for which coverage is proposed in the bills: *inpatient settings* which include general hospitals and hospitals specializing in psychiatric care and *outpatient settings* which include partial hospitalization (day treatment) in general and psychiatric hospitals, community mental health centers, clinics and other free-standing facilities, and the private offices of physicians and psychologists. The use of treatment services provided by the State, the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS), and Medicaid plans were also reviewed although they will not be affected by the proposed legislation.

Inpatient treatment. According to the State Health Planning and Development Agency (SHPDA), inpatient psychiatric care is provided at two private and four county/state acute care hospitals. In addition, care is provided at Kahi Mohala, a private psychiatric care facility, the Hawaii State Hospital, a psychiatric

inpatient program for children at Leahi Hospital, and at Tripler Hospital. Kaiser Medical Center has 20 beds slotted for acute psychiatric care but has had no admissions as of September 1987.

The SHPDA reports that there was a total of 3697 psychiatric admissions statewide to acute care facilities in 1986. Hawaii State Hospital had 765 long-term admissions and Kahi Mohala had 967 admissions. Based on a population base of 1,053,900, psychiatric admissions to acute care hospitals are roughly 3.5 per 1000 population. Admissions for long-term and specialty hospital care are less than one person per 1000. Data relating to the utilization of inpatient treatment facilities are summarized in Table 5.1.

Table 5.1

Utilization of
Inpatient Treatment Facilities, 1986

	Capacity	Number of	Days	Percent
	(beds)	Admissions	of stay	Occupancy
Acute Care Hospitals				
Queens	50	1530	10.8	90.8
Castle	55	1280	11.4	72.6
Hilo	21	455	7.2	42.1
Kona	8	0	0	0
Maui Memorial	10	247	7.4	45.7
Samuel Mahelona	9	185	7.9	39.2
Long Term Care and Spe	ecialty Hos	<u>pitals</u>		
Hawaii State Hosp.	239	765	109	95.3
Kahi Mohala	88	967	22	66.5

Source: State Health Planning and Development Agency.

Utilization of inpatient services is low among the privately insured. The utilization rates and the average length of stay among the public and privately insured are shown in Table 5.2.

Table 5.2

Utilization Rates

Among Private and Publically Insured Groups
1986

	Inpati	Inpatient		<u>Outpatient</u>		
		·		Visits Per		
	Use/1000	ALOS*	Use/1000	User Per Year		
HMSA	1.3	12.2	19	7.0		
Kaiser	1.7	11.2	**	**		
CHAMPUS	3.2	15.0	23	8.4		
Medicaid	18.0	10.0	**	**		

Sources: Hawaii Medical Service Association; Kaiser Permanente; CHAMPUS reports URJ126, URJ093 and URQ093; Richard Hakkarinen, CHAMPUS Chief of Information Systems; CHAMPUS Handbook, January 1986.

Kaiser and Hawaii Medical Service Association (HMSA) enrollees used inpatient psychiatric services at a rate of 1.7 and 1.3 persons for every 1000 insured. The average number of inpatient days per user of these services was 11 for Kaiser members and 12 for HMSA. In comparison, mainland groups averaged between 2-4 individuals for every 1000 insured, with average lengths of stay of 12-37 days. The differences may be due to the degree and type of coverage,

^{*}Average length of stay in days.

^{**}Not available.

geographical location, socioeconomic and cultural factors, existence of treatment resources, and other factors.

The CHAMPUS, which covers military dependents, has more generous coverage and rates closer to those on the mainland. Inpatient services were used by 3.2 members per 1000 covered enrollees. Average length of stay per user was 15 days.

Highest rates were shown in the Hawaii Medicaid population. Typically, the Medicaid population uses mental health services more than the general population and more than the privately-insured groups. In 1986, the number of users per 1000 was more than ten times that of HMSA and Kaiser.

Outpatient treatment. Outpatient care is provided by a variety of professionals in many different treatment settings, including hospitals, medical clinics, specialty clinics, and free-standing counseling facilities.

The use of outpatient care by Hawaii's privately-insured population is also lower than the rates for insured mainland populations. According to a review of several mainland states, the average range is about 46 people for every 1000 subscribers and 7 visits per user per year. The HMSA reports that in 1986 approximately 19 members per 1000 used outpatient services at a rate of roughly 7 visits per user per year.

Kaiser was unable to provide 1986 data on the number of members treated, but the rate of use is lower than that of HMSA members.

Usage by individuals insured by CHAMPUS and Medicaid is again higher than the privately insured. For every 1000 members enrolled in CHAMPUS, 23 used the services at an average of 8 visits per user.

Medicaid data were unavailable for 1986. However, 1985 data show the number of Medicaid outpatient visits per 1000 enrollees to be approximately 6 times

the number reported by HMSA and about 15 times that reported by Kaiser for 1986. Again, it is important to recognize that this population is different from the general population in that it includes many who are chronically and acutely ill.

State services. The DOH Mental Health Division provides outpatient care in nine community mental health centers located throughout the State. In addition, the State contracts with a number of private agencies and individuals to provide outpatient, day treatment, and residential treatment services.

The community mental health centers served approximately 8300 clients in 1986. The community mental health centers served approximately 8300 clients in 1986. The community of these, approximately 20 percent were aged 17 and under. Most clients, 62 percent, had no source of income. About 12 percent made less than \$5000 per year. Roughly 17 percent worked full time and may be presumed to have some insurance coverage. Close to 8 percent had annual incomes of \$15,000 or more.

The DOH had no data on the total clients served through private agencies under contract with the State or the numbers who might be insured. Information provided by the Central Oahu Community Mental Health Center indicates that the numbers served through purchase of service contracts with private agencies is growing. Between FY 1982-83 and FY 1986-87, the number of clients more than tripled from 250 to 823. In addition, the center referred roughly 1800 people to private mental health providers after initial screening.

The extent to which the proposed coverage is already generally available. We found that coverage varies among plans. The benefits proposed in the bills expand the coverage currently provided by the major insurers in most of their plans. However, we also found that existing mental health coverage is comparable to that provided by most states that have mandated mental health insurance except for the

lack of inpatient coverage for a significant number of enrollees of certain Health Maintenance Organization (HMO) plans.

Our analysis of current coverage is based on the descriptions of various plans, not on the benefits which may be paid after claims are made. This is an important distinction because claims may be paid on benefits not stipulated in a plan. For example, partial hospitalization, while not a specified benefit, may be paid under coverage for outpatient services. Because of the number and variety of plans marketed and sold, our review focused on coverage currently offered in standard plans and did not explore variations in the specific plans selected or negotiated by employers, unions, and individuals.

Table 5.3 summarizes the coverage of the prototypical plans we selected for review and compares this coverage with that proposed by the two legislative measures. Plans have been divided into three categories: (1) group plans, (2) HMO plans, and (3) individual plans. For the sake of comparison, we also included descriptions of coverage provided by CHAMPUS and two plans offered to federal employees although these plans will not be affected by the proposed legislation.

Group plans. Group plans cover the majority of people who would be affected by mandated insurance. Most group plans provide 30 days of hospital coverage and 30 inhospital visits by a psychologist or psychiatrist compared with the 45 days proposed by the bills. They cover outpatient treatment subject to dollar limits ranging between \$500 to \$3000. According to HMSA, the majority of its members, about 389,000, have outpatient benefits of \$500 to \$750 per year. At current charges, this would mean about 7–10 hours compared with the 500–750 hours of partial hospitalization plus 25–50 outpatient hours proposed by the bills. The number of allowable visits vary widely among plans as do the deductibles and copayment arrangements.

TABLE 5.3

SUMMARY OF HEALTH INSURANCE COVERAGE FOR MENTAL ILLNESS AMONG PROTOTYPICAL GROUP, HMO, AND INDIVIDUAL PLANS, 1986-87

Plans	Inpatient	Outpatient
Group Plans		
. HMSA Basic Group Plans	30 days per calendar year; 30 in-hospital visits by psychiatrist or psychologist; 25% copayment.	Subject to dollar maximums per year of \$500, \$750, \$1000, etc. depending on plan; 25% copayment beginning with second session.
. HMSA Federal Plan	30 days per calendar year; 30 visits per calendar year; 20% copayment.	\$750 maximum per calendar year; 25% copayment beginning with second session.
Queen's Health Plan	30 days per calendar year; lifetime maximum of \$10,000; 30 visits per calendar year; \$5 to 20% copayment.	\$750 limit per calendar year; \$5 copayment beginning with second visit for preferred providers; 25% copayment for non-preferred providers.
. Partners Program, Plan A	30 days per calendar year; 30 visits per year; 10% copayment for partners.	\$1000 maximum per year; copayment of 20% for preferred or 50% for non-preferred.
. CHAMPUS	60 days per calendar year; covers residential treatment centers for children and adolescents needing long-term care for a serious mental disorder.	Two 2 sessions per week; \$50-\$100 deductible; 20%—25% copayment.
HMO Plans	•	
. Kaiser Group Plans	No coverage.	20 visits per calendar year for evaluation and crisis intervention; copayments of \$2-\$5; no copayments for Plan C.
. Kaiser Group Plan B with Rider	30 days per calendar year.	20 visits per calendar year.
. Kaiser Federal Plan	30 days per calendar year; 20%-25% copayment.	20 visits per calendar year; \$2-\$5 copayment.
. Health Plan Hawaii (HPH) Plans 5 and W	No coverage.	20 individual or group sessions per year; \$10 copayment.
. Plantation Contract HPH	No coverage,	Diagnosis only.
. HMSA Community Health Plan (CHP)	30 days per calendar year; visits by psychiatrist or psychologist; 25% copayment.	20 individual sessions per calendar year; \$10 copayment; 20 group therapy sessions; \$5 copayment.
. Island Care	30 days per calendar year; visits by physician for which member pays 25% copayment.	20 visits per calendar year; \$20 copayment.
ndividual Plans		
. HMSA, Plan 6 for self-employed individuals	30 days per calendar year; 30 in-hospital visits by psychiatrist or psychologist; 25%-30% copayment.	\$750 maximum per calendar year beginning with second session; 25%-30% copayment; one year waiting period for psychiatric benefits.
HMSA Plan 5, group members converting to individual coverage	30 days per calendar year; 30 sessions by psychiatrist or psychologist; 25% copayment.	No coverage.

Sources: HMSA, Kaiser Permanente, Island Care, Queens Health Plan, Aetna Partners Program, and CHAMPUS.

HMO plans. The majority of HMO plan members are with Kaiser which offers coverage to both groups and individuals. The HMSA also offers two basic HMO plans: Health Plan Hawaii and the Community Health Plan.

The major difference between HMO plans and group plans is in coverage for inpatient services. Over 111,500 members of Kaiser and HMSA, including members enrolled in Medicare and private plans administered by these groups, do not have this coverage. About 80,500 are members of Kaiser plans and the remaining 31,000 are enrolled in HMSA's HMO plans.

Kaiser offers 30 days of inpatient benefits to its group Plan B subscribers through a rider and also provides inpatient coverage to members of its federal and University of Hawaii student plans.

Those plans with inpatient coverage provide 30 days of hospital care with copayments ranging from 10 to 25 percent for physician visits.

The standard for outpatient benefits in HMO plans is 20 visits with varying copayments. However, the outpatient benefits for Kaiser plans are limited to evaluation and crisis intervention. In addition, Kaiser plans require utilization supervision by a primary care physician. Approximately 21,000 HMSA members of HMO plans do not have outpatient coverage.

Individual plans. Coverage is also limited in the individual plans. We reviewed two individual plans offered by HMSA, one for self-employed and individual members and the other for group members converting to individual coverage. Both plans cover 30 days of hospital care and 30 inhospital visits by a psychologist or psychiatrist. However, outpatient care in Plan 6 is capped at \$750 per year with one year's waiting period, and no coverage is provided in Plan 5 which covers about 3000 members.

None of the plans we examined specified partial hospitalization benefits, although these benefits are generally available under the outpatient category. Also, none of the plans we reviewed provided coverage for mental illness that is comparable to that for physical illnesses. For example, the plans have lifetime limits on benefits or on the number of reimbursable visits and have higher copayment rates and deductibles.

Comparison with mandated coverage in other states. The current coverage for inpatient care in most plans is similar to that required in 5 of the 14 states with mandated insurance laws. Six states mandate 45 or more days of coverage or provide benefits similar to other medical care. Three states do not specify benefits.

Current outpatient coverage is roughly comparable to that provided in most states with mandated insurance, although many plans have less coverage. Ten states provide coverage within an equivalent range. Of these, six provide minimum coverage of at least \$1000. In addition, six states with mandated benefits require coverage for partial hospitalization, with benefits usually applied against inpatient care.

The extent to which the lack of coverage results in persons being unable to receive treatment. We found little evidence linking lack of treatment to inadequate insurance coverage. The relatively low use of services in relation to the numbers estimated to be in need suggests that many who should receive treatment do not. Public programs may make certain medical services more accessible, but most people meet the cost of care either through direct payment or indirectly through some form of insurance. Providers and patient advocacy groups provided anecdotal accounts of patients with severe disorders whose limited coverage acted as a barrier

to treatment. However, we were unable to obtain quantitative data on the number of individuals who did not receive treatment because of inadequate coverage.

The lack of insurance may act as a barrier to obtaining an individual's treatment of choice in the private sector. However, it does not bar access to treatment in public programs. As noted earlier, the State operates nine community mental health centers and also contracts with private agencies for outpatient and residential mental health care.

In addition, patients without financial resources who have exhausted their benefits may apply for Medicaid assistance. For the chronically mentally ill without resources, treatment is available at the Hawaii State Hospital. However, the facility is not accredited and a recent evaluation of state programs (and Washington, D.C.) rated Hawaii 51st in the nation in treatment for the seriously mentally ill. 10

The extent to which the lack of coverage results in unreasonable financial hardship. We found that certain treatment programs could result in financial hardship. There is evidence that the mentally ill pay more of the cost of treatment than do the physically ill because there is less coverage and copayments and deductibles are higher. Table 5.4 compares the coverage for physical illness with the coverage for mental illness in a typical basic plan.

Table 5.4

A Comparison of Coverage for Psychiatric Care and Regular Medical Care

Regular Medical Care	Psychiatric Care
HOSPITAL CARE	HOSPITAL CARE
100% of eligible charges for room and board	75% of eligible charges for room and board
80% of eligible charges for medical services	75% of eligible charges for physician visits
OUTPATIENT CARE	OUTPATIENT CARE
80% of eligible charges for physician visit	75% of eligible charges for visit, beginning with the second visit.
No limit on number of visits per calendar year	Maximum of \$750 per calendar year

Source: HMSA

Inpatient care could present a financial burden. Current inpatient coverage of 30 days may be inadequate for patients with serious or chronic disorders requiring hospitalization. The average length of inpatient stay for acute conditions is roughly eight to nine days; however, patients who have multiple admissions may exhaust their benefits. Moreover, providers say that certain conditions, such as emotional disorders in children and adolescents, may require longer hospitalization than present benefits allow. According to HMSA, between April 1986 and March 1987, 62 members, or 9 percent of those receiving inpatient care, used up to or exceeded the 30-day cap on inpatient treatment.

Patients who use up their benefits would either have to pay high out-of-pocket costs or forego private care. Inpatient costs per patient day and per admission vary with the facility. According to data provided by Queen's acute care psychiatric unit, the average charge per patient per day was \$299.29 in FY 1986-87, including room, board, general nursing services, occupational therapy, and other ancillary charges (but not including physicians' visits). The average charge per admission for the same year was \$3,280.11.

The dollar caps on outpatient care may constrain some patients from seeking private care. The typical policy limits the number of visits to about ten per calendar year. No similar limits are placed on regular medical care. Copayment arrangements are higher for psychiatric care, 25 percent versus 20 percent. In addition, the mentally ill patient must pay for the first visit.

The level of public demand for the treatment. We could not determine the level of public demand given the limitations in available data. However, if the overall use of mental health services is compared with estimates of the prevalence of mental illness, then it appears that the demand for treatment is low.

There have been no studies that measure the degree to which people are interested, motivated, and able to seek treatment for mental illness in Hawaii. Proponents and opponents of mandated insurance perceive demand in opposite ways. Providers, patients, and advocate groups for the mentally ill believe demand to be high because they see a tremendous need in the community for care. At the same time, they maintain that use is low because of the stigma of the condition and lack of public awareness.

Insurers and employers, on the other hand, perceive demand and need to be low because use is low relative to other kinds of medical care. At the same time, they cite the spiraling costs of mental health care and the great potential for abuse.

These contradictions make the analysis of demand particularly difficult.

Prevalence rates for severe mental illness in Hawaii are estimated at 3 percent of the population, or 28 per every 1000 adults. An additional 12 percent or 126 per 1000 adults possibly need care. However, as we reported earlier, the utilization of services is far lower than the need. For example, less than 2 per 1000 HMSA or Kaiser enrollees receive inpatient care. Outpatient care is used by less than 2 percent of the membership or fewer than 20 people per 1000 members.

Insurance carriers reported only occasional inquiries about treatment services from their membership. In its testimony against the legislation, HMSA noted, "Our experience shows that only a small percentage of our membership use and exhaust maximum benefits. If there is a glaring need for a greatly expanded mental health coverage, our data does not show it." 12

However, researchers have found that the demand for treatment can increase when coverage is increased, when constraints on coverage are removed, when services are made more accessible, and when the public is made more aware of the value of care. Thus, while overt demand can be low, the potential for increase is present as long as the condition is prevalent.

Insurance alone does not explain why people who are genuinely ill do not seek care. One of the barriers to care is the stigma attached to the condition. Other factors include the racial, ethnic, and socioeconomic characteristics of the population, the level of mental health status among the population, the level of education, attitudes towards mental illness, and awareness of the efficacy of treatment.

The level of public demand for individual or group coverage of the treatment. We found little indication of demand for increased insurance coverage for mental illness. However, the level of consumer interest may not be a useful indicator. Most health insurance is sold to groups, with employers or unions acting on behalf of employees. Individual consumer choice is not involved.

The major insurers reported no demand for coverage of these services from either groups or individual members. The HMSA says it determines market demand from two sources, the contacts their field representatives make with employer groups and the inquiries made to their customer service department. They report no direct requests for increasing benefit levels for mental illness. According to HMSA, its customer service department receives an average of three calls per month relating to mental health benefits.

There is a general lack of information about what consumers want in the way of benefits. No formal surveys have been conducted in Hawaii on consumer preferences and insurers do not usually survey their membership about benefits. According to a study by the Center for Health Policy Studies, most health insurance in the United States is sold to groups, with the employer or union acting on behalf of employees. ¹³

Our interviews with insurers and employer groups tended to confirm that individual choice or preference plays a minor role in the purchase of benefits. Employers choose plans that comply with the State's Prepaid Health Care Act. Thereafter, employers look at the cost advantages of plan designs, such as deductibles, the cost of retention, interest paid on reserves, and administrative fees.

Individual plans are usually purchased as complete packages. Enrollees cannot as a rule select additional coverage available to groups through riders. For example,

Kaiser's rider for inhospital coverage for mental illness is only available to members enrolled in certain group plans.

The level of interest of collective bargaining organizations in negotiating for this coverage. We found no interest in increasing insurance coverage for mental illness among the collective bargaining organizations we interviewed. Unions, as well as employers, have become increasingly aware of the costs of coverage. Interviews with administrators of the Public Employees Health Fund and several bargaining agents for public and private employees indicated that there is little or no interest in negotiating for increased coverage of mental illness in group contracts. Coverage for mental illness is felt to be a low demand area, and existing coverage is seen as adequate. They tended to favor more popular coverage such as vision care, dental care, and prescription drugs.

The impact of indirect costs on the question of the costs and benefits of coverage. Opponents maintain that mandated insurance has produced tremendous increases in utilization, in costs, and in the number of providers. On the other hand, proponents maintain that better mental health care will have financial benefits for employers, individuals, and society and that mandated insurance shifts some of the cost burden from the government to the private sector. We found no evidence that increasing coverage would have an impact on the indirect costs of mental illness.

National estimates of the total costs of mental illness are around \$67.6 billion. Direct treatment accounts for 43 percent of total costs; indirect costs such as reduced productivity and lost employment and related costs such as crime comprise the larger share of 57 percent. Proponents argue that increased treatment should result in a proportionately larger reduction in the indirect costs of the illness.

The key question is the degree to which mandated insurance per se will reduce the indirect costs in Hawaii of this condition. Proponents generally assume that decreased costs will be the result, but the actual evidence is lacking. As for decreases in government outlays for other programs, a study for the National Institute of Mental Health reported that there was no data to examine the impact of mandates on public programs and their expenditures. This is because most states with mandates did not establish systems to monitor public expenditure changes resulting from mandates. ¹⁵

Financial Impact

In the following sections we discuss the financial impact that the proposed measures might have. The assessments required by Act 331, SLH 1987 include their impact on the cost of treatment, the cost of premiums, and on the total cost of health care.

The extent to which coverage would increase or decrease the cost of treatment. It has been suggested that mandated insurance might result in more cost effective care by encouraging the use of less expensive treatment, such as outpatient care. Results from research are mixed, and no clear answers are available.

Most clinical research has shown that inpatient care is not any more effective for most patients than less expensive and less restrictive settings. One review of 33 studies found that alternatives to traditional inpatient settings, such as partial hospitalization or combined partial and inpatient care, appear to be more effective for some patients. ¹⁶

However, another study concluded that while outpatient care can be more cost effective for some patients, traditional inpatient care is the only realistic option for many mentally ill patients. ¹⁷ Providers of mental health care generally agree that the necessary criteria for measuring the cost-effectiveness of care for all mental conditions are not available.

Most of the research supporting the cost effectiveness of outpatient and partial hospitalization has been done in prepaid settings such as HMOs. The reduction in the use of inpatient psychiatric services in these settings may have resulted from tighter controls on who uses the services and strict utilization review procedures. The findings in these cases are difficult to transfer to fee-for-service situations where treatment may be subject to less scrutiny.

The Oregon experience. In 1983, the Oregon legislature enacted mandated insurance coverage for mental illness and substance abuse to assure access to cost effective mental health and chemical dependency treatment. The statute was expected to result in more people receiving care at less cost to insurers.

The results of the mandate have been followed closely, and a series of reports have been issued on its effects. The reports have concluded that the mandate accomplished what it was expected to do. More people received treatment in a more cost-effective manner. More outpatient and residential services became available while the more expensive inpatient services declined. The provision of less expensive care seems to have had a beneficial effect on costs overall. ¹⁸

However, it is important to note that the Oregon mandate had two cost containment methods: (1) lower percentage copayments for residential and outpatient services than for inpatient services, and (2) utilization review of claims to determine whether level of care and length of treatment were appropriate. Much

of the savings appears to have resulted from the utilization review. In addition, the bill contained constraints on inpatient care that are not present in the proposed Hawaii measures.

The extent to which the proposed coverage will increase the use of the treatment. There is also no clear answer to the question of whether insurance coverage will encourage people to use the service. There is general agreement that, as with other medical treatment, the use of mental health services increases with insurance coverage. However, the pattern of this increase and the degree to which the terms of insurance affect use have yet to be determined.

It is not clear, for example, how utilization is influenced by variables such as constraints on the supply of services, knowledge about benefits, breakdown of stigma, patterns of treatment, and cost-sharing (deductibles, copayments, and dollar limits). Thus, policymakers have to proceed without clear guidance in this area.

It is reasonable to assume that there will be increases in use because first, those who currently use the services might increase the number of visits or days of service; second, those who have not sought treatment might be encouraged by the new or increased coverage to seek care.

At the same time, the Rand Health Insurance Experiment which examined the influence of a cost-sharing insurance system on health care utilization found no evidence of a surge in demand for outpatient mental health services or evidence of a "massive influx" of patients into the treatment system once health services were covered. They found that use was steady and that it changed to the same degree as the use of regular medical services. ¹⁹

The influence of price. The important role played by price is also underlined by the Rand Health Insurance Experiment. The project, which began in

1971, involved 7,770 people from six sites across the country over a period of three to five years. The subjects were enrolled in insurance programs with different patterns of deductibles and copayment arrangements. The results showed that the use of mental health services was highly responsive to cost-sharing. In other words, the less people paid for care, the more they used the service. ²⁰

The results confirmed earlier research that economic considerations play a large role in decisions to seek treatment. For example, the use of outpatient services increased from 46 per 1,000 with 50 percent copayments to 60 per 1,000 when copayments were reduced to 25 percent. However, the researchers also found that the amount of copayments had little effect on the duration of care. In other words, once treatment begins, the terms of insurance have less effect.

This research has important implications for the design of benefit packages. If the objective is to increase access to treatment, then broader coverage may encourage the mentally ill to seek care, but there must also be controls to prevent the abuse of the system.

The extent to which the coverage might serve as an alternative to more expensive treatment. We were unable to determine the degree to which expanding benefits for mental health will result in less expensive alternative treatment.

The mentally ill are known to be high users of regular medical services, and a large proportion of mental health treatment is delivered under the guise of regular medical care. According to one study, nearly 50 percent of outpatient visits by patients with a diagnosed mental disorder were made to primary care physicans. Studies in the United States and Great Britain have estimated that perhaps as many as 27 percent of all patients in primary health care settings have a current,

diagnosable mental disorder. ²² These patients average twice as many vists as those without a mental disorder, thereby consuming a disproportionate amount of time and resources.

Cost offset studies that have attempted to ascertain the degree to which mental health treatment "offsets" the use of other medical services have had limited success. The best evidence in this area has been from studies that focus on specific classes of patients in specific settings.

One group of studies focusing on patients with chronic conditions found that mental health treatment reduced the use of other medical care. However, the research was limited to specific conditions, and it provided no evidence that treating all mental conditions would lead to offset savings.

Another group of studies focused on the effects of mental health services in general. The studies found some reduction in the use of medical services and inpatient medical care with significantly larger reductions in inpatient services for those over 65.²⁴ A recent study confirmed previous findings that overall health care costs which rise prior to mental health treatment can be expected to decline after treatment is begun.²⁵ While the results of these studies are encouraging and work continues in this area, there remain questions as to whether an argument can be made about aggregate cost savings.

Studies conducted by Kaiser found significant reductions in medical care following the advent of mental health treatment. However, most of these were conducted in prepaid health care settings where patient care is more carefully managed than fee-for-service settings. Thus, generalizations to other settings have to be made cautiously. Finally, as a recent review observed, these approaches have

not yet been able to establish a direct, causal link between mental health treatment and observed reductions in health care spending or use.²⁷

The extent to which coverage can be expected to increase or decrease insurance premiums or administrative expenses. The analyses in the previous sections suggest that expanding benefits for mental health services will likely result in increases in costs but that these may be offset in the long run because of some cost benefit of providing mental health care. However, it is not possible to establish the extent to which the insurance premium or the administrative expenses will be increased or decreased.

Premium increases. There is little published information on the effect of mandated insurance on insurance premiums. Studies have shown mixed results. Comparisons are difficult because the coverage in mandates differ. In Arkansas, where a mandate required a minimum coverage of \$4,000 for inpatient and outpatient care, premiums increased by 5 to 10 percent. Replaying Maryland's mandate, the cost of Blue Cross and Blue Shield group contracts for the mental health benefit was \$3.15 per member in 1984 of which \$2.05 was for outpatient care.

The Browne Company study cited in the previous chapter found mixed results. In Connecticut, for example, premiums increased between 0 and 5 percent. On the other hand, Wisconsin premiums increased between 25 and 75 percent. 30

The impact of the proposed measures on premiums is difficult to project because they are complex and more generous than most states in many respects. They cover both inpatient, partial hospitalization and outpatient services. They contain no dollar limits. They require a minimum series of mental health benefits to

be part of every health insurance policy—group and individual—each of which can be expected to have very different effects on use and costs.

Because the two measures greatly expand existing coverage of most insurers, they will very likely result in premium increases. However, there may be some offset effects from treating mental illness. For example, claims volume may be reduced in subsequent years if total medical care utilization is reduced.

Administrative expenses. The proposed measures may increase administrative expenses. Group and individual policies will need to be amended, and insurance company personnel will need to learn the new benefit levels. The measures also create new levels of treatment for children and adolescents, raising technical and administrative questions that will have to be addressed. Costs associated with the revisions will probably be passed on to policyholders; however, we have no way of estimating what these costs will be.

A number of studies analyzing the costs resulting from mandated coverage found that costs to insurers rise after benefits are introduced. One analysis of these studies noted that it is misleading to focus on the cost to insurers when evaluating the cost of a mandate since it is difficult to separate out inflation. The cost of outpatient care, for example, has risen with or without a mandate. Mandates also shift some out-of-pocket and state costs to insurers. Moreover, increases reported by individual insurers may not account for the possibility that contracts may have been shifted from one insurer to another.

Impact on the total cost of health care. There is virtually no data on the impact of mandates on the total cost of health care. There will probably be some cost shifting from the public sector to the private sector and from individuals to insurers. However, whether this will result in any increase in cost is unknown. It is

probable that there will be some increase in the total cost of health care since there is consistent evidence that use increases with the expansion in coverage. The increased use will, in turn, probably result in some increase in the total cost of health care. However, the extent of any overall increase or decrease in total costs remains unknown.

In view of these limitations, we developed projected increases in costs under different scenarios. Separate projections were developed for inpatient mental health treatment and for outpatient treatment since the coverage, utilization rates, and costs differ for the two settings. The outpatient scenarios include costs of treatment for both substance abuse and mental illness. As we noted in the previous chapter, we could not obtain separate data for substance abuse and mental illness in outpatient settings. In both the inpatient and outpatient projections, we estimated the impact of the measures under three scenarios: (1) conservative use of the services, (2) moderate increases in use, and (3) high use of services.

The projections are qualified in the following ways: first, they do not include potential offset savings since these could not be determined; second, they do not take into consideration inflation or unpredictable changes that might occur over the long term; third, they do not consider procedures used by HMOs to control the use of services; and fourth, they do not consider other factors which would hold down utilization such as available providers, capacity rates of existing facilities, etc.

Inpatient scenarios. The projected total cost of inpatient mental health services is based on estimates of the number of people affected by the mandate, utilization of mandated services, and charges for mandated services.

Numbers affected. The mandate was assumed to affect people with insurance coverage excluding those insured under Medicaid, Medicare, CHAMPUS,

and self-insured plans. The numbers affected were divided into two groups: those with no coverage for inpatient care and those with coverage at levels assumed to be less than that proposed by the two measures. The numbers estimated to be affected are shown in Table 5.5.

Table 5.5
Estimated Numbers Affected by the Mandate
For Inpatient Mental Health Services

Health Plans	Covered	Not Covered	Total Affected
HMSA	507,000	31,000	538,000
Kaiser	50,000	69,000	119,000
Commercial carriers	40,000	•	40,000
Island Care	17,000		17,000
Total	614,000	100,000	714,000

Source: HMSA, Kaiser, Island Care, and Hawaii Data Book, 1986.

Utilization. Utilization is derived from (1) incidence, or the number of people using the service; and (2) the average length of stay for inpatient care. Inpatient utilization was measured in terms of the number of admissions per 1000 and the average length of stay.

Estimated charges. The charge of \$485 per inpatient day, including professional services, room and board, and ancillary services was based on the HMSA average facility charge and the CHAMPUS average 1986 charge for professional visits.

Scenario I for inpatient care. This scenario assumes that additional costs will result only from new utilization by those who are not currently covered for

inpatient care. They are assumed to experience the same utilization rates as those who are currently insured: a rate of 1.3 for HMSA for 1986 and a rate of 1.9 for Kaiser, based on an average of the last three years. The average lengths of stay for 1986 of 12.2 for HMSA and 11.2 for Kaiser were used.

Scenario II. This scenario assumes an increase in the average length of stay. It assumes that incidence rates will remain at current levels as in the first scenario. The average length of stay of 15.5 days was chosen based on the CHAMPUS rate averaged over 1985 and 1986. Thus, those with coverage were assumed to experience an increase of 3.3 days for HMSA members and 4.3 days for Kaiser members. Those without coverage were assumed to experience an incidence rate comparable to current levels and an average length of stay of 15.5 days. The CHAMPUS rate was selected because it represents inpatient treatment experience in Hawaii under more generous coverage and is similar to the rate in the Length of Stay by Diagnosis, a publication of the Commission on Professional and Hospital Activities (CPHA).

Scenario III. This scenario assumes that both incidence and average length of stay will increase. The average length of stay was projected to increase to 15.5 days as in the second scenario and the incidence rate to 3.2 per 1000 enrollees based on CHAMPUS utilization rates. Those without coverage would experience utilization based on these projections. Those with coverage would experience increases in current levels of incidence and average length of stay to the projected levels.

Total estimated costs for inpatient care. Table 5.6 contains our projection on the cost of inpatient services under three scenarios.

Table 5.6

A Summary of Estimated Cost Increases for Inpatient Mental Health Care

Cost Increase	Incidence	Admissions	Length of Stay
Scenario I	current rate	current rate	\$ 948,175
Scenario II	current rate	15.5	2,657,615
Scenario III	3.2	15.5	12,325,305

In calculating the additional costs for inpatient care, we multiplied the estimated number of affected members by the incidence rate to obtain the number of additional admissions. This figure was then multiplied by the average length of stay to obtain the additional number of days, and the number of additional days was multiplied by the average charge per day to obtain the total cost (see Appendix B for calculations).

The additional cost for mandating insurance coverage for inpatient mental health is estimated to be \$948,175 if current utilization remains the same and newly covered members have the same utilization rate. If the average length of stay increases then the additional costs would be \$2,657,315. Finally, if both the incidence and the average length of stay increases, then the additional cost would be \$12,325,305.

Outpatient scenarios. There was no data that could be used as reasonable assumptions for projecting costs for outpatient treatment. There will be an increase in the number of visits, but the extent of this increase under different insurance plans is unknown. It did not seem reasonable to use CHAMPUS data on the number of visits since it is almost four times that of Kaiser members. Consequently, we projected three scenarios, simply positing a 10 percent increase in use in the first

scenario, a 50 percent increase in use in the second scenario, and a 100 percent increase in use in the third. Table 5-7 shows the increases in number of visits per 1000 members in the three scenarios.

Table 5.7
Estimated Increases in Outpatient
Utilization in Three Scenarios

	Current	Scenario I	Scenario II	Scenario III
	Visits/1000	+10 Percent	+50 Percent	+100 Percent
HMSA & Other	111 / 1000+	100 /1000	367 (1000	222 /1000
Carriers	111/1000*	122/1000	167/1000	222/1000
Kaiser	52/1000	57/1000	78/1000	104/1000

^{*}Adjustment of HMSA's current rate of 134/1000 to eliminate professional inpatient visits.

The numbers affected were 24,000 members with no coverage for outpatient care and 690,000 with coverage which would be extended by the proposed measures.

The average charge per visit was estimated at \$91 based on 1987 data provided by CHAMPUS.

With a 10 percent increase in use, the additional cost would be \$892,164, with 50 percent increase, it would be \$3,556,098, and with 100 percent increase, the cost would be \$6,815,627. This increase in cost would include both outpatient treatment for substance abuse and for mental illness (see Appendix C for calculations).

Analysis of the Proposed Measures

We believe that the measures, as currently drafted, do not carry out the intent for which they were created, i.e., to implement an "effective, responsible, and humane" social policy to provide for the public health. They simply broaden coverage in all categories, without controlling unit costs of treatment or the costs of insurance.

Problems of purpose. One of the purposes of mandating coverage for mental illness is to achieve a social goal: to create a humane—but also effective and responsible—social policy consistent with legislative efforts to provide for the public health.

As with proposed coverage for substance abuse, the coverage for mental illness was evaluated with the following in mind: *First*, does it have the potential to achieve effective, responsible, and humane social ends, such as protecting against financial catastrophe and promoting the use of mental health services by those who are truly ill? *Second*, does it achieve its goal in an effective and responsible manner that avoids unnecessary increases in the cost of care and insurance?

Both measures vastly increase the amount of coverage to be required of all health insurance plans for both inpatient and outpatient treatment. The expanded benefits will protect most enrollees against financial hardship and may encourage those needing care to seek it, particularly those for whom existing coverage has proven to be inadequate. However, the measures do not contain the means to hold down costs. No dollar limits are placed on benefits paid per year, and consequently there are no incentives for providers to hold down the costs for each unit of treatment. In addition, there are no provisions to encourage the use of less expensive care (e.g., residential over hospital, or partial hospitalization over hospitalization), nor are insurers allowed adequate means to improve upon plans in the event of waste and abuse.

As we pointed out in the previous chapter, the peer and utilization reviews outlined in the bills are unclear as to who will carry out the procedures and how they will be accomplished in a timely fashion. The bills place limits on use such as copayments and deductibles and stipulate that these must be coequal to other medical care. While this may address the discriminatory nature of much existing coverage, it may also prevent insurers from improving on their plans and controlling use and abuse.

The Oregon mandate which has been found to be cost effective serves again as a useful comparison. It decreased the benefits for inpatient care, increased the outpatient benefits, and added benefits for intensive "part-day" treatment and non-medical residential care. The Oregon legislation had several cost related provisions. It set maximum dollar limits over a 24-month period. In addition, the legislation provided insurance companies with two methods to contain costs. One option allowed insurers to provide lower copayments for residential and outpatient services than for inpatient care. The other allowed insurers to review claims for the appropriateness of both level of care and length of treatment. If the insurer found that treatment could have been provided in a less expensive setting (e.g., residential facility rather than hospital), it could reimburse at the rate of the lower cost setting. ³²

Conclusion

Although this study was unable to provide clear-cut answers to many questions on the social and financial impact of mandated insurance for mental illness, it did clarify a number of costs and benefits. We found that coverage for mental illness varies considerably, with many enrollees lacking benefits for inpatient care. While

outpatient coverage is almost universal, the benefits vary among plans, with only a small number of enrollees having benefits similar to that proposed in the legislation. In all plans, coverage is not equal to that of general medical care, which may reflect long standing attitudes about whether the mentally ill are as deserving of treatment as those who are physically ill. The coverage provided by HMSA and Kaiser Permanente is important because according to the Prepaid Health Care Act, they determine the existing level of benefits for all health care in the state.

The prevalence rates suggest there is a need for treatment among the general population. However, the use of mental health services is low even among those who have coverage. Expanding current benefit levels may provide better care for certain patients with serious conditions for whom existing levels are not adequate. However, it is less clear how insurance alone will result in people seeking treatment in the early stages of these illnesses as many proponents claim. More information and study are needed in order to judge the favorable social benefits of the legislation.

As for the costs of expanding coverage, researchers have shown that increased coverage leads to higher use and costs. But at the same time, current use is low relative to prevalence, and it appears that a proportionately small number of patients account for the greater share of costs. The largest users of mental health care are those who are genuinely ill. This makes it difficult to argue strongly for or against mandated insurance on the basis of cost savings alone. A cost argument may, in fact, divert attention from the equity of care and the observation that much existing coverage discriminates against the mentally ill. Nevertheless, responsible social policy cannot avoid consideration of costs. The proposed measures, if they are to be considered for passage, should include provisions to prevent the unnecessary escalation of the costs of both treatment and insurance.

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NOTES

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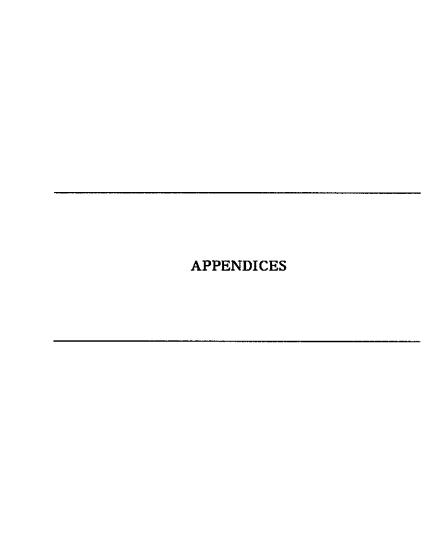
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APPENDIX A

Additional Cost for Inpatient Substance Abuse Treatment

Shown below are the calculations to derive the estimated costs of mandating inpatient treatment for substance abuse. Covered members were estimated at 496,000 and uncovered members at 218,000, and a daily rate of \$228 was chosen. The numbers affected excluded those covered by Medicaid and Medicare.

Scenario I assumes that incidence and average length of stay (ALOS) would remain the same for covered members of HMSA and commercial carriers. Island Care and noncovered HMSA members are assumed to have the same rates as covered members, and Kaiser's rates would increase from current levels to that of HMSA.

Scenario II assumes that incidence would remain the same but that the ALOS would increase to 21.7 days based on experience in Aetna's Federal Employee Benefits Program.

Scenario III assumes that incidence would increase from current levels to .90/1000 and ALOS from current levels to 21.7 days.

The number of members who would be affected by the legislation was multiplied by the incidence rate to derive the number of new admissions. This figure was then multiplied by the average length of stay to obtain the additional number of days that would result. The number of additional days was then multiplied by the daily rate to obtain the total cost.

	Scenario I	Scenario II	Scenario III
Covered Members			
HMSA members		456,000	456,000
Commercial carriers		+ 40,000	+ 40,000
Total covered members		496,000	496,000
Admissions/1000		<u>X .37</u>	X .37
Admissions		184	184
Increase in ALOS ¹		X 2.5	X 2.5
Additional days		460	460
HMSA members			456,000
Commercial carriers			+ 40,000
Total covered members			496,000
Additional admissions/			-
1000 ²			X53
New admissions			X .53 263
ALOS			X 21.7 5,707
Additional days			5,707
Noncovered members			
HMSA members	82,000	82,000	82,000
Island Care members	+ 17,000	+ 17,000	<u>+ 17,000</u>
Total noncovered members	99,000	99,000	99,000
Admissions/1000	<u>X .37</u>	<u>x .37</u>	<u>x .90</u>
Admissions	37	37	89
ALOS	X 19.2	X 19.2	X 21.7 1,931
Additional days	710	710	1,931
Kaiser members	119,000	119,000	119,000
Current admissions/1000	<u>x .22</u>	<u>x .22</u>	<u>x .22</u>
Admissions	26	26	26
Increase in ALOS ³	<u>X 7.3</u>	9.8	<u>X 9.8</u>
Additional days	190	255	255
Kaiser members	119,000	119,000	119,000
Additional admissions/			
1000 ⁴	<u>X . 15</u>	<u>x . 15</u>	X .68
New Admissions	18	18	81
ALOS	X 19.2	<u>X 21.7</u>	<u>X 21.7</u>
Additional days	346	391	1,758
Total additional days	1,246	1,816	10,111
Estimated charge/day	<u>X \$228</u>	<u>x \$228</u>	<u>X \$228</u>
TOTAL COST	\$ 284,088	<u>\$ 414.048</u>	\$2,305,308

- 1. The increase in ALOS for HMSA and commercial carriers was derived by subtracting HMSA's current ALOS of 19.2 from the ALOS assumed by Scenario II and Scenario III.
- 2. The increase in incidence was derived by subtracting HMSA's current incidence rate of .37/1000 from the rate of .90/1000 assumed by Scenario III.
- 3. The increase in Kaiser's ALOS was derived by substracting the current ALOS of 11.9 days from the ALOS assumed by Scenario II and Scenario III.
- 4. The increase in Kaiser's incidence rate was derived by substracting the current incidence rate of .22/1000 from the rates assumed by the three scenarios.

APPENDIX B

Additional Cost for Inpatient Mental Health Treatment

Shown below are the calculations to derive the estimated costs of mandating inpatient treatment for mental illness proposed by the two measures. Covered members are estimated at 614,000 and noncovered members at 100,000, excluding those covered by Medicare and Medicaid. The scenarios assume an average charge per day of \$485 including ancillary services and professional inpatient visits.

Scenario I assumes that the incidence rates and average lengths of stay (ALOS) of covered members of HMSA, Island Care, and commercial carriers remain at HMSA's current levels of 1.3/1000 and 12.2. Kaiser rates also remain at the current levels of 1.9/1000 (based on an average of the rates for 1984, 1985, and 1986) and 11.2. Noncovered members are assumed to experience the same utilization rates as covered members.

Scenario II assumes the incidence rates remain the same but that the ALOS increases to Hawaii's CHAMPUS plan rate of 15.5 resulting in an increase of 3.3 days for HMSA and other carriers and 4.3 for Kaiser.

Scenario III assumes that the incidence rates increase to 3.2/1000 and the ALOS to 15.5 days based on Hawaii's CHAMPUS plan. This results in an increase in incidence of 1.9/1000 for HMSA and other carriers and 1.3/1000 for Kaiser and an increase in ALOS of 3.3 days for HMSA and other carriers and 4.3 days for Kaiser.

The estimated number of affected members was multiplied by the incidence rate to obtain the number of additional admissions. This figure was multiplied by the ALOS to derive the additional number of days. The number of additional days was then multiplied by the average charge per day to obtain the total cost.

Appendix B con't.

	Scenario I	Scenario II	Scenario III
Covered Members			
HMSA members Commercial carriers		507,000 40,000	507,000 40,000
Island Care members Total covered members		+ 17,000 564,000	+ 17,000 564,000
Admissions/1000 Admissions		X 1.3	X 1.3
Increased ALOS ¹		X 3.3	<u>X 3.3</u>
Additional days		2,419	2,419
Kaiser members Admissions/1000		50,000 X 1.9	50,000 X 1.9
Admissions Increased ALOS ²		95 V 4.3	95
Additional days		X 4.3 409	X 4.3 409
Members of HMSA, Island Care & commercial carriers Additional admissions/			564,000
1000 ³ Additional admissions			X 1.9 1,072
ALOS			X 15.5
Additional days			16,616
Kaiser members Additional admissions/ 1000 ⁴			50,000 X 1.3
Additional admissions			65
ALOS Additional days			X 15.5 1,008
Noncovered Members			
HMSA members	31,000	31,000	31,000
Admissions/1000 Admissions	X 1.3 40	X 1.3 40	X 3.2 99
ALOS	X 12.2 488	X 15.5	15.5
Additional days Kaiser members	69,000	620 69,000	1,535
Admissions/1000	X 1.9	<u>X 1.9</u>	69,000 X 3.2
Admissions ALOS	131 X 11.2	131 <u>X 15.5</u>	221 15.5
Additional days	1,467	2,031	3,426
Total additional days Estimated charge/day	1,955 X \$485	5,479 <u>X \$485</u>	25,413 X \$485
TOTAL COST	<u>\$ 948,175</u>	\$ 2,657,315	\$ 12,325,305

- 1. The increase in ALOS for HMSA members was derived by substracting current rate of 12.2 days from the assumed rate of 15.5 days, resulting in an increase of 3.3 days.
- 2. The increase in ALOS for Kaiser members was derived by subtracting the current rate of 11.2 days from the assumed rate of 15.5 days, resulting in an increase of 4.3 days.
- 3. The additional admissions/1000 members of HMSA, Island Care and other commercial carriers of 1.9/1000 was derived by subtracting the current incidence rate of 1.3/1000 from the assumed rate of 3.2/1000.
- 4. The additional admissions/1000 members of Kaiser of 1.3/1000 was derived by subtracting the current incidence rate of 1.9/1000 from the assumed rate of 3.2/1000.

APPENDIX C

Additional Cost for Outpatient Mental Health Treatment

Shown below are the calculations to derive the estimated cost of mandating outpatient treatment for mental illness and substance abuse. Covered members were estimated at 690,000 and noncovered members at 24,000. The numbers affected excluded those covered by Medicare and Medicaid. The average charge per visit of \$91.00 was based on CHAMPUS data for 1987.

HMSA's current rate of outpatient visits of 134/1000 was adjusted to eliminate professional inpatient visits. The current rate was estimated at 83 percent of total visits or 111 visits/1000. Kaiser's current rate of 52 visits/1000 was used.

Scenario I assumes a 10 percent increase in visits/1000 members. This would result in an increase of 11 visits/1000 enrollees for HMSA, Island Care, and other commercial carriers and 5 visits/1000 members for Kaiser.

Scenario II assumes a 50 percent increase in visits/1000. This would result in an increase of 56 visits/1000 members for HMSA, Island Care, and other commercial carriers and 26 visits/1000 enrollees for Kaiser.

Scenario III assumes a 100 percent increase in visits/1000. This would result in an increase of 111 visits/1000 enrollees of HMSA, Island Care, and other commercial carriers and 52 visits/1000 members for Kaiser.

The number of affected members was multiplied either by the rate of increased visits (covered members) or the projected rate of visits (noncovered members) to obtain the number of additional visits. This figure was then multiplied by the estimated charge per visit to obtain the total cost.

Appendix C con't.

	Scenario I	Scenario II	Scenario III
Covered Members			
HMSA members	514,000	514,000	514,000
Island Care members Commercial carriers	17,000 + 40,000	17,000 + 40,000	17,000 40,000
Total covered members	571,000	571,000	571,000
Increased visits/1000 ¹ Additional visits	X 13 6,281	X 56 31,976	X 111 63,381
Kaiser members	119,000	119,000	119,000
Increased visits/1000 ² Additional visits	X 5 595	X 26 3,094	X 52 6,188
Noncovered Members			
HMSA members	24,000	24,000	24,000
Visits/1000	X 122	X 167	<u>X 222</u>
Additional visits	2,928	4,008	5,328
Total additional visits	9,804	39,078	74,897
Estimated charge/visit	<u>X \$91</u>	<u>x \$91</u>	<u>X \$91</u>
TOTAL COST	<u>\$ 892,164</u>	\$ 3,556,098	<u>\$ 6,815,627</u>

^{1.} The number of increased visits/1000 for HMSA, Island Care and commercial carriers was based on 10, 50, and 100 percent increases in the adjusted current rate of 111 visits/1000.

^{2.} The number of increased visits/1000 for Kaiser members was based on 10, 50, and 100 percent increases in the current rate of 52 visits/1000.