MaineCare Behavioral Health Care Expenditures

State Fiscal Years 1996 – 2002

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EXECUTIVE SUMMARY

Introduction

Expenditures by MaineCare (the Maine Medicaid program) for behavioral health care services have risen rapidly in the past few years. The Governor's Office of Health Policy and Finance (GOHPF) commissioned researchers at the Edmund S. Muskie School of Public Service to examine these increases in detail to gain an understanding of how and why the expenditures were rising. The report "MaineCare Behavioral Health Care Expenditures: State Fiscal Years 1996 – 2002" was submitted to the GOHPF in November, 2004; it was revised based on comments from providers, consumers, and advocates in March, 2005. This Executive Summary describes key aspects of the design and major results of the revised study. The full report presents more details on study design and results, discusses the implications of the study, describes directions for future research, and summarizes several new policies and programs initiated by MaineCare in response to the increase in behavioral expenditures. This report can be accessed at http://muskie.usm.maine.edu/Publications/ihp/BehavTrendsRep.pdf and an executive summary can be accessed at http://muskie.usm.maine.edu/Publications/ihp/BehavTrendsSum.pdf.

We had two perspectives in this study: The first is on MaineCare members with a behavioral health condition; the second is on MaineCare behavioral health care expenditures for all MaineCare members.

The report has three objectives:

- To track trends in MaineCare expenditures for **behavioral health care services** from SFY 1996 to 2002 compared to expenditures for medical and long-term care services
- To track trends in MaineCare expenditures for members with **behavioral conditions** from SFY 1996 to SFY 2002 compared to expenditures for members without behavioral conditions
- To identify potential reasons for the increases and areas for further study

Data and methods

We used MaineCare claims and eligibility data for SFYs 1996 through 2002. The study is limited to "service users," defined as MaineCare members who were eligible for MaineCare at any time during the year and used a MaineCare service. Members who used only prescription benefits were not included, since diagnoses are not reported on prescription claims. Thus, members only eligible for benefits such as Healthy Maine prescriptions were excluded from the study. We did include prescription costs when determining MaineCare expenditures for service users. In 2002, 91.7% of MaineCare members eligible for full benefits used services; they are included in this study. Members are considered to have a behavioral health condition if they had a behavioral health diagnosis or if they received a behavioral health care service.

We used the Clinical Classification Software (CCS) categories developed by the federal Agency for HealthCare Research and Quality (AHRQ) to summarize information on diseases and health conditions into diagnostic categories. There are nine CCS categories that cover behavioral health conditions. They include mental health conditions such as depression, cognitive disorders such as senility, substance abuse and alcohol-related mental disorders, mental retardation, and developmental disability. We used the nine CCS mental health categories in this study. This broad definition of behavioral conditions is based on the CCS Mental Health categories.

We grouped the nine categories into three more general headings: mental retardation/developmental delay (MR/DD), mental health/substance abuse (MH/SA), and senility, Alzheimer's disease, and dementia (Senility). The latter category, Senility, was added to the analysis in March, 2005, based on concerns expressed by providers, advocates, and consumers that the more general category of MH/SA in the original report combined two very different groups of conditions. It is important to note that individuals can be classified into more than one CCS category. In contrast, we designed the more general headings of MR/DD, Senility, and MH/SA to be mutually exclusive.

We used the amount that MaineCare paid the providers ("paid claims") to estimate the cost to MaineCare of the services provided.

Behavioral health care services include facility services, community support services, waiver for persons with mental retardation (MR), mental health services, substance abuse, day habilitation, psychological services, intermediate care facility (ICF)/MR boarding, home-based mental health, and development/behavioral clinic services. Expenditure categories used in the MaineCare Annual Report 2002 were used to designate behavioral health services. The remaining expenditure categories were classified as long-term care or medical/other.[1]

Limitations

Claims and eligibility data are constructed primarily for administrative purposes, which poses some limitations for research. Expenditures (paid claims) are registered fairly completely, but other information, especially diagnoses, may be under-reported. We focused on general categories of service users and not on individual diagnoses, so the groups represent aggregate populations that do not reflect clinical treatment patterns. We did not focus on treatment by type of provider (inpatient, ambulatory, or psychiatrist). We used a general algorithm to allocate PNMI expenditures.

[1] Private Non-Medical Institution (PNMI) services can either be received for behavioral health conditions, medical conditions, or functional impairments. It is not possible to determine the reason PNMI services were used from the member's age or from the service provider. Based on comments from the reviewers and analysis of the claims data, we classified PNMI expenditures for members with a behavioral condition as a behavioral health care expenditure and PNMI expenditures for members without a behavioral health condition as a long-term care expenditure. This is different from standard MaineCare practice, which classified all PNMI expenditures as long-term care expenditures, and from the earlier report by McGuire (2003), which followed that practice.

Key findings

Analysis by type of service

Between SFY 1996 and SFY 2002, total MaineCare expenditures for behavioral health care expenditures increased by 162.5% compared to 6.1% for long term care and 112.3% for medical/other expenditures.

Behavioral health care services account for an increasing proportion of MaineCare expenditures: they increased from 26.7% of MaineCare expenditures in SFY 1996 to 37.2% in SFY 2002.

Analysis of members with behavioral conditions

In 2002, 41.0% of all service users had a behavioral health condition; they accounted for 76.5% of MaineCare expenditures.

In 2002, MaineCare spent more per month on members with behavioral conditions ($1,195) than on members without behavioral health conditions ($272).

From SFY 1996 to 2002, MaineCare expenditures for persons with behavioral health conditions increased much faster (by 118.5%) than for persons without a behavioral health condition (by 29.5%).

The increase in MaineCare spending for persons with behavioral health conditions is attributed to two factors – increasing numbers of members involved and increasing cost per person per month. Most – 76% – of the growth in total expenditures was due to an increase in the number of members enrolled and the percent of members with a behavioral condition; 18% was due to an increase in the average expenditure per month; and the remaining 6% was due to an increase in the average number of months each member was enrolled in MaineCare.

The number of children (0-20 years of age) with a behavioral health condition increased especially dramatically -- by 107.8%.

Mental health/substance abuse (MH/SA) is the fastest growing general category in number of members (up 82.7%) and in total expenditures (up 146.7%). The highest average monthly expenditure is for service users with mental retardation/developmental delay (MR/DD), at $4,435/month.

The diagnostic categories with the largest increases in the number of service users were substance-related mental disorders (up 164.8%), other mental conditions (up 106.4%), and affective disorders (up 103.3%).

The most common conditions in 2002 were anxiety, affective disorders, substance-abuse related disorders, and other mental conditions. The most expensive conditions per-service-user per-month in 2002 were mental retardation, senility and organic mental disorders, and schizophrenia and other psychoses.

Persons with behavioral health conditions use a mix of services. In SFY 2002, 47.9% of MaineCare expenditures for this group were for behavioral health care services, 15.7% were for long-term care, and 36.4% were for medical/other services. A higher percentage of expenditures for service users age 65 and over are for long-term care services, compared to younger service users, who use more medical and behavioral services.

Other findings

- The use of out-of-state psychiatric facilities by children increased dramatically from SFY 1996 to 1999 and then dropped substantially from 1999 to 2002. Out-of-state treatment is considerably more expensive than in-state treatment.

- Total expenditures for psychotropic medications (that is, medications that are used to treat mental health conditions) increased by 229.8% for service users with behavioral conditions from SFY 1996 to SFY 2002.

- Total expenditures on medications for members with behavioral conditions increased by 214.0% from SFY 1996 to SFY 2002; this compares to an increase of 86.8% for other service users.

- Almost all the MaineCare high-cost users in SFY 2002 had a behavioral health condition. Three-fourths (75.0%) of the amount MaineCare spent on these high-cost service users was for behavioral health care services.

Discussion and conclusions

Policy implications of the study

By virtually every measure we studied, from SFY 1996 to 2002 expenditures for behavioral health care services increased more rapidly than for medical or long-term care services. Similarly, expenditures for MaineCare service users with behavioral health conditions increased more rapidly than for MaineCare services users without behavioral health conditions. MaineCare will not be able to control costs until it can control its behavioral health care expenditures. The trends in spending and enrollment for members with behavioral conditions show no sign of slowing down. There is every sign that MaineCare expenditures in the future will be even more heavily weighted to members with behavioral conditions.

In order to make a far-reaching impact on MaineCare behavioral health care expenditures, a multi-program, interdepartmental strategy will be needed. This study shows that behavioral health care

in MaineCare includes a much broader and larger group than those traditionally served by behavioral services programs. Behavioral health care appears to be a need that spans Department of Health and Human Services programs (e.g. aged, child protective, and TANF) as well as Department of Education programs (special education) and Department of Labor programs (rehabilitation and unemployment). The new Department of Health and Human Services, which resulted from the merger of the Department of Behavioral and Developmental Services and the Department of Human Services, represents an important opportunity for developing such a strategy. However, even with the merger there will still be a need to involve the Department of Education and the Department of Labor.

The increase in the number and percent of children with behavioral conditions warrants special attention. In part, this was due to an increase in the number of children covered by MaineCare. In part, however, it was due to an increase in the percent of children with a diagnosed behavioral condition.

Service users with high behavioral health care expenditures also have high medical expenditures. National studies indicate that as much as 70% of mental health care services are provided in the primary (medical) care system. This suggests that primary care providers and other medical care providers play an important role in the care of MaineCare service users with behavioral conditions.

The increase in the number of service users with substance abuse-related conditions deserves special attention. The number of children still receiving out-of-state treatment may indicate a capacity limitation.

Additional questions for consideration by MaineCare

Will the dramatic increase in the number and percentage of children with behavioral conditions continue?

Does the continued use of out-of-state providers for children's treatment indicate greater service need or greater patient complexity than can be met in-state? Does it indicate a capacity limitation in Maine?

Certain physical conditions, such as cardiovascular disease, can lead to or co-occur with mental health problems such as depression or anxiety (summarized in Chiles, Lambert, and Hatch 1999). To what extent are the MaineCare expenditures of the high-cost users identified in this report driven by their medical conditions and to what extent are they driven by their behavioral conditions?

What infrastructure is already in place to manage the care of high-cost users? Can anything be done to manage the expenditures of the much larger percentage of members with lower-than-average costs? Can existing case management or utilization review programs be used more effectively to contain expenditures? Would greater use of managed care for behavioral health care help control costs?

There are traditional differences in the approaches and operations of behavioral, medical, and long-term care programs in such areas as rate setting, payment, care management, the use of managed care, client assessment, and care planning. In many instances, these differences lead to tighter control over expenditures or service use for medical and long-term care services compared to behavioral services. For example, assessment of client case mix, service needs, and planning for long-term care are the responsibility of a different organization from the organization that delivers the care after the assessment has been made. This raises the question of whether it would be useful for DHHS to consider adapting for behavioral services some of the management and oversight policies in other DHHS programs, such as separating the diagnosis of the clients' condition and needs and the development of the care plan from the provision of care.

Table of Contents

I. INTRODUCTION

Expenditures by MaineCare (the Maine Medicaid program) for behavioral health care services have risen rapidly in the past few years. The Governor's Office of Health Policy and Finance (GOHPF) commissioned researchers at the Edmund S. Muskie School of Public Service to examine these increases in detail to gain an understanding of how and why the expenditures were rising. The report "MaineCare Behavioral Health Care Expenditures: State Fiscal Years 1996 – 2002" was submitted to the GOHPF in November, 2004; it was revised based on comments from providers, consumers, and advocates in February, 2005. The report presents the study design and results, discusses the implications of the study, describes directions for future research, and summarizes several new policies and programs initiated by MaineCare in response to the increase in behavioral expenditures.

This study builds on an earlier report, "Trends in Behavioral Health Expenditures in the MaineCare Program 1996 - 2002: A Data Overview," February, 2003, by Catherine McGuire. It expands on the earlier work by examining reasons for the dramatic increase in MaineCare expenditures on members with behavioral health conditions and identifying areas for further study. It was conducted under the 2003-2004 Muskie/DHS Medicaid Policy Cooperative Agreement. The full report can be accessed at http://muskie.usm.maine.edu/Publications/ihp/BehavTrendsRep.pdf and an executive summary can be accessed at http://muskie.usm.maine.edu/Publications/ihp/BehavTrendsSum.pdf.

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- To track trends in MaineCare expenditures for members with **behavioral conditions** from SFY 1996 to SFY 2002 compared to expenditures for members without behavioral conditions[1]
- To identify potential reasons for the increases and areas for further study

[1] "Behavioral health conditions" in this report includes mental retardation, developmental delay, mental health conditions such as depression, cognitive disorders such as senility, and substance abuse and alcohol-related mental disorders.

II. STUDY POPULATION

We included MaineCare members who were eligible at any time during the year and used a MaineCare service in State Fiscal Years (SFYs) 1996, 1999, or 2002. We excluded members who did not use any MaineCare-covered service, since we did not have the information needed to classify them as having a behavioral health condition or not. We also excluded members whose only benefit received was retail pharmacy prescriptions (those enrolled in the Healthy Maine Prescription (HMP) program or the Drugs for the Elderly (DEL) program), since diagnoses are not reported in MaineCare prescription claims. However, we did include prescription costs when determining MaineCare expenditures for service users. The members who were excluded from the study population were those members with no MaineCare claims during the study year and those members whose only claims during the year were retail pharmacy prescription claims.

In 2002, 91.7% of MaineCare members (outside of those enrolled only in HMP or DEL) were service users; they are included in this study. (See Appendix A for details.)

III. DATA AND METHODS

The data for this report were drawn from MaineCare claims from the decision support system (MMDSS). Three years (SFYs 1996, 1999, and 2002) of MaineCare claims experience were compiled.

***Age*:** Age was calculated on the last day of the SFY based on the service user's date of birth.

***Expenditures*:** We used the amount that MaineCare paid the providers ("paid claims") to estimate the cost to MaineCare of the services provided. Payments to hospitals have been adjusted to account for cost settlement. No other off-claims settlements, adjustments, or payments are included; pharmaceutical rebates are not included. While prices for medical care services increased during the period studied, MaineCare prices for many services are not systematically increased to account for inflation, and they did not increase during the time we studied. We have therefore not adjusted the expenditures here to reflect medical inflation.

***High-cost users*:** In each year, the service users were ranked from high to low by their per-service-user per-month MaineCare expenditure. Those in the top 1% were selected for additional study.

Categories of service: MaineCare designates a variety of services as behavioral health care services, including psychiatric facility services, community support services, MR/DD waiver, mental health services, substance abuse, day habilitation, psychological services, intermediate care facility (ICF)/MR boarding, home based mental health and development/behavioral clinic services (McGuire 2003).

To determine which services belonged to which group, we generally followed the MaineCare system's classification methods. However, we did make three exceptions to the groupings under MaineCare's headings:

- We moved the "mental inpatient" category from medical/other to behavioral.
- We divided the "prescribed drugs" category between behavioral and medical/other based upon information suggesting the principal therapeutic use for each drug.
- We divided the "private non-medical institutions" (PNMI) category between behavioral and long-term care.

This latter exception warrants more comment. PNMI services can either be received for behavioral health conditions, medical conditions, or functional impairments. We deviated from regular MaineCare practice for PNMI charges because our primary focus is on behavioral services and we wanted a more detailed examination of PMNI services. It is not possible to determine the reason PNMI services were used from the member's age or from the service provider. Based on comments from the reviewers and analysis of the claims data, we classified PNMI expenditures for members with a behavioral condition as a behavioral health care expenditure and PNMI expenditures for members without a behavioral health condition as a long-term care expenditure. This is different from standard MaineCare practice, which classifies all PNMI expenditures as long-term care expenditures, and from the earlier report by McGuire (2003), which followed that practice.

The remaining categories of service the members used were classified as long-term care (LTC) (which can include behavioral and non-behavioral) or as medical/other.

Psychotropic medications were included in the behavioral health care group; other medications were included in the medical/other group. Appendix B-1 lists the specific categories of service included in each group. Appendix B-2 lists the specific services included in the mental health (MH)-related category of service. Appendix B-3 gives definitions of categories of service from the MaineCare Benefits Manual.

Research indicates that from 50% to 70% of persons with mental health conditions receive mental health treatment from a primary care practitioner. Often, however, no diagnosis is documented for such services due to stigma or other reasons. We have not attempted to classify primary care services as behavioral due to this data limitation.

Identification of members with behavioral conditions: Studies of "behavioral health care" define the term in a variety of ways. Some studies include a wide range of conditions and diagnoses and others use a narrower definition, excluding mental retardation, developmental delay, and/or severe cognitive impairment such as Alzheimer's and senile dementia (Mark et al. 2003). In order to capture the widest range of behavioral conditions and services, we used a broad definition, including mental health, substance abuse problems (including alcohol problems), mental retardation, developmental delay, and cognitive impairment.

We used the Clinical Classification Software (CCS) categories developed by the federal Agency for HealthCare Research and Quality (AHRQ) to summarize information on diseases and health conditions into diagnostic categories. These categories were developed by the Agency for Healthcare Research and Quality (AHRQ) to group ICD-9-CM diagnostic and procedure codes to indicate diseases or conditions. We downloaded the CCS categories and the CCS grouper algorithm from the internet website address for AHRQ

(http://www.ahrq.gov/data/hcup/ccsfact.htm). Based on diagnostic information from the MaineCare claims, we classified the behavioral diagnoses and conditions into CCS categories. Figure 1 lists the behavioral health diagnosis categories used and a description of each. There are nine CCS categories that cover behavioral health conditions. They include mental retardation, developmental delay, mental health conditions such as depression, cognitive disorders such as senility, and substance abuse and alcohol-related mental disorders. We used the nine CCS mental health categories in this study. This broad definition of behavioral conditions is based on the CCS Mental Health categories.

We grouped the nine categories into three more general headings: mental retardation/developmental delay (MR/DD), mental health/substance abuse (MH/SA), and senility, Alzheimer's disease, and dementia (Senility). The latter category, Senility, was added to the analysis in February, 2005, based on concerns expressed by providers, advocates, and consumers that the more general category of MH/SA in the original report combined two very different groups of conditions. It is important to note that individuals can be classified into more than one CCS category. In contrast, we designed the more general headings of MR/DD, Senility, and MH/SA to be mutually exclusive; an individual is grouped into only one of these more general headings. The MR/DD category includes service users (defined below) who had any diagnosis of mental retardation of developmental delay or who had a MaineCare claim for an MR/DD-related category of service. The Senility category includes service users who had a diagnosis of senility, Alzheimer's disease, or dementia, excluding all persons classified into the MR/DD category. The mental health/substance abuse category includes services users who had a claim classified into one of the CCS categories listed in Figure 1 under MH/SA or a claim for an MH- or SA-related service, excluding all persons classified into the MR/DD or Senility category.

Service users: MaineCare members who used a covered service ("service users") were divided into those who did or did not have a behavioral health diagnosis, based on the information in their claims. We reviewed all claims-based diagnoses and accepted claims-based diagnoses from any type of provider. Service users were assigned to one or more of the 10 CCS behavioral health diagnosis categories described above (e.g. "schizophrenia and other psychoses" or "mental retardation") if they had one or more behavioral health diagnoses related to that CCS category. Note that the 260 CCS categories are not mutually exclusive; a member can be counted in more than one CCS category. The CCS category for alcohol-related mental disorders includes only psychological manifestations of alcohol abuse, such as alcohol dependence syndrome. It does not include physiological consequences of alcohol abuse, such as liver cirrhosis.

The majority of the service users studied had a mental health condition or a substance abuse-related mental health condition (MH/SA). Only a small percentage (2.7% in 2002) had mental retardation or developmental delay (MR/DD). However, treatment per-service-user per-month of members with MR/DD is on average four times more expensive than for members with MH/SA. We therefore analyzed these two groups separately. We created three mutually exclusive groups: those with MR/DD, those with senility and not MR/DD, and those with MH/SA and not MR/DD or senility.

Figure 1. Description of behavioral health diagnosis categories used

CCS Behavioral diagnosis category[1]	Description
MR/DD: Mental retardation/developmental delay	
MR/DD	Mental retardation, general developmental delay
Senility	
Senility	Dementia, Alzheimer's disease, senility, and organic mental disorders
MH/SA: Mental health/substance abuse	
Anxiety, somatoform, dissociative, and personality disorders	Acute reaction to stress, disturbance of conduct, anxiety states, hysteria, obsessive compulsive disorders, phobic disorders, somatoform disorder, personality disorders, post-traumatic stress, and others
Substance-related mental disorders	Drug dependence, drug abuse, and drug-related psychoses
Depression and other affective disorders	Bipolar affective disorder – depressed or mixed, neurotic depression, depressive psychosis, bipolar affective disorder - manic, other affective psychoses, and personality disorders
Pre-adult disorders	Separation anxiety, disturbance of conduct (aggressive or non-aggressive) special to children, disturbance of emotions, attention deficit disorder, etc.
Schizophrenia and other psychoses[2]	Schizophrenia, psychoses with origin specific to childhood, other non-organic psychoses, and paranoid states
Alcohol-related mental disorders	Alcohol dependence syndrome, alcohol abuse, and alcoholic psychoses (Does NOT include diagnoses for alcohol-related physical diseases like liver cirrhosis)
Other mental conditions	Adjustment reaction, depressive disorder not elsewhere classified, disturbance of emotions, other neurotic disorders, physiological malfunction arising from mental factors, sexual deviations and disorders, anorexia and other eating disorders, Tourette's disorder, and specific delays in development (including speech, language or learning) in the absence of general mental retardation

[1] A MaineCare service user can be classified into more than one CCS category.

[2] For the purposes of this study, the two CCS categories "Schizophrenia and related disorders" and "Other psychoses" were combined into one category.

Members were considered to have a behavioral health condition if they had a behavioral health diagnosis or if they received a behavioral health care service. A small percentage of the members used behavioral health care services but did not have a behavioral health diagnosis. Behavioral health care services include facility services, community support services, waiver for persons with mental retardation (MR), mental health services, substance abuse, day habilitation, psychological services, ICF/MR boarding, home based mental health, and development/behavioral clinic services. Expenditure categories used in the MaineCare Annual Report 2002 were used to designate behavioral health services. The remaining expenditure categories were classified as long-term care or medical/other.[1]

Per Service-User Per-Month (PSUPM) Expenditures: The expenditures for persons in a behavioral health diagnosis category reported here include expenditures for all MaineCare services, including medical and long-term care services as well as behavioral health care services. The numerator for monthly expenditures is the sum of the MaineCare expenditures for the service users; the denominator is the sum of the number of months the service users were eligible.

IV. LIMITATIONS

Claims and eligibility data are constructed primarily for administrative purposes, which poses some limitations for research. Expenditures (paid claims) are registered fairly completely, but other information, especially diagnoses, may be under-reported. We focused on general categories of service users and not on individual diagnoses, so the groups represent aggregate populations that do not reflect clinical treatment patterns. We did not focus on treatment by type of provider (inpatient, ambulatory, or psychiatrist). We used a general algorithm to allocate PNMI expenditures.

[1] Private Non-Medical Institution (PNMI) services can either be received for behavioral health conditions, medical conditions, or functional impairments. It is not possible to determine the reason PNMI services were used from the member's age or from the service provider. Based on comments from the reviewers and analysis of the claims data, we classified PNMI expenditures for members with a behavioral condition as a behavioral health care expenditure and PNMI expenditures for members without a behavioral health condition as a long-term care expenditure. This is different from standard MaineCare practice, which classifies all PNMI expenditures as long-term care expenditures, and from the earlier report by McGuire (2003), which followed that practice.

V. RESULTS

A. MaineCare expenditures on behavioral services grew faster than expenditures on medical or long-term care services

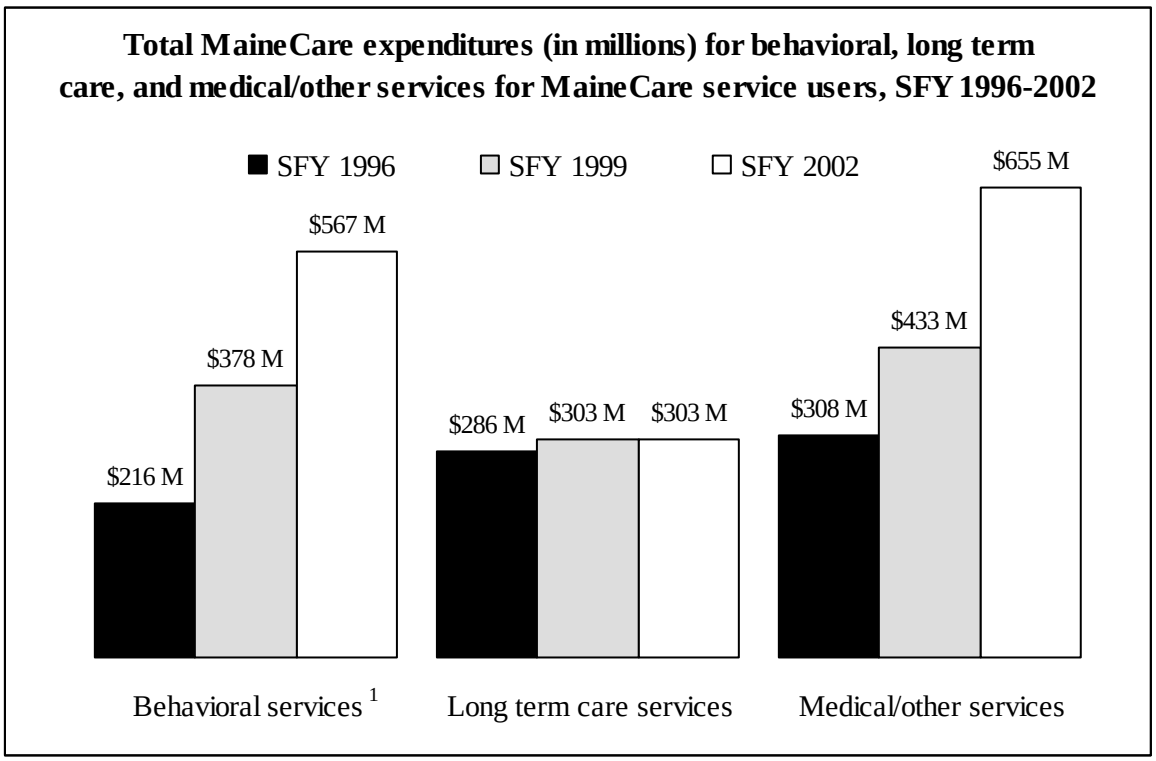
KEY FINDINGS

- MaineCare spending increased faster for behavioral health care services than for medical or long-term care services from SFY 1996 to 2002.
- Behavioral health care services account for an increasing proportion of MaineCare expenditures for the study population.

RESULTS

Between SFY 1996 and SFY 2002, total MaineCare expenditures for behavioral health care services increased by 162.5%, compared to 6.1% for long term care (LTC), and 112.3% for medical/other services (Chart 1 and Table 1).

Chart 1



[1] "Behavioral services" includes behavioral health services plus psychotropic medications.

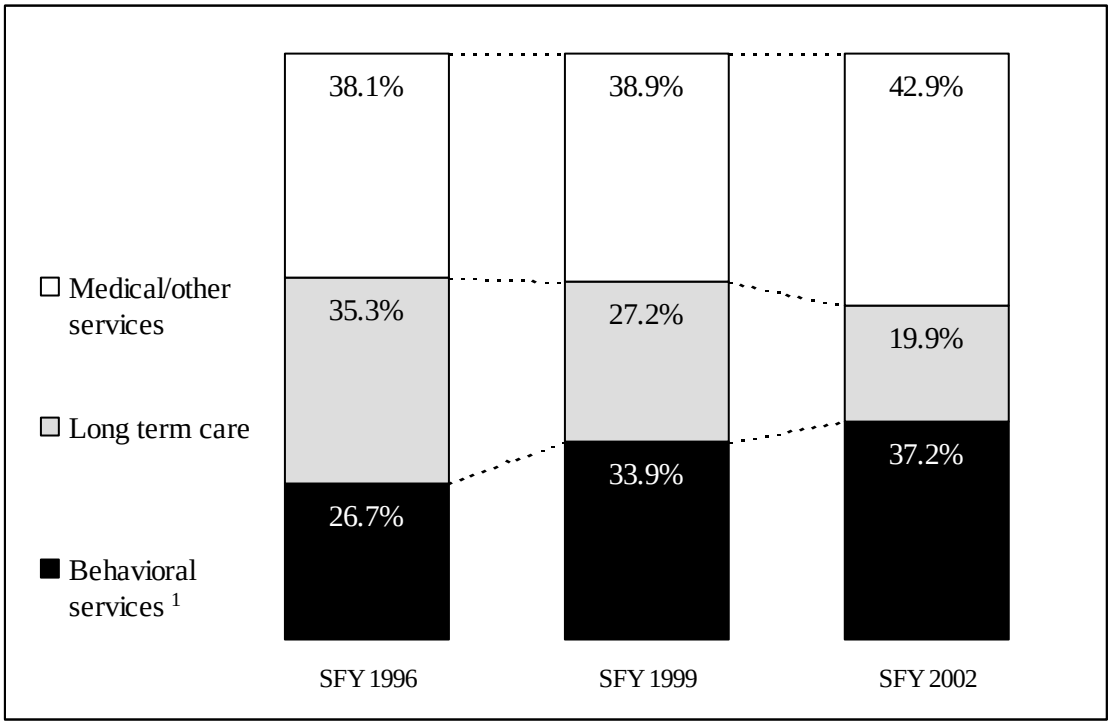
Table 1. Total MaineCare expenditures for behavioral, long term care, and medical/other services, SFY 1996 - 2002

State fiscal year	MaineCare services			
	Behavioral[1]	Long-term care	Medical/ other	Total
1996	$215,975,870	$285,905,016	$308,433,050	$810,313,936
2002	$566,833,572	$303,219,243	$654,781,556	$1,524,834,371
Increase from 1996 to 2002	162.5%	6.1%	112.3%	88.2%

[1] "Behavioral services" includes behavioral health services plus psychotropic medications.

As a result of the increased number of members using behavioral health care services and the rapid increase in expenditures for those services, behavioral health care services accounted for an increasing proportion of MaineCare expenditures on the study population, from 26.7% of the expenditures in 1996 to 37.2% in 2002 (Chart 2).

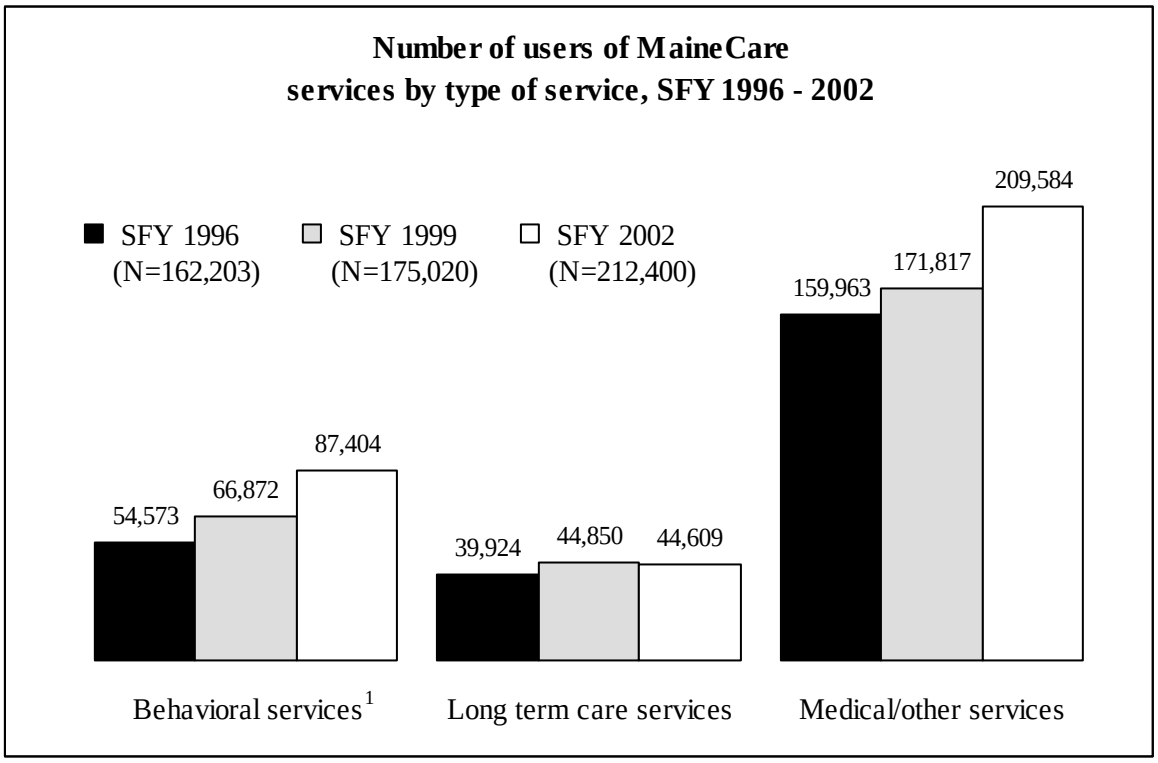
Chart 2. Share of total MaineCare expenditures for behavioral, long term care, and medical/other services, SFY 1996 – 2002



[1] "Behavioral services" includes behavioral health care services plus psychotropic medications.

The number of MaineCare members who used behavioral health care services increased by 60.2%, compared to increases of 11.7% for long-term care and 31.0% for medical/other services (Chart 3). (These categories are not mutually exclusive, and members can be counted in two or all three of the categories.)

Chart 3



[1] "Behavioral health services" includes behavioral health services plus psychotropic medications. While nearly all services users used at least one "medical or other" service, many persons are counted as users of two or all three types of MaineCare services.

B. Dramatic increases in number of service users with behavioral health conditions and in expenditures on them

KEY FINDINGS

- By every measure examined, MaineCare spends more on members with behavioral health conditions than on members without behavioral health conditions.

- From SFY 1996 to 2002, MaineCare expenditures for persons with behavioral conditions increased much faster than for persons without behavioral health conditions.

RESULTS

From SFY 1996 to 2002, MaineCare expenditures for persons with behavioral conditions increased much faster (by 118.5%) than for persons without behavioral conditions (by 29.5%).

In 2002, MaineCare spent $1,195 per month on persons with behavioral health conditions compared to $272 on persons without behavioral health conditions (Table 2).

The increase in MaineCare spending for persons with behavioral health conditions is attributed to two factors – *increasing numbers of members involved and increasing expenditures per person per month*:

- Between SFY 1996 and 2002, the number of MaineCare service users with a behavioral health condition increased by 75.7%, compared to an increase of 11.2% in the number of service users without a behavioral health condition.
- The average monthly MaineCare expenditure per service user increased by 18.3% for members with a behavioral health condition, compared to 9.1% for members without a behavioral health condition

In 1996, 30.6% of all service users had a behavioral health condition. They accounted for 65.9% of MaineCare expenditures (Table 2).

In 2002, 41.0% of all service users had a behavioral health condition; they accounted for 76.5% of MaineCare expenditures (Table 2).

The increase in MaineCare spending for persons with behavioral health conditions is attributed primarily to two factors – increasing numbers of members involved and increasing cost per person per month. Most –76% -- of the growth in total expenditures was due to an increase in the number of members enrolled and the percent of members with a behavioral condition; 18% was due to an increase in the average expenditure per month; and the remaining 6% was due to an increase in the average number of months each member was enrolled in MaineCare.

For the members with MR/DD, 69.8% of the growth in total expenditures was due to an increase in the number of members enrolled; 28.7% was due to an increase in the average expenditure per member per month; and 1.5% was due to an increase in the average number of months members were enrolled.

For the members with senility, 53.4% of the growth in total expenditures was due to an increase in the number of members enrolled; 37.6% was due to an increase in the average expenditure per member per month; and 9.0% was due to an increase in the average number of months members were enrolled.

For members with MH/SA, 71.2% of the growth in total expenditures was due to an increase in the number of members; 24.2% was due to increased monthly expenditures per member; and 4.7% was due to an increase in the average number of months of enrollment.

The 2.7% of MaineCare members with a MR/DD condition in SFY 2002 accounted for 19.9% of MaineCare expenditures. Total MaineCare expenditures for members with MR/DD increased by 121.3%, and their costs per service user per month increased by 28.7%. These increases were greater than for members with a mental health/substance abuse disorder.

C. Dramatic increase in the number of children with behavioral health conditions

KEY FINDING

- The number of child service users with a behavioral health condition doubled from SFY 1996 to SFY 2002.

RESULTS

The number of child service users with a behavioral health condition increased by 107.8% from 1996 to 2002 (Table 3). The number of children with a behavioral health condition increased because the *number* of children enrolled in MaineCare increased and the *percent* of children with a behavioral health condition increased.

The total *number* of child service users increased by 24.1%.

The *percent* of child service users with a behavioral health condition increased from 20.1% of the MaineCare child service users in SFY 1996 to 33.6% in SFY 2002.

Total MaineCare expenditures increased for child service users with a behavioral health condition by 230.6% from 1996 - 2002, compared with an increase of 44.2% for child service users without a behavioral health condition. The proportion of total MaineCare expenditures for children with behavioral conditions shifted dramatically --- from 66.0% in 1996 to 81.6% in 2002.

In SFY 2002, $982 was spent per month for child services users with a behavioral health condition, compared to $122 on child services users with no behavioral health condition.

Monthly spending for children with behavioral conditions grew more quickly than for child service users with no behavioral condition (by 49.2% compared to 30.5%).

Table 2. Enrollment, total expenditures, and per service user per month MaineCare expenditures for service users with and without behavioral conditions, SFY 1996 – 2002

Measure	State fiscal year				Percent change[1]
	1996		2002		
Population	**Number**	**Percent**	**Number**	**Percent**	
Service users with MR/DD[2]	*3,418*	*2.1%*	*5,796*	*2.7%*	*69.6%*
Services users with senility[3]	*5,006*	*3.1%*	*6,141*	*2.9%*	*22.7%*
Service users with MH/SA[4]	*41,177*	*25.4%*	*75,236*	*35.4%*	*82.7%*
Sub-total: Service users with behavioral conditions	**49,601**	**30.6%**	**87,173**	**41.0%**	**75.7%**
Service users w/o behavioral conditions	112,602	69.4%	125,227	59.0%	11.2%
All MaineCare service users	**162,203**	**100.0%**	**212,400**	**100.0%**	**30.9%**
Total expenditures					
Service users with MR/DD	*$137,396,090*	*17.0%*	*$304,063,150*	*19.9%*	*121.3%*
Services users with senility	*$116,902,674*	*14.4%*	*$172,639,271*	*11.3%*	*47.7%*
Service users with MH/SA	*$279,939,096*	*34.5%*	*$690,540,410*	*45.3%*	*146.7%*
Sub-total: Service users with behavioral conditions	**$534,237,860**	**65.9%**	**$1,167,242,831**	**76.5%**	**118.5%**
Service users w/o behavioral conditions	$276,076,076	34.1%	$357,591,540	23.5%	29.5%
All MaineCare service users	**$810,313,936**	**100.0%**	**$1,524,834,371**	**100.0%**	**88.2%**
PSUPM expenditures[5]					
Service users with MR/DD		*$3,447*		*$4,435*	*28.7%*
Services users with senility		*$2,267*		*$2,629*	*15.9%*
Service users with MH/SA		*$640*		*$820*	*28.1%*
Sub-total: Service users with behavioral conditions		**$1,010**		**$1,195**	**18.3%**
Service users w/o behavioral conditions		$249		$272	9.1%
All MaineCare service users		**$495**		**$665**	**34.4%[6]**

[1] Percent change was calculated as (2002 amount – 1996 amount) / 1996 amount.

[2] Includes all users of any MaineCare service during the fiscal year who had any diagnosis of mental retardation or developmental delay (MR/DD) or who had a MaineCare claim for an MR/DD-related category of service.

[3] Includes all users of any MaineCare service who had a diagnosis of senility, Alzheimer's disease, or dementia, excluding all persons appearing in the MR/DD category.

[4] Includes all users of any MaineCare service who had a mental health diagnosis or substance abuse-related (MH/SA) mental health diagnosis, or had a claim for an MH or SA-related category of service, excluding all persons appearing in the MR/DD or senility categories.

[5] PSUPM = per-service-user per-month (includes all MaineCare expenditures for all MaineCare members who used any non-pharmacy MaineCare service during the year).

[6] It appears paradoxical that the average MaineCare expenditure per service user per month (PSUPM) rose by 18.3% for members with behavioral health conditions and by 9.1% for other MaineCare members, but it rose by 34.4% for all MaineCare service users (that is for the two groups combined). Much of the combined increase is accounted for by a shift in the composition of the MaineCare population between 1996 and 2002; the number of months for service users who had a behavioral condition rose from 32% of all service users' months to 43%. Since the average PSUPM expenditures for service users with a behavioral health condition are about four times higher than the average for other MaineCare service users, this shift weighted the composition more heavily toward high-cost-members. Even if the average PSUPM expenditure within each group had remained at the 1996 levels ($1,010 for members with behavioral conditions and $249 for other members), based only on this shift towards a higher prevalence of members with behavioral health conditions, the PSUPM expenditure for the combined MaineCare populations would have risen by 16%.

Table 3. Enrollment and total per service user per month (PSUPM) MaineCare expenditures for child service users (0-20 years of age) with and without behavioral conditions, SFY 1996 - 2002

Measure	State fiscal year				Percent change[1]
	1996		2002		
Children	**Number**	**Percent**	**Number**	**Percent**	
Service users with MR/DD[2]	*553*	*0.7%*	*1,984*	*2.0%*	*258.8%*
Service users with MH/SA[3]	*15,602*	*19.4%*	*31,583*	*31.7%*	*102.4%*
Sub-total: Service users with behavioral conditions	16,155	20.1%	33,567	33.6%	107.8%
Service users without behavioral conditions	64,243	79.9%	66,216	66.4%	3.1%
All MaineCare service users	**80,398**	**100.0%**	**99,783**	**100.0%**	**24.1%**
Total expenditures for children					
Service users with MR/DD	*$13,777,880*	*8.0%*	*$65,823,035*	*14.3%*	*377.7%*
Service users with MH/SA	*$99,476,390*	*57.9%*	*$308,646,460*	*67.3%*	*210.3%*
Sub-total: Service users with behavioral conditions	$113,254,271	66.0%	374,469,495	81.6%	230.6%
Service users without behavioral conditions	$58,410,501	34.0%	$84,243,536	18.4%	44.2%
All MaineCare service users	**$171,664,772**	**100.0%**	**$458,713,031**	**100.0%**	**167.2%**
PSUPM expenditures for children[4]					
Service users with MR/DD		*$2,157*		*$2,823*	*30.9%*
Service users with MH/SA		*$600*		*$862*	*43.6%*
Sub-total: Service users with behavioral conditions		$658		$982	49.2%
Service users without behavioral conditions		$94		$122	30.5%
For all MaineCare service users		**$177**		**$316**	**78.1%[5]**

[1] Percent change was calculated as (2002 amount – 1996 amount) / 1996 amount.

[2] Includes MaineCare service users with any diagnosis of mental retardation or developmental delay (MR/DD) or who had a MaineCare claim for an MR/DD-related category of service.

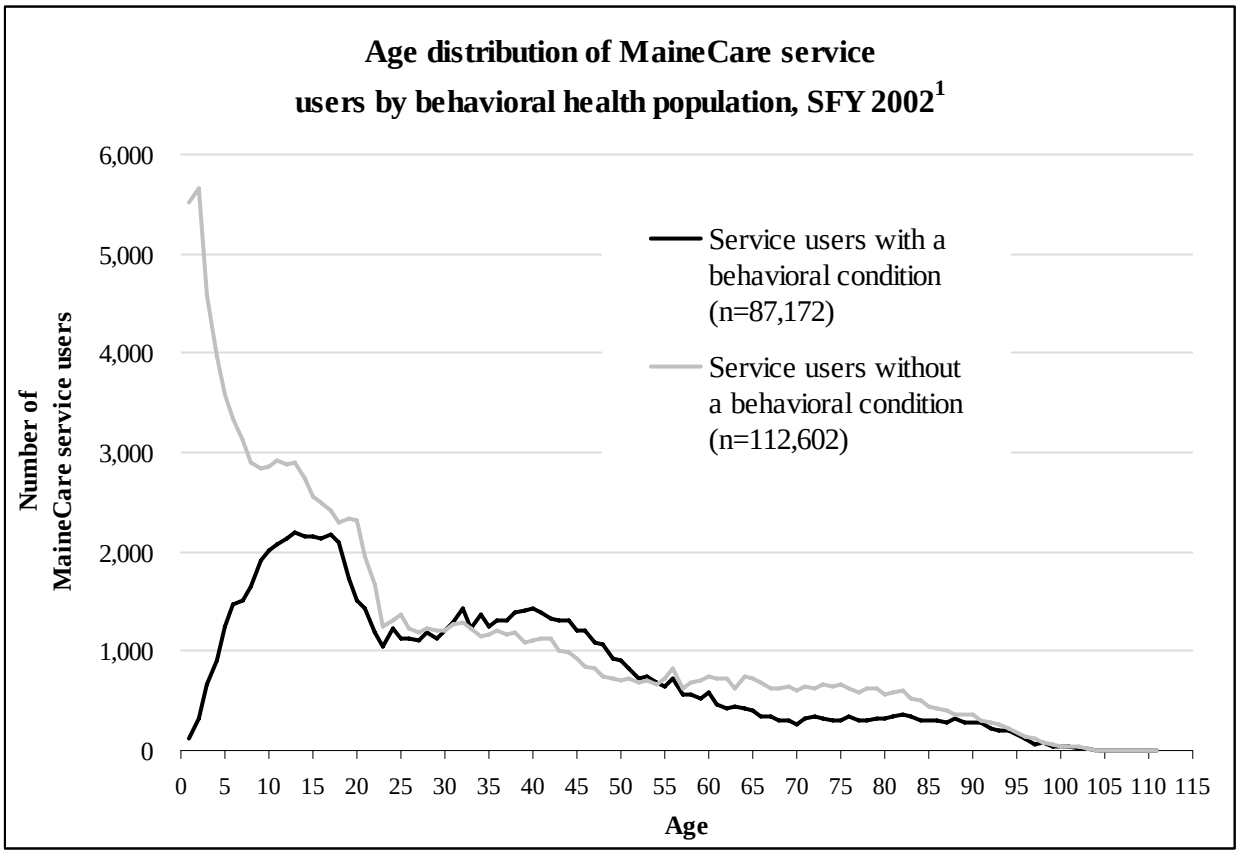
[3] Includes all users of any MaineCare service who had a mental health diagnosis or substance abuse-related (MH/SA) mental health diagnosis, or had a claim for an MH or SA-related category of service, excluding all persons appearing in the mental retardation category above.

[4] PSUPM = per-service-user per-month (includes all MaineCare expenditures for all MaineCare members who used any non-pharmacy MaineCare service during the year).

[5] The monthly expenditure for all service users increased by 78.1%, which was more than the increase for either service users with or without behavioral health diagnosis. This was due to the larger proportion of the more expensive service users with a behavioral health diagnosis.

The number of child service users with a behavioral health condition increases steeply with age (Chart 4). By about age 17, nearly half the MaineCare service users had a behavioral health condition.

Chart 4



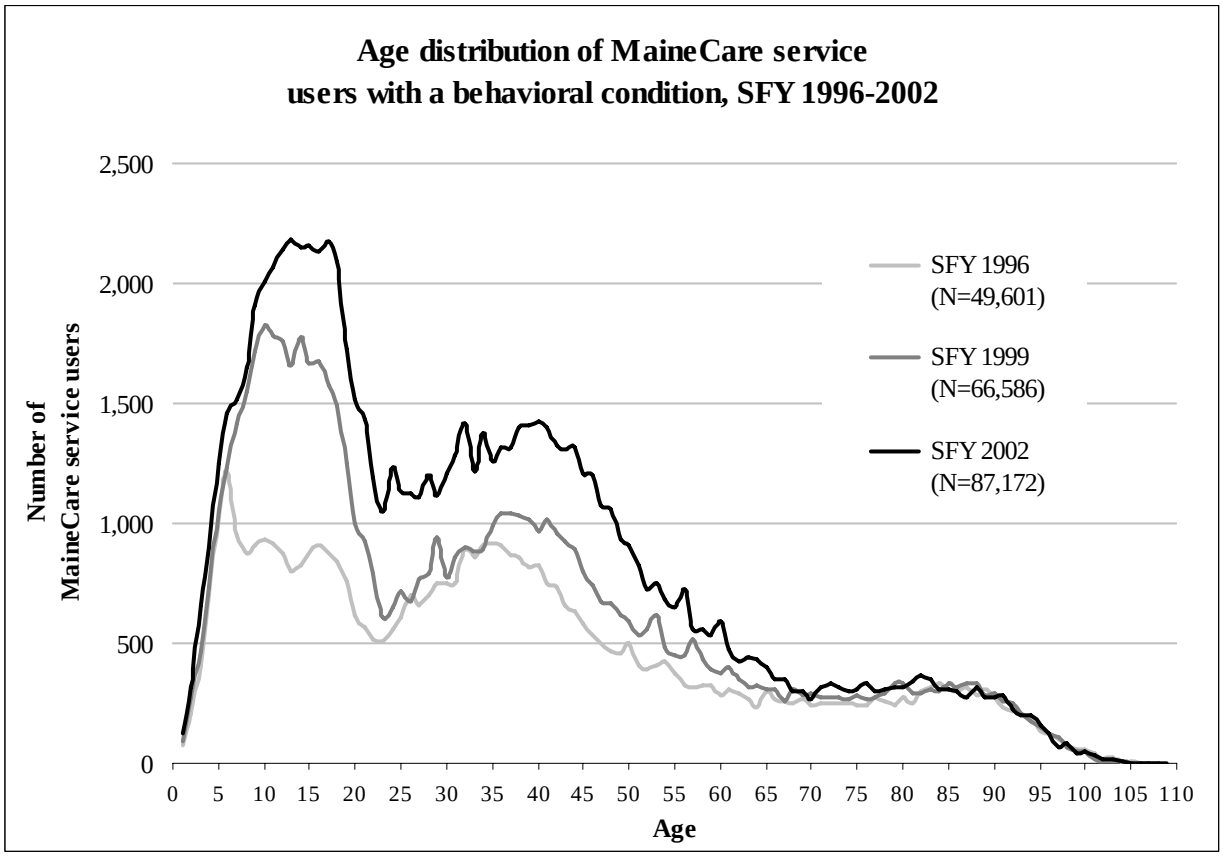
[1] "MaineCare service users" is defined as any MaineCare member who had one or more non-prescription claims during the study year.

The most rapid increase in the number of child service users (0 to 20 years of age) with behavioral health conditions occurred between SFY 1996 and SFY 1999. This increase is illustrated by the longer vertical distance between the light gray line in Chart 5 (representing 1996) and the medium gray line (representing 1999), compared to the shorter vertical distance between the medium gray line (1999) and the black line (2002). The size of the child population with mental illness increased by 64.6% between SFY 1996 and SFY 1999, but only by 23.0% between SFY 1999 and SFY 2002.

In contrast, the number of adults age 26 to 50 with behavioral health conditions rose faster in the later period than in the earlier years. Between SFY 1999 and SFY 2002, the number of adults 26 to 50 years of age with behavioral health conditions rose by 46.9% compared to only 21.1% between SFY 1996 and SFY 1999.

We examined the contribution of two benefit categories to the increase in the number of children enrolled in MaineCare and in MaineCare expenditures, Early Intervention Services (EIS) and Katie Beckett. (Note that a child can receive both services; we did not take account of any children who were dually enrolled.)

Chart 5



The number of children receiving EIS increased by 135 or 9.2% from 1996 to 2002, but during that time the percent of MaineCare children in this category actually fell slightly, from 1.8% to 1.6% (Appendix C-1). MaineCare expenditures on EIS increased by 95.4% compared to an increase of 174.2% for other children. In 2002 expenditures per-service-user per-month for children receiving EIS were four times those of other children ($1,604 vs. $408).

The number of children enrolled in Katie Beckett rose by 1,028 or 142.0% from 1996 to 2002 (Appendix C-2). During that time, the percent of MaineCare children enrolled in this category increased from 0.9% to 1.8%. MaineCare expenditures on the Katie Beckett eligibility increased by 355.0% compared to an increase of 159.6% for other children. In 2002 expenditures per-service-user per-month for children receiving services through Katie Beckett were more than three times those for other children ($1,573 vs. $408). While the enrollment and expenditures in both these categories increased during the time we examined, these programs do not explain the dramatic increase in the number of children with behavioral health conditions nor in the increased MaineCare expenditures for children.

Other changes in coverage and programs probably account for the increase in children with behavioral conditions. These include expanded MaineCare eligibility for children due to the CubCare and SCHIPS benefits and for adults due to benefits for the parents of children enrolled in CubCare and SCHIPS and for non-categorical adults. In addition, “growth of MaineCare

expenditures for children is in large part due to the passing of LD 760, legislation specifically designed to expand services to children. The French (late Risinger) lawsuit followed immediately thereafter and required the expansion of case management (ACT services were also added in 1999) and in-home support services. The latter are targeted for review and revision for SFY 2005 and a comprehensive utilization review plan is being developed." (B. Harvey, correspondence, April 12, 2004).

D. Increased enrollment and expenditures for men with behavioral conditions

KEY FINDINGS

The percentage of MaineCare members with a behavioral health condition who were male increased slightly, from 40.9% in SFY 1996 to 43.3% in SFY 2002. The percentage of members without a behavioral condition who were male was virtually unchanged during that time (60.4% in SFY 2002).

- Enrollment, total expenditures, and monthly expenditures all increased more for men than for women from SFY 1996 – 2002.

- Generally speaking, women showed the same patterns as men – larger increases in the population with MH/SA than with MR/DD or senility and in expenditures for MH/SA, and increases in each measure studied. However, women had smaller increases for each measure studied than did men.

- In spite of the increase in the number of men during the time studied, women still comprise over half of MaineCare service users. In SFY 2002, 58.9% of service users were women.

RESULTS

The percent of men service users with a behavioral condition increased by 86.1% from SFY 1996 to 2002 (Chart 6 and Table 4). This compares with an 11.7% increase for men without a behavioral condition. The increase was greatest among men with a MH/SA condition.

Total expenditures for services to men with behavioral conditions increased dramatically, by 138.4%, with the greatest increase being for men with MH/SA – a 164.6% increase (Table 4). Expenditures for all male MaineCare service users increased by 109.5%. In 2002, 43.2% of male MaineCare service users had a behavioral health condition, and 80.6% of MaineCare expenditures for men were for this group.

The number of women with a behavioral condition increased by 68.6% from 1996 to 2002 compared to an increase of 10.9% among women without a behavioral condition (Chart 6 and Table 5). In 2002, 39.5% of female MaineCare service users had a behavioral health condition and 73.2% of MaineCare expenditures for women were for this group. As for men, the greatest increase was in the group with MH/SA.

Chart 6

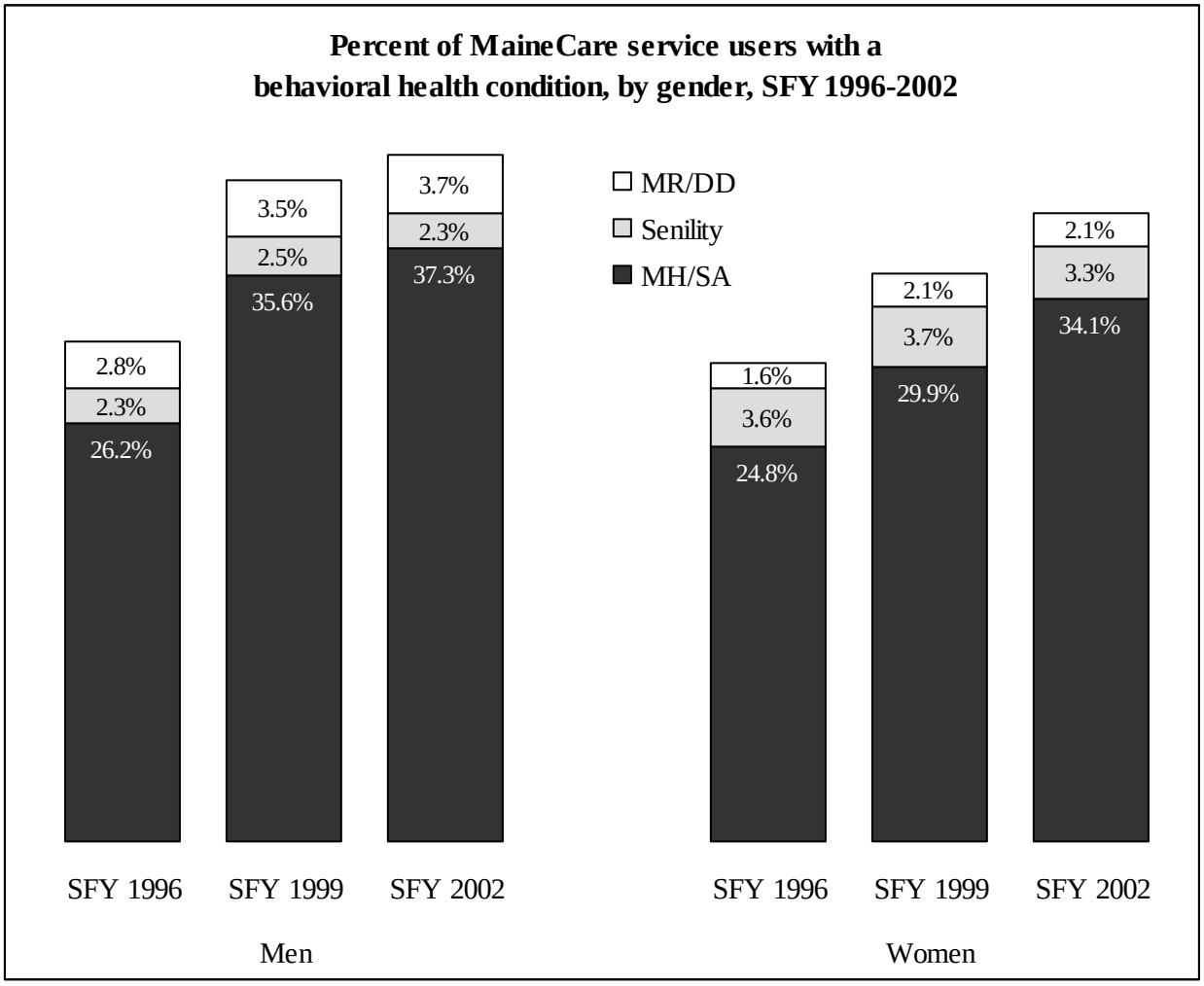

Percent of MaineCare service users with a behavioral health condition, by gender, SFY 1996-2002
MR/DD
Senility
MH/SA
2.8%
2.3%
26.2%
3.5%
2.5%
35.6%
3.7%
2.3%
37.3%
1.6%
3.6%
24.8%
2.1%
3.7%
29.9%
2.1%
3.3%
34.1%
SFY 1996
SFY 1999
SFY 2002
SFY 1996
SFY 1999
SFY 2002
Men
Women

Table 4. Trends in enrollment and in total and per service user per month MaineCare expenditures for male service users with and without behavioral diagnoses, SFY 1996 - 2002

Measure	State Fiscal Year				Percent Change[1]
	1996		2002		
Population	**Number**	**Percent**	**Number**	**Percent**	
Service users with MR/DD[2]	*1,838*	*2.8%*	*3,202*	*3.7%*	*74.2%*
Service users with senility[3]	*1,492*	*2.3%*	*2,008*	*2.3%*	*34.6%*
Service users with MH/SA[4]	*16,965*	*26.2%*	*32,557*	*37.3%*	*91.9%*
Sub-total: Service users with behavioral conditions	20,295	31.4%	37,767	43.2%	86.1%
Service users without a behavioral condition	44,433	68.6%	49,614	56.8%	11.7%
All MaineCare service users	**64,728**	**100.0%**	**87,381**	**100.0%**	**35.0%**
Total expenditures					
Service users with MR/DD	*$76,231,528*	*23.5%*	*$174,130,376*	*25.6%*	*128.4%*
Service users with senility	*$34,044,346*	*10.5%*	*$57,222,840*	*8.4%*	*68.1%*
Service users with MH/SA	*$120,028,048*	*36.9%*	*$317,628,667*	*46.7%*	*164.6%*
Sub-total: Service users with behavioral conditions	$230,303,922	70.9%	$548,981,883	80.6%	138.4%
Service users without a behavioral condition	$94,553,789	29.1%	$131,733,380	19.4%	39.3%
All MaineCare service users	**$324,857,711**	**100.0%**	**$680,715,263**	**100.0%**	**109.5%**
PSUPM expenditures[5]					
Service users with MR/DD		*$3,558*		*$4,594*	*29.1%*
Service users with senility		*$2,287*		*$2,681*	*17.3%*
Service users with MH/SA		*$670*		*$876*	*30.7%*
Sub-total: Service users with behavioral conditions		$1,069		$1,302	21.7%
Service users without a behavioral condition		$216		$255	17.8%
All MaineCare service users		**$498**		**$725**	**45.7%**

[1] Percent change was calculated as (2002 amount – 1996 amount) / 1996 amount.

[2] Includes MaineCare service users with any diagnosis of mental retardation or developmental delay (MR/DD) or who had a MaineCare claim for an MR/DD-related category of service.

[3] Includes all users of any MaineCare service who had a diagnosis of senility, Alzheimer's disease, or dementia, excluding all persons appearing in the MR/DD category.

[4] Includes all users of any MaineCare service who had a mental health diagnosis or substance abuse-related (MH/SA) mental health diagnosis, or had a claim for an MH or SA-related category of service, excluding all persons appearing in the mental retardation or senility categories above.

[5] PSUPM = per-service-user per-month (includes all MaineCare expenditures for all MaineCare members who used any non-pharmacy MaineCare service during the year).

Table 5. Trends in enrollment and in total and per service user per month MaineCare expenditures for female service users with and without behavioral diagnoses, SFY 1996 - 2002

Measure	State Fiscal Year				Percent Change[1]
	1996		2002		
Population	**Number**	**Percent**	**Number**	**Percent**	
Service users with MR/DD[2]	*1,580*	*1.6%*	*2,594*	*2.1%*	*64.2%*
Service users with senility[3]	*3,514*	*3.6%*	*4,133*	*3.3%*	*17.6%*
Service users with MH/SA[4]	*24,208*	*24.8%*	*42,679*	*34.1%*	*76.3%*
Sub-total: Service users with behavioral conditions	29,302	30.1%	49,406	39.5%	68.6%
Service users without a behavioral condition	68,163	69.9%	75,612	60.5%	10.9%
All MaineCare service users	**97,465**	**100.0%**	**125,018**	**100.0%**	**28.3%**
Total expenditures					
Service users with MR/DD	*$61,164,562*	*12.6%*	*$129,932,774*	*15.4%*	*112.4%*
Service users with senility	*$82,858,328*	*17.1%*	*$115,416,431*	*13.7%*	*39.3%*
Service users with MH/SA	*$159,877,952*	*32.9%*	*$372,911,743*	*44.2%*	*133.2%*
Sub-total: Service users with behavioral conditions	$303,900,843	62.6%	$618,260,948	73.2%	103.4%
Service users without a behavioral condition	$181,509,510	37.4%	$225,858,002	26.8%	24.4%
All MaineCare service users	**$485,410,353**	**100.0%**	**$844,118,951**	**100.0%**	**73.9%**
PSUPM expenditures[5]					
Service users with MR/DD		*$3,318*		*$4,239*	*27.7%*
Service users with senility		*$2,260*		*$2,604*	*15.2%*
Service users with MH/SA		*$619*		*$777*	*25.5%*
Sub-total: Service users with behavioral conditions		$970		$1,114	14.9%
Service users without a behavioral condition		$271		$283	4.5%
All MaineCare service users		**$493**		**$624**	**26.5%**

[1] Percent change was calculated as (2002 amount – 1996 amount) / 1996 amount.

[2] Includes MaineCare service users with any diagnosis of mental retardation or developmental delay (MR/DD) or who had a MaineCare claim for an MR/DD-related category of service.

[3] Includes all users of any MaineCare service who had a diagnosis of senility, Alzheimer's disease, or dementia, excluding all persons appearing in the MR/DD category.

[4] Includes all users of any MaineCare service who had a mental health diagnosis or substance abuse-related (MH/SA) mental health diagnosis, or had a claim for an MH or SA-related category of service, excluding all persons appearing in the mental retardation or senility categories above.

[5] PSUPM = per-service-user per-month (includes all MaineCare expenditures for all MaineCare members who used any non-pharmacy MaineCare service during the year).

E. Dramatic differences in growth rates and expenditures by behavioral health condition

KEY FINDINGS

- There is a dramatic difference in average monthly expenditures for service users by behavioral health diagnoses: from $950/month for service users with substance-related mental diagnoses to $4,435/month for service users with mental retardation/developmental disability diagnoses.

- MaineCare expenditures increase rapidly as the number of behavioral health diagnoses increases.

- Among service users with a behavioral condition, the average number of behavioral diagnoses grew by 8.3% from 1996 to 2002.

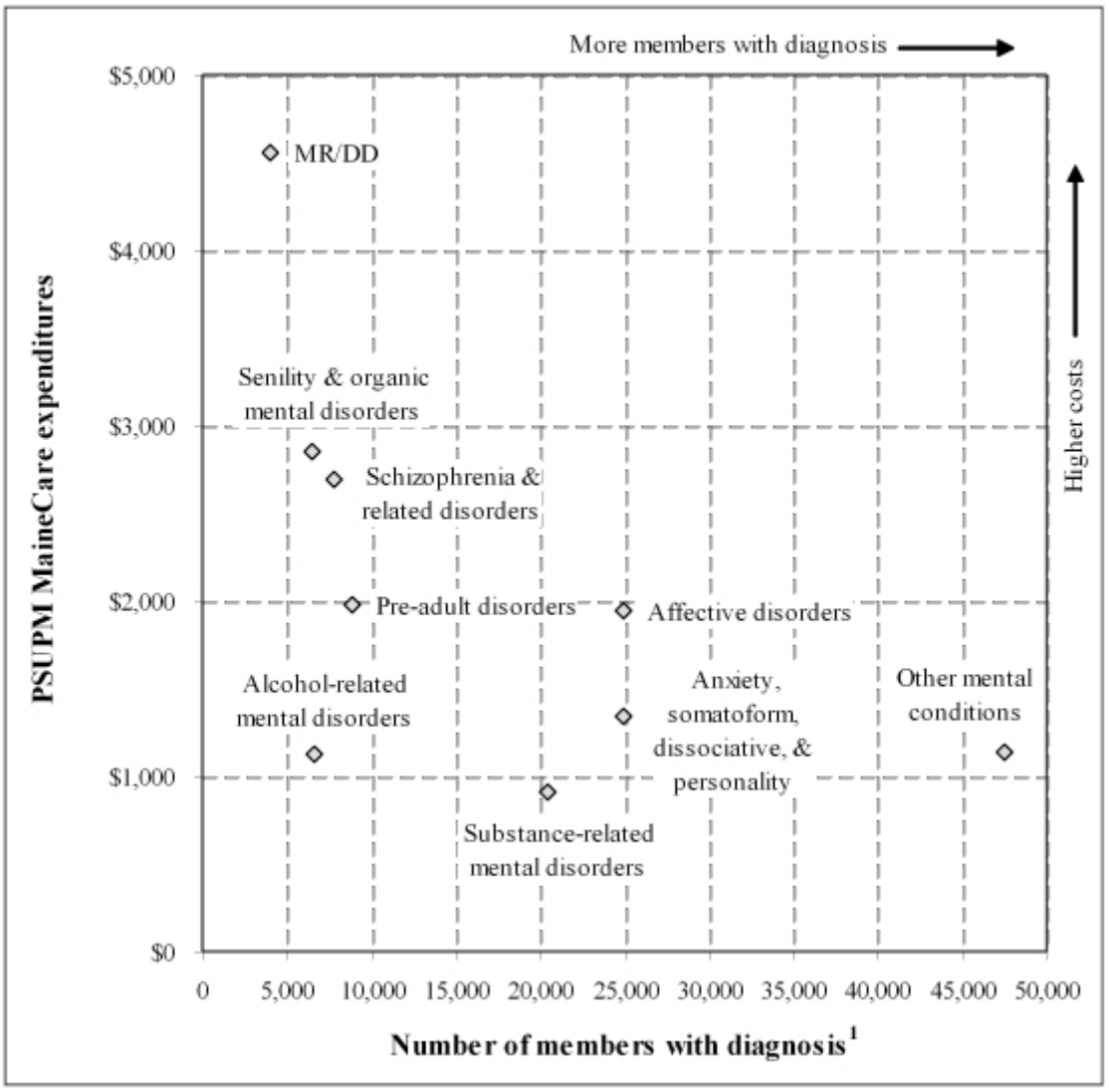
- In 2002, 11.2% of the service users had three behavioral diagnoses and 7.6% had four or more behavioral diagnoses.

RESULTS

We focus here on the diagnoses with the most members and the highest monthly expenditures (Chart 7). The four most common conditions in 2002 were other mental conditions; anxiety; affective disorders; and substance-abuse related disorders. In 2002, 34.9% of all MaineCare service users had one or more of these four diagnoses and persons with these diagnoses accounted for 56.9% of MaineCare expenditures for all service users. (Note that a service user may appear in more than one group. Each year, approximately 2% to 3% of the study population used a behavioral health care service but did not have a corresponding diagnosis. They are not included in the charts and tables in this section.)

The three most expensive conditions (PSUPM) in 2002 were mental retardation; senility and organic mental disorders; and schizophrenia and other psychoses. In 2002, 7.7% of all MaineCare service users had one or more of these three diagnoses. Together, 35.8% of total MaineCare expenditures for service users in 2002 were devoted to service users with one or more of these three conditions.

Chart 7. Number of members and per service user per month (PSUPM) MaineCare expenditures for each behavioral health category, SFY 2002



[1] MaineCare service users can be classified into more than one behavioral health category.

The categories with the largest increases in the number of service users from 1996 to 2002 were substance-related mental disorders (up 164.8%), other mental conditions (up 106.4%), affective disorders (up 103.3%), anxiety, somatoform, dissociative and personality disorders (up 98.5%), and pre-adult disorders (up 88.6%) (Chart 8 and Table 5). The increase in the number of available addictive substances and medications, such as OxyContin, and increased awareness of substance abuse problems may in part account for the dramatic increase in the number of members in the substance abuse category.

The slowest growing categories are two that are organic (senility and schizophrenia) and one that is related to chemical dependency (alcohol-related disorders). The slow growth of alcohol-related disorders may be related to the fact that the CCS categories only capture psychological aspects of alcohol use, not physiological aspects like liver cirrhosis.

Chart 8

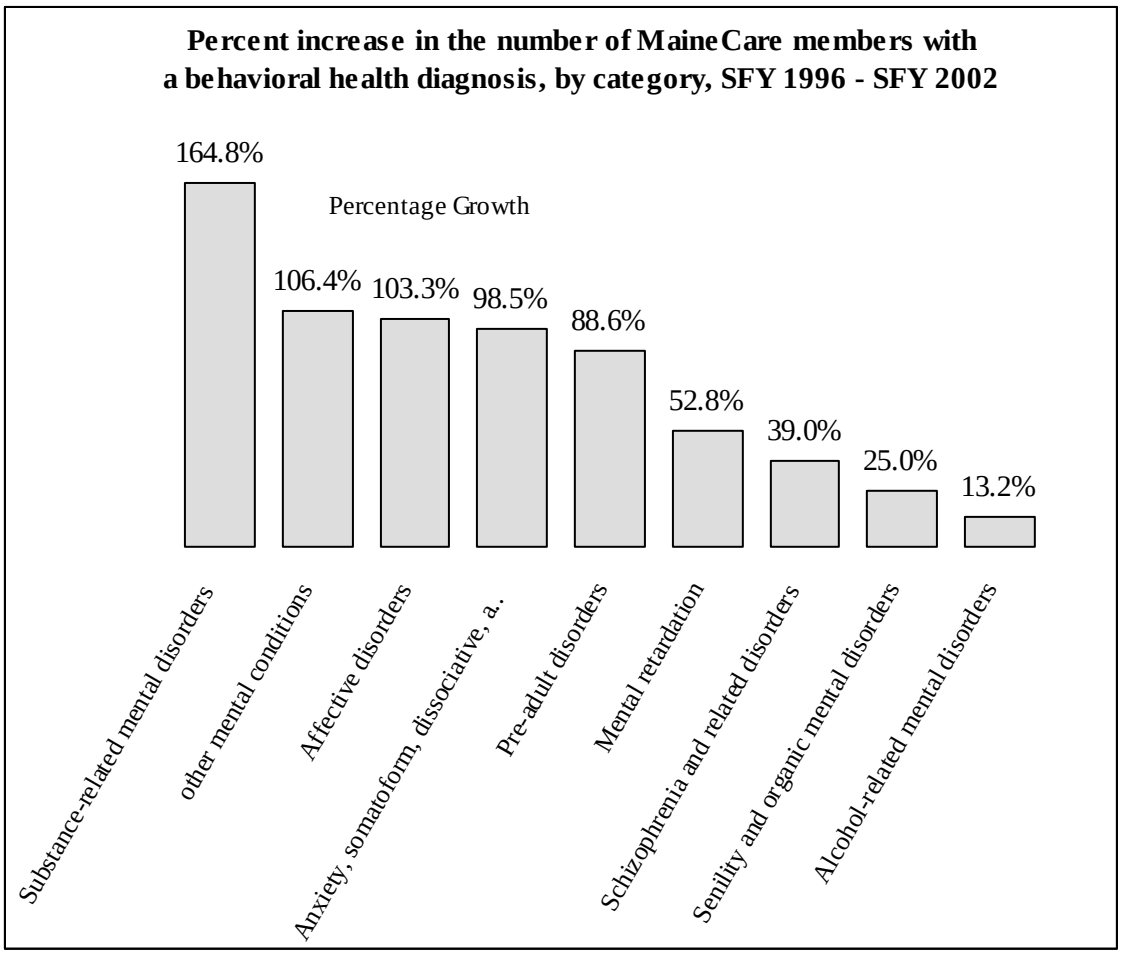


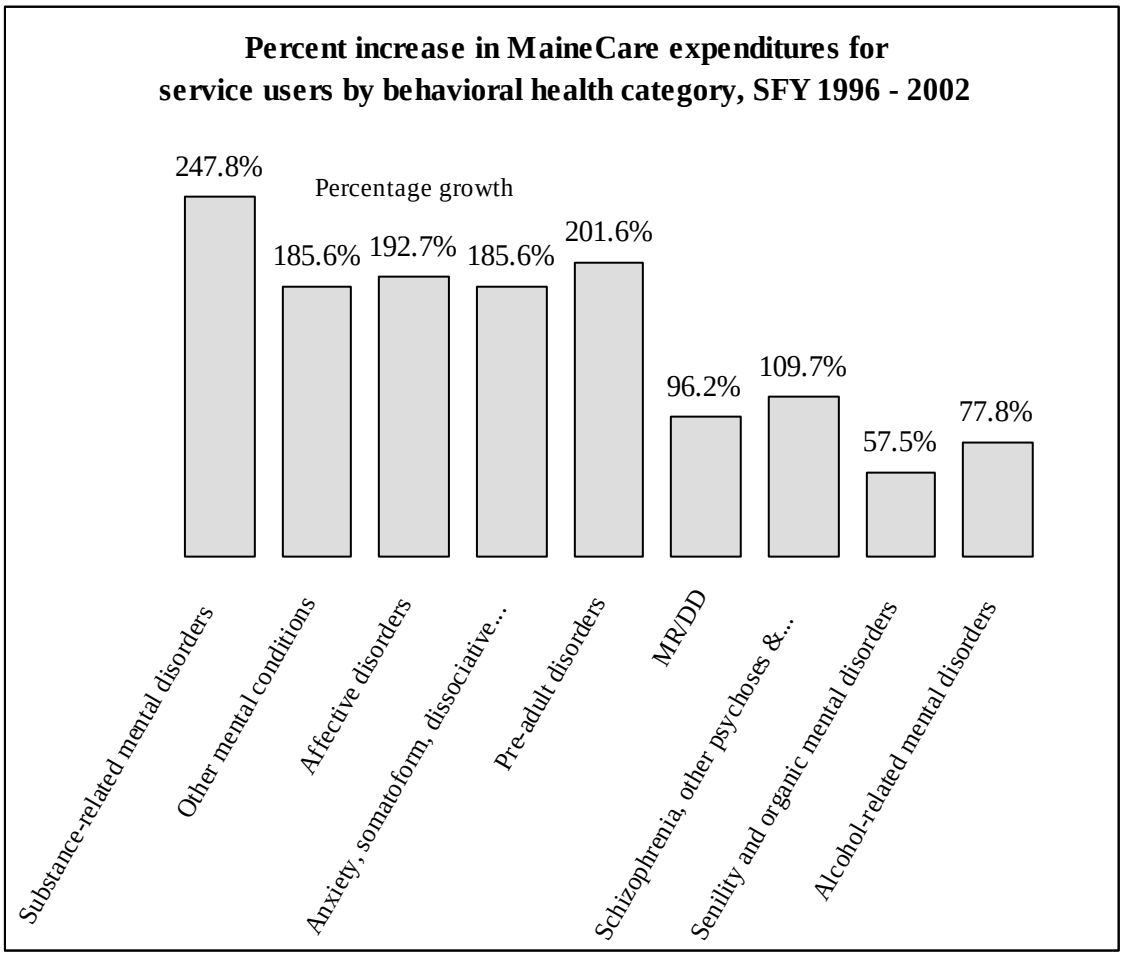
Table 5. Number of MaineCare service users and per service user per month (PSUPM) expenditures by behavioral health category, SFY 1996 - 2002

Behavioral health category[1]	Number of service users in SFY 2002	Percent of all SFY 2002 service users	Percent increase in number of service users SFY 1996 - SFY 2002	SFY 2002 PSUPM expenditure	Percent change in PSUPM SFY 1996 - SFY 2002
MR/DD					
Mental retardation / developmental disabilities	4,029	1.9%	52.8%	$4,554	26.5%
Senility					
Dementia, Alzheimer's disease and organic mental disorders	6,522	3.1%	25.0%	$2,854	21.2%
MH/SA: Mental health/substance abuse					
Anxiety, somatoform, dissociative, and personality	24,920	11.7%	98.5%	$1,340	37.7%
Affective disorders	21,076	9.9%	103.3%	$1,512	36.5%
Substance-related mental disorders	20,404	9.6%	164.8%	$909	23.7%
Schizophrenia and related disorders	7,793	3.7%	39.0%	$2,695	46.0%
Pre-adult disorders	8,863	4.2%	88.6%	$1,974	51.8%
Alcohol-related mental disorders	6,624	3.1%	13.2%	$1,124	49.4%
Other mental conditions	47,571	22.4%	106.4%	$1,135	30.9%

[1] MaineCare service users can be classified into more than one behavioral health category.

Total MaineCare expenditures increased by 150% or more for five behavioral health categories: substance-related mental disorders (247.8%), other mental conditions (185.6%), affective disorders (192.7%), anxiety, somatoform, dissociative, and personality disorders (185.6%), and pre-adult disorders (201.6%) (Chart 9 and Table 5).

Chart 9



Pre-adult disorders (51.8%), alcohol-related mental disorders (49.4%), and schizophrenia (46.0%) had the most rapid increase in expenditures per-service-user per-month (Table 5).

The average number of CCS behavioral categories per service user increased by 8.3% (from 1.57 to 1.70) from 1996 to 2002 (Table 6). The number of categories increased fastest for children (by 10.4%) and adults 45-64 years of age (by 10.7%). In 2002, the groups with the highest average number of behavioral health categories were children with MR/DD and adults 21-64 years of age with a MH/SA condition.

Table 6. Average number of behavioral health categories per service user, SFY 1996 - 2002

Age group	Service users with MR/DD		
	SFY 1996	SFY 2002	Change
0-20	1.97	2.21	11.9%
21-44	1.61	1.62	1.1%
45-64	1.57	1.67	6.5%
65+	1.42	1.65	16.1%
All ages	**1.63**	**1.84**	**12.4%**

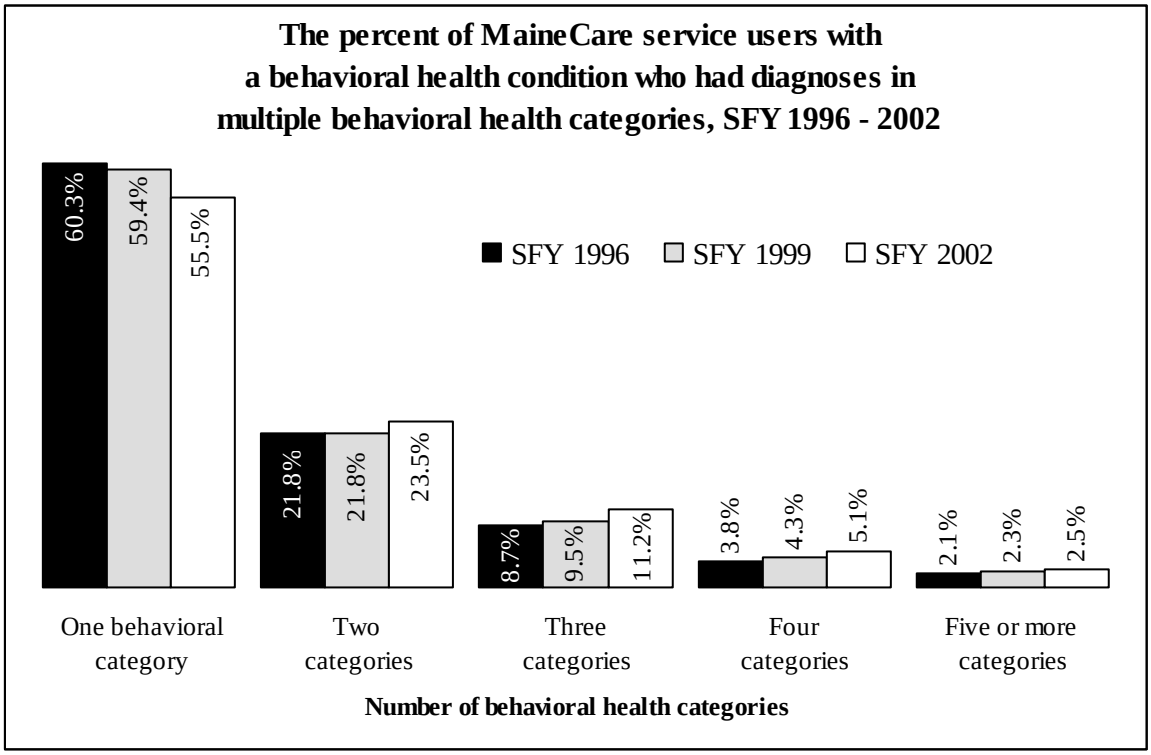
Age group	Service users with senility		
	SFY 1996	SFY 2002	Change
0-20	2.72	2.91	6.8%
21-44	2.88	3.16	9.8%
45-64	2.62	2.92	11.6%
65+	1.40	1.57	12.1%
All ages	**1.66**	**2.01**	**21.2%**

Age group	Service users with MH/SA		
	SFY 1996	SFY 2002	Change
0-20	1.37	1.49	8.4%
21-44	1.76	1.85	5.0%
45-64	1.61	1.78	10.5%
65+	1.28	1.32	3.8%
All ages	**1.55**	**1.66**	**7.1%**

Age group	Service users with a behavioral condition		
	SFY 1996	SFY 2002	Change
0-20	1.41	1.56	10.4%
21-44	1.78	1.86	4.9%
45-64	1.65	1.82	10.5%
65+	1.35	1.45	8.1%
All ages	**1.57**	**1.70**	**8.3%**

The percent of members with a behavioral health condition who had diagnoses in two or more behavioral categories increased from 36.5% in 1996 to 42.2% in 2002 (Chart 10). By SFY 2002, 11.2% of the service users had diagnoses in three behavioral health categories, 5.1% had diagnoses in four behavioral health categories, and 2.5% had diagnoses in five or more behavioral health categories.

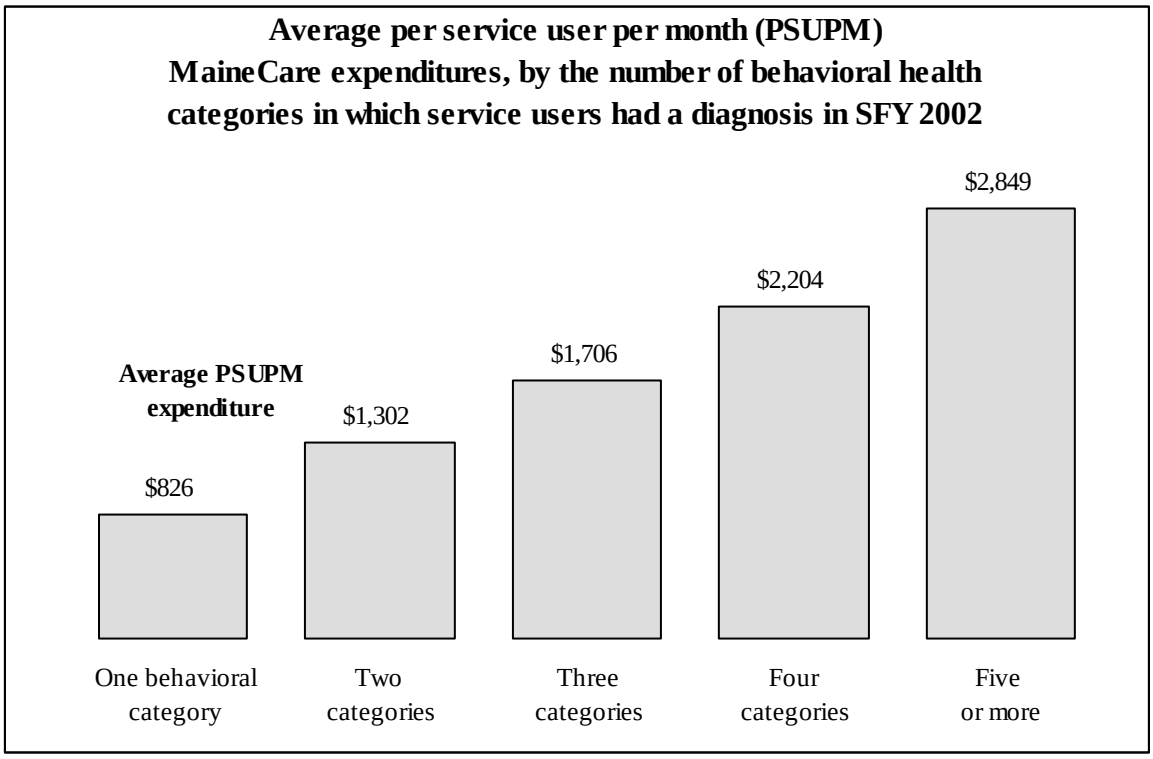
Chart 10



Note: In each year about 2% to 3% of the members had a behavioral health care service but did not have a corresponding diagnosis. They are not included in the chart.

The average number of behavioral health categories per service user is important because MaineCare expenditures rise sharply as the number of categories increases – from $826/month for service users with diagnoses in one behavioral health categories to $2,849/month for service users with diagnoses in five or more behavioral health categories (Chart 11).

Chart 11



Note: In each year about 2% to 3% of the members had a behavioral health care service but did not have a corresponding diagnosis. They are not included in the chart.

F. Service users with behavioral conditions use a mix of different types of services

KEY FINDINGS

- Persons with behavioral health diagnoses use a mix of different types of services.
- The types of services used differed by the service user's age.

RESULTS

The mix of services used by members with a behavioral condition differed greatly by the type of condition and by age. In 2002, three fourths (78.9%) of the expenditures for service users with MR/DD were for behavioral health services (PNMI is included in the behavioral category for this

group of members). Over half (61.9%) of the expenditures for those with senility were for long-term care. Almost half (41.7% and 49.3%) of the expenditures for members with MH/SA were for behavioral services and medical services, respectively.

Almost half (47.9%) of the expenditures for all service users with behavioral conditions were for behavioral services and more than a third (36.4%) were in medical/other services; the remaining 15.7% were for long-term care services (Table 7). This contrasts with service members without behavioral conditions: For them, almost two-thirds (64.4%) of expenditures were for medical/other services and one-third (33.5%) were for long-term care.

Service users who were less than 65 years of age with behavioral diagnoses were heavy users of medical as well as behavioral services (Table 7). In contrast, service users 65 and older with behavioral diagnoses used long-term care services heavily and made less use of behavioral services.

Based on our previous work, we know that a large proportion of the persons 65 and older are dually eligible for Medicare as well as MaineCare (Payne, Keith, and Salley 2001). We do not have access to data on Medicare expenditures. Medicare covers the majority of the health care expenditures for physician and hospital services of dually eligible individuals. Expenditures for these services, and for any diagnoses for persons with dual eligibility that are in the Medicare claims but not the MaineCare claims, are not reflected here.

Table 7. MaineCare per service user per month (PSUPM) expenditures by service categories as a percentage of total PSUPM expenditures, SFY 2002

Age group	MaineCare service users with MR/DD				
	Average PSUPM expenditures	Behavioral services[1]	Long term care	Medical/ other services	All services
0-64	$4,421	80.2%	3.1%	16.7%	100.0%
65+	$4,579	66.0%	19.9%	14.1%	100.0%
All Ages	$4,435	78.9%	4.7%	16.4%	100.0%

Age group	MaineCare service users with senility and organic mental disorders				
	Average PSUPM expenditures	Behavioral services	Long term care	Medical/ other services	All services
0-64	$2,487	34.9%	24.7%	40.4%	100.0%
65+	$2,697	11.3%	78.4%	10.3%	100.0%
All Ages	$2,629	18.5%	61.9%	19.6%	100.0%

Age group	MaineCare service users with MH/SA				
	Average PSUPM expenditures	Behavioral services	Long term care	Medical/ other services	All services
0-64	$787	43.8%	4.3%	51.9%	100.0%
65+	$1,328	21.3%	52.8%	25.9%	100.0%
All Ages	$820	41.7%	9.0%	49.3%	100.0%

Age group	MaineCare service users with behavioral conditions				
	Average PSUPM expenditures	Behavioral services	Long term care	Medical/ other services	All services
0-64	$1,087	53.9%	5.1%	41.0%	100.0%
65+	$2,123	21.6%	62.7%	15.7%	100.0%
All Ages	$1,195	47.9%	15.7%	36.4%	100.0%

Age group	MaineCare service users without behavioral health conditions				
	Average PSUPM expenditures	Behavioral services[2]	Long term care	Medical/ other services	All services
0-64	$191	1.9%	12.8%	85.3%	100.0%
65+	$774	2.4%	65.3%	32.3%	100.0%
All Ages	$272	2.1%	33.5%	64.4%	100.0%

[1] "Behavioral services" includes behavioral health services plus psychotropic medications.

[2] Behavioral services expenditures for service users without any behavioral health conditions represent the cost of psychotropic prescription medications for persons otherwise not identified with a behavioral condition.

G. Use of out-of-state facilities by children decreased

KEY FINDING

- The use of out-of-state facilities for mental health treatment for children increased dramatically from SFY 1996 to 1999, and then dropped substantially from SFY 1999 to 2002.

RESULTS

We are able to measure changes in the use of out-of-state compared to in-state specialized inpatient psychiatric facilities. (We are not able to identify reliably mental health stays in psychiatric wards of general hospitals, and so do not include them here.) The number of MaineCare members of all ages receiving inpatient mental health services in out-of-state facilities increased by 41.1% from SFY 1996 to SFY 2002, compared to an increase of only 4.9% in in-state inpatient mental health stays (Table 8). There was a substantial increase in the percent of members receiving these services from SFY 1996 to SFY 1999, and then a decrease from SFY 1996 to SFY 1999. Total expenditures showed the same pattern, increasing from SFY 1999 and then decreasing. The average cost per member for out-of-state hospitalizations increased 2.3% from $77,960 in SFY 1996 to $79,772 in SFY 2002 (not shown in table). In SFY 2002 this was about five times higher than the average expenditure per member for in-state stays, which had risen by 37.0% from $11,997 in SFY 1996 to $16,438 in SFY 2002. This difference may be accounted for by case mix of the members, the types of services needed, the length of stay, or other factors.

In SFY 2002, 14.2% of the members who received inpatient mental health services received them in out-of-state facilities; 44.5% of MaineCare expenditures on these services went to out-of-state facilities.

Teenagers (13-20) were more likely to receive services in out-of-state facilities than children 12 or younger (Table 8). Adults had no out-of-state inpatient mental health stays during the period studied.

Appendix C-3 indicates the specific hospitals providing these services in Maine and in other states and the MaineCare reimbursements to each institution.

Table 8. Number of MaineCare members receiving inpatient services and MaineCare expenditures for inpatient services at out-of- state and in-state psychiatric facilities, SFY 1996 - 2002

	Age 0-12							
	Number of Members				Expenditures[1]			
	SFY 1996	SFY 1999	SFY 2002	% change 1996-2002	SFY 1996	SFY 1999	SFY 2002	% change 1996-2002
Out-of-state	36	107	39	8.3%	$2,520,420	$6,479,259	$3,097,348	22.9%
In-state	308	202	286	-7.1%	$5,074,560	$5,647,077	$6,122,652	20.7%
Total	344	309	325	-5.5%	$7,594,980	$12,126,336	$9,220,000	21.4%
Out-of-state	10.5%	34.6%	12.0%		33.2%	53.4%	33.6%	

	Age 13-20							
	Number of Members				Expenditures[1]			
	SFY 1996	SFY 1999	SFY 2002	% change 1996-2002	SFY 1996	SFY 1999	SFY 2002	% change 1996-2002
Out-of-state	59	206	95	61.0%	$4,885,784	$14,582,502	$7,592,080	55.4%
In-state	420	310	508	21.0%	$3,928,953	$6,189,433	$6,967,448	77.3%
Total	479	516	603	25.9%	$8,814,737	$20,771,934	$14,559,528	65.2%
Out-of-state	12.3%	39.9%	15.8%		55.4%	70.2%	52.1%	

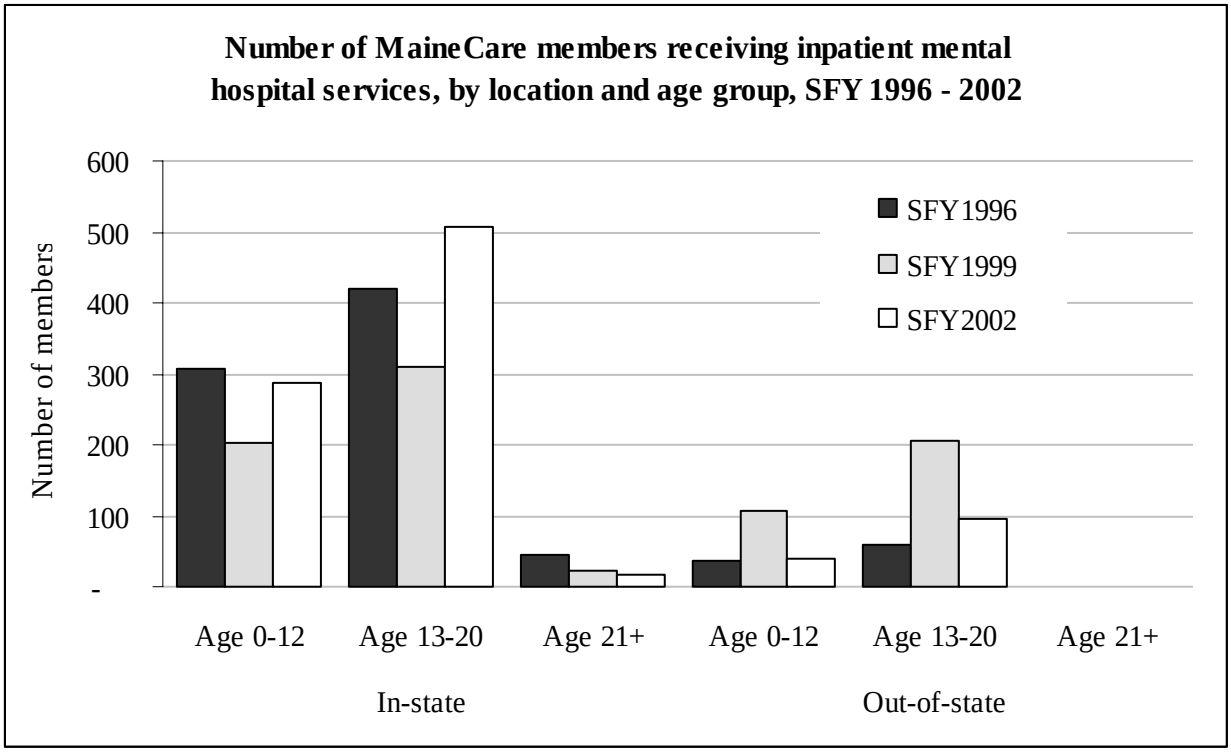
	Age 21+							
	Number of Members				Expenditures[1]			
	SFY 1996	SFY 1999	SFY 2002	% change 1996-2002	SFY 1996	SFY 1999	SFY 2002	% change 1996-2002
Out-of-state	-	-	-	-	-	-	-	-
In-state	46	23	18	-60.9%	$282,427	$240,040	$257,462	-8.8%
Total	46	23	18	-60.9%	$282,427	$240,040	$257,462	-8.8%
Out-of-state	-	-	-		-	-	-	

	All Ages							
	Number of Members				Expenditures[1]			
	SFY 1996	SFY 1999	SFY 2002	% change 1996-2002	SFY 1996	SFY 1999	SFY 2002	% change 1996-2002
Out-of-state	95	313	134	41.1%	$7,406,204	$21,061,760	$10,689,429	44.3%
In-state	774	535	812	4.9%	$9,285,940	$12,076,550	$13,347,562	44.7%
Total	869	848	946	8.9%	$16,692,144	$33,138,311	$24,036,991	44.0%
Out-of-state	10.9%	36.9%	14.2%		44.4%	63.6%	44.5%	

[1] Expenditures for in-state inpatient psychiatric facility care have been adjusted to reflect the estimated amount MaineCare actually pays the facility.

Chart 12 illustrates graphically the increase in out-of-state utilization for children 0-12 and 13-20 from 1996 to 1999, followed by a decrease between SFY 1999 and SFY 2002.

Chart 12



H. Expenditures for psychotropic and other medications increased dramatically

KEY FINDINGS

- Total expenditures for psychotropic medications (that is, medications that are used to treat mental health conditions) increased by 229.8% for service users with behavioral conditions from SFY 1996 to SFY 2002.

- Total expenditures on medications for members with behavioral conditions increased by 214.0% from SFY 1996 to SFY 2002; this compares to an increase of 86.8% for other service users.

RESULTS

We examined the contribution of expenditures on medications to the increase in spending on members with behavioral health care conditions. Expenditures on medications of all types for service users with a behavioral condition (Table 9) increased by $94,974,017 from SFY 1996 to SFY 2002; expenditures on medications represented 15.0% of the increase in total expenditures on this group of service users (the increase in total expenditures is shown in Table 2). During that time period, expenditures on medications per service user per month (PSUPM) increased from $83.90 to $142.66; this represented 31.8% of the increase in total expenditures on this group of service users (shown in Table 2).

Total expenditures on medications for members with behavioral conditions (Table 9) increased by 214.0% from SFY 1996 to SFY 2002; this compares to an increase of 86.8% for other service users.

Total expenditures for psychotropic medications increased by 229.8% for service users with behavioral conditions from SFY 1996 to SFY 2002. Total expenditures on psychotropic medications for service users without behavioral conditions increased by 196.3%.

There are at least two reasons why a MaineCare member who did not fit our definition of a person having a behavioral condition would have filled a prescription for a psychotropic medication. Psychotropic medications can be used to treat non-mental-health-related conditions such as allergies and migraine. There also might be circumstances when a primary care physician or a non-behavioral specialist might prescribe a psychotropic medication for a behavioral health care-related purpose without recording a behavioral diagnosis on the claim for the medical office visit. Since many psychotropic medications can be used for non-behavioral conditions, and because prescription claims do not carry a diagnosis, claims for psychotropic medications were not included in this study's definition of behavioral conditions.

Expenditures for medications for the behavioral group as a percentage share of their total MaineCare expenditures rose 3.6%, from 8.3% to 11.9% of total expenditures. The 3.6% climb was almost half of the original 8.3%.

Expenditures for medications with the non-behavioral group as a percentage share of total MaineCare expenditures rose 6.6%, from 14.8% to 21.4%. The 6.6% climb was almost half of the original 14.8%.

Table 9. MaineCare expenditures for psychotropic and other medications for service users with and without behavioral conditions, SFY 1996 – 2002

Total expenditures for medications	State Fiscal Year						Percent change[1] SFY 1996 - 2002		
	1996			2002					
	Psych.	Other	All	Psych.	Other	All	Psych.	Other	All
Service users with MR/DD	$1,402,956	$3,808,101	$4,211,057	$5,380,067	$7,953,955	$13,234,023	283.5%	108.9%	214.3%
Service users with senility	$1,343,449	$4,307,968	$5,651,417	$5,992,957	$9,960,095	$15,953,052	346.1%	131.2%	182.3%
Service users with MH/SA	$13,142,232	$21,367,780	$34,510,012	$41,133,501	$69,025,926	$110,159,427	213.0%	223.0%	219.2%
Sub-total: Service users with behavioral conditions	$15,888,636	$29,483,849	$44,372,485	$52,506,525	$86,939,976	$139,346,502	230.5%	194.9%	214.0%
Other service users	$2,502,938	$38,396,308	$40,899,251	$7,415,586	$68,977,587	$76,393,173	196.3%	79.6%	86.8%
All MaineCare service users	$19,794,536	$69,688,257	$89,482,793	$65,102,179	$163,871,519	$238,973,697	228.9%	135.1%	167.1%

Medications as a percent of each group's total MaineCare expenditures	State Fiscal Year						Percent change[2] SFY 1996 - 2002		
	1996			2002					
	Psych.	Other	All	Psych.	Other	All	Psych.	Other	All
Service users with MR/DD	1.0%	2.0%	3.1%	1.7%	2.6%	4.4%	0.7%	0.6%	1.3%
Service users with senility	1.1%	3.7%	4.8%	3.5%	5.8%	9.2%	2.3%	2.1%	4.4%
Service users with MH/SA	4.7%	7.6%	12.3%	6.0%	10.0%	16.0%	1.3%	2.4%	3.6%
Sub-total: Service users with behavioral conditions	3.0%	5.3%	8.3%	4.5%	7.4%	11.9%	1.5%	2.1%	3.6%
Other service users	0.9%	13.9%	14.8%	2.1%	19.3%	21.4%	1.2%	5.4%	6.6%
All MaineCare service users	2.1%	7.4%	9.4%	3.6%	9.0%	12.5%	1.5%	1.6%	3.1%

Per service user per month (PSUPM) expenditures for medications	State Fiscal Year						Percent change[1] SFY 1996 - 2002		
	1996			2002					
	Psych.	Other	All	Psych.	Other	All	Psych.	Other	All
Service users with MR/DD	$35.20	$70.45	$105.65	$77.01	$116.01	$193.03	118.8%	64.7%	82.7%
Service users with senility	$26.06	$83.56	$109.61	$91.26	$151.67	$242.92	250.2%	81.5%	121.6%
Service users with MH/SA	$30.04	$48.85	$78.89	$48.82	$81.93	$130.75	62.5%	67.7%	65.7%
Sub-total: Service users with behavioral conditions	$30.04	$53.86	$83.90	$53.65	$89.01	$142.66	78.6%	65.3%	70.0%
Other service users	$2.26	$34.64	$36.90	$5.64	$52.42	$58.06	149.6%	51.3%	57.3%
All MaineCare service users	$11.80	$41.55	$53.35	$27.57	$69.40	$96.97	133.6%	67.0%	81.8%

Psych. = psychotropic medications; Other = non-psychotropic medications; All = all medications

[1] Percent change calculated as: (dollar amount for SFY 2002 - dollar amount for SFY 1996) ÷ dollar amount for SFY 1996

[2] Percent change calculated as: percent of total MaineCare expenditures in SFY 2002 - percent of total MaineCare expenditures in SFY 1996

I. Almost all the high-cost service users have behavioral health diagnoses

KEY FINDING

- Among the top 1% of service users of annual MaineCare expenditures in 2002, almost all had a behavioral health condition.

RESULTS

As noted above, 41.0% of all service users in SFY 2002 had a behavioral health condition; they accounted for 76.5% of MaineCare expenditures. However, among the most expensive 1% of MaineCare service users (n=2,124) in SFY 2002, 1,879 (88.5%) had a behavioral health condition (Table 10). Those 1,879 service users accounted for 91.0% of the expenditures on the 2,124 highest-cost service users and 17.4% of total MaineCare expenditures for all service users.

Three-fourths (75.0%) of the amount MaineCare spent on these 1,879 individuals was for behavioral services. By far the single most costly category of service was for services under the waiver for persons with MR, which accounted for 36.3% of MaineCare expenditures for the 1,879 members. MR waiver expenditures for this high-cost group accounted for 6.3% of total MaineCare expenditures.

Table 11 presents comparative information for the least expensive 99% of service users who had a behavioral health condition. Among the least expensive 99% of service users (n=210,276), 85,294 (40.6%) had a behavioral health condition. They accounted for 59.2% of total MaineCare expenditures in SFY 2002. Almost a third (29.2%) of their expenditures were for nursing facility services and prescribed medications.

Table 10. Types of services used by the most expensive service users (top 1%) who had a behavioral health condition, SFY 2002 (n=1,879)

Rank	Type of service[1]	Expenditures	Percent of expenditures for most expensive service users with a behavioral condition who were among the most expensive 1% of all service users (n=1,879)	Percent of total MaineCare expenditures (n=212,400)
1	MR waiver (B)	$96,205,655	36.3%	6.3%
2	Private Non-Medical Institutions (B)	$41,040,840	15.5%	2.7%
3	ICF/MR boarding (B)	$30,688,787	11.6%	2.0%
4	General inpatient (M)	$27,517,241	10.4%	1.8%
5	Mental inpatient (B)	$15,262,473	5.8%	1.0%
6	Prescribed medications (B/M)	$10,277,302	3.9%	0.7%
7	Case management (M)	$7,914,091	3.0%	0.5%
8	Rehab. services (head injury) (L)	$6,249,230	2.4%	0.4%
9	Community support services (B)	$5,642,990	2.1%	0.4%
10	Mental health services (B)	$4,328,005	1.6%	0.3%
	Other categories	$20,084,696	7.6%	1.3%
Total expenditures for service users with a behavioral condition who were among the most expensive 1% of all service users (n=1,879)		**$265,211,311**	**100.0%**	17.4%
Total expenditures for the most expensive 1% of all service users (n=2,124)		**$291,588,857**		
Total costs for all MaineCare service users (n=212,400)		**$1,524,834,371**		

[1] B=behavioral, L=long-tem care, and M=medical/other.

Table 11. Types of services used by the least expensive service users (lower 99%) who had a behavioral health condition, SFY 2002 (n=85,294)

Rank	Type of Service[1]	Expenditures	Percent of expenditures for service users with a behavioral condition who were among the least expensive 99% of all service users (n=85,294)	Percent of total MaineCare expenditures (n=212,400)
1	Nursing facility (L)	$134,719,377	14.9%	8.8%
2	Prescribed medications (B/M)	$129,069,199	14.3%	8.5%
3	Private Non-Medical Institutions (B)	$107,689,933	11.9%	7.1%
4	General inpatient (M)	$70,731,933	7.8%	4.6%
5	Mental health services (B)	$66,540,299	7.4%	4.4%
6	Case management (M)	$56,351,686	6.2%	3.7%
7	BMR Waiver (B)	$54,011,235	6.0%	3.5%
8	General outpatient (M)	$52,866,540	5.9%	3.5%
9	Community Support Services (B)	$37,302,877	4.1%	2.4%
10	Non-traditional PHP (M)	$25,348,735	2.8%	1.7%
	Other categories	$167,399,706	18.6%	11.0%
Total expenditures for service users with a behavioral condition who were among the least expensive 99% of all service users (n=85,294)		$902,031,520	100.0%	59.2%
Total expenditures for the least expensive 99% of all service users (n=210,276)		$1,233,245,514		
Total expenditures for all MaineCare service users (n=212,400)		**$1,524,834,371**		

[1] B=behavioral, L=long-tem care, and M=medical/other.

VI. DISCUSSION AND CONCLUSIONS

Maine, like many other states, has experienced a dramatic increase in Medicaid funding for mental health services. Medicaid currently funds about 75% of the public mental health system in the U.S. (Rowland, Garfield and Elias 2003). Several trends have influenced this nationwide increase:

- During the last decade, nearly all states increasingly relied on Medicaid to fund mental health services (Frank, Goldman, and Hogan 2003; and Buck 2003). In part, this development was the result of deliberate state efforts to shift mental health services to Medicaid to take advantage of federal matching funds. This "Medicaidization" of mental health was accomplished by shifting funding from the mental health block grant and general state revenues to Medicaid. For example, states have offered "optional" community support under Medicaid for persons with serious mental illness (usually SSI-eligible) to take advantage of additional federal Medicaid match dollars.

- Use of mental health services has increased as Medicaid programs, health care providers, and mental health specialists have implemented evidence-based practices for the treatment of persons with behavioral diagnoses (Mechanic and Bilder 2004; *Governing Magazine* 2004).

- There is continued legal pressure on the state to comply with the court-ordered receivership and public pressure to expand in-state access to mental health services for children.

- States increased services available to TANF children and adults as awareness of their mental health needs has grown.

- Spending on psychotropic medications by Medicaid programs increased dramatically, by 1200% from 1991-2000 nationally (Frank, Goldman, and Hogan 2003).

- MaineCare enrollment has increased. Expansion of coverage for low-income children through the SCHIP program and expansion of coverage to low-income adults increased their numbers.

- Children with learning disabilities must have a behavioral health diagnosis to receive school-based special education services, which provides an incentive to diagnose.

- As a result of these developments, publicly-funded mental health care is increasingly dependent on Medicaid (Frank, Goldman and Hogan 2003).

- These pressures to increase Medicaid-funded mental health care have occurred at the same time as state budget shortfalls (*Governing Magazine* 2004).

It is important to note that individuals with mental health problems frequently use the medical care system for non-medical reasons; a substantial proportion of medical visits in the U.S. are

made by persons without an identifiable medical reason; and certain physical conditions can lead to or co-occur with mental health problems such as depression or anxiety (summarized in Chiles, Lambert, and Hatch 1999). There is evidence that behavioral health care services can reduce as well as increase health care expenditures. A literature review of 91 studies suggests that appropriate psychological interventions can reduce or "offset" medical costs by an average of 20% (Chiles, Lambert, and Hatch 1999). This suggests that assuring that behavioral services are used appropriately and when needed is as important as managing their costs.

Our results have several policy implications:

MaineCare will not be able to control its expenditures until it can control its behavioral health care expenditures. The trends in spending and enrollment for members with behavioral conditions show no sign of slowing down. There is every sign that MaineCare expenditures in the future will be even more heavily weighted to members with behavioral conditions.

In order to make a far-reaching impact on MaineCare behavioral health care expenditures, a multi-program, interdepartmental strategy will be needed. This study shows that behavioral health care in MaineCare includes a much broader and larger group than those traditionally served by behavioral services programs. Behavioral health care appears to be a need that spans Department of Health and Human Services programs (e.g. aged, child protective, and TANF) as well as Department of Education programs (special education) and Department of Labor programs (rehabilitation and unemployment). The new Department of Health and Human Services, which resulted from the merger of the Department of Behavioral and Developmental Services and the Department of Human Services, represents an important opportunity for developing such a strategy. However, even with the merger there will still be a need to involve the Department of Education and the Department of Labor.

The increase in the number and percent of children with behavioral conditions warrants special attention. In part, this was due to an increase in the number of children covered by MaineCare. In part, however, it was due to an increase in the percent of children with a diagnosed behavioral condition.

Service users with high behavioral health care expenditures also have high medical expenditures. National studies indicate that as much as 70% of mental health care services are provided in the primary (medical) care system. This suggests that primary care providers and other medical care providers play an important role in the care of MaineCare service users with behavioral conditions.

The increase in the number of service users with substance abuse-related conditions deserves special attention. The number of children still receiving out-of-state treatment may indicate a capacity limitation.

Programmatic responses by DHHS: During and after the time this study covers, the Department of Human Services has initiated several programmatic responses to the increase in spending on behavioral health care services. Some of these were initiated during the period covered here; we have seen evidence of their impact in the information we reviewed. For example, the Department

of Behavioral and Developmental Services (DBDS, which is now part of the Department of Human Services) through prior authorization and utilization review, has decreased the use of out-of-state institutions to treat children. Expenditures for these services dropped "from $15.7 million in 1999 to slightly more than $2 million in 2003" [after the period covered in this report] (B Harvey, memo to T Riley, April 12, 2004). In addition, a comprehensive utilization review program is being developed to target other services for children, including those legally mandated" (B Harvey, memo to T Riley, April 12, 2004). The State is "embarking on a significant service/system overhaul of the mental retardation service system – moving from a system oriented to deinstitutionalization under a consent decrees for the majority of recipients to one of community services for a majority of non-class recipients" (B Harvey, memo to T Riley, April 12, 2004). Targeted case management has been implemented to assure that members are getting the services in their care plan, that objectives are being met, and that the care plan is appropriate (C Zukas-Lessard, memo T Riley, April 7, 2004).

This analysis raises several additional questions for consideration by MaineCare:

Will the dramatic increase in the number and percentage of children with behavioral conditions continue?

Does the continued use of out-of-state providers for children's treatment indicate greater service need or greater patient complexity than can be met in-state? Does it indicate a capacity limitation in Maine?

Certain physical conditions, such as cardiovascular disease, can lead to or co-occur with mental health problems such as depression or anxiety (summarized in Chiles, Lambert, and Hatch 1999). To what extent are the MaineCare expenditures of the high-cost users identified in this report driven by their medical conditions and to what extent are they driven by their behavioral conditions?

What infrastructure is already in place to manage the care of high-cost users? What can be done to manage the expenditures of the much larger percentage of members with lower-than-average costs? Can existing case management or utilization review programs be used more effectively to contain expenditures? Would greater use of managed care for behavioral health care help control costs?

There are traditional differences in the approaches and operations of behavioral, medical, and long-term care programs in such areas as rate setting, payment, care management, the use of managed care, client assessment, and care planning. In many instances, these differences lead to tighter control over expenditures or service use for medical and long-term care services compared to behavioral services. For example, assessment of client case mix, service needs, and care planning for long-term care are the responsibility of a different organization from the organization that delivers the care after the assessment has been made. This raises the question of whether it would be useful for DHHS to consider adapting for behavioral services some of the management and oversight policies in other DHHS programs, such as separating the diagnosis of the clients' condition and needs and the development of the care plan from the provision of care.

VII. ACKNOWLEDGMENTS

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IX. APPENDICES

Appendix A. Study population, SFY 1996 - 2002

	SFY 1996		SFY 1999		SFY 2002	
	Number	**Percent**	**Number**	**Percent**	**Number**	**Percent**
All MaineCare members	185,043	100.0%	195,908	100.0%	342,710	100.0%
Healthy Maine Prescriptions[1] or Drugs for the Elderly	1,483	0.8%	4,033	2.1%	111,142	32.4%
Number of members eligible for the study	183,560	99.2%	191,875	97.9%	231,568	67.6%

	SFY 1996		SFY 1999		SFY 2002	
	Number	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Number of members eligible for the study	183,560	100.0%	191,875	100.0%	231,568	100.0%
Service users	162,203	88.4%	175,020	91.2%	212,400	91.7%
Non-service users	21,357	11.6%	16,855	8.8%	19,168	8.3%

[1] Healthy Maine Prescriptions members are only included in the figures for SFY 2002.

Appendix B-1. List of MaineCare categories of service by general group

MR/DD-related services

Category of service	
26	MR/DD Waiver
34	ICF/MR Services Nursing
35	Day Habilitation
39	Private Non-Medical Institutions[1]
40	ICF/MR Boarding
56	MR/DD Waiver Boarding Home

MH-related services

Category of service	
2	Mental Inpatient
12	Community Support Services
28	Mental Health Services
38	Psychological Services
39	Private Non-Medical Institutions[1]
62	Home Based Mental Health
64	Outpatient Mental Health
66	Developmental Behavioral Clinic

SA-related services

Category of service	
39	Private Non-Medical Institutions[1]
48	Substance Abuse Treatment Facility

Long term care services

Category of service	
3	Nursing Facility
11	Home Health Services
21	Hospice
22	Waiver for Physically Disabled
23	Swing Bed
36	Day Health
39	Private Non-Medical Institutions[1]
41	Medicare Part A
50	Medicare Part B
55	PVT Non-Medical Institution
57	Elderly Waiver
58	Private Duty Nursing
59	Personal Care Services
61	Rehab. Services (Head Injury)

Medical/other services

Category of service	
1	General Inpatient
4	General Outpatient
5	Social Services Client
6	Physician
7	Podiatrist
8	PHP Agency
9	Dental
10	Other Prescribed Drugs
13	LCSW/LCPC
14	Independent Lab
15	Transportation
16	Medical Supplies/DME Supplies
17	Prosth/Orthotic Devices
18	Ambulatory Surgical Center
19	Clozarill Monitoring
20	Reserved
24	Case Management
25	Family Planning Clinic
27	Speech/Hearing Services
29	Ambulance
30	Ambulatory Care Clinic Service
31	Physical Therapy Services
32	Chiropractic Services
33	Occupational Therapy Services
37	Optometric Services
42	Optical Services
43	Certified Rural Health Clinic
44	V.D. Screening
45	Hearing Aid Dealer
46	Audiology Services
47	Speech Pathology Services
49	Boarding Home
51	Reserved
52	HMO Services
53	Nurse/Midwife Services
54	State Use Only
60	Family and Pediatric Nurse Pract.
63	Federally Qualified Health Center
65	Early Intervention
67	Non-Traditional PHP

[1] MaineCare expenditures related to the Private Non-Medical Institutions category have been split between the MR/DD, MH/SA, and LTC categories.

Appendix B-2. Types of providers who submit claims under mental health-related MaineCare categories of service

COS	Category	Provider Type	
2	**Mental inpatient**	Private psychiatric hospital	State psychiatric hospital
12	**Community support services**	Other qualified staff Community support services MSW social worker Community support work Lic. clinical professional counselor Psychiatric nurse Physician Registered nurse	LCSW social worker Certified nurse practitioner Psychologist Substance abuse counselor Mental health professional Certified seed Interpreter Licensed nurse
28	**Mental health services**	Other qualified staff MSW social worker School administration district Lic. clinical professional counselor Mental health clinic Physician LCSW social worker Psychiatric nurse Certified seed Psychologist Registered nurse Mental health professional Certified nurse practitioner	Physicians assistant (servicing only) Lic. professional counselor Interpreter Licensed nurse Community support work Psychological examiner Substance abuse counselor Physician assistant Certified nurse midwife Licensed dietician Non-residential rehabilitation
38	**Psychological services**	Psychologist	Psychological examiner
39	**Private non-medical institutions**	Boarding home Private non-medical institution Community support work Other qualified staff	Psychiatric nurse Certified seed MSW social worker
62	**Home-based mental health**	Home-based mental health Community support work Other qualified staff MSW social worker	Lic. clinical professional counselor Psychiatric nurse Mental health clinic
64	**Outpatient mental health**	Private psychiatric hospital	State psychiatric hospital
66	**Developmental Behavioral Clinic**	Developmental and behavioral clinic	Other

Appendix B-3. Definitions of categories of service from the MaineCare Benefits Manual

COS	Category
2	**Mental Inpatient**
	"'Inpatient Services' are services furnished in a psychiatric facility that is primarily engaged in providing diagnosis, treatment, or care for individuals who have been admitted to the facility for 24-hour-a-day acute psychiatric care when the needs of such individuals cannot be met in a less restrictive setting. Inpatient services are limited to individuals age 65 and over and age 21 and under."
12	**Community Support Services**
	"Community Support Service means a rehabilitative service that is provided in the context of a supportive relationship, pursuant to an individual support plan that promotes a person's recovery, and integration of the person into the community, and sustains the person in his or her current living situation or another living situation of his or her choice."
28	**Mental Health Services**
	"Mental Health Services shall mean those covered services provided as described in Sections 65.04-3 and 65.05-3, under the direction of a psychiatrist, physician, psychologist, licensed clinical social worker, licensed clinical professional counselor or advanced practice psychiatric and mental health nurse to an eligible adult or child (20 years of age or less) and as indicated under Section 65.04-3, Covered Services, his/her family by approved staff members of a State agency or a mental health agency licensed by the State of Maine for the diagnosis, assessment, treatment, or rehabilitation of mental disorders, as described in the Diagnostic and Statistical Manual of Mental Health Disorders (DSM), published by the American Psychiatric Association. Children eighteen (18) years of age through twenty (20) years of age who have completed their public education and children who are emancipated minors, may choose to receive children's mental health services or adult mental health services, both of which are covered under this Section."
38	**Psychological Services**
	"'Psychological Services', as set forth in this section, are those services provided to a recipient in accordance with a plan of care by an individual in private practice who meets the licensure requirement for the diagnosis and treatment of mental, psychoneurotic, or personality disorders as described in the Diagnostic and Statistical Manual of Mental Disorders published by the American Psychiatric Association."
39	**Private Non-Medical Institutions**
	"A Private Non-Medical Institution (PNMI) is defined as an agency or facility that is not, as a matter of regular business, a health insuring organization, hospital, nursing home, or a community health care center, that provides food, shelter, and treatment

services to four or more residents in single or multiple facilities. Private Non-Medical Institution services or facilities must be licensed by the Department of Human Services, the Executive Department or the Department of Behavioral and Developmental Services, or must meet comparable licensure standards and/or requirements and staffing patterns as determined by the appropriate Department specified in Section 97.01 (A-F). Services provided out-of-state must be medically necessary and unavailable in the state of Maine, and are subject to prior approval by the Commissioner of the Department of Human Services. Services provided out-of-state also require prior authorization as described in Chapter I of the MaineCare Benefits Manual.

"A. Substance Abuse Treatment Facility

"A substance abuse treatment facility is a PNMI that is maintained and operated for the provision of substance abuse treatment and rehabilitation services, and is licensed and funded by the Department of Behavioral and Developmental Services (BDS). Substance abuse treatment facilities are also subject to rules in MBM, Chapter III, Section 97, and Chapter III, Section 97, Appendix B.

"B. Child Care Facilities

"A child care facility is any private or public agency or facility that is maintained and operated for the provision of child care services, as defined in 22 MRSA §8101, 8101(1), and 8101(4), is funded by the Department of Human Services and licensed by the Department of Human Services (DHS) under the "Rules for Licensure of Residential Child Care Facilities", 10-148 CMR, Chapter 18; and/or is licensed and funded by the Department of Behavioral and Developmental Services pursuant to 34-B MRSA§3606. Requests for exceptions to the Department of Behavioral and Developmental Services funding and licensure requirement may be made through written correspondence to the Bureau of Medical Services from the Department of Behavioral and Developmental Services. Providers may make requests for exceptions to the Department of Human Services funding and/or licensure requirement through written correspondence to the Bureau of Medical Services from the Bureau of Child and Family Services.

"For the purpose of MaineCare reimbursement only, child care facility Private Non-Medical Institutions also include treatment foster homes, their staff and parents, licensed by the Department of Human Services, Bureau of Child and Family Services, and child placing agencies under contract with the Bureau of Child and Family Services. Child placing agencies must be licensed in accordance with the rules providing for the licensing of child placing agencies. Child care facilities are also subject to rules in MBM, Chapter III, Section 97, and Chapter III, Section 97, Appendix D.

"C. Community Residences for Persons with Mental Illness

"A community residence PNMI is a PNMI with integral mental health treatment and rehabilitative services that is licensed by the Department of Behavioral and Developmental Services, funded as a mental health residential treatment or supportive housing service by BDS, and operated in compliance with treatment

standards established through these rules and the pertinent Principles of Reimbursement.

"Community residences for persons with mental illness also include residential services for the integrated treatment of persons with dual disorders, which provide mental health and substance abuse treatment services to individuals with coexisting disorders of mental illness and substance abuse. These residences shall be licensed by the BDS. Such residences must also be receiving funds from the BDS for the treatment of persons with dual disorders. Community residences for persons with mental illness are also subject to rules in MBM, Chapter III, Section 97, and Chapter III, Section 97, Appendix E.

"D. Medical and Remedial Services Facility

"Medical and remedial services facilities are those facilities as defined in 22 MRSA §7801 that are maintained wholly or partly for the purpose of providing residents with medical and remedial services and licensed by the Department of Human Services under the "Regulations Governing the Licensing and Functioning of Assisted Living Facilities". These facilities must also be also be qualified to receive cost-reimbursement for room and board costs not covered under this Section. Medical and remedial facilities are also subject to rules in MBM, Chapter III, Section 97, and Chapter III, Section 97, Appendix C.

"E. Non-Case Mixed Medical and Remedial Facilities

"Non-case mixed facilities provide PNMI medical and remedial services to members in specialized facilities not included in the case mix payment system described in Appendix C. These facilities specialize in solely treating members with specific diagnoses such as acquired brain injury, HIV/AIDS, mental retardation, or blindness. The Department providing the State share of MaineCare reimbursement (applicable Department) may be either the Department of Human Services or the Department of Behavioral and Developmental Services. Services must be provided in compliance with these rules, the pertinent Chapter III, Principles of Reimbursement, and Chapter III, Appendix F, and any contractual provisions of the applicable Department."

62 Home Based Mental Health

"Home-Based Mental Health Services are short-term, crisis-oriented, counseling services provided in the member's home or other appropriate setting. For purposes of Home-Based Mental Health Services, crisis is defined as "Risk of Removal." These services are provided under the direction of a psychiatrist, psychologist or other professional staff as defined in Section 37.06(2) (A), by a team of counselors for the evaluation, diagnosis, and treatment of mental disorders, or conditions, as described in the Diagnostic and Statistical Manual of Mental Health Disorders published by the American Psychiatric Association. Services are billed to the Department using the ICD-9 coding system. The services are intended to prevent the removal of the member from the home to an institution or some other therapeutic residential setting and to facilitate return to the home. Home-Based Mental Health Services are not intended to provide crisis or emergency services between the hours of 11pm and 7am. However, between 7am and 11pm, Home-Based Mental Health Services providers are expected to provide a

first response to members whenever possible, in conjunction with public safety and mental health crisis resolution and emergency services agencies, as necessary, in order to protect the health and safety of both the members and the public."

64 OP Mental Health

"'Outpatient Services' are a planned combination of diagnostic, treatment and rehabilitative services provided to mentally or emotionally disturbed persons who need similar or more active or inclusive treatment than is available through a weekly visit to a mental health center, psychologist or psychiatrist but who do not need partial hospitalization or full-time hospitalization or institutionalization. Outpatient Services provide support and facilitate a more integrated and independent level of functioning in the community to persons with psychiatric disorders."

66 Developmental Behavioral Clinic

"Developmental and Behavioral Evaluation Clinic Services means those covered diagnostic and evaluation services provided to an eligible child or adolescent by approved staff members of a developmental and behavioral evaluation clinic under the direction of a physician."

Developmental and Behavioral Evaluation Clinic means a clinic that has as its primary purpose the provision of developmental and behavioral evaluations for children and adolescents from birth through twenty years of age. A developmental and behavioral evaluation clinic may operate as a sub unit of an existing agency, but not as part of a hospital, home health agency or rural health clinic, and shall be licensed by the Department of Mental Health and Mental Retardation to provide outpatient therapy services, and/or receiving funding from the Division of Maternal and Child Health, Coordinated Care Services for Children with Special Needs, to provide developmental and behavioral evaluation clinic services.

Appendix C-1. Comparison of children (age 0-20) who did and did not receive Early Intervention Services, SFY 1996 - 2002

Number of children

	Early Intervention	Other children	Total	Early Intervention	Other children	Total
SFY 1996	1,465	78,933	80,398	1.8%	98.2%	100.0%
SFY 1999	1,496	84,236	85,732	1.7%	98.3%	100.0%
SFY 2002	1,600	98,183	99,783	1.6%	98.4%	100.0%
Increase	**135**	**19,250**	**19,385**			
1996-2002	**9.2%**	**24.4%**	**24.1%**			

Total expenditures

	Early Intervention	Other children	Total	Early Intervention	Other children	Total
SFY 1996	$15,204,997	$156,459,774	$171,664,772	8.9%	91.1%	100.0%
SFY 1999	$20,954,866	$282,456,966	$303,411,832	6.9%	93.1%	100.0%
SFY 2002	$29,711,948	$429,001,084	$458,713,031	6.5%	93.5%	100.0%
Increase	**$14,506,950**	**$272,541,309**	**$287,048,260**			
1996-2002	**95.4%**	**174.2%**	**167.2%**			

PSUPM expenditures

	Early Intervention	Other children	Total
SFY 1996	$922	$201	$216
SFY 1999	$1,227	$329	$346
SFY 2002	$1,604	$408	$429
Increase	**$682**	**$207**	**$213**
1996-2002	**74.0%**	**103.1%**	**98.6%**

Appendix C-2. Comparison of children (age 0-20) who did and did not receive Katie Beckett services, SFY 1996 - 2002

Number of children

	Katie Beckett	Other children	Total	Katie Beckett	Other children	Total
SFY 1996	724	79,674	80,398	0.9%	99.1%	100.0%
SFY 1999	1,306	84,426	85,732	1.5%	98.5%	100.0%
SFY 2002	1,752	98,031	99,783	1.8%	98.2%	100.0%
Increase 1996-2002	**1,028**	**18,357**	**19,385**			
	142.0%	**23.0%**	**24.1%**			

Total expenditures

	Katie Beckett	Other children	Total	Katie Beckett	Other children	Total
SFY 1996	$6,647,828	$165,016,943	$171,664,772	3.9%	96.1%	100.0%
SFY 1999	$16,794,176	$286,617,655	$303,411,832	5.5%	94.5%	100.0%
SFY 2002	$30,249,318	$428,463,713	$458,713,031	6.6%	93.4%	100.0%
Increase 1996-2002	**$23,601,490**	**$263,446,770**	**$287,048,260**			
	355.0%	**159.6%**	**167.2%**			

PSUPM expenditures

	Katie Beckett	Other children	Total
SFY 1996	$874	$210	$216
SFY 1999	$1,216	$332	$346
SFY 2002	$1,573	$408	$429
Increase 1996-2002	**$700**	**$198**	**$213**
	80.1%	**94.7%**	**98.6%**

Appendix C-3. MaineCare-reimbursed inpatient psychiatric services provided by in-state and out-of-state facilities, SFY 2002

Psychiatric Facility	Location	Members		Expenditures	
		Number	Percent of Total	Amount	Percent of Total
In-state					
Spring Harbor Hospital	Westbrook, ME	450	49.3%	$7,390,634	30.3%
Acadia Hospital Corp	Brewer, ME	365	40.0%	$6,051,891	24.8%
Bangor Mental Health Institute	Bangor, ME	14	1.5%	$104,624	0.4%
Riverview Psychiatric Center	Augusta, ME	12	1.3%	$202,409	0.8%
Unduplicated sub-total		805	88.2%	$13,749,558	56.3%
Out-of-state					
Hampstead Hospital	Hampstead, NH	86	9.4%	$4,891,401	20.0%
Brattleboro Retreat	Brattleboro, VT	18	2.0%	$731,609	3.0%
Devereux Foundation	Orlando, FL	14	1.5%	$2,041,400	8.4%
Other out-of-state facilities[1]		16	1.8%	$3,012,069	12.3%
Unduplicated sub-total		132	14.5%	$10,676,479	43.7%
Unduplicated grand total		913	100.0%	$24,426,036	100.0%

[1] Other category indicates hospitals with fewer than 10 members