MENTAL HEALTH, DENTAL SERVICES, AND OTHER COVERAGE IN THE HEALTH INSURANCE STUDY

PREPARED FOR THE OFFICE OF ECONOMIC OPPORTUNITY

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PREFACE

This Report was prepared as part of the Health Insurance Study (HIS), which The Rand Corporation is conducting with the support of the Office of Economic Opportunity. The HIS will provide families with health insurance plans of varying deductible and coinsurance rates to determine the effects of alternative types of insurance provisions on the quantity of medical services demanded and the effect of those services upon health status. A full discussion of the Study can be found in Joseph P. Newhouse, *A Design for a Health Insurance Experiment,* R-965-OEO, November 1972.

Those designing the HIS faced the problem of defining which services they wished to cover with insurance. Newhouse's report set forth three criteria that were used to determine whether a service should be covered: (1) the more likely such a service would be part of national financing legislation, the more desirable to include it; (2) the lower the cost of covering a specific service, the more desirable to include it; (3) the less catch-up or transitory demand induced by covering a service, the more desirable to include it.

This report presents the results of a literature search. Because the most difficult decision concerned mental health and dental coverage, the greater part is devoted to a discussion of those services. A subsequent study will summarize the process by which decisions were made to cover and exclude specific services in the HIS.

SUMMARY

Mental health and dental insurance benefits are discussed in relation to three criteria for including these benefits in the Health Insurance Study's experimental plan. These criteria are the cost and extent of transitory demand under experimental conditions for a specific benefit, and the likelihood of its inclusion in a national health insurance plan. Each section begins with a description of the current benefit structure of private insurance plans and of Medicare and Medicaid. This is followed by a discussion of cost and utilization studies from the literature, an outline of the coverage provisions of four major national health insurance proposals, and, finally, implications of the literature findings for the Health Insurance Study.

Analysis of data from a Medicaid dental program in New York demonstrates a direct relationship between age and cost of dental services, since older people tend to use more expensive dental procedures, such as dentures and restorations. The HIS, however, is excluding individuals over 65 years old since it was thought that their coverage under Medicare would not change as a result of national financing legislation, and the increased variation in response resulting from their inclusion in the study would reduce the strength of statistical tests for a finite sample size. Therefore, the cost of covering dental services in the HIS would be lower than the total cost cited for the Medicaid program, which covered all age groups.

Estimates on transitory demand for dental services under a two and one-half year experimental program suggest that there would be some "catch-up" demand for dental services occurring mostly in the first year of the HIS and perhaps some increased utilization during the last six months.

The commercial insurance sector's experience with unlimited coverage of outpatient mental health services is reviewed in Section III. The literature provides no extensive data on the cost or demand for mental health services under experimental conditions. However, a number of studies have attempted to determine whether there is a correlation between the demand for mental health and the demand for general medical services. Such a relationship could have a substantial effect on overall cost and demand estimates for the benefits provided by the HIS to its experimental families. If, for example, coverage of psychiatric services caused other medical utilization to fall, the additional cost of psychiatric services could be relatively low. A series of studies conducted at Kaiser Permanente in the 1960s indicates that utilization of all health services does decline following psychotherapy. However, the results of these studies may be biased since members of the experimental groups elected psychotherapy themselves.

Section IV discusses problems relating to coverage of other medical services. The likelihood of inclusion of these services in a national plan is discussed in relation to the four national health insurance proposals summarized in the Introduction. However, cost and transitory demand estimates are not reviewed since the main focus of this report is on dental and mental health services.

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I. INTRODUCTION

The objectives and goals of the Health Insurance Study (HIS) were summarized in Newhouse (1972):

1. Estimate the responsiveness of health services utilization to insurance provisions, especially various deductibles and coinsurance rates.
2. Learn how this responsiveness to insurance provisions differs with such factors as family income and severity of illness.
3. Assess the effect of insurance plans and various levels of health services utilization on health status.
4. Determine how quality of care is affected, if at all, by type of insurance coverage.
5. Test three innovative types of insurance, including:
   a. Plans in which outpatient care is free but inpatient care is subject to deductibles or coinsurance.
   b. Health maintenance organization (HMO).
   c. The placing of limits on family out-of-pocket health expenditures in all plans where family payments are required. These limits will be determined as fractions of family income.
6. Gain familiarity with the difficulties of administering insurance plans with income-related expenditure limits, and develop rules of operation pertaining to such limits (as well as to other features of health insurance plans).

Medical provider and recipient response to the health insurance benefits of the Health Insurance Study can provide useful information on the feasibility of covering such benefits or services in a national plan. Thus, in addition to addressing the larger objectives above, the HIS may serve as a demonstration program insofar as its plan of health insurance benefits differs from other plans. Although a health insurance plan that places no restrictions on coverage of benefits may be the optimal one for such a feasibility study, financial and other constraints dictate the placing of certain restrictions on the study's scope of coverage. The following criteria for determining the extent and nature of such restrictions are outlined in Newhouse (1972):

1. Extent of transitory demand for services (catch-up demand and crowding-in of services at the end of the experiment);
2. The likelihood of inclusion in a universal plan; and
3. Cost.

It is to these criteria that the present report directs its primary attention.

The first and third of the above are addressed on the basis of experimental data and selected insurance companies' experience, and the second on the basis of national health insurance proposals. Coverage under Medicare and Medicaid is also described, as these programs may serve as models for some benefits. Where appropriate, rules, possible administrative problems, and federal standards are discussed in relation to specified benefits. Thus, both precedents and principles serve as guidelines in establishing a basis for the final decisionmaking process.

Wherever private plans are discussed, they are generally dealt with on the basis of representative policies, descriptive material, and group manuals. Plans offered by insurance companies are of two types: basic benefit, which provides "first dollar" coverage of expenses for selected services, generally without a deductible or coinsurance rate; and major medical, which covers major or catastrophic expenses. Major medical policies, characterized by deductibles and coinsurance, are either supplementary (supplements basic benefit plans), or comprehensive (no basic coverage, but one complete package).

In mid-1971, some 45 National Health Insurance (NHI) bills were pending before the legislature. Four of the more publicized bills, which have been introduced since that time, are discussed in this report. They are summarized in Table 1.

There is little agreement among National Health Insurance Plans on scope—who should be covered and what benefits should be provided. Indeed, all the proposals summarized in Table 1, with the exception of the Health Security Act, are primarily funding mechanisms. Some of the proposals are not discussed in relation to a number of the benefits reviewed in Section III.

Table 1

SUMMARY OF RECENT NHI BILLS

Legislation	Introduced As	Supported By
Health Care Insurance Assistance Act (Medicredit)	S.444 by Sen. Clifford P. Hansen (R-Wyo), H.R.2222 by Rep. Richard Fulton (D-Tenn), January 1973	American Medical Association
Health Security Act	S.3 by Sen. Ted Kennedy (D-Mass), H.R.23 by Rep. Martha Griffiths (D-Mich), January 1973	AFL-CIO, UAW, National Council of Senior Citizens, Committee on National Health Insurance
National Health Insurance Partnership Act	S.1623 by Sen. Wallace F. Bennett (R-Utah), H.R.7741 by Rep. John W. Byrnes (R-Wisc), April 1971	The Administration
National Healthcare Act	S.1100 by Sen. Thomas J. McIntyre (D-N.H.), H.R.5200 by Rep. Omar Burleson (D-Tex), March 1973	Health Insurance Association of America

The Rules of Operation for the HIS state that the study's coverage shall be no less than that of any health insurance policy a family may hold at the time of enrollment in the study's plan. To avoid possible exceptions to the general plan, it was recognized that the study's scope of coverage should be reasonably broad and its policy should be written on an all-cause rather than on an each-cause basis—that is, all services included in the plan would be covered regardless of cause (or diagnosis). It is noted below, however, that an exception might be made in the case of cosmetic surgery.

II. DENTAL SERVICES

THE BENEFIT STRUCTURE OF PREPAID DENTAL CARE PLANS

The Directory of Prepaid Dental Care Plans, 1967, a digest of plans offered by Blue Cross-Blue Shield, Group Hospitalization Associations, and commercial health insurance carriers, defines the scope of these carriers' dental benefits according to the following criteria:

1. Minimum: emergency treatment for pain, clinical examination and radiographs;
2. Basic: prophylaxis, topical fluoride, routine fillings, simple extractions, plus the three minimum benefits;
3. Intermediate: space maintainers, inlays, crowns, oral surgery, partial and full dentures, plus basic benefits;
4. Comprehensive: all intermediate benefits, periodontal treatment, fixed bridges, root canal therapy, and orthodontic care.

There are, of course, variations from the above, but, in general, this classification has proved useful in equating specified dental benefits with coinsurance and deductible rates, limitations, and maximum reimbursement rates.

Commonly, the minimum or basic plan either reimburses the specified services in full or is accompanied by a 20 percent coinsurance rate. Deductibles and coinsurance rates increase as the covered benefits increase in scope. A typical example is the Dental Service Corporation plan of the American Insurance Management Corporation of Toledo, Ohio, which is described as "intermediate plus fixed bridges, root canal therapy and periodontal treatment." This plan covers only employees (not their dependents) with a $25 deductible per person per year for basic dental care. There is no deductible for examinations and prophylaxis, however. The patient pays 20 percent coinsurance rate on dentists' "usual and customary" charges for *all* benefits covered. In addition, there is a maximum of $600 per person per year.[1] Most plans offering orthodontic care have the patient paying anywhere from a 40 to 60 percent coinsurance rate with a maximum lifetime reimbursement of $500 to $600.

Many comprehensive major medical plans of private insurers have a special deductible for dental expenses. Where there is a common deductible for both medical and dental expenses, a special coinsurance rate and a yearly maximum for dental benefits often apply.[2] Data on premium rates of both dental service corporations and

[1] Boch and Sperberg (1968), pp. 268-269.
[2] Reed and Carr (1970), p. 72.

private insurance companies are not available in any usable form (rates vary according to area), but these rates, at least where coverage is reasonably broad, are expensive.[3] For example, the comprehensive dental plan (which excludes orthodontia) of Group Health Dental Insurance in New York City in 1968 had premiums of $4.55 per month for a single person and $18.90 for a family. The monthly rate for the family plan that included orthodontia was $22.90.[4]

Of nine community group practice plans reviewed,[5] none covers dental services, except for those arising from accidental injury. Group Health Association, Inc. of Washington, D.C. and Group Health Cooperative of Puget Sound have affiliated dental prepayment plans, which members may join, but very few members participate.

MEDICARE AND MEDICAID

Medicare covers only certain oral surgery procedures. The Social Security-welfare bill (HR 1), which was passed by Congress October 17 and signed into law by the President October 30, 1972, does not provide for any increased dental benefits under Medicare, and the initial proposal providing for coverage of dentures was deleted in committee.

Dental care is one benefit permitted, but not required, under Medicaid. Of the 52 states and territories that have implemented the Medicaid program,[6] 36 have chosen to provide dental benefits, which in most instances have been severaly limited because of the unexpected high costs of the Medicaid dental program.[7] Only two years after Title XIX became effective, New York, in an attempt to curb rising costs, instituted a 20 percent coinsurance rate payable by the "medically indigent" and eliminated prosthetic services from the program.[8]

COST AND UTILIZATION STUDIES OF DENTAL PROGRAMS

The Chemung County, New York Study of Medicaid Recipients of a Comprehensive Dental Program, July 1, 1967 to June 30, 1968

Chemung County was chosen as the site for study of its Medicaid dental program because of a number of desirable characteristics.[9] These included the compre-

[3] *Ibid.*, p. 74.

[4] *Ibid.*, p. 110.

[5] Community Group Health Association (CHA) of Detroit; Community Health Foundation (CHF) of Cleveland; Group Health Association, Inc. (GHA) of Washington, D.C.; Group Health Cooperative of Puget Sound; Health Insurance Plan of Greater New York (HIP); and four Kaiser Foundations.

[6] Arizona and Alaska do not participate.

[7] Only 20 jurisdictions have chosen to include the "medically needy" as well as the "categorically needy" in their dental benefit programs.

[8] Fisher (1970), pp. 76-79.

[9] Faine and Brusseau (1971).

hensive character of the program and the comparability of the county's population —according to median family income, age, and educational achievement—to that of the United States as a whole.[10] The survey findings, reconstructed in part below, were based on claims from 1,290 individuals—about 13 percent of the nearly 13,000 county residents who were eligible for Medicaid benefits at that time.

Six types of services accounted for more than 95 percent of all those provided. The percent distribution of cost and type of service is given in Table 2. Table 3 presents utilization and cost distribution by age group.

Table 2

PERCENT DISTRIBUTION OF COST AND TYPE OF SELECTED SERVICES

Type of Service	Percent of Total Cost	Percent of Total Services
Dentures	43.7[a]	2.9
Restorations	27.3	37.4
Extractions	7.2	11.9
Prophylaxes	5.7	9.7
Examinations	5.6	11.5
Radiographs	5.2	22.1
Other services[b]	5.3	4.5

SOURCE: Constructed from Fig. 2, Table 4, and Table 9 of Faine and Brusseau (1971).

[a]Data recorded from claim forms did not include cost per service. Figures were constructed by multiplying total number of specific services by the appropriate fee from New York Medicaid dental fee schedule.

[b]"Other services" include topical fluoride applications, treatment for pain, endodontic services, crown and bridge work, surgical procedures (other than surgical extractions), general anesthesia, prosthetic repair, and orthodontic procedures.

Some striking characteristics of this study are similar to those reported by O'Shea and Bissell in their Erie County study, and many of the data are comparable to those reported in the July 1963 to June 1964 National Health Survey:[11] 78 percent of the dental patients in the Chemung County study and 62 percent in the Erie County study were under 25 years of age; the mean number of visits per patient (for both sexes) was 2.4 per year in Chemung County; in the National Health Survey the mean number of visits was 2.1; restorations were the greatest proportion of all

[10] Median family income in Chemung County is slightly higher than the U.S. average, but lower than the average for New York State. In 1965, the dentist-population ratio for Chemung County was 1:2,025; for New York State the ratio was 1:1,215; and for the United States, 1:1,714.

[11] O'Shea and Bissell (1969); U.S. National Center for Health Statistics (1965).

services provided in all three studies—37.4 percent in Chemung County, 36.0 percent in Erie County, and 37.8 percent in the National Health Survey.

Dentures, which accounted for only 2.9 percent of total services, were 43.7 percent of the total cost of the Chemung County Medicaid program. From this striking fact and the cost and age group distribution (see Table 3), it is evident that a relatively small proportion of the sample population, presumably the over-65 population, was responsible for a large proportion of the total cost. Unfortunately, no analytic breakdown was made of the cost of dentures in each age group. The greatest utilization was among those 45 and over: 17 percent of the 45-54 age-group, 19.6 percent of the 55-64 group, and 19.2 percent of those 65 and over received denture-related services. The study revealed that the older the patient, the higher the average cost for total services received—the 55 and older age group (8 percent of the sample) received services costing 22.2 percent of the total, and the under 25 age group (78.3 percent of the sample) accounted for only 48.3 percent of the total costs.

Table 3

DISTRIBUTION OF UTILIZATION AND COSTS OF DENTAL SERVICES BY AGE GROUP

Age Group	Percent of Sample	Number of Visits	Percent of Total Visits	Total Cost of Services	Percent Distribution of Cost	Mean Cost per Patient	Median Cost per Patient
Total	100.0	3,104	100.0	$89,732	100.0	$ 70	$ 35
Under 5	4.9	114	3.7	1,766	2.0	28	15
5-14	54.1	1,624	52.3	26,736	29.8	38	25
15-24	19.3	644	20.8	14,842	16.5	60	35
25-34	4.9	165	5.3	9,461	10.6	150	95
35-44	4.1	162	5.2	9,981	11.1	188	175
45-54	2.6	88	2.8	6,118	6.8	185	175
55-64	2.0	62	2.0	5,327	5.9	205	275
65 and over	6.0	204	6.6	14,654	16.3	188	250
Unknown	2.1	41	1.3	847	1.0	31	25

SOURCE: Constructed from Fig. 1, Table 1, Table 3, and Table 8 of Faine and Brusseau (1971).

The Teamster Comprehensive Care Program at Montefiore Hospital and Medical Center, Bronx, New York, July 1, 1966-December 31, 1968

The Teamster Comprehensive Care Program (TCP)[12] was a 2-1/2 year pilot demonstration project that provided complete medical and dental care[13] without charge to 3,701 Teamsters and their dependents. Before the program, most families were covered by Group Health Insurance, Inc.'s Comprehensive Indemnity plan and, in addition, held 120-day Blue Cross coverage. Because *dental care insurance was not*

[12] Morehead, Donaldson, and Zanes (1971).

[13] Orthodontic care was the only service not covered because of the limited duration of the program.

provided to the Teamsters before the program began, the change in utilization rates of TCP participants may prove valuable as an indicator of the worst case transitory demand if dental benefits are similarly covered under the HIS.

Of the families who chose to participate in the program, 43 percent reported seeing a dentist during the year preceding July 1966 and averaged 2.4 visits per person; 52 percent of the control group, composed of Teamster families who chose not to participate in TCP, reported having seen a dentist during the same year and averaged 3.1 visits per person. Because of the six months of publicity the program received before enrollment, it is possible that the TCP participants deferred dental care in expectation of the program. The average number of dental visits per person per year during the program was 3.3, which is comparable to the 3.1 average reported by the control group. Indicative of the "crowding in" problem, however, was the average reported 4.9 visits per interviewed TCP member from March 1967 to February 1968. These same members reported an average of 2.5 visits for the year before the program started.

The Teamster Comprehensive Care Program reported no statistics on population characteristics (as the Chemung County Study did), except that the covered population was composed "primarily [of] white, working class families with few persons over 63 years of age." Obviously, such variables affect utilization rates. However, of those reviewed, this study was the only one that measured average visits of the *same population* both in the absence of dental coverage and during the period that comprehensive dental coverage was in force. From all indications, it is evident that utilization increased substantially from "crowding in" of services under coverage by a plan providing dental care without charge. (Were it not for the 4.9 figure cited above, it might appear that this increase was due wholly to the six months' publicizing of the program.) Furthermore, although no substantiating data are cited, a "significant increase" was reported in the proportion of high cost services (dentures and restorations) and a "noticeable increase" in the number of routine procedures (radiographs and prophylaxes) during the last six months of the program. (See Tables 4, 5, and 6.) This seems to indicate further "crowding in" of demand by participating TCP members who presumably were anxious to complete both routine and expensive procedures in anticipation of termination of the program.

Table 4

TOTAL SERVICES AND COSTS PER YEAR

Period	Total Services	Total Cost
First year	18,135[a]	$201,153
Second year	15,653	207,873
Last six months (annual rates)	21,650	279,450

[a]The decline in total services from the first to the second year is substantial, but the overall averages are not dramatically different. This seems to suggest that catch-up is mostly in the first year or first year plus.

Table 5

PERCENT DISTRIBUTION OF TOTAL COST AND TYPE OF SELECTED SERVICES

Type of Service	Percent of Total Cost	Percent of Total Services	Percent Difference in Cost Between 2nd and 1st Year
Total	100.0	100.0	
Fillings	21.3	49.9	-20
Partial dentures	27.2	2.0	+42
Complete dentures	14.6	1.2	+32
Full mouth radiographs	8.0	6.5	-37
Crowns	6.2	1.1	+18
Extractions	3.8	6.9	-27
Periodontal services	3.6	5.6	-9
Oral examinations	2.7	6.6	-32
Prophylaxes	3.3	6.3	+6
Denture repairs, rebasing	2.0	1.0	+28
Root canal fillings	1.3	0.3	-26
Consultations	1.2	0.8	-12
Fixed bridges	1.2	0.5	+93
Radiographs, not full-mouth	0.9	5.6	+29
All other	2.7	5.7	-4

SOURCE: Adapted from Table 12 of Morehead, Donaldson, and Zanes (1971).

Table 6

PERCENT TOTAL COSTS AND SERVICES PER YEAR

Period	Percent of Total Cost	Percent of Total Services
First year	36.66	40.65
Second year	37.88	35.09
Last six months	25.46	24.26

SOURCE: Adapted from Table 12 of Morehead, Donaldson, and Zanes (1971).

It is noteworthy that dentures accounted for only 4.2 percent of the total services, but 43.8 percent of the total cost. (See Tables 5 and 6.) There was a higher utilization rate among older persons, and although they constituted a small proportion of the member population, they were responsible for a large proportion of the total cost, just as in Chemung County.

NATIONAL HEALTH INSURANCE PROPOSALS

The NHI proposals that have been submitted to date vary greatly in the provisions for dental services, and, in all cases, the breadth of these benefits is not specifically defined. The most restrictive bill is the AMA's Health Care Insurance Act, which limits benefits to "dental or oral surgery subject to 20 percent coinsurance." The HIAA's National Healthcare Act would limit "dental care" to children under 19 years subject to a 20 percent coinsurance rate. The Administration's proposal would phase in dental care for children at least three years after the programs became effective. The Kennedy-Griffiths Health Security Act, the most comprehensive of the NIH proposals in all respects, would initially limit "dental care" to children under 15. The covered age group would be extended during each of the succeeding five years until all under 25 are covered. Once covered, an individual would remain so for life.

IMPLICATIONS FOR THE HEALTH INSURANCE STUDY

Surfacing from among the national health insurance debates on the scope of coverage for dental services is the lone observation that, although there is disagreement on the particulars, all the plans discussed here would cover dental benefits to some degree. The Health Insurance Study presents an unprecedented opportunity to measure the effects of coverage of such benefits as part of a comprehensive health insurance plan.

The cost to the HIS of covering dental benefits would presumably be affected by such variables as the sample population's characteristics, dentists' charges, and utilization patterns. However, the study has no foreknowledge of all the relevant variables; thus, no *a priori* approximation can be made of how they might affect cost.

The premium rates of private insurers yield some indication of the cost of dental care coverage to the private insurance sector. The experiences of the Chemung County and the Teamster Comprehensive Care programs, however, are more pertinent to the problems the HIS faces in estimating cost and transitory demand for dental services.

The two most important factors affecting total cost of a dental care program are age distribution of the covered population and the types of services. Table 3, reporting utilization and cost distribution by eight age groups for the Chemung County program, indicates that all age groups visited dental service providers at approximately the same rate. (Compare percent of sample column with percent of total visits.) Because no correlation between cost and age distribution was readily apparent, a linear regression was run to determine whether there was a relationship between cost per visit and age groups.

The assumed equation was:

$$C_i = \beta_0 + \beta_1 A_i + \epsilon_i \tag{1}$$

where C_i is dollar cost of service divided by number of visits per age group, and A_i the mean age for each age group. The estimate of (1) based on data in Table 3 was:

(2) $C_i = 11.475 + 1.103\ A_i$ $\quad \bar{R}^2 = .856$

(6.673) $\quad F\ (1,6) = 44.530$

The number in parentheses is the t-ratio.

The results were statistically significant, indicating that cost per service increased in direct proportion with age.

The second striking characteristic is the utilization and cost of dentures and denture-related services. Although dentures accounted for only 4.2 percent of the total services in the TCP and 2.9 percent of the total services in the Chemung County program, the cost of providing this service in the respective programs was 43.8 percent and 43.7 percent of the total costs. (See Tables 2 and 5.)

One may conclude from the two findings discussed above that the older population used the more expensive procedures. One reason the National Health Insurance proposals place age limits on dental benefit eligibility requirements may be an attempt to circumvent the disproportionate cost of covering the older population groups, although another reason often cited is the provision of preventive care to children.

The extent of transitory demand for dental services indicates that "catch-up" demand occurs mostly in the first year or first year plus. Because the Teamster Comprehensive Care Program ran for only a 2-1/2 year period, the effect of "crowding-in" of services is not as clear, although noticeable and significant increases were observed. Therefore, in terms of the HIS, we can expect perhaps one to three years of clean observations if dental services are covered under the study's plan of benefits.

III. MENTAL HEALTH SERVICES

There is no insurance benefit structure for mental health services like that drawn for dental services. For insurance purposes, "mental illness" is not defined diagnostically or symptomatically. Instead, benefits are broadly defined in terms of services: inpatient, which may include all or only selected services covered under a policy's general illness provisions; and outpatient, which encompasses office or home visits. Some insurance plans specify treatments covered, but this is the exception rather than the rule. In general, treatment modes such as psychotherapy, chemotherapy, electroconvulsive or shock therapy, and so on are neither specifically included in nor excluded from coverage.

THE BENEFIT STRUCTURE OF PRIVATE HEALTH INSURANCE

In general, private health insurance plans provide considerably less extensive benefits for mental than for general illness, and a lower level of benefits for mental disease in mental hospitals than for mental disease in general hospitals.[14] Limitations are often placed on (a) the type of facility in which a patient may be hospitalized, (b) the duration of stay, and (c) in the case of outpatient treatment, the extent of reimbursement.

(a) Blue Cross plans vary (notably across states) in their conditions for acceptance of institutions as "member hospitals." These conditions range from the universal requirement of licensing by a state agency or registration by the American Hospital Association to construction approval by health or hospital planning agencies. Some plans accept as members only general hospitals or hospitals that provide medical and surgical services. Other plans exclude proprietary hospitals. A smaller proportion of inpatient costs are met (through dollar allowances) by Blue Cross plans in "nonmember" hospitals than in "member" hospitals, where contractual benefits exist. The advantages of a subscriber receiving care in "member" rather than "nonmember" hospitals are clear.

Some of these requirements have prevented psychiatric hospitals from becom-

[14] Coverage of alcoholism, drug addiction, and suicide attempts, although within the parameters of psychiatric care, will be discussed in Section IV.

ing "member" hospitals. In addition, several plans are simply reluctant to provide some or even *any* benefits in such hospitals.[15]

(b) Under their general illness provisions, most Blue Cross (and other private health insurance) plans specify the number of inpatient days allowed per "spell of illness." Where a second admission occurs within a certain number of days of discharge (usually 90), it is considered a continuation of the first admission's "spell of illness." Where a second admission occurs after 90 days, it is considered a new admission, and the full number of benefit days per "spell of illness" are receivable.

The majority of private plans do not provide inpatient days for mental illness according to the above definition. Only 30 of 69 Blue Cross plans (that specify benefits) under their most widely held contracts do so, and 10 of these require an interval of more than 90 days. The other 39 plans designate the maximum number of days covered for a specified period—usually 12 months or a calendar year. Under the most widely held Blue Cross contracts, an average of 120 to 125 days of hospital inpatient care are covered for general illness, but the average number of days covered for mental illness is 30 to 31.[16] Such restrictions, coupled with those limitations inherent in the definition of a benefit period, serve to reduce the total inpatient psychiatric benefits of private health insurance plans.

(c) The extent of reimbursement for psychiatric services varies greatly across private health insurers and across plans. In general, however, benefits for psychiatrists' services (including visits to hospital patients and outpatient or office visits) are less extensive than those for other medical specialists' services. For example, Blue Shield plans offer to pay for physicians' services on the basis of their "usual, customary and reasonable charges," or contract allowances determined on the basis of "appropriate compensation for internists."[17]

Further reimbursement discrepancies are exemplified under the outpatient provisions of Blue Cross-Blue Shield Supplementary Major Medical plans. After a deductible has been met, most of these plans cover 75 to 80 percent of outpatient expenses for general illness (up to an annual or lifetime limit), but only 50 percent of outpatient psychiatric expenses, with limitations on fees, number of visits, and maximum benefits.[18]

In recent years, more comprehensive psychiatric insurance packages have been written, most notably for employee or other purchasing groups. Two of these are the Blue Cross-Blue Shield Federal Employees Health Benefits (FEHB) high option plan and the Aetna Life and Casualty Government-Wide Indemnity plan for federal employees. Basic hospital benefits under FEHB provide 365 days of care for general and mental illness in general hospitals and in mental hospitals that are members of local plans. Supplemental benefits pay 80 percent of the costs over a $100 deductible per person per calendar year for the same mental services as general services covered. These include office and home visits, drugs, appliances, and so on. In addition, nonmember hospital care is covered by the supplemental benefits. Services for mental conditions, when performed at the direction and under the supervision of an attending physician, include day-night hospital care, group therapy, collateral visits

[15] Reed, Myers, and Scheidemandel (1972), pp. 46-49.

[16] *Ibid.*, pp. 46-47, July 1971 data.

[17] *Ibid.*, p. 56.

[18] *Ibid.*, p. 57.

with members of the patient's immediate family, and services of a mental health team (physician, psychologist, psychiatric nurse, and psychiatric social worker).[19]

The Aetna 1971 Government-Wide Indemnity contract covers charges for both in- and outpatient mental services on the same basis as any other illness: the first $1000 of hospital room and board charges, and 80 percent over a $50 deductible per person per calendar year for all other covered services (including outpatient). Covered services are similar to those of the FEHB high option plan.[20]

MEDICARE AND MEDICAID

Part A of Medicare covers hospital care for up to 90 days per spell of illness (with the patient paying the first $68 of the bill and an additional $17 for each day over 60). There is an additional "lifetime reserve" of 60 days (where the patient pays the first $34 a day). A "spell of illness" terminates when a patient has remained out of a hospital or extended care facility for 60 consecutive days.[21] These same rates apply to coverage of mental illness in a general hospital. Coverage in a psychiatric hospital, however, is limited to a 190-day *lifetime* maximum, and because of the maximum 90-day benefit period, the 190 days in a psychiatric hospital cannot be used consecutively.[22] Part B limits payment of outpatient psychiatric services to the lesser of 50 percent of "reasonable charges" or $250 per day. Treatment for "mental, psychoneurotic, and personality disorders" is covered.

State programs may not deny service to Medicaid eligibles on the basis of diagnosis, but limits are often placed on services such as number of hospital days or office visits allowed. Some evidence[23] suggests that several states place greater restrictions on ambulatory psychiatric benefits than on general illness benefits. A program of services for the mentally ill is not required under Medicaid and is not included in the plans of a number of states.[24]

COST AND UTILIZATION OF PSYCHIATRIC SERVICES

Apart from a few insurance programs such as the two federal employee high option plans discussed above, benefits for outpatient psychiatric services in particular are greatly restricted. The historic reasons for the present limitations on ambulatory services (commonly 50 percent coverage with a $250 annual maximum) deserve some attention. In the early and middle 1950s, when some insurance companies

[19] *Ibid.*, p. 58.

[20] *Ibid.*, pp. 62-63.

[21] 1972 Medicare rates.

[22] Thus, a Medicare patient who begins a new benefit period in a psychiatric hospital would be allowed a maximum 150 days (90 plus 60 lifetime reserve days). In order to receive the additional 40 days, he must remain out of the hospital for 60 days.

[23] See *Financing Mental Health Care Under Medicare and Medicaid* (1971), pp. 37-38.

[24] The 1965 Long Amendment permitted federal assistance payments to over-65 Medicaid patients in mental hospitals and to all mentally ill patients in general hospitals, regardless of length of stay. The 1972 Social Security-Welfare bill, recently signed into law, authorizes treatment in mental hospitals for Medicaid eligibles under 21 years of age.

began underwriting major medical coverage, care for mental illness was covered on the same basis as all other conditions—at 75 to 80 percent, with no limitations on fees, number of office visits, or maximum benefits. But the drastic losses suffered by these commercial companies forced them to reduce and limit benefits for outpatient psychiatric care.[25]

Several psychiatrists at the time characterized the unexpected outcomes as "flagrant abuse" of the insurance programs. It is likely, however, that adverse selection contributed to the high utilization rates. That is, individuals who elected to become employees of companies already offering outpatient coverage for mental services may have done so because of the companies' coverage policies, thus contributing to the upward biasing of overall utilization rates.

Although companies will underwrite any coverage an employer or union wants, they currently advise against purchasing limitation-free ambulatory care for mental conditions. During the course of the Reed, Myers, and Scheidemandel (1972) study, insurance company officials who were interviewed generally agreed that the primary problem is psychoanalysis, which, at a minimum of $35 or $40 a session, four sessions a week, and 48 weeks per year, can mean over $7,000 per person in annual claims.

A number of studies conducted in the early 1960s attempted to measure the relationship between psychiatric and other medical services. One study was the Group Health Insurance Project,[26] which showed that users of psychiatric services are also "significantly frequent" users of medical services. This study, however, did not address the question of whether a reduction in the use of medical services occurred following psychotherapy. Kaiser Permanente conducted a series of studies in its prepaid health plan setting in an attempt to determine whether there is such a relationship, and if so, to what extent. Emotionally distressed patients were observed to be significantly higher users of both in- and outpatient medical services than the average Kaiser Plan user. During the years of the first study (1959-1964),[27] psychiatric services were not covered by Kaiser Permanente on a prepaid basis, but such services were available to subscribers at reduced rates. Users of psychiatric services were compared with a control group, composed of members who had never presented themselves to the Department of Psychiatry, but were shown to be high medical users according to their medical records, and who matched the monitored group in age, sex, socioeconomic status, medical utilization in 1959, and criteria of psychological distress.[28] Each experimental patient was thus matched with a control patient according to the above.

The experimental group was divided into three sub-groups according to the average number of psychotherapy sessions per year during the five years of the study as shown in Table 7. The yearly combined averages of *total* outpatient visits (medical plus psychotherapy) of the experimental group and of the control (nonpsychiatric) group are shown in Table 8. The most significant declines in utilization of

[25] See Reed, Myers, and Scheidemandel (1972), pp. 61-62.

[26] See Avnet (1962a), pp. 7-11; and (1962b).

[27] See Cummings and Follette (1967).

[28] *Ibid.*, p. 28, Table 1, describes these criteria, which assign weights to various measures of psychological distress, such as "chronic allergic state" (one point), "compulsive eating (or over-eating)" (one point), "fear of cancer, brain tumor, venereal disease, heart disease, leukemia, diabetes, etc." (2 points), "suicidal attempt, threat, or preoccupation" (3 points), and so on.

Table 7

AVERAGE NUMBER OF PSYCHOTHERAPY SESSIONS PER YEAR FOR FIVE YEARS BY EXPERIMENTAL GROUP

Experimental Group	1-A[a]	2-A	3-A	4-A	5-A
One session only (80)[b]	1.00	0.00	0.00	0.02	0.06
Brief therapy (41) (2 to 8 sessions)	6.22	0.00	0.09	0.57	0.52
Long-term therapy (31)	12.33	5.08	5.56	5.88	5.05

SOURCE: Table 5 of Cummings and Follette (1967).

[a] 1-A through 5-A = one year through five years after psychotherapy was started.

[b] Numbers in parentheses are number of patients in each experimental group. Number of observations for psychotherapy sessions were not given.

Table 8

COMBINED AVERAGES (OUTPATIENT MEDICAL PLUS PSYCHOTHERAPY VISITS) OF UTILIZATION BY YEARS BEFORE AND AFTER PSYCHOTHERAPY FOR THE EXPERIMENTAL GROUPS, AND TOTAL OUTPATIENT UTILIZATION BY CORRESPONDING YEARS FOR THE CONTROL GROUP

Group	1-B[a]	1-A	2-A	3-A	4-A	5-A
One session only	11.4	11.2	7.7	6.5	6.1	4.5
Brief therapy	19.0	17.7	8.6	6.4	7.7	6.2
Long-term therapy	11.6	22.7	14.1	14.3	12.4	10.8
All experimental: (Psychotherapy) groups	13.5	15.3	9.2	8.3	7.9	6.2
Control group	11.4	11.5	11.3	12.4	14.5	12.9

SOURCE: Table 6 of Cummings and Follette (1967).

[a] 1-B = one year before psychotherapy; 1-A = one year after psychotherapy was started, and so on.

outpatient services for all three psychotherapy groups occurred in the second year after the initial meeting, and the declines remained constant during the five years of the study. Of course, these individuals had self-selected psychiatric utilization and therefore differed from the controls in this respect. The patients who received one session only or brief therapy (two to eight sessions) maintained this lower level of utilization without additional therapy. However, the long-term therapy group (which is clearly *not* a psychoanalysis group, and therefore might better be termed an "extended therapy group") demonstrated no overall decline in total outpatient utilization. Cummings and Follette conclude that therapy visits probably supplant-

ed other medical visits for this group.[29] However, because of the self-selection factor, inferences about any of the three experimental groups are difficult.

Declines in inpatient utilization were perhaps more significant. Results showed a 60 percent reduction in number of hospital days between the year before and the second year after therapy began for the first two experimental groups. Furthermore, this decline was maintained through the fifth year after. The "long-term therapy" group's use of inpatient services was initially about three times that of the other two experimental groups. Here again, a significant decline (88 percent) occurred between the year before and the second year after therapy began, and the lower level of utilization was maintained through the fifth year after. The control group maintained a constant level of utilization of inpatient services throughout the six years.

Although the setting and experimental group were peculiar, the study has been dealt with here in some detail because of at least one implication it has for the Health Insurance Study. The experimental and control groups were composed of Kaiser Permanente members who had demonstrated "psychological distress" according to the experiment's criteria, and who were all initially higher users of all medical services than members who did not meet the psychological criteria standards. The results indicate that predictions of utilization, hence cost, of psychiatric services should not be made until the population's characteristics (or "health status") are determined.

A second study at Kaiser Permanente[30] conducted a computerized psychological test as part of an Automated Multiphasic Screening Examination on 10,667 patients during a six-month period. One implication, which may prove valuable to the HIS's experience with health status measurement, was that attempts at early detection of emotional stress (and subsequent referral in certain cases) did *not* generate a greater number of psychiatric clinic patients than did routine medical practice in this setting.

NATIONAL HEALTH INSURANCE PROPOSALS

The AMA bill lists "psychiatric care," both in and out of the hospital, as a necessary provision for an insurance policy to qualify under the Health Care Insurance Act. No special deductible or coinsurance rates apply to this benefit.

Under the Administration's NHI Partnership Act, physicians' services, "when provided by a psychiatrist," are excluded from FHIP, and are not required of employer-employee plans. (Psychiatric benefits may, of course, be included in the latter case.)

The Kennedy-Griffiths bill is more explicit on coverage of mental illness benefits. It would furnish inpatient psychiatric benefits on the same basis as all other medical services in a general hospital and limit such benefits to 45 days per year in a mental hospital. Outpatient service, if it constitutes "active preventive, diagnostic, therapeutic, or rehabilitative service with respect to emotional or mental disorders," is covered without limits if furnished by "a comprehensive health service organi-

[29] See Cummings and Follette (in press).

[30] See Cummings and Follette (1968).

zation, by a hospital, or by a community mental health center" [prepaid plans], and is limited to 20 consultations per year if provided by a solo practitioner.

IMPLICATIONS FOR THE HEALTH INSURANCE STUDY

The inclusion of at least some mental health services in a national plan does appear possible. However, lack of conclusive information and sufficient data on cost and utilization of mental health services has, in large part, been responsible for the differences among the varying national health insurance proposals and reflect the dilemma of formulators of the nation's public health policies. Difference of opinion concerning effectiveness and suitability of modes of treatment in the area of mental health exacerbates the policy analyst's dilemma. The Health Insurance Study again presents an opportunity to address unanswered questions concerning coverage of these benefits as part of a comprehensive health insurance plan.

One argument often advanced against including psychiatric services in a universal health insurance plan is based on claims that the cost of such coverage is prohibitive. This argument can hardly be ignored, considering the drastic losses suffered by the private insurance sector in the mid-1950s. But the likelihood of adverse selection weakens this argument, and at the same time one should not fail to consider the effects of coverage of psychiatric benefits on total medical service utilization. Furthermore, one cannot ignore a parallel argument that failure of an insurer to cover the cost of psychiatric benefits may force patients to seek and perhaps overuse other medical services, which may have no positive effect on their health.

The Kaiser Permanente studies indicate that there is a direct correlation between the demand for general medical services and the demand for mental health services. The declines in the number of total outpatient visits between the year before and the second year following initiation of psychotherapy were significant for two of the experimental groups: 32 percent for the "one session only" group, and 55 percent for the "brief therapy" group. In this same period, declines in inpatient utilization were also significant: 60 percent for each of the first two experimental groups, and 88 percent for the "long-term therapy" group. If cost is a major criterion of coverage, one must consider these relationships and not merely the projected isolated cost of covering mental health services.

Transitory demand for mental health services is difficult to gauge. First, no study has addressed this particular problem and, to my knowledge, no study of mental health insurance benefits has generated any reliable data from which inferences may be drawn. Second, the apparent relationship between mental health services use and other medical services use necessitates a study of the demand for psychiatric services as part of a comprehensive health insurance plan. The experience of the private insurance carriers that introduced coverage of psychiatric benefits, however, does imply that some "catch-up demand" is to be expected, particularly if the insured population had no prior coverage.

IV. OTHER SERVICES

This section discusses health insurance benefits that are generally included under commercial plans, plans for federal employees, and Medicare and Medicaid, but are accompanied by various restrictions. When this report was drafted, it was expected that all of the following benefits would be provided under the Health Insurance Study's plan. However, since little was known of the common restrictions, they were reviewed and generalized to aid in the final process of defining benefits for the study.

NURSING HOMES AND RELATED FACILITIES

For financing purposes, the federal government has defined three types of institutions that deliver "nursing-home services": skilled nursing homes, which provide primarily long-term skilled nursing care and are financed under Medicaid; extended care facilities (ECFs), which provide post-hospital care and are supported for a limited period (100 days) under Medicare; and intermediate care facilities (ICFs), which provide primarily long-term supportive care under Medicaid.[31] Thus, under federal regulations, a "nursing home" may include everything from a facility providing care comparable to that provided by a hospital (excluding surgery) to a facility offering little more than room and board.

For coverage purposes, insurance companies define a nursing home[32] as an institution that provides room and board and 24-hour skilled nursing services, and is not, other than incidentally, a place of rest, a place for the aged, for alcoholics, for drug addicts, for the blind or deaf, or for the mentally ill.

The most recent commercial contracts generally allow two days of nursing home care for each hospital day that is not used during a benefit period. Services in a nursing home include most services available to hospital patients—semi-private room and board, skilled nursing care, inpatient drugs, and so on. Frequently, benefits are covered only when transfer to a nursing home occurs within a specified

[31] U.S. Department of Health, Education and Welfare (1971), pp. 1-2.

[32] For convenience, the term "nursing home" will be used hereafter to include both nursing homes *and* "related facilities," unless an exception is noted.

number of days (usually seven to fourteen) of a hospital confinement of a minimum number of consecutive days (usually three to five) for the same or related causes.

Medicare covers care in a nursing home (after at least a three-day hospital stay) for up to 20 days for each "spell of illness," plus an additional 80 days for which the patient pays $8.50 per day. A Medicare patient must enter an extended care facility within 14 days of leaving a hospital.[33]

The national health insurance proposals treat coverage of nursing home care in a variety of ways:

1. The HIAA's National Healthcare Act covers 120 days in a hospital, 120 days in an ECF, and 180 days of home health services per benefit period.
2. The AMA's Medicredit basic benefit plan covers a total of 60 hospital days per benefit period, with an ECF day equaling one-half of a hospital day. Under the catastrophic illness provisions, 30 additional ECF days are allowed.
3. The Administration's National Health Insurance Partnership Act makes no provision for nursing home care under the employer-employee plan. Under the Family Health Insurance Plan, 30 days of inpatient hospital care are covered, with an ECF day counting as one-third of a hospital day.
4. The Kennedy-Griffiths Health Security Act limits skilled nursing home care to 120 days per benefit period but includes the provision that the governing board may extend the duration period under certain circumstances, either for a stated number of days in a benefit period or indefinitely.

According to several independent sources, more than 90 percent of nursing home patients in all proprietary, non-profit, and government institutions are over 65 years of age.[34] Consequently, the subject of nursing homes may not appear very relevant to the under-62 population of the Health Insurance Study. However, if nursing homes and related facilities are to be covered under the hospital clause, particular attention must be given to regulations governing such institutions. At present, states issue licenses to nursing homes, subject to seldom enforced federal regulations. For example, to receive matching federal funds through Medicaid, some states have attempted to classify as ICFs any nursing homes that failed in the past to qualify as skilled nursing homes.[35]

Until new and uniform federal regulations are passed, it appears that the HIS's rules for coverage of nursing homes must be current federal standards. However, it might be advisable to evaluate all facilities that are used during the course of the study since the quality of the institution, as well as the quality of care provided, may affect utilization rates.

PRESCRIPTION DRUGS

Coverage of out-of-hospital prescription drugs, although almost universal under insurance companies' major medical policies, is relatively new and experimental

[33] 1972 Medicare rates and restrictions. The recently passed Social Security-Welfare bill (HR 1) authorizes the Secretary of HEW to experiment with reduction of the three-day prior hospitalization requirement for admission to a skilled nursing home and to extend the 14-day transfer limit to 28 days.

[34] U.S. Department of Housing and Urban Development (1970), pp. 1-47; Towle et al. (1971), p. 5.

[35] See U.S. General Accounting Office (1971), pp. 1-49.

under basic benefit plans. Most commercial plans restrict coverage by limiting the types of drugs to be covered, cost-sharing by beneficiaries, or annual reimbursement maximums.

Prescription drugs have not been covered under Medicare since the program was enacted in 1965, in part to avoid the administrative problems of processing a large number of small claims, and because of the costly experiences in countries where this benefit has been covered under national programs.[36] The latest attempt to enact coverage of prescription drugs under Medicare and Medicaid—proposed in the Senate version of the Social Security-Welfare bill (HR 1)—was defeated in committee. No coverage of this benefit is included in either the AMA's or the Administration's national health insurance bills. The HIAA's National Healthcare Act would provide prescription drugs on a $1 per patient cost-sharing basis. The Kennedy proposal would limit coverage to inpatient drugs, specified drugs for the treatment of chronic conditions, and drugs provided through qualified participating hospitals or group practice organizations, such as Health Maintenance Organizations (HMOs).

Although cost-sharing has been shown to be an effective control, both under private insurance plans in the United States and under national programs in other countries, it has also been shown to significantly affect utilization patterns.[37] Consideration of this restriction, therefore, must be weighed against the goal of estimating the responsiveness of health services utilization to various deductibles and coinsurance rates before it is seriously considered within the context of the Health Insurance Study.

Placing limits on types of drugs to be covered presents its share of problems, too. If the HIS considers for benefit purposes only maintenance drugs (those used for the treatment of chronic illness), sometimes arbitrary decisions must be made in classifying illnesses. Furthermore, administrative problems could arise when an illness changes from acute to chronic.

DRUG ADDICTION, ALCOHOLISM, AND SELF-INFLICTED INJURIES

Inpatient services for alcoholism were covered without limitation on number of days by 33 of 74 Blue Cross plans under the most widely held contract in 1969. Coverage was provided for a specified number of days (ranging from 20 to 70 per year) by 19 plans, and completely excluded by 22 plans.[38] Drug addiction benefits were the same for these plans, and self-inflicted injuries were covered by 71 of the plans. Similar statistics for other health insurance carriers are not available, but some evidence suggests a trend toward coverage of these benefits under general mental illness provisions.[39]

Medicare specifically excludes coverage of intentional self-inflicted injuries. None of the national health insurance proposals reviewed specifically covers or excludes alcoholism, drug addiction, or self-inflicted injuries. Presumably, these would be subject to the same regulations as psychiatric services.

[36] Myers (1972), pp. 1-2.

[37] See Myers (1972), pp. 3-4 for the experience of the National Health Service in England and Wales.

[38] *Blue Cross Plan Psychiatric Benefit Survey* (1969).

[39] See Reed et al. (1972), pp. 76-79.

COSMETIC SURGERY

Most private insurance plans that cover cosmetic surgery do so only if the need results from an accidental injury incurred after coverage becomes effective. This same restriction is made under Medicare and under the Kennedy-Griffiths and AMA bills, the only two national health insurance proposals that provide for coverage of this benefit.

There is no evidence that insurance companies have had any adverse experience with coverage of cosmetic surgery subject to the above restriction. One additional possibility for the Health Insurance Study's consideration, however, is coverage of this benefit without restriction for children.

VISION AND HEARING

Vision care is a fairly new and experimental benefit being offered by insurance company group policies under their basic benefit plans. A typical plan pays for one examination and one pair of lenses during any 12-month period and one pair of frames during any 24-month period. Payments are generally made in accordance with schedule of allowances. Eye examination for eyeglasses and glasses themselves, however, are usually not covered under most supplementary major medical plans.

All community group practice plans reviewed provide eye refraction examinations, but none provides eyeglasses on a prepayment basis. However, most have optical units that furnish glasses at prices lower than those charged commercially.[40]

Vision and hearing exams and fittings and prescriptions for eyeglasses and hearing aids are excluded from coverage under Medicare. The 1972 Social Security-Welfare Act recognizes an optometrist as a "physician" under Medicaid, as does the Kennedy Health Security bill. In addition, the Kennedy proposal provisionally covers eyeglasses and hearing aids, subject to the board's discretion.

Under the Health Insurance Study, a provision could be made to allow one eye examination per calendar year, and perhaps one hearing test during the course of the study, or, alternatively, to cover the professional services of an optometrist and audiologist. Dealing with prescriptions will not be a simple matter. Coverage of eyeglasses and hearing aids without restriction (for example, schedule of allowances or yearly maximum) could be costly since some accumulated neglect can be anticipated.

PRESCRIBED APPLIANCES

Prescribed appliances (artificial limbs, braces, crutches, and so on) and rental of medical equipment (hospital beds, wheelchairs, and the like) are covered by the majority of insurance companies under their supplementary major medical plans. Almost all plans limit coverage to "reasonable and customary" charges, and many place a yearly, lifetime, or benefit period maximum on these charges.

[40] 1968 data. See Reed and Carr (1970).

Part B of Medicare covers the "purchase or rental of durable medical equipment used in the patient's home" and the cost of other prescribed applicances, such as artificial limbs, but excludes coverage of orthopedic shoes, for example. Coverage of appliances (including prosthetics) under the Kennedy bill is similar in concept and operation to that of drug benefits, but subject to a limitation on aggregate cost. The HIAA's National Healthcare Act would cover prosthetic appliances subject to a 20 percent coinsurance rate only under the public plan. The remaining NHI proposals do not specify benefits.

VENEREAL DISEASE, STERILIZATION, AND ABORTION

Treatment for venereal disease and sterilization are almost universally covered without restriction under private health insurance plans. For example, in 1969, 69 out of 74 Blue Cross plans and 67 out of 72 Blue Shield plans covered both of these under their most widely held contract.[41] No statistics are available on coverage of abortion, although some companies have recently begun to cover this service subject to state laws. Since the January 22, 1973 Supreme Court ruling, however, sections of current state laws are unconstitutional.[42] Broader coverage by commercial plans can therefore be expected.

SPECIAL MATERNITY BENEFITS

Many private plans cover maternity benefits under a separate health rider. (A waiting period of eight to 10 months is usually imposed, but to avoid discontinuity between policies in force and coverage under the HIS, this restriction should not apply.) Limits are placed on number of days for maternity cases or total expenditure. There are often special allowances for complications. Special provision for maternity benefits is not made under any of the NHI proposals reviewed except Medicredit, which covers "services for pregnancy and complications of pregnancy, including prenatal, obstetrical, and post partum care."

SERVICES PROVIDED BY CHIROPRACTORS AND PODIATRISTS

Chiropractic services are not specifically excluded from any of the NHI proposals and would therefore presumably be covered, at least in states where a chiropractor is legally regarded as a "physician." Medicare excludes this service. Effective July 1973, chiropractors' services were covered under Part B of Medicare in cases where x-rays show a subluxation (an incomplete or partial dislocation).

The majority of private plans excludes coverage of all podiatric services except surgical services. Medicare has excluded "routine foot care," but will begin to cover

[41] *Ibid.*, pp. 14, 41.

[42] Roe v. Wade, 93 S.Ct. 705 (1973); and Doe v. Bolton, 93 S.Ct. 739 (1973).

"services of podiatric interns and residents" under Part A in 1973. The Kennedy-Griffiths proposal would cover "professional services of podiatrists."

Podiatrists and chiropractors were at one time excluded from most insurance policies under a "fringe practitioners limitation." In some states, laws now dictate that provisions be made for all or selected licensed practitioners. For this reason, insurers have named chiropractors or podiatrists in their policies but have protected themselves against abuse by restricting coverage of their services.

SERVICES OF A CHRISTIAN SCIENTIST

Some private insurers have recently begun to cover services of Christian Science practitioners. The Aetna plan for federal employees, as an example, will cover such services in lieu of services of a doctor of medicine for a given year if a beneficiary so elects. Unless a plan specifies this benefit (Medicare and Medicaid do not), it must be assumed that it is excluded since Christian Scientists are not legally regarded as "physicians" in most states.

The Kennedy plan would cover only "inpatient services of a Christian Science sanitorium." Under the Administration's minimum employer-employee plan, all services "except such services for the purpose of providing maternity care" may be provided at the option of the beneficiary by a Christian Scientist practitioner "if he is listed as such in the Christian Science Journal current at the time he provides the service." Such services are not covered under the Administration's Family Health Insurance Plan.

SERVICES RELATED TO PREVENTIVE CARE

Routine preventive medical care and services, such as periodic checkups, well-baby care, and immunizations are generally excluded from private insurers' supplementary and basic benefit plans. Some companies offer to cover these services under their comprehensive major medical plans, however, for increased premium rates.[43]

It is probable that limited preventive care services would be provided under a national plan. Two proposals that specify benefits are the AMA's Health Care Insurance Assistance Act and the Administration's NHI Partnership Act. Of particular interest is the Administration's plan, which would cover "immunizations and other preventive care" for all persons not inpatients of a hospital (including one routine eye exam for children under 12) under its employer-employee provision. The Administration's Family Health Insurance Plan (FHIP) offers a varying number of physician visits for well-child care, depending upon the age of the child. Under this section of the bill, preventive care for adults is not specified.

There are strong arguments for including preventive care services under the HIS. First, there has been a historical interest in preventive medicine and health maintenance among the medical community and recently among commercial insurers. Second, no measure of utilization or cost has been made of preventive services

[43] Reed and Carr (1968), pp. 68-72.

as part of a *comprehensive* insurance plan. Significant cross-price elasticity on such services can be expected, and thus we could gain valuable information for the study and for planning a national program. Third, coverage of physical exams as part of preventive services would be of value to the HIS in measuring health status.

HOSPITAL-RELATED AND ANCILLARY SERVICES

Coverage of services ordinarily furnished by hospitals for inpatients is common to commercial plans, Medicare and Medicaid, and all the national health insurance proposals: semi-private room and board; use of operating and recovery rooms; regular duty nursing services; professional services of pathologists, anesthesiologists, radiologists, x-ray technicians, and so on; drugs and biologicals; appliances such as wheelchairs and prosthetic appliances; and the like. Private nurses and private rooms are not covered unless medically indicated. Personal comfort items or items of a "luxury" nature (television, telephone, and so on) and custodial care are not covered.

Most private plans cover ambulance services for emergency only. Similar restrictions are placed on this service by all the NHI proposals except the Kennedy bill, which covers "ambulance and other emergency transportation services, and such nonemergency transportation services as the Board finds essential to overcome special difficulty of access to covered services."

GENERAL EXCLUSIONS

In addition to exclusions or restrictions placed on specified benefits, all commercial health insurance plans (including those written for federal employees), Medicare, and Medicaid contain a section of general exclusions. These include services for any condition for which coverage is available under workmen's compensation law (or similar legislation); services for any injury resulting from an act of war (for which services are rendered in a Veterans Administration or Government hospital); services furnished under the laws of the United States; payment for services provided outside the United States or its territories; and for expenses that an individual is not legally required to pay.[44]

From an inspection of the National Health Insurance proposals submitted to date, it can be expected that workmen's compensation and veterans' benefits would not be incorporated into a national plan. Whether medical care received outside the United States would be excluded from a national plan cannot be determined at this point.

[44] *Ibid.*, pp. 41, 65.

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