### I. Executive Summary

The National Association of Psychiatric Health Systems (NAPHS) and the Association of Behavioral Group Practices (ABGP) asked the Hay Group to analyze trends in the proportion of employer health care dollars spent on behavioral health care. This report is an update of Hay's initial May 1998 report. It amends the initial report with benefit trend data through the end of 1998.

We used the Hay Benefits Reports from 1988 to 1998 to determine trends in plan design for both general and behavioral health care. Then, using our Mental Health Benefits Value Comparison (MHBVC) model, we determined the average value of benefits offered by medium and large employers in the United States for each year.

Since 1987, there has been a dramatic change in the way health care services are managed. Ninety-two percent of employers reported fee-for-service plans as the most prevalent plan type in 1987. By 1998, fee-for-service plans were reported as the most prevalent plan by only 14 percent of employers. In 1998, the most popular plan type is the Preferred Provider Organization, which is reported as the most prevalent plan by 40 percent of employers. Health Maintenance Organizations and Point of Service Plans were reported as the most prevalent plan type by 26 percent and 21 percent of organizations, respectively.

The total value of employer provided health care benefits, in constant dollars, decreased by 14.2 percent over the last eleven years. The value of general health care benefits decreased by 11.5 percent since 1988, while the value of behavioral health care benefits decreased by 54.7 percent. As a proportion of the total health care costs, behavioral health care benefits decreased from 6.1 percent in 1988 to 3.2 percent in 1998.

In addition to tighter management controls, behavioral health care benefits have become more limited since 1988. In 1988, 38 percent of plans imposed a day limit on inpatient psychiatric care. By 1998, limits were imposed by 62 percent of plans. The most prevalent limit remained 30 days during this time. The number of plans imposing any type of limit on inpatient psychiatric care increased from 63 percent in 1990 to 88 percent in 1998.

Outpatient behavioral health care limits have also changed. Twenty-six percent of plans imposed an annual visit limit in 1988. In 1998, such limits were imposed by 57 percent of plans. In addition to an increase in the number of plans imposing a limit, the limit has decreased. In 1988, 46 percent of plans imposing a limit allowed a maximum of 50 visits. In 1998, only 14 percent of plans with a limit allow 50 visits. The most prevalent limit is 20 visits, which is imposed by 39 percent of plans with a limit.

In addition to annual visit limits, many plans impose per visit dollar limits and annual dollar limits. In 1988, 45 percent of plans imposed annual dollar limits on outpatient psychiatric care. By 1998, the number of plans imposing these limits had decreased to 35 percent. However, the dollar limits imposed by these plans have not kept pace with inflation. Most

plans imposed a limit of \$2,500 or less in 1988 and 1998. To keep pace with inflation, a limit of \$2,500 in 1988 would have to be increased to \$5,028 in 1998.

Data from Mutual of Omaha show a four percent increase in outpatient utilization for mental and behavioral services from 1988 to 1997, but a 24.6 percent decline in encounters per 1,000 people from 1993 through 1997. In contrast, there was an increase of 57.7 percent in general medical outpatient encounters per 1,000 during the period from 1988 through 1997. For inpatient utilization, Mutual of Omaha data indicate that the number of mental and behavioral admissions per 1,000 did not decline as precipitously as for general health diagnoses (19.0 percent compared with 28.8 percent for general), but the number of inpatient days per 1,000 declined by 69 percent for mental and behavioral diagnoses.

It is important to note that some of the data for 1998 may not reflect implementation of the Mental Health Parity Act of 1996 (MHPA). The law was effective with plan years beginning on or after January 1, 1998. If an employer's plan year began both after the law's effective date and after the 1998 benefits data were collected, the data may reflect a mental health benefit that was not then in compliance with MHPA.

### II. Methodology

The Hay Benefits Report collects data on the typical design of health care benefits provided by medium and large employers in the United States. The data in the 1998 Hay Benefits Report were collected from 1,017 US employers representing a broad industry and geographic mix.

#### Common Cost Approach

Benefit values, in this report, are based on the average cost of providing the benefits to employees in a typical medium to large U.S. company. Valuations take into account the expected frequency and duration of use of a benefit. Benefit plans are complex and multi-faceted. Consequently, any comparison of several, almost invariably dissimilar, benefits plans is extremely difficult without a single common denominator or yardstick on which all plans can be measured.

Cost is clearly the most direct common denominator. All benefits cost somebody something, and if a dollar value could be assigned to each plan in a survey, almost limitless comparisons are possible. Actual cost is clearly of vital concern to an employer, although it has the following disadvantages that render it unsuitable for most benefit plan comparison studies.

- Actual costs are very often not available from participants. This can be true either because of the difficulty in developing the desired figures, or because of a conscious decision not to share such data.
- Funding, financing, and accounting techniques differ widely among firms. Consequently, the actual cost of two identical benefit programs can differ significantly for a host of reasons in no way related to the benefit itself.
- The employee "mix" can vary substantially from one employer to another. That is, the distribution of employees by age, sex, service, salary level, and relative health is rarely similar from one firm to another. Therefore, even if the same benefit and the same financing method were used, the actual cost could, and probably would, be different.
- A firm's bargaining power and skill as a benefits buyer is yet another variable making actual cost unreliable as a tool for measuring relative value of benefits. Because of differences in negotiating abilities, a poor plan in one environment can cost more than a superior plan in another.

For these reasons, Hay does not use actual cost in studies comparing benefits values. The Hay Group has, however, developed a technique of common costs that permits the assignment of dollar values, a common yardstick, without the aforementioned problems associated with actual costs.

The key to the Hay "common cost" approach is the use of a single, realistic method for all plans being valued. All plans in the study are, in effect, "purchased" for the same group

of employees from the same source using the same financing technique and the same economic and actuarial assumptions. The "employees" used are a typical mix of employees as might be found in a large industrial environment. The "providers" are a hypothetical group of insurance companies and/or trustees who are "selling" coverage using the same average group rates, actuarial assumptions, and experience ratings for all the plans in the study. The result is an actuarially derived "common cost" for each plan, expressed as an annual dollar value. For health benefits, the value is adjusted to reflect the type of delivery system; that is, traditional fee-for-service (FFS), Preferred Provider Organization (PPO), Point of Service (POS) plan, or Health Maintenance Organization (HMO).

#### Benefits Value Comparison Model

Plan design information for 1988 through 1998 was extracted from the Hay Benefits Report for each year. The benefits for each year were coded into Hay's Mental Health Benefit Value Comparison (MHBVC) model. MHBVC was developed by the Hay Group for the National Institute of Mental Health (NIMH) to provide estimates of the costs of mental health parity.

The MHBVC produces a standardized benefits value based on the input of over 125 items describing the benefit design of a health plan. These include deductibles, coinsurance, maximum out-of-pocket and coverage limitations. In behavioral health care, in particular, the model includes over 25 items including day, visit, and dollar limits. The standardized benefits value is equivalent to the average premium for health care per single employee for medium and large employers in the United States in 1998.

The BVC approach and the Hay Benefits report have been used extensively by the private sector, NIMH, and the Congressional Research Service (CRS) to analyze the cost and prevalence of benefits in the United States.

### III. Findings

### Cost Trends

The National Association of Psychiatric Health Systems (NAPHS) and the Association of Behavioral Group Practices (ABGP) asked the Hay Group to analyze trends in the proportion of employer health care dollars spent on behavioral health care. This analysis includes trends in absolute and proportionate expenditures in health care costs and trends in behavioral health care plan design over the last eleven years. In addition, this report shows specific characteristics of plans regarding the treatment of inpatient and outpatient mental health services and provides statistics on lengths of stay and utilization.

The total value of employer provided health care benefits decreased by 14.2 percent from 1988 through 1998. This decrease in total value is attributed to the shift towards managed care. The value of general health care benefits decreased by 11.5 percent since 1988, while the value of behavioral health care benefits decreased by 54.7 percent. As a proportion of the total value, behavioral health care decreased from 6.1 percent in 1988 to 3.2 percent in 1998. Although there is a slight increase in the proportion of employer health care dollars attributed to behavioral health care from 1997 to 1998, the value of behavioral health benefits remains significantly below the 1988 level.

The table below shows the total benefits value, general health benefits value and behavioral health benefits value for each year from 1988 through 1998. The dollar values shown are per single employee per year. In addition, the table shows the behavioral health value as a percent of the total value.

	Total	General	Behavioral	Behavioral Health as a
Year	Value	Health Value	Health Value	Percent of Total
1988	\$2,526.49	\$2,372.01	\$154.48	6.1%
1989	\$2,528.85	\$2,381.51	\$147.33	5.8%
1990	\$2,503.04	\$2,365.36	\$137.68	5.5%
1991	\$2,490.59	\$2,361.07	\$129.51	5.2%
1992	\$2,470.83	\$2,349.80	\$121.04	4.9%
1993	\$2,420.83	\$2,312.62	\$107.64	4.4%
1994	\$2,383.85	\$2,287.27	\$96.58	4.1%
1995	\$2,336.77	\$2,250.33	\$86.44	3.7%
1996	\$2,281.00	\$2,203.60	\$77.40	3.4%
1997	\$2,268.38	\$2,197.42	\$70.96	3.1%
1998	\$2,168.55	\$2,098.68	\$69.87	3.2%
% Change				
1988 – 1998	-14.2%	-11.5%	-54.7%	

#### Table 1: Behavioral Health Care Benefit Costs as a Percent of Total Health Care Benefit Costs (All Values are in 1998 Dollars)

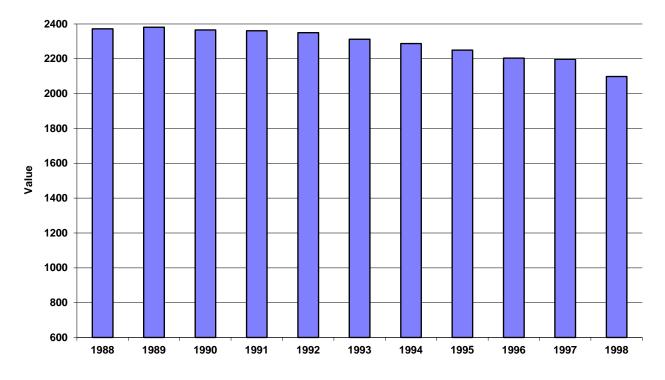
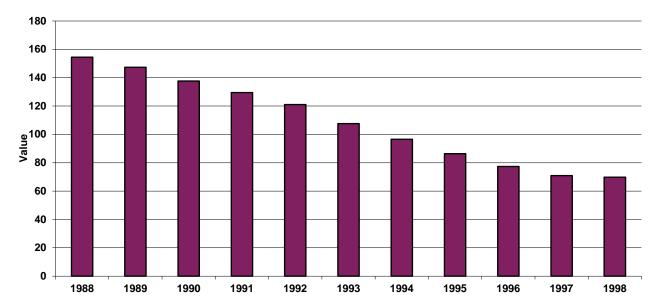
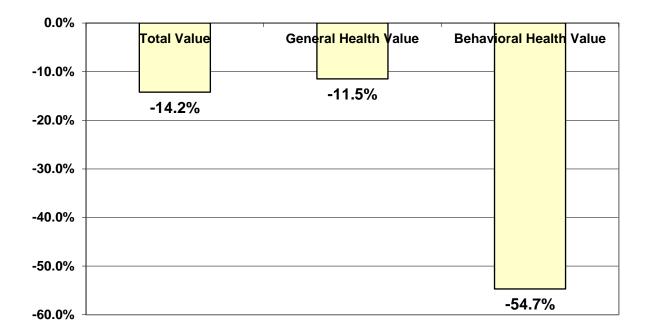


Figure 1: Change in General Health Care Value 1988 - 1998 (values are in 1998 dollars)

Figure 2: Change in Behavioral Health Care Value 1988 - 1998 (values are in 1998 dollars)





### Plan Design Trends

Over the last several years, the way health care is managed has changed dramatically. Health care plans can be classified into four types with differing levels of management: fee-for-service plans (FFS), Preferred Provider Organizations (PPO), Point of Service Plans (POS), and Health Maintenance Organizations (HMO).

- *Fee-for-service plan*: A fee-for-service plan allows patients to choose any provider and does not require patients to obtain referrals to see specialists. They are considered loosely managed.
- Preferred Provider Organization: A PPO allows patients to receive medical services at a lower cost by obtaining care from network providers. Patients may choose to receive care from a non-network provider; however, out-ofpocket costs for these services are substantially higher than for services provided by network providers. Patients do not need a referral to see a specialist. These plans are considered moderately managed.
- *Point of Service Plan*: A POS plan is similar to a PPO plan, except that patients are required to receive a referral from their primary care physician prior to receiving care from a specialist. These plans are also considered moderately managed.
- Health Maintenance Organization: An HMO requires patients to receive care through a system of affiliated providers. Out-of-network services are not available, except in emergencies. Patients must receive a referral from their primary care physician prior to receiving care from another provider. HMOs are considered tightly managed.

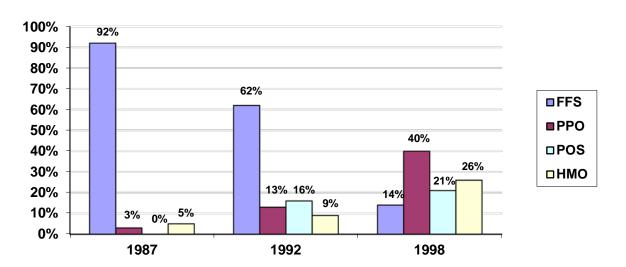
Under any of these four arrangements, a carve-out plan can be implemented to provide mental health and substance abuse services. A carve-out plan is a managed care approach that provides uniform care for mental health and substance abuse treatment regardless of what type of plan provides for general health benefits. Carve-out plans are considered tightly managed. Under a carve-out plan, costs are contained by individual case management of the treatment each patient receives. Any treatment for mental health or substance abuse must be pre-approved by a case manager.

The extent to which carve out plans are being used to provide mental health benefits is not fully known. However, some survey data are now available. In 1998, the Hay Benefits Report collected data on the prevalence of carve out plans for mental health benefits. The following table shows the results of Hay's survey and indicates that approximately 20 percent of the 204 employers responding provide in- and outpatient mental health benefits through a carve out arrangement.

Answer	<u>Number</u>	<u>Percent</u>
Response Rate	204	20%
Of those, who responded:		
Yes, inpatient only	0	0%
Yes, outpatient only	0	0%
Yes, both	39	19%
Yes, other	1	Less than 1%
No	164	80%

 Table 2: Is your plan's mental health/psychiatric care a "carve-out" plan?

Over the last 12 years, fee-for-service medical plans have become significantly less prevalent as the primary medical plan (plan type covering most employees) while managed care plans continue to gain in prevalence. The chart below shows the shift in health care delivery systems from 1987 through 1998. Unless otherwise noted, data presented in this report are from the Hay Benefits Report.



### Figure 4: Design of Primary Medical Plan

The last decade has also seen a shift in the way behavioral health care services are managed. Specifically, there have been shifts in the way limits are imposed on both inpatient and outpatient psychiatric health care.

The Mental Health Parity Act of 1996 (MHPA) prohibits health care plans from imposing more restrictive annual or lifetime limits on mental health benefits than on medical/surgical benefits. For example, if a plan imposes an aggregate lifetime expense limit or an annual dollar limit on medical/surgical benefits, it cannot impose more restrictive limits on mental health benefits. The law does not require a plan to provide mental health benefits. In addition, the MHPA allows plans to adopt higher copayments and deductibles and, to impose limits on the number of visits or days. The requirements of the MHPA do not apply to substance abuse benefits. The Act is effective for plan years beginning January 1, 1998 or later.

All the pre-1998 data in this report were collected prior to implementation of the MHPA. However, some plans in the 1998 Hay Benefits Report database have benefit provisions that are not in compliance with the MHPA because these plans do not operate on a calendar year basis and may not have modified their provisions to comply with the Act at the time our 1998 survey was completed. Also, small employer plans (fewer than 50 employees) and government plans are exempt from the provisions of the MHPA. It is also possible that a small number of plans were simply not in compliance or data were reported incorrectly.

#### Inpatient Psychiatric Care – Day Limits

In 1988, 38 percent of all plans imposed a day limit on inpatient psychiatric care. By 1998, day limits were imposed by 62 percent of plans. While more plans are imposing limits, the limit has remained stable. Of the plans imposing a day limit, 59 percent imposed a limit of 30 days in 1988 and in 1998.

#### Inpatient Psychiatric Care Room and Board - Level of Coverage

The level of coverage for inpatient psychiatric care is measured by the percentage covered, as well as any maximums imposed on the amount of coverage (day limits, for example). The percentage of plans covering inpatient psychiatric care at the same maximum as other confinements (total of rows 1 and 3 in the table below) decreased from 37 percent in 1990 to 12 percent in 1998. The percentage of plans covering inpatient psychiatric care at 100 percent of reasonable and customary (total of rows 1 and 2 in the table below) has remained relatively stable over the years. In 1988, 46 percent of plans covered inpatient psychiatric care at 100 percent of reasonable and customary. In 1998, 48 percent of plans covered inpatient psychiatric care at 100 percent psychiatric care at 100 percent of reasonable and customary. In 1998, 48 percent of plans covered inpatient psychiatric care at 100 percent psychiatric care at 100 percent of reasonable and customary.

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
100% of R&C Same Maximum as Other Confinements	22%	22%	14%	10%	7%	7%	4%	5%	6%	7%	5%
100% of R&C Separate Maximum	24%	21%	33%	30%	32%	40%	38%	40%	40%	40%	43%
Less than 100% of R&C (Same Maximum)			23%	16%	12%	9%	9%	8%	7%	7%	7%

Table 4: Inpatient Psychiatric Room and Board Level of Coverage

Less than 100% of	54% <sup>*</sup>	57% <sup>*</sup>	30%	44%	49%	44%	49%	47%	47%	46%	45%
R&C (Separate											
Maximum)											

In 1988 & 1989, these amounts were reported as "Less than 100% of R&C - Same or Separate Maximum."

#### In Hospital Psychiatric Care - Limits

The number of plans imposing any type limit on inpatient psychiatric care increased from 63 percent in 1990 to 88 percent in 1998. Also, the number of plans that impose more than one limit increased from 16 percent in 1988 to 24 percent in 1998. The first row of the table below shows the percentage of plans that impose a limit. The remaining rows show the type of limits and the percentage of plans with limits that impose each type. For example, in 1998, 88 percent of plans impose a limit and, of these, 55 percent impose a limit on the number of days of inpatient care that are covered.

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Plans with limits	63%	74%	81%	84%	87%	87%	87%	86%	88%
Have a Maximum Number of Days Only	59%	46%	42%	41%	42%	47%	47%	47%	55%
Have an Annual Dollar Limit Only	7%	5%	5%	5%	5%	4%	4%	4%	5%
Have a Lifetime Dollar Limit Only	18%	25%	25%	24%	23%	21%	21%	21%	16%
Have a Combination of Limits	16%	24%	28%	30%	30%	28%	28%	28%	24%

#### Table 5: Inpatient Psychiatric Care Limits

(Data for 1988 & 1989 are unavailable)

#### Maximum Number of Visits Per Year for Outpatient Psychiatric Care

Outpatient psychiatric care limits have also changed. In 1988, 26 percent of plans imposed an annual visit limit. In 1998, 57 percent of plans imposed such a limit. In addition to an increase in the number of plans imposing a limit, the number of visits allowed has decreased. In 1988, 46 percent of plans that imposed a limit allowed a maximum of 50 visits. In 1998, the most prevalent limit was 20 visits. One possible explanation for the increase in the number of plans imposing a visit limit from 1997 to 1998 is that plan designs have been modified to offset the costs of compliance with the MHPA, although no supporting data are yet available.

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
	1900	1909	1990	1991	1992	1995	1994	1995	1990	1997	1990
Plans with Visit Limit	26%	28%	33%	35%	34%	39%	40%	43%	47%	48%	57%
Fewer than 20			7%	6%	5%	4%	4%	4%	4%	5%	4%
20			16%	22%	25%	28%	31%	34%	39%	38%	39%
21 – 29			5%	3%	4%	4%	4%	3%	4%	5%	5%
30	29%*	34%*	11%	12%	14%	17%	16%	17%	16%	17%	19%
31 – 49	4%	3%	7%	8%	8%	9%	9%	7%	8%	8%	9%
50	46%	42%	36%	35%	30%	25%	25%	23%	20%	17%	14%
51 – 75	16%	18%	15%	13%	13%	12%	10%	11%	8%	9%	9%
More than 75	5%	3%	3%	1%	1%	1%	1%	1%	1%	1%	1%

#### **Table 6: Annual Outpatient Psychiatric Care Visit Limits**

\* In 1988 and 1989, the data are shown for 30 visits and less

#### Outpatient Psychiatric Care - Maximum Benefit Per Visit

In addition to annual visit limits, plans impose per visit dollar limits and annual dollar limits on outpatient psychiatric care. The table below shows the percentage of plans imposing a per visit dollar limit and the limits imposed by these plans. The amounts shown are not adjusted for inflation. Based on the overall trend in health care costs, a

limit of \$50 in 1988 is equal to a limit of \$101 in 1998. Therefore, even though fewer plans are imposing per visit dollar limits, the amount of the average limit is more restrictive than in 1988.

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Plans with Per Visit Dollar Limit	27%	26%	25%	23%	21%	19%	17%	17%	14%
Less than \$20	3%	9%	5%	4%	3%	2%	2%	0%	4%
\$20 - \$29	13%	25%	27%	24%	22%	24%	19%	23%	22%
\$30 - \$39	7%	20%	18%	17%	17%	18%	13%	18%	14%
\$40 - \$49	18%	19%	19%	16%	14%	13%	15%	13%	14%
\$50 - \$59	24%	14%	14%	21%	23%	26%	26%	23%	25%
\$60 - \$69	13%	7%	6%	5%	5%	5%	7%	8%	6%
\$70 or greater	22%	6%	11%	13%	16%	12%	18%	15%	15%

 Table 7: Outpatient Psychiatric Care Per Visit Dollar Limits

### Annual Dollar Maximum for Outpatient Psychiatric Care

In 1988, 45 percent of plans imposed annual dollar limits on outpatient psychiatric care. Of these, 34 percent imposed limits of \$751 to \$1,000; 21 percent imposed limits of \$1,001 to \$1,999; and, 15 percent imposed limits of \$2,000 to \$2,500. By 1998, the percentage of plans imposing limits had decreased to 35 percent. Of these, 17 percent imposed a limit of \$1,000; 22 percent imposed limits of \$1,500 to \$1,999; 16 percent imposed limits of \$2,000 to \$2,499. Ten percent of plans imposed limits greater than or equal to \$5,000. Again these numbers are not adjusted for inflation. Therefore, a limit of \$1,000 in 1988 is equal to a limit of \$2,011 in 1998.

### Outpatient Psychiatric Care Coverage

There is a growing trend of providing outpatient psychiatric care with a separate per visit copayment as opposed to providing these benefits under the general medical plan deductible. The percentage of plans that do not cover outpatient psychiatric care has remained stable. In 1998, three plans out of 1,017 responding did not cover outpatient psychiatric treatment, which resulted in zero percent when rounded to the next whole percentage in the following table.

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Provided Subject to Medical Plan Deductible	85%	85%	79%	74%	72%	64%	58%	49%	41%	38%	35%
Provided Subject to Separate Per Visit Copay/Deductible	6%	6%	10%	13%	14%	18%	21%	26%	32%	35%	39%
Provided and Not Subject to Deductible	7%	8%	10%	12%	13%	17%	20%	24%	26%	26%	26%
Not Covered	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%*

Table 8: Outpatient Psychiatric Care Coverage

\*Three plans do not cover outpatient psychiatric care.

#### Percentage of Reasonable and Customary Charges Paid for Outpatient Psychiatric Care

The typical percentage of reasonable and customary charges paid for outpatient psychiatric care varies from 50 percent to 100 percent. Payment of 100 percent of reasonable and customary is increasing in popularity while both 50 percent and 80 percent of reasonable and customary coverage are declining. It is important to remember

that coinsurance is not the only measure of the amount of coverage provided. The use of other limits (such as per visit or annual dollar limits and limits on the number of visits) decreases the actual amount of charges that a plan covers.

С	Columns do not total 100%. Some plans offer coinsurance rates that are not shown in this table.											
		1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
	50%	68%	63%	55%	52%	50%	43%	42%	37%	32%	31%	26%
	80%			23%	23%	23%	22%	20%	20%	16%	16%	16%
	90%			4%	5%	6%	8%	7%	7%	8%	9%	9%
	100%			13%	13%	15%	22%	23%	30%	36%	38%	44%

#### Table 9: Outpatient Psychiatric Care Coinsurance

\*Data for 1988 & 1989 were not reported in this manner.

#### Summary of Maximums on Outpatient Psychiatric Care

The table on the following page shows a summary of the changes in maximums on outpatient psychiatric care. The dollar values shown in this table have not been adjusted for inflation. Therefore, a limit of \$1,000 in 1988 is equal to a limit of \$1,573 in 1992 and \$2,011 in 1998.

1988	1992	1998
<ul> <li>Of 628 respondents,</li> <li>25% have no dollar maximum other than the overall major medical plan maximum</li> <li>Of those plans that have a maximum,</li> <li>63% have an annual maximum only</li> <li>10% have a lifetime maximum only</li> <li>27% have a combination of both annual and lifetime maximums</li> <li>For the 48 plans with a separate dollar</li> </ul>	<ul> <li>Of 977 respondents,</li> <li>33% have no dollar maximum other than the overall comprehensive medical plan maximum</li> <li>Of those plans that have a maximum,</li> <li>39% have an annual maximum only</li> <li>20% have a lifetime maximum only</li> <li>41% have a combination of both annual and lifetime maximums</li> <li>For the 69 plans with a separate dollar</li> </ul>	<ul> <li>Of 972 respondents,</li> <li>48% have no dollar maximum other than the overall comprehensive medical plan maximum</li> <li>Of those plans that have a maximum,</li> <li>35% have an annual maximum only</li> <li>40% have a lifetime maximum only</li> <li>25% have a combination of both annual and lifetime maximums.</li> <li>For the 57 plans with a separate dollar</li> </ul>
<ul> <li>maximum per lifetime for outpatient psychiatric coverage, the common maximums are:</li> <li>\$5,000 and less (11%)</li> <li>\$7,000 to \$10,000 (27%)</li> <li>\$20,000 to \$29,999 (25%)</li> <li>\$50,000 and Greater (33%)</li> </ul>	<ul> <li>maximum per lifetime for outpatient psychiatric coverage, the common maximums are:</li> <li>less than \$10,000 (17%)</li> <li>\$10,000 (38%)</li> <li>\$25,000 (12%)</li> <li>\$50,000 (16%)</li> </ul>	<ul> <li>maximum per lifetime for outpatient psychiatric coverage, the common maximums are:</li> <li>less than \$10,000 (9%)</li> <li>\$10,000 (19%)</li> <li>\$20,001 to \$29,999 (18%)</li> <li>\$50,000 (30%)</li> </ul>
Comparable data not collected in 1988.	<ul> <li>364 plans had a combination inpatient/outpatient maximum; of these,</li> <li>24% are \$25,000</li> <li>41% are \$50,000</li> <li>12% are greater than \$50,000</li> </ul>	<ul> <li>272 plans have a combination inpatient/outpatient maximum; of these,</li> <li>27% are \$20,001 to \$29,999</li> <li>37% are \$50,000</li> <li>11% are greater than \$50,000</li> </ul>
Of the 295 plans with separate annual maximums for outpatient psychiatric care, the most common maximums are: • \$500 and less (14%) • \$751 - \$1,000 (34%) • \$1,001 - \$1,999 (21%) • \$2,000 - \$2,500 (15%) • \$3,000 - \$4,999 (5%) • \$5,000 or greater (5%)	Of the 406 plans with separate annual maximums for outpatient psychiatric care, the most common maximums are: • Less than \$1,000 (10%) • \$1,000 (22%) • \$1,500 - \$1,999 (22%) • \$2,000 - \$2,499 (18%) • \$2,500 - \$2,999 (7%) • \$3,000 - \$4,999 (9%) • \$5,000 or greater (9%)	Of the 305 plans with separate annual maximums for outpatient psychiatric care, the most common maximums are: • Less than \$1,000 (8%) • \$1,000 (17%) • \$1,500 - \$1,999 (22%) • \$2,000 - \$2,499 (16%) • \$2,500 - \$2,999 ( 11%) • \$3,000 - \$4,999 (9%) • \$5,000 or greater (15%)

#### Data from Other Sources

#### Mutual of Omaha - Current Trends Data - National Average

Each year, Mutual of Omaha produces a report entitled, "Current Trends in Health Care Costs and Utilization." The reports are based on a sample of Mutual of Omaha's group business and the actual experience of their policyholders. The policies included in the study represent a mixture of groups with and without managed care features.

Hay has found that the Mutual of Omaha reports reflect national trends. The advantage of the reports is that they provide detailed consistent information on use of specific components of health care for a large insured base over a period of years.

The following tables and paragraphs present Mutual of Omaha data from 1988 through 1997. The findings shown differ somewhat from data presented in the initial report. This results from including data prior to 1991 and changes in the Mutual of Omaha reporting practices regarding inclusion of substance abuse utilization with inpatient mental and behavioral utilization. Since the initial report was published we determined that substance abuse data were included with inpatient mental and behavioral care through 1995 but were excluded beginning in 1996. We have excluded substance abuse data for each year in all of the following tables.

#### Office Psychiatric Encounters and Average Claims

An "encounter" is defined as a patient/service date combination. A patient who visits more than one physician in a day will have only one visit counted for the day.

The table below shows the change in outpatient psychiatric encounters and average charge per encounter from 1988 through 1997. From 1988 through 1993, the number of outpatient psychiatric encounters per thousand increased. Since 1993, however, the number per thousand has decreased by 24.6 percent and returned to nearly the 1988 level. After adjusting for inflation, the average charge per encounter decreased by 36.2 percent between 1988 and 1997, but increased by eight percent between 1993 and 1997.

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	% Ch	ange
											88-97	93-97
Encounters per 1,000 people	276	271	276	313	346	378	360	339	285	285	3.3%	-24.6%
Average Charge Per Encounter	\$74	\$73	\$76	\$81	\$83	\$84	\$85	\$87	\$92	\$93	25.7%	10.7%
Average Charge per Encounter in 1998 Dollars	\$149	\$122	\$108	\$102	\$94	\$88	\$87	\$88	\$94	\$95	-36.2%	8.0%

Table 11: Psychiatric Encounters and Average Claims	
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### • General Office Visit Encounters and Average Claims

The table below shows the change in general office visit encounters and average charge per encounter from 1988 through 1997. The number of general office visit encounters increased by 57.7 percent and the average charge per encounter decreased by 12.1 percent, after adjusting for inflation. The average charge per encounter (adjusted for inflation) has increased 20.8 percent since 1993.

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	% Change 1988-1997
Encounters per 1,000 people	1326	1405	1441	1638	1747	1928	1956	2023	2087	2091	57.7%
Average Charge per Encounter	\$33	\$36	\$38	\$41	\$43	\$46	\$48	\$51	\$54	\$57	72.7%
Average Charge per Encounter in 1998 Dollars	\$66	\$60	\$54	\$52	\$49	\$48	\$49	\$51	\$55	\$58	-12.1%

Table 12: General Office Visit Encounters and Average Claims

• Inpatient Utilization - Mental and Behavioral (excluding Substance Abuse)

The tables below show the trends in inpatient utilization for mental and behavioral diagnoses, and for all diagnoses. The data exclude substance abuse treatment. Inpatient utilization has decreased across all categories of care. From 1988 through 1997, the number of inpatient admissions per thousand people declined by 19 percent for mental and behavioral diagnoses. For all diagnoses, the decline was 28.2 percent.

Similarly, lengths of stay have decreased across all categories of care. The decrease is more dramatic for mental and behavioral diagnoses than for all diagnoses (61.9 percent compared to 19.4 percent).

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	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	% Change 1988 - 1997
Inpatient Admissions per 1,000 people	4.2	4.3	4.2	4.0	3.8	3.6	3.3	3.4	3.5	3.4	-19.0%
Average Length of Stay	21.0	21.6	19.0	17.0	16.0	13.2	12.4	10.2	8.5	8.0	-61.9%
Inpatient Days per 1,000 people	87	93	82	68	54	47	41	35	29	27	-69.0%

Table 13: Inpatient Utilization – Mental and Behavioral

Inpatient Utilization - All Diagnoses (including mental & behavioral; excluding substance abuse)

				Та	ble 14						
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	% Change 1988 - 1997
Inpatient Admissions per 1,000 people	76.2	73.6	72.8	69.7	68.6	66.2	62.3	63.2	60.5	54.7	-28.2
Average Length of Stay	6.2	6.3	6.2	6.0	5.8	5.7	5.6	5.1	4.9	5.0	-19.4
Inpatient Days per 1,000 people	475	462	449	416	396	378	347	322	294	275	-42.1

Inpatient Utilization - General Health Diagnoses (excluding mental & behavioral & substance abuse)

				Id							
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	% Change 1988 – 1997
Inpatient Admissions per 1,000 people	72.0	69.3	66.9	65.7	64.8	62.6	59.0	59.8	57.0	51.3	-28.8
Inpatient Days per 1,000 people	388	369	367	348	342	331	306	287	265	248	-36.1

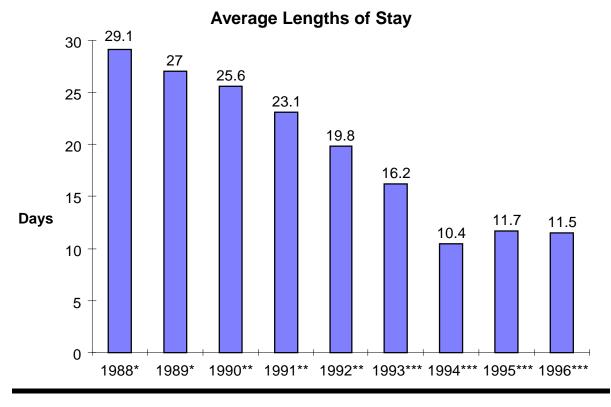
Inpatient admissions per thousand people for mental and behavioral diagnoses declined by 19 percent between 1988 and 1997 while inpatient admissions per 1,000 for general health diagnoses declined by 28.8 percent. However, the number of inpatient days per thousand for mental and behavioral admissions declined by almost twice as much as inpatient days for general diagnoses (68.1 percent for mental and behavioral compared to 36.1 percent for general diagnoses). The greater decline in inpatient days per thousand for mental and behavioral admissions reflects the relative trend in the average length of stay for mental and behavioral compared to general health diagnoses admissions.

The results of the Mutual of Omaha survey confirm the trends shown in the Hay Benefits Report regarding plan design and management.

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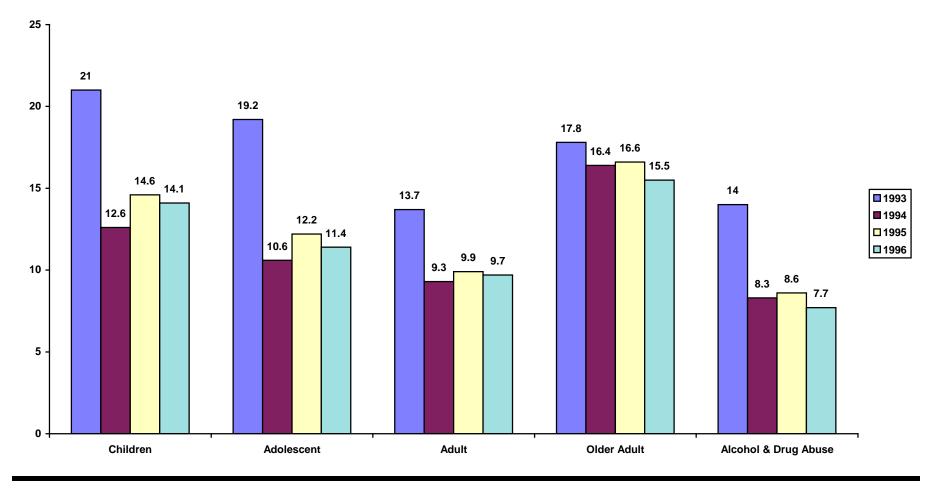
### National Association of Psychiatric Health Systems Annual Survey Reports

Each year NAPHS surveys its members to examine various aspects of the behavioral health delivery system. The data reported in the NAPHS surveys show a decrease in average lengths of stay from 1993 to 1996 of 29 percent.



\* trimmed at 90 days \*\*trimmed at 60 days

\*\*\*trimmed at 30 days



#### Figure 6: Average Length of Stay by Psychiatric Program Service (Trimmed at 30 days)

# **APPENDIX A**

Typical Plan Design 1988 and 1998

# **Typical Plan Designs**

Dollars have not been updated for inflation.

Feature	1988 (FFS - 92% of plans)	1998 (FFS- 14% of plans)
Deductible	Individual: \$100	Individual: \$200
	Family: \$300	Family: \$400
Hospitalization	Maximum Number of Days: Unlimited	Maximum Number of Days: Unlimited
	Inpatient Hospital Coinsurance: 80%	Inpatient Hospital Coinsurance: 80%
	Inpatient Surgery Coinsurance: 80%	Inpatient Surgery Coinsurance: 80%
	General Coinsurance: 80%	General Coinsurance: 80%
Physician Visits	Inpatient Physician Visits Coinsurance: 80%	Inpatient Physician Visits Coinsurance: 80%
	Outpatient Physician Visits Coinsurance: 80%	Outpatient Physician Visits Coinsurance: 80%
Outpatient x-ray & lab	Coinsurance: 80%	Coinsurance: 80%
	Subject to General Deductible	Subject to General Deductible
Prescription Drugs	Covered	Covered
	Co-pay: \$2 per prescription (brand name or	Co-pay: \$5 generic; \$10 brand name
	generic)	Purchase of generic is NOT required
		Voluntary mail order pharmacy service available
Out-of-pocket Limits	Individual: \$1,000	Individual: \$1,000
	Family: \$3,000	Family: \$3,000
Vision Care	Not Covered	Not Covered
Dental Care	Separate Dental Deductible: \$50/person	Separate Dental Deductible: \$50/person
	Deductible waived for preventive care	Deductible waived for preventive care
	Preventive Care Coinsurance: 100%	Preventive Care Coinsurance: 100%
	Basic Restorative Care Coinsurance: 80%	Basic Restorative Care Coinsurance: 80%
	Major Restorative Care Coinsurance: 50%	Major Restorative Care Coinsurance: 50%
	Maximum Annual Dental Benefit: \$1,000	Maximum Annual Dental Benefit: \$1,000
	Orthodontia Coinsurance: 50%	Orthodontia Coinsurance: 50%
	Max. Lifetime Orthodontia Benefit: \$1,000	Max. Lifetime Orthodontia Benefit: \$1,000

Feature	1998 (PPO – 40% of plans)	1998 (POS- 21% of plans)
Deductible	In network: None	In network: None
	Out of network: \$100 Ind/ \$200 Family	Out of network: \$150 Ind/\$300 Family
Hospitalization	Maximum Number of Days: Unlimited	Maximum Number of Days: Unlimited
	Inpatient Hospital and Surgery Coinsurance: 90% In network	Inpatient Hospital and Surgery Coinsurance: 100% In network
Physician Visits	Inpatient Physician Visits: 90% In network	Inpatient Physician Visits: 100% In network
	Outpatient Physician Visits: 100% In network	Outpatient Physician Visits: 100% In network
Outpatient x-ray & lab	Coinsurance: 90% In network	Coinsurance: 100% In network
	Subject to General Deductible	Subject to general deductible (out of network)
Prescription Drugs	Covered	Covered
	Copay: \$5 generic/\$10 brand name	Copay: \$5 generic/\$10 brand name
	Purchase of Generic is NOT required	Purchase of Generic is NOT required
	Voluntary mail order pharmacy service	Voluntary mail order pharmacy service available
	available	
Out-of-pocket Limits	In network: \$1,000 Ind/ \$2,000 Family	In network: \$1,000 Ind/ \$2,000 Family
	Out of network: \$2,000 Ind/ \$4,000 Family	Out of network: \$2,000 Ind/ \$4,000 Family
Vision Care	Not Covered	Not Covered
Dental Care	Separate Dental Deductible: \$50/person	Separate Dental Deductible: \$50/person
	Deductible waived for preventive care	Deductible waived for preventive care
	Preventive Care Coinsurance: 100%	Preventive Care Coinsurance: 100%
	Basic Restorative Care Coinsurance: 80%	Basic Restorative Care Coinsurance: 80%
	Major Restorative Care Coinsurance: 50%	Major Restorative Care Coinsurance: 50%
	Maximum Annual Dental Benefit: \$1,000	Maximum Annual Dental Benefit: \$1,000
	Orthodontia Coinsurance: 50%	Orthodontia Coinsurance: 50%
	Max. Lifetime Orthodontia Benefit: \$1,000	Max. Lifetime Orthodontia Benefit: \$1,000

# Under PPO and POS plans, the coinsurance for out of network services is reduced by 20%.

Feature	1998 (HMO - 26% of plans)
Deductible	None
Hospitalization	Unlimited
	No Copay
Physician Visits	Inpatient Physician Visits: 100%
	Outpatient Physician Visits: \$10 Copayment
Outpatient x-ray & lab	No Copay
Emergency Room	\$25 Copay
Prescription Drugs	Covered
	Copay: \$5 Generic/\$10 Brand
	Generic Required if available
	Mail order pharmacy service is available
Out-of-pocket Limits	None
Vision Care	Not Covered
Dental Care	Separate Dental Deductible: \$50/person
	Deductible waived for preventive care
	Preventive Care Coinsurance: 100%
	Basic Restorative Care Coinsurance: 80%
	Major Restorative Care Coinsurance: 50%
	Maximum Annual Dental Benefit: \$1,000
	Orthodontia Coinsurance: 50%
	Max. Lifetime Orthodontia Benefit: \$1,000