

# Mental Health Chartbook

*Tracking the Well-being of People with Mental Health Challenges*

August 2012



The National Center for Children in Poverty (NCCP) is a leading public policy center dedicated to promoting the economic security, health, and well-being of America's low-income families and children. Using research to inform policy and practice, NCCP seeks to advance family-oriented solutions and the strategic use of public resources at the state and national levels to ensure positive outcomes for the next generation. Founded in 1989 as a division of the Mailman School of Public Health at Columbia University, NCCP is a nonpartisan, public interest research organization.

## MENTAL HEALTH CHARTBOOK

Tracking the Well-being of People with Mental Health Challenges

## ACKNOWLEDGMENTS

This report is an update of *Mental Health Chartbook: Tracking the Well-being of People with Mental Illness* (2008) by Sherry Glied, Health Policy and Management Columbia University Mailman School of Public Health and Richard Frank Health Care Policy, Harvard Medical School. The funding for this chartbook was provided by the MacArthur Foundation. Yumiko Aratani, Shannon Stagman, Christel Brellochs from NCCP and Nick Tilipman from Cornell University have contributed to the updates of this chartbook. Morris Ardoin, Telly Valdellon and Amy Palmisano provided support for the production of this report.

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# List of Data Sources

This chartbook was compiled based on the following nine national and local survey data.

- ◆ Medical Expenditure Panel Study (MEPS)
- ◆ National Health Interview Survey (NHIS)
- ◆ National Ambulatory Medical Care Survey (NAMCS)
- ◆ National Hospital Discharge Survey (NHDS)
- ◆ The National Association of State Mental Health Program Directors (NASMHPD): Detailed statistics on revenues and spending for mental health services by state mental health agencies
- ◆ Social Security Insurance/Social Security Disability Insurance (SSI/SSDI): The Social Security Administration publishes annual data on enrollment by illness in SSI/DI, spending by beneficiary according to type of disabling illness
- ◆ Medicaid (Florida, national drug files)
- ◆ HUD assessment data
- ◆ Bureau of Justice Statistics



## About This Chartbook

This chartbook documents the prevalence of mental health problems and illness, patterns of treatment and service use, cost of mental health care and quality of care, and life measures for children, adults and the elderly in the United States from the mid-1990s to 2008. Trends are also examined across different racial/ethnic groups and income levels. The data are compiled from nine different national and local surveys.

Key findings are:

- ◆ Increasing rates of emergency room visits by children with mental health problems.
- ◆ Problems in access to and affordability of care among people with mental health functional limitations.
- ◆ Overall increases in the rate of mental health problems among children and in the rates of mental health diagnosis among adults and seniors.
- ◆ Reductions in mental health out-of-pocket expenses for all age groups.
- ◆ The proportion of inpatient hospitalization among people with a mental health diagnosis has remained stable over time.
- ◆ The proportion of psychiatrists participating in insurance programs has remained steady and shows a slight increase in the recent years.
- ◆ The share of people with social security disability insurance (SSDI) due to mental illness has remained stable over time.
- ◆ Continued growth in the number of people with mental illness incarcerated in jails and prisons.

## SECTION 1

# Prevalence of Mental Illness

The prevalence of mental health problems or mental illness appears to be quite stable over time. Full epidemiological surveys of prevalence, reported using complex instruments, are conducted only sporadically. As a substitute, we examine trends in the prevalence of parent-reported mental health problems for children and of self-reported mental health limitations and mental health symptoms among adults. According to the National Health Interview Survey, approximately two to three percent of adults age 18 to 64 report limitations in their activity. The rate among older adults, ages 65 and above, is slightly lower at 1.5 percent. Among children age 4 to 17, about five percent are reported to have a moderate or severe mental health problem. While the prevalence rate

seems stable over time in the U.S. population for both children and adults, the burden of mental health problems seems to fall most heavily upon low-income groups. Among children, Hispanic children are much less likely to have a reported mental health problem than their white or black counterparts; while among adults, there were less variations across racial and ethnic groups.

The treated rates have also been largely unchanged, and only about half of children with a mental health problems and adults under age 65 with mental health limitation/access professional services. The treated rates are even lower among adults over age 65; only about one-fourth of older adults access needed services.

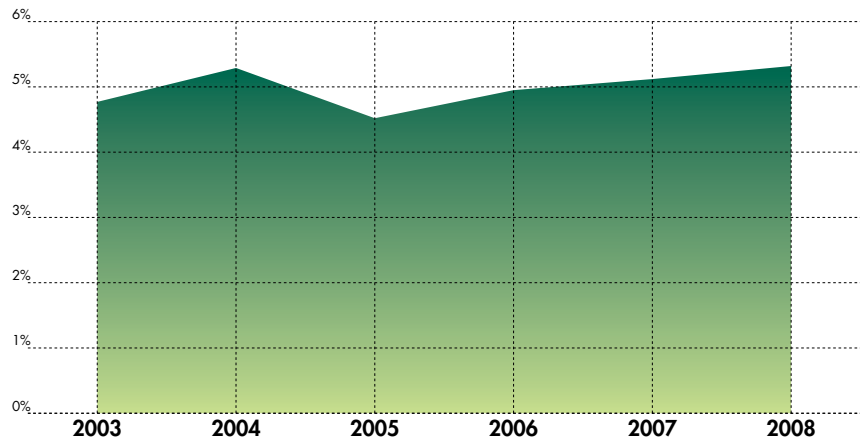


## Prevalence of Mental Illness

- ◆ Children were diagnosed as having a mental health problem when their parents reported their child having “definite” or “severe” difficulties in any of the following areas: emotions, concentration, behavior, or being able to get along with other people.
- ◆ The number of children with a mental health problem has remained stable at about five percent for the last several years.

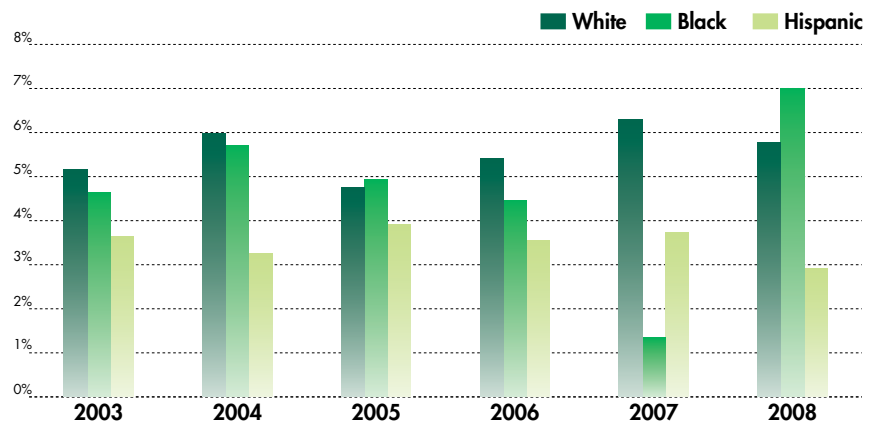
### Children ages 4-17

#### Children with a mental health problem



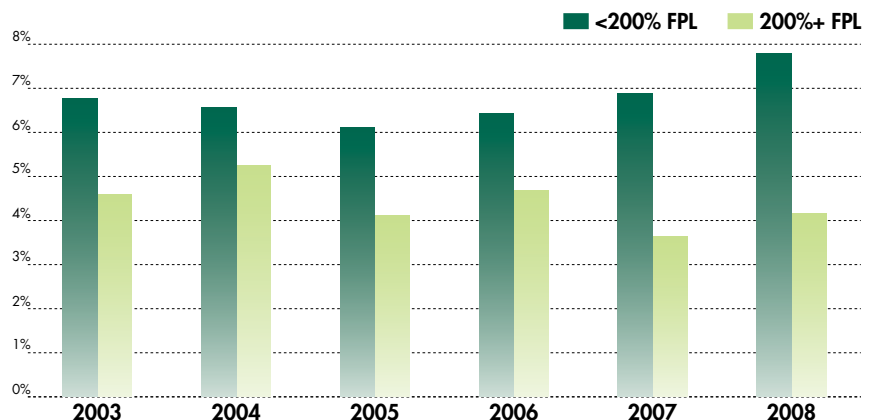
- ◆ Overall, the prevalence of children with a mental health problem for white and Hispanic groups have not significantly changed since 2001.
- ◆ Hispanic children have a lower prevalence rate (three percent in 2008) than white or black children.
- ◆ Black children’s prevalence rate increased to seven percent in 2008.

#### Children with a mental health problem, by race/ethnicity



- ◆ Low-income children are slightly more likely to have reported mental health problems than higher-income children.
- ◆ These rates are stable over the study period, but increased to close to eight percent in 2008.

#### Children with a mental health problem, by income level



Data source: NHIS

## Prevalence of Mental Illness

- ◆ The prevalence of adult mental health illness remained fairly stable from 2003 to 2008.
- ◆ Approximately three percent of adults between ages 18 and 64 experience a mental health activity limitation, an indicator of serious mental illness.

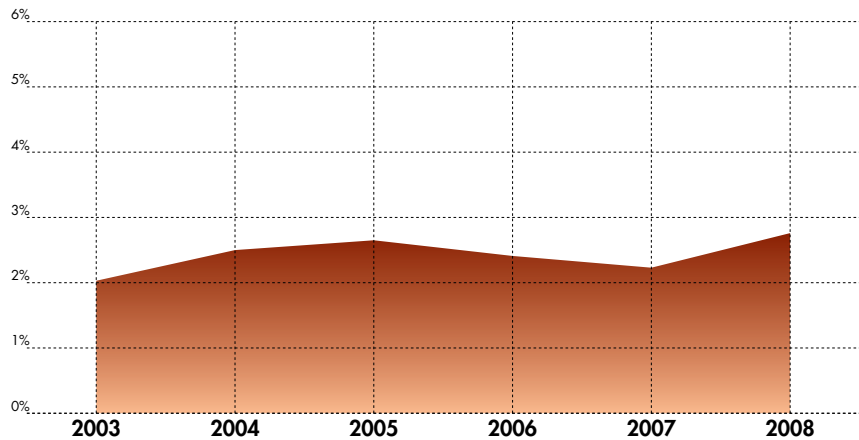
- ◆ Prevalence was similar and fairly stable across racial and ethnic groups.
- ◆ Rates of mental health activity limitation were highest among white respondents.
- ◆ Overall, variance between groups was very small and no clear trend emerged over time.

- ◆ The prevalence of mental illness between ages 18 and 64 is much higher among low-income adults, close to six percent in 2008, compared to only two percent among higher-income adults.
- ◆ The relationship between poverty and mental illness is complex; while an impoverished environment can diminish mental health, mental illness can also severely limit earning potential.

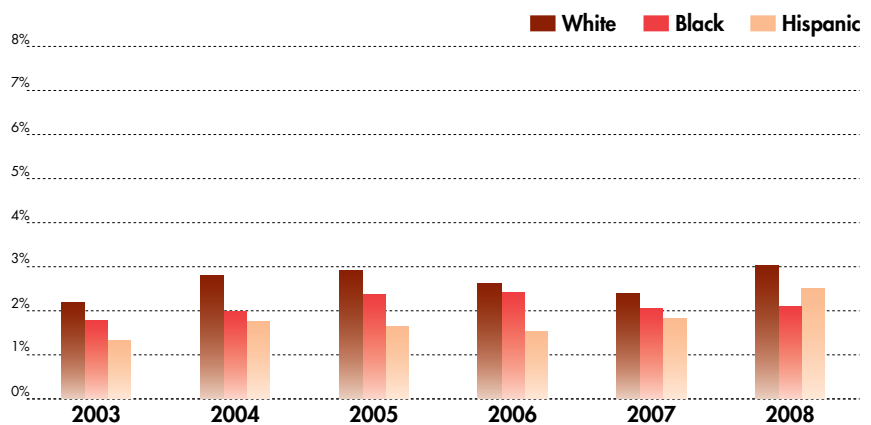
Data source: NHIS

### Adults ages 18-64

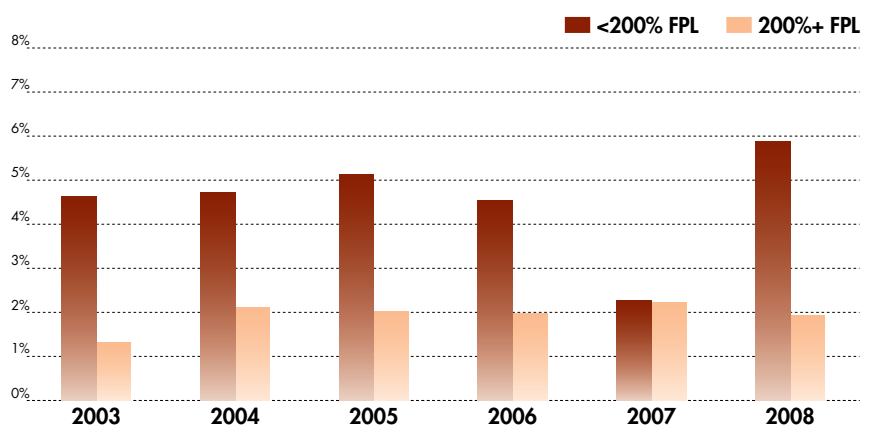
Adults with a mental health activity limitation



Adults with a mental health activity limitation, by race/ethnicity



Adults with a mental health activity limitation, by income level

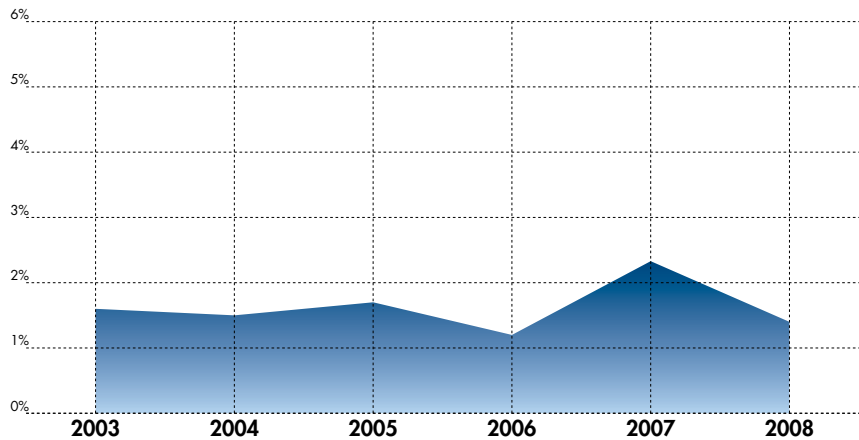


# Prevalence of Mental Illness

## Adults ages 65+

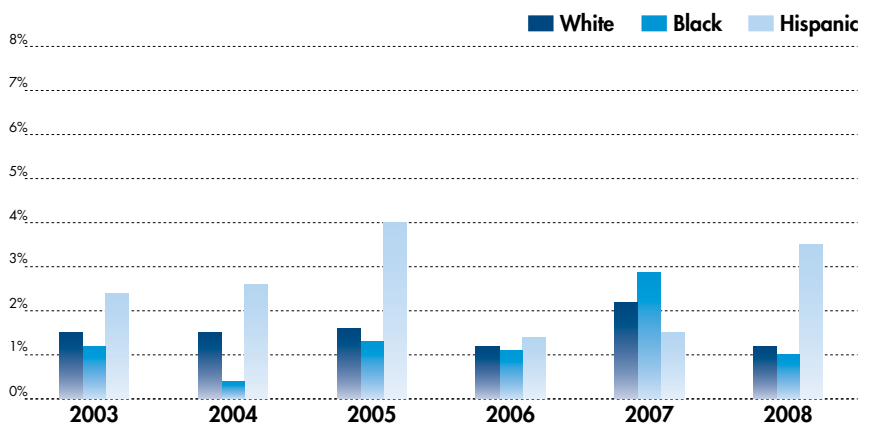
- ◆ The prevalence of mental illness among older adults remained quite stable between 2003 and 2008.
- ◆ In 2008, approximately 1.5 percent of adults over 65 experienced a mental health activity limitation, an indicator of serious mental illness.
- ◆ Mental illness is slightly less common among older adults than younger adults.

Adults with a mental health activity limitation



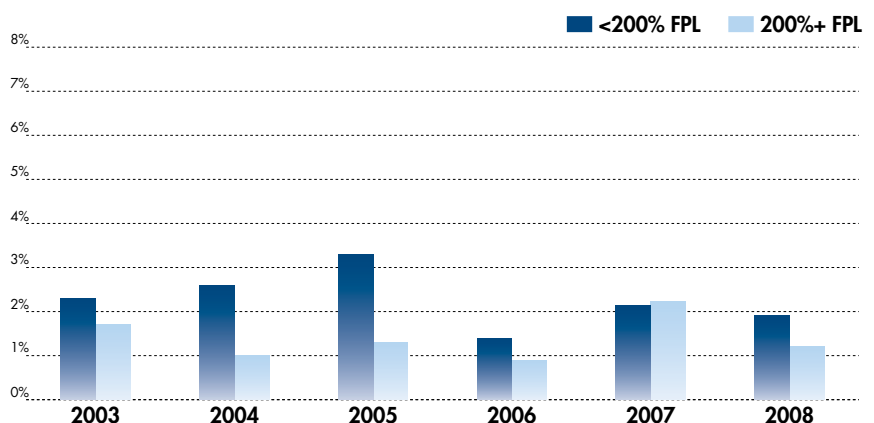
- ◆ Among older adults, Hispanics have a slightly higher rate of mental illness (3.5 percent in 2008) than do whites or blacks (1.2 and 1.0 percent respectively in 2008).

Adults with a mental health activity limitation, by race/ethnicity



- ◆ The prevalence of mental illness after age 65 is somewhat higher among low-income adults, around two percent, while slightly over one percent among higher income adults.

Adults with a mental health activity limitation, by income level



Data source: NHIS

## Treated Prevalence

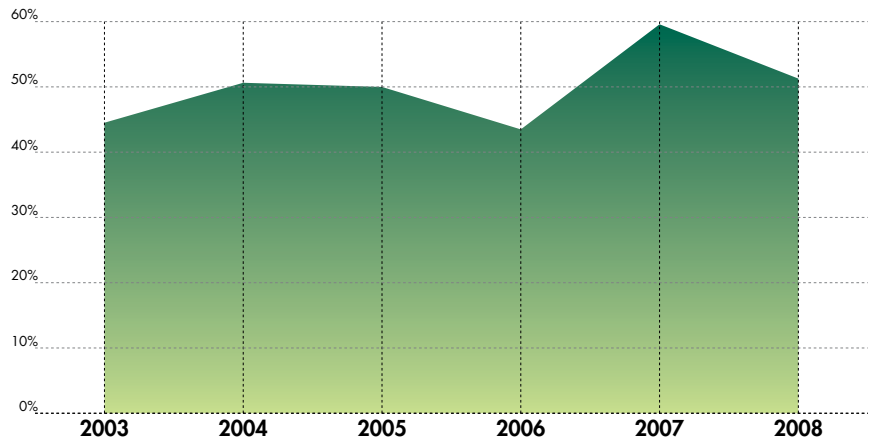
- ◆ Between 2004 and 2008, on average about half of children with a mental health problem talked to a mental health professional, with a notable spike in 2007.

- ◆ In 2008, white children were more likely to have a reported visit to a mental health professional than black and Hispanic children, though the trend of racial and ethnic difference varies over time.
- ◆ The overall rate increased for white and Hispanic children from 2004 to 2008.
- ◆ The drastic change in the percentage for black children in 2007 may be due to noise in the sample.

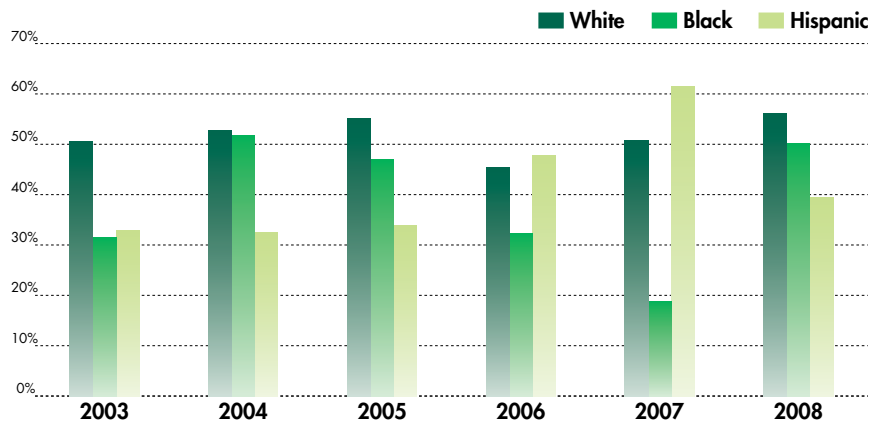
- ◆ Overall, there is an increasing percentage of low-income children with a mental health problem who contacted a mental health professional.
- ◆ The visits to a mental health professional among higher income groups have been stable.

### Children ages 4-17

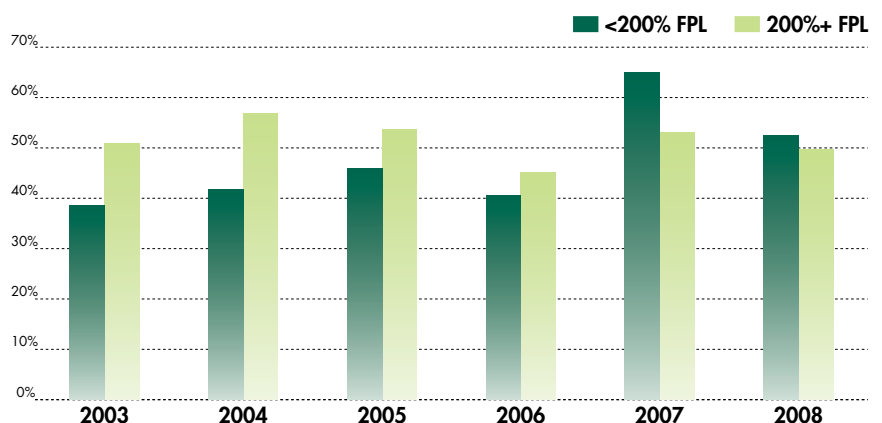
Children with a mental health problem who reported talking to a mental health professional in the prior year



Children with a mental health problem who reported talking to a mental health professional in the prior year, by race/ethnicity



Children with a mental health problem who reported talking to a mental health professional in the prior year, by income level



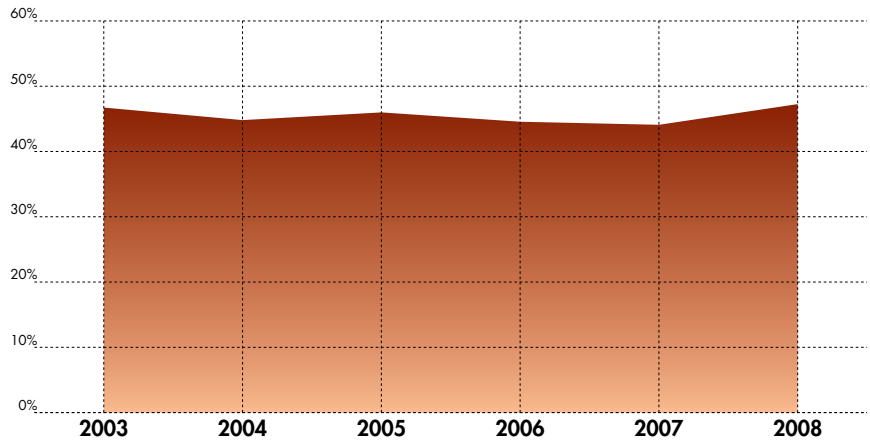
Data source: NHIS

## Treated Prevalence

- ◆ The percentage of adults with a mental health activity limitation who reported speaking with a mental health professional in the prior year was largely unchanged from 2003 to 2008, around 46 percent.

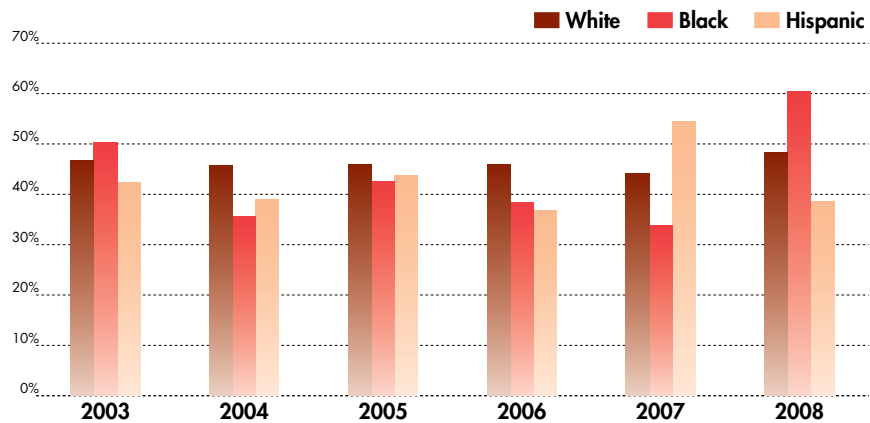
### Adults ages 18-64

Adults with a mental health activity limitation who have spoken to a mental health professional in the prior year



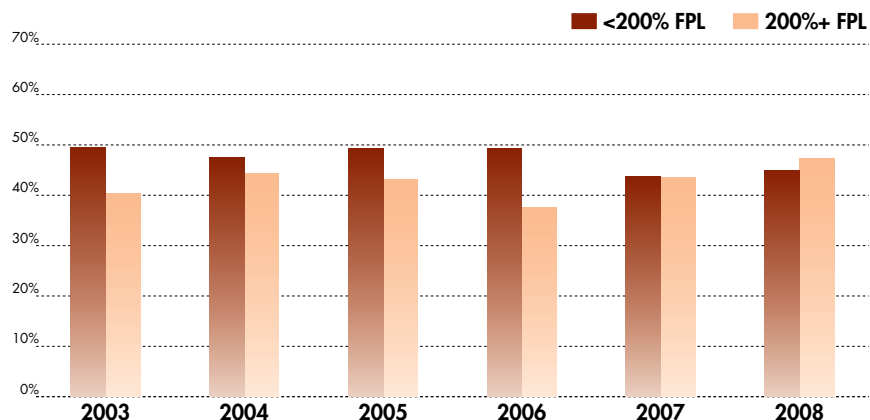
- ◆ The percentage of black adults reporting professional contact increased over time and was higher compared with whites and Hispanics in 2008.

Adults with a mental health activity limitation who have spoken to a mental health professional in the prior year, by race/ethnicity



- ◆ Contact with a mental health professional occurred more frequently among low-income adults in 2003 to 2007 than among higher income adults.
- ◆ In 2008, about 47 percent of higher-income adults contacted a mental health professional, a slightly higher proportion than found among low-income adults.

Adults with a mental health activity limitation who have spoken to a mental health professional in the prior year, by income level



Data source: NHIS

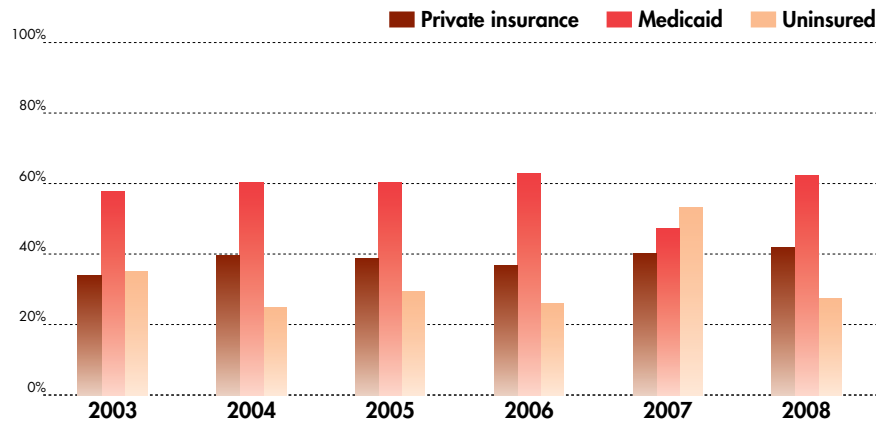
## Treated Prevalence

- ◆ Medicaid recipients are more likely to have spoken with a mental health professional than those with private insurance or without insurance. This result is not surprising, as a serious and persistent mental health illness (SPMI) is one qualifying criteria for Medicaid eligibility.
- ◆ The uninsured are the least likely to have accessed professional care, likely reflecting a financial barrier to access.
- ◆ Those with private insurance are increasingly contacting mental health professionals, demonstrating an eight percent increase from 2003 to 2008.

Data source: NHIS

### Adults ages 18-64

Adults with a mental health activity limitation who have spoken to a mental health professional in the prior year, by insurance type





## Treated Prevalence

- ◆ Among adults over 65, the share of people with a mental health activity limitation who spoke with a mental health professional has been stable.
- ◆ The percentage reporting having accessed professional care after 2003 was within a range of 21 to 23 percent,\* and the rates are lower than for younger age groups.

- ◆ Older Hispanic adults are more likely to access mental health professional services compared with their white and black counterparts in 2008.

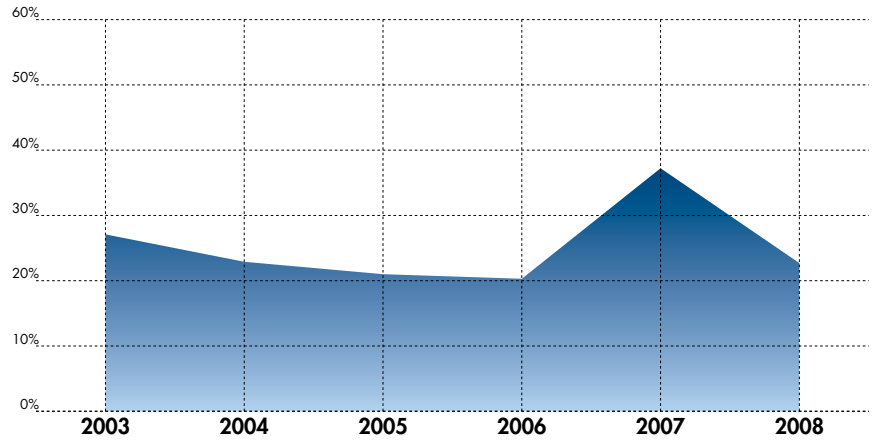
- ◆ Higher-income adults over age 65 are about twice as likely to access mental health care compared with their lower-income counterparts.

\* With the exception of 2007, which may be due to the reduction in sample size in that year.

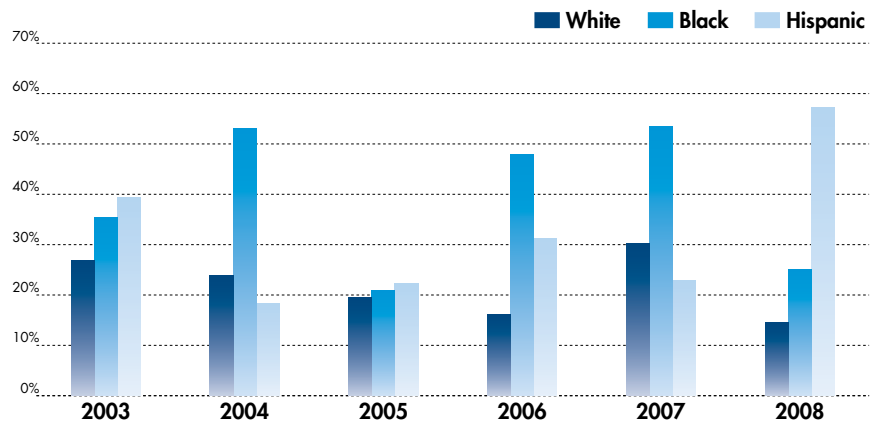
Data source: NHIS

### Adults ages 65+

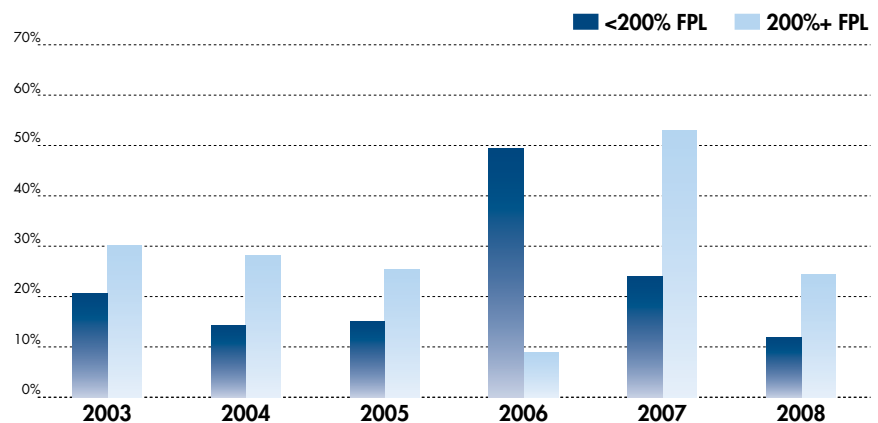
Adults with a mental health activity limitation who have spoken to a mental health professional in the prior year



Adults with a mental health activity limitation who have spoken to a mental health professional in the prior year, by race/ethnicity



Adults with a mental health activity limitation who have spoken to a mental health professional in the prior year, by income level



## Treated Prevalence

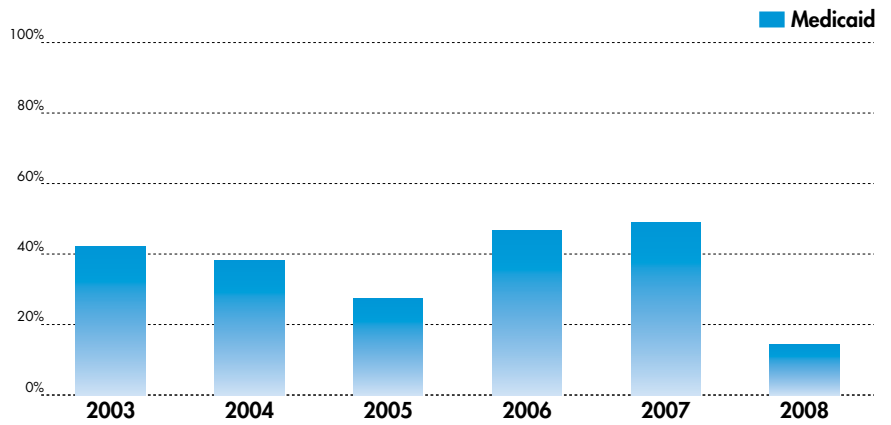
- ◆ Among those with Medicaid, close to 50 percent of them have accessed professional mental health care in 2006 and 2007, but it dropped to less than half in 2008.

Note: For those with private insurance and the uninsured, data were not available for all survey years and it is not included in this graph.

Data source: NHIS

### Adults ages 65+

#### Adults with a mental health activity limitation who have spoken to a mental health professional in the prior year, by insurance type



## Diagnosed Prevalence

- ◆ Of all age groups, the percentage of children with a mental health diagnosis increased by the least amount, from about six percent to eight percent.
- ◆ Between 1996 and 2007, the prevalence increased by less than 1.1 percent as compared to four percent and six percent increases in adult categories.

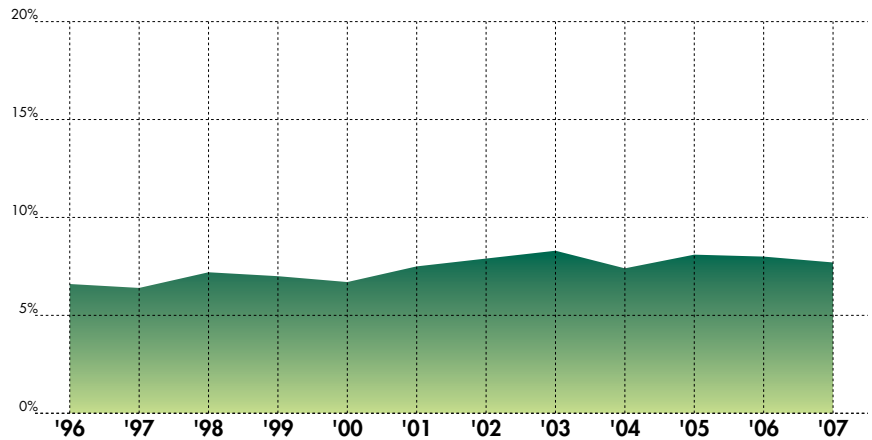
- ◆ While the prevalence rate of children with a mental health diagnosis is stable over time, there are more considerable upward trends observed among black children, with a three percent increase from 1996 to 2007.
- ◆ Still, white children have the highest rate and Hispanic children have the lowest rate, around five to six percent, in recent years.

- ◆ Children with Medicaid have the highest percentage of mental health diagnoses, and the uninsured display the lowest. These percentages have increased slightly over time with approximately the same rate of increase for those with private insurance and Medicaid.
- ◆ Among those without insurance, there has been a four percent increase over the years.

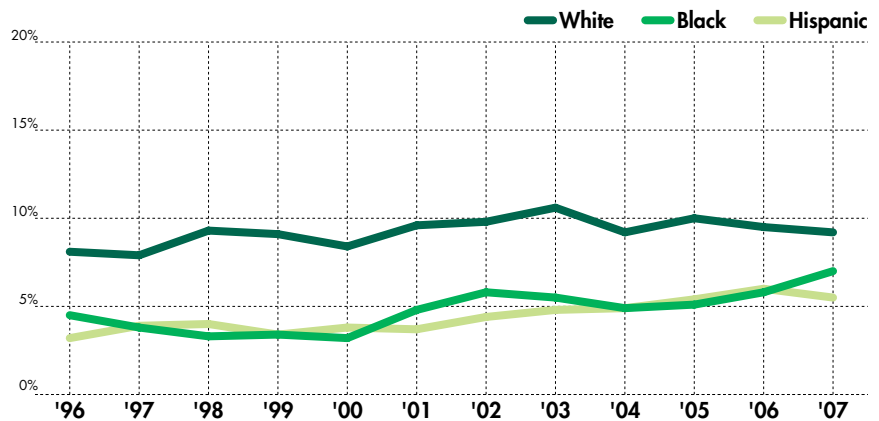
Data source: MEPS

### Children ages 4-17

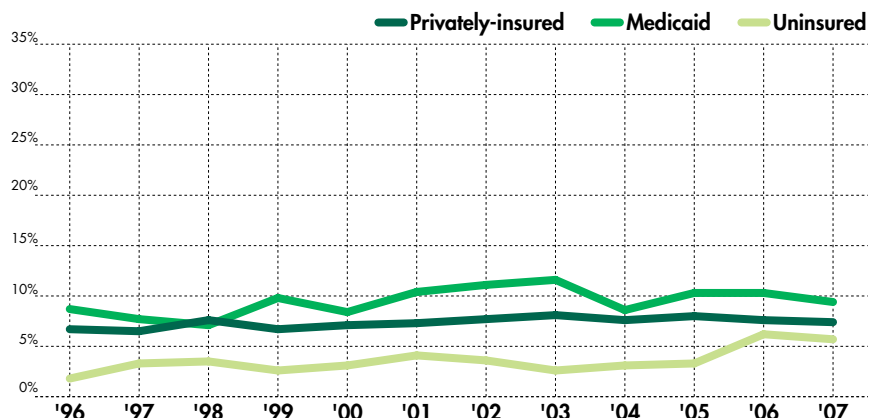
Children with a mental health diagnosis reported at a medical encounter in prior year



Children with a mental health diagnosis reported at a medical encounter in prior year, by race/ethnicity



Children with a mental health diagnosis reported at a medical encounter in prior year, by insurance type



## Diagnosed Prevalence

◆ The diagnosis of mental illness in adults ages 18 to 64 has increased by nearly four percent since 1996, with the most dramatic increases occurring after 2000.

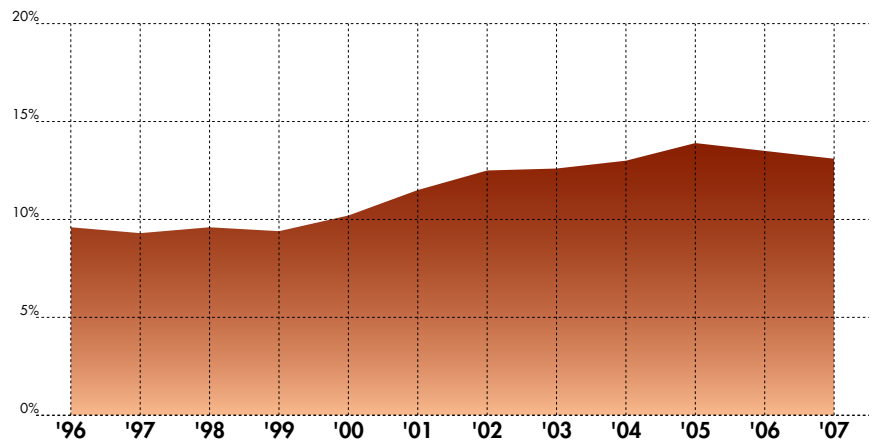
◆ This increase in mental health diagnosis was observed across all racial and ethnic groups. Diagnosis of whites outpaced diagnosis of minority groups to increase the racial disparity that has existed since 1996.

◆ Slight increases in mental health diagnoses were observed across categories of insurance coverage.

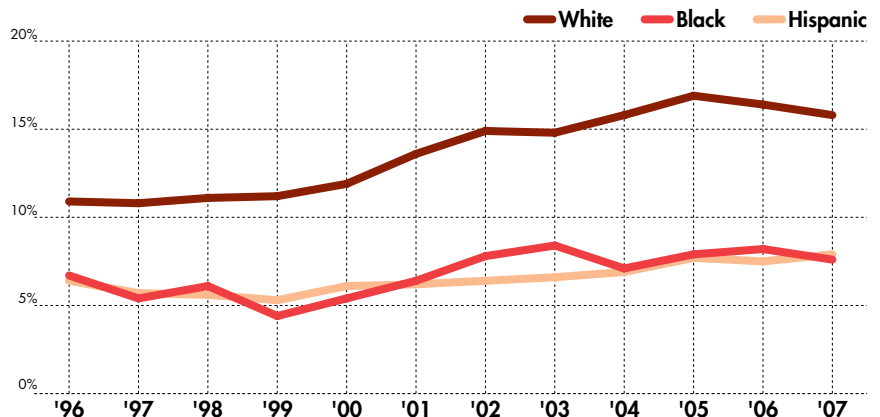
◆ The highest percentage of mental health diagnoses and greatest increase were observed for Medicaid beneficiaries; the least increase and lowest percentage of diagnoses occurred among the uninsured.

### Adults ages 18-64

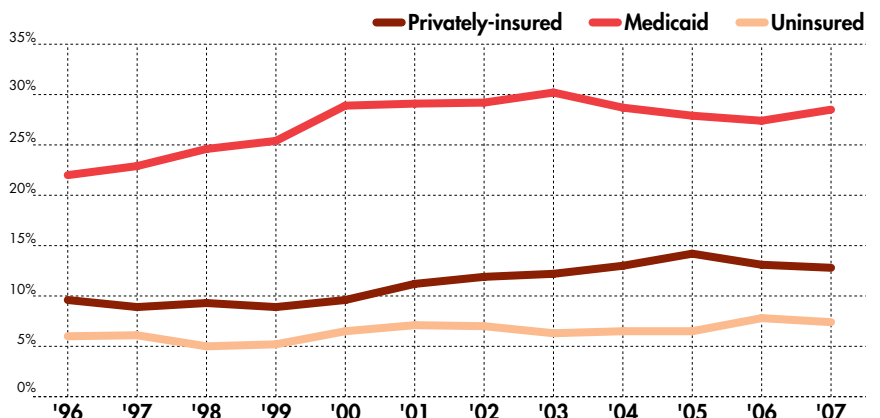
Adults with a mental health diagnosis reported at a medical encounter in prior year



Adults with a mental health diagnosis reported at a medical encounter in prior year, by race/ethnicity



Adults with a mental health diagnosis reported at a medical encounter in prior year, by insurance type



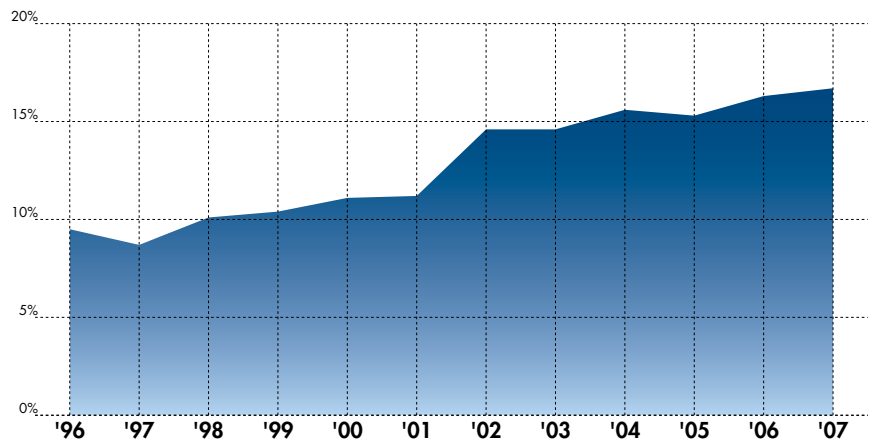
Data source: MEPS

## Diagnosed Prevalence

- ◆ Older adults exhibited the greatest increase of any age group in the percentage of respondents with a mental health diagnosis.
- ◆ Diagnosis prevalence increased from 9.5 percent in 1996 to 16.7 percent in 2007.

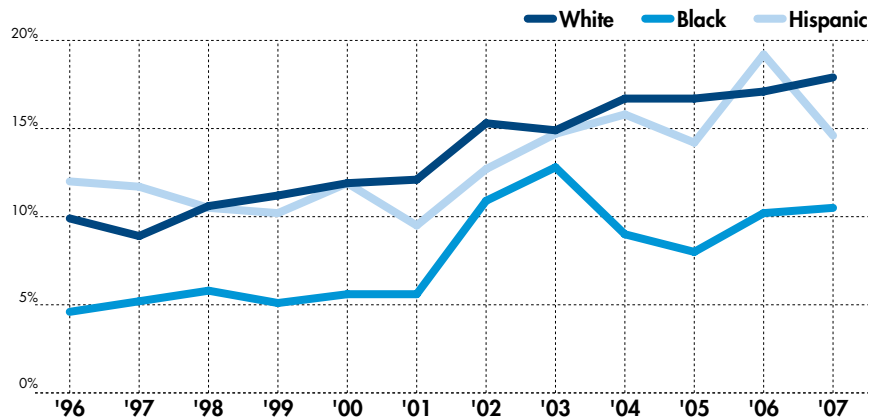
### Adults ages 65+

Adults with a mental health diagnosis reported at a medical encounter in prior year



- ◆ Overall increases in diagnosis of older adults were observed across all racial and ethnic groups.
- ◆ In 2007, the prevalence was highest among older white adults and lowest among blacks.
- ◆ The diagnosed prevalence among blacks more than doubled, and older black adults experienced the highest increase to narrow the racial and ethnic differences.

Adults with a mental health diagnosis reported at a medical encounter in prior year, by race/ethnicity



Data source: MEPS

## SECTION 2

# Patterns of Treatment and Service Use: Outpatient Care

Across all age groups, the number of visits to physicians for mental health services has increased steadily over the study period, with the exception of pediatric visits, which experienced a slight decline in 2007. The number of visits for children doubled from 1995 to 2006 but still represent only a small portion of all mental health visits. With this increasing trend, mental health visits consume a greater share of primary care visits, especially for children. The percentage of office-based specialty declined for children in 2007, while it increased for adults aged 18 to 64, and showed no notable change for older adults. White adults were more likely to access care than their black and Hispanic counterparts,

while black children were increasingly getting more access than their white and Hispanic counterparts in 2007. Trends across insurance types vary by age group.

Mental health prescriptions have increased across all age groups as well, most notably among older adults. The percentage of older adults with a mental health prescription almost doubled over the 12 year survey period. Whites were more likely to have a prescription than their black and Hispanic counterparts across age groups. Those with Medicaid were more likely to have a prescription than other groups, and the least likely were the uninsured.

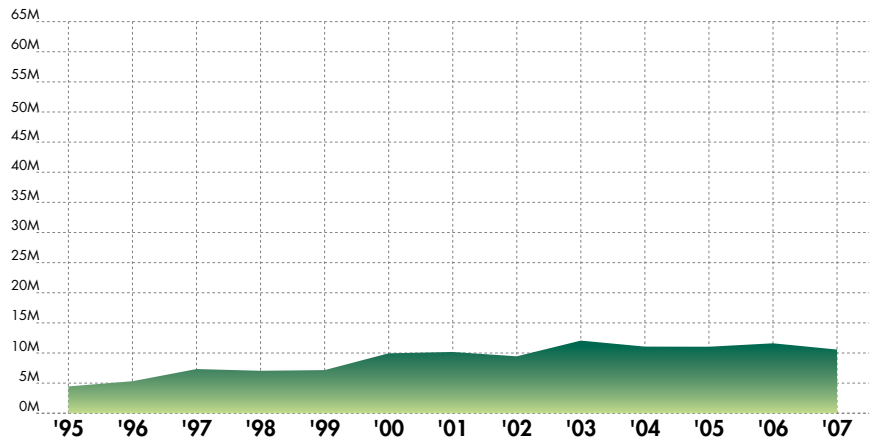


# Mental Health Visits to Physicians

## Children ages 4-17

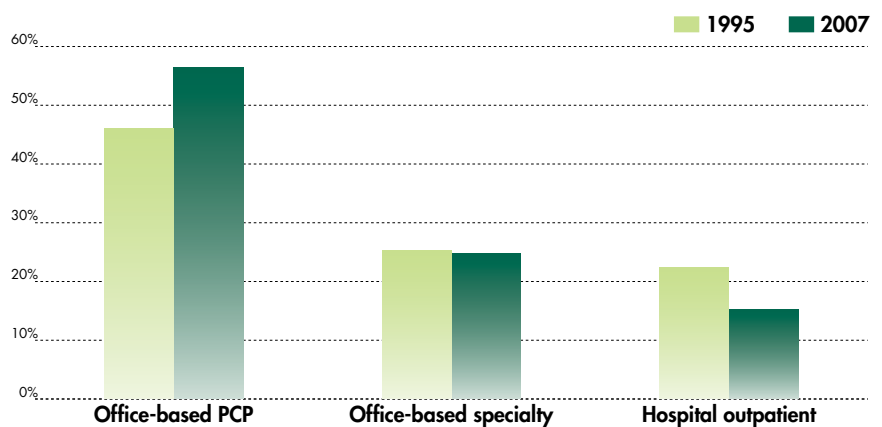
- ◆ The total number of physician visits for mental health services for children has steadily increased since 1995, more than doubling to nearly 12 million visits by 2006, then declining slightly in 2007.
- ◆ Children's service usage, however, still remains at relatively low levels, constituting roughly one-sixth of the amount of annual mental health service visits for adults ages 18 to 64.

Number of visits for mental health services, in millions



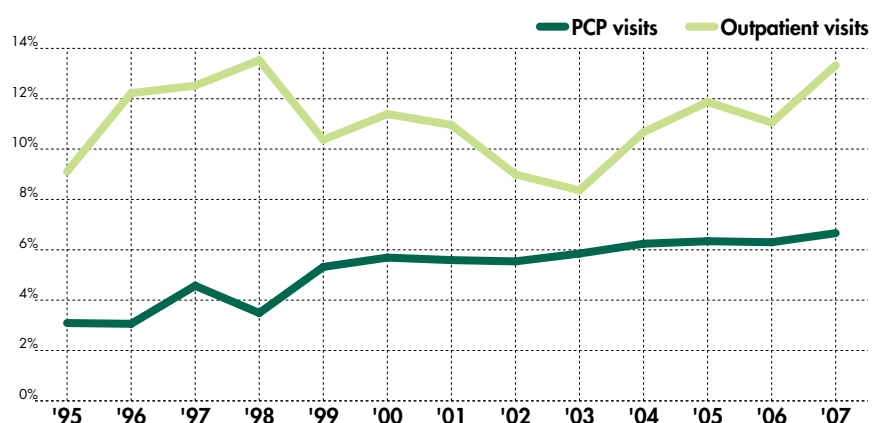
- ◆ Nearly half of all pediatric mental health visits occur in the office of a primary care physician (PCP), a share that has been increasing in recent years.
- ◆ The share of hospital outpatient visits declined from 22 percent in 1995 to 15 percent in 2007, while still highest among this age group.
- ◆ The share of hospital outpatient visits declined from 22 percent in 1995 to 15 percent in 2007.

Visits for mental health services, by service setting



- ◆ There is a growing percentage of visits by children to their PCPs which included a mental health diagnosis, doubling from 3.1 percent in 1995 to 6.7 percent in 2007.
- ◆ The percentage of mental health visits in the hospital outpatient setting increased from nine percent in 1995 to 13 percent in 2007.

Percentage of office-based physician (PCP) visits that included a mental health diagnosis



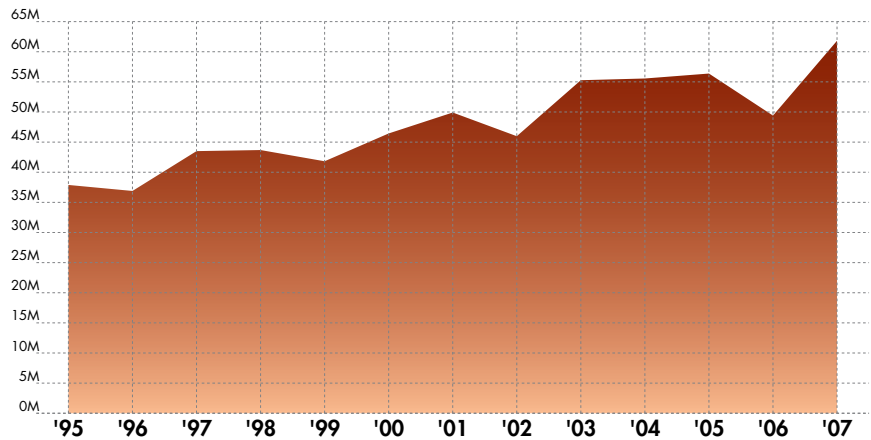
Data source: NAMCS, NHAMCS

# Mental Health Visits to Physicians

## Adults ages 18-64

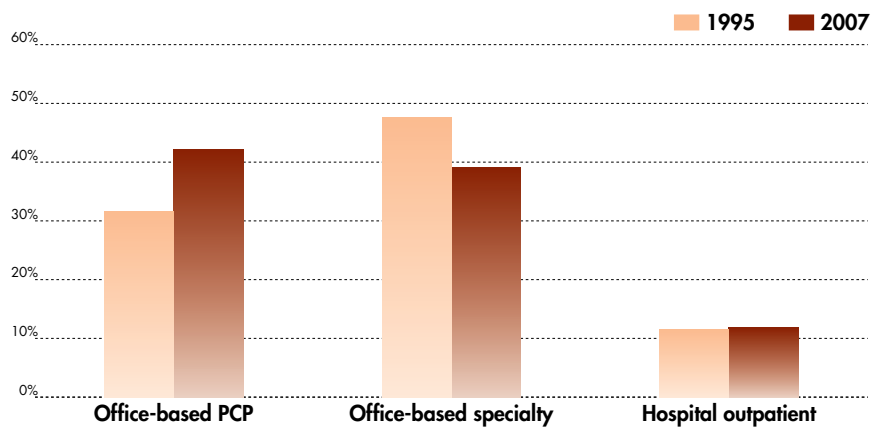
- ◆ Adults ages 18-64 account for the vast majority of visits to physicians for mental health services: over 60 million in 2007.
- ◆ The number of visits increased consistently over the survey period, with a notable jump of 15 million visits after 2002.

Number of visits for mental health services, in millions



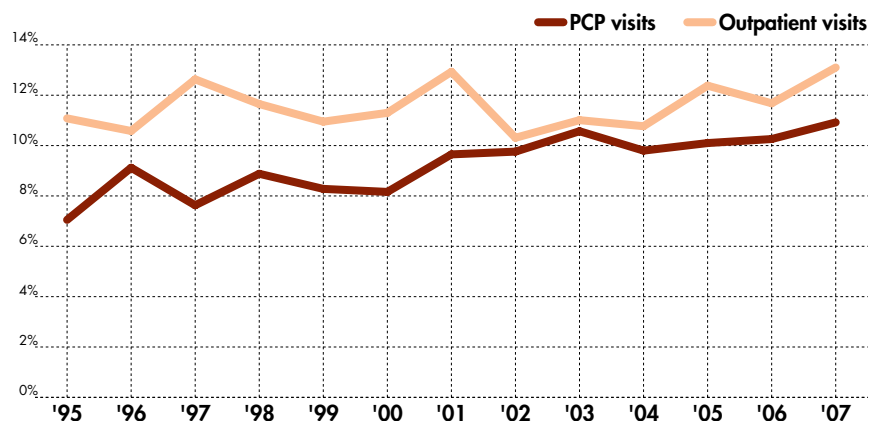
- ◆ The share of adult outpatient hospital visits remained stable at 11 percent.
- ◆ The overall trend reveals a 10 percent increase in primary care visits with a concomitant decline in specialty visits.

Visits for mental health services, by service setting



- ◆ There is a gradual increasing percentage of adults, aged 18 to 64, who visit their primary care physicians (PCP) for mental health services.
- ◆ The percentage of outpatient mental health visits in the hospital setting was fairly stable, between 11 and 13 percent, during the survey period.

Percentage of office-based physician (PCP) visits that included a mental health diagnosis



Data source: NAMCS, NHAMCS

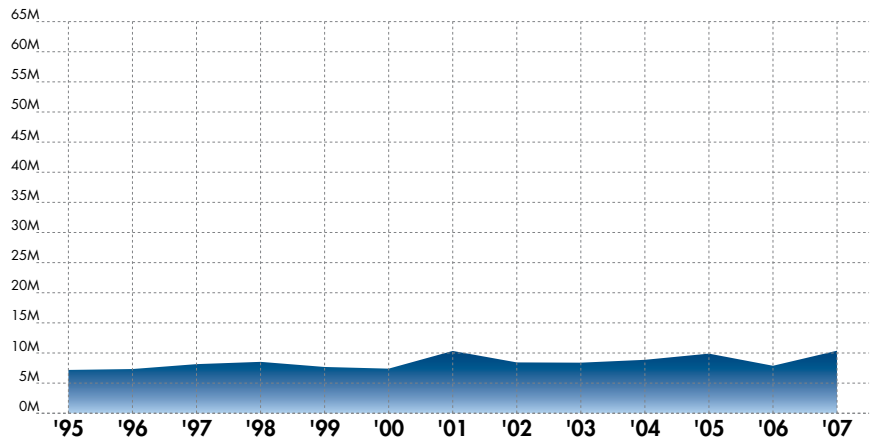


# Mental Health Visits to Physicians

## Adults ages 65+

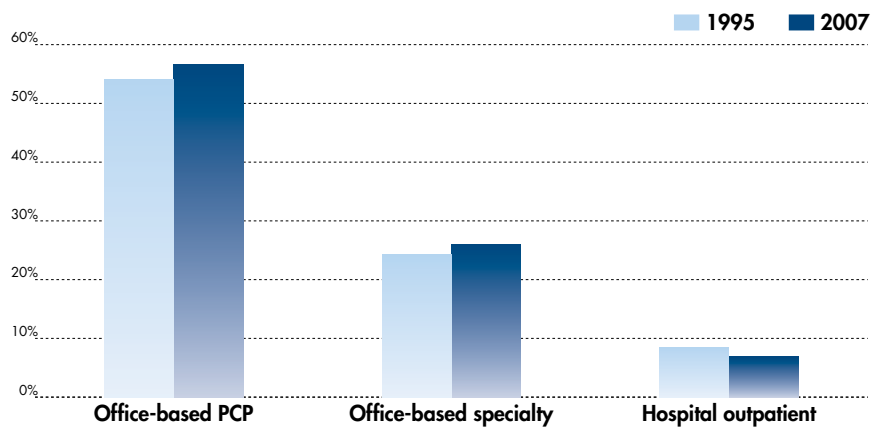
- ◆ The number of mental health visits for older adults has increased slowly but steadily to over 10 million visits in 2007.
- ◆ This increase may reflect a graying of the general population rather than a true increase in access to mental health care.

Number of visits for mental health services, in millions



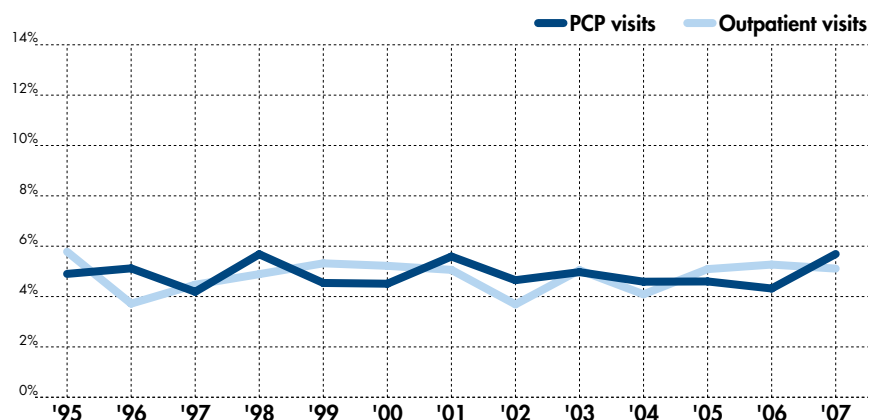
- ◆ The majority of older adults' care was accessed in primary care physician's offices, and there has been very little change in treatment setting trends over the survey decade for this age group.

Visits for mental health services, by service setting



- ◆ The percentage of primary care and hospital outpatient visits that included a mental health diagnosis has remained fairly steady for older adults between 1995 and 2007.

Percentage of office-based physician (PCP) visits that included a mental health diagnosis



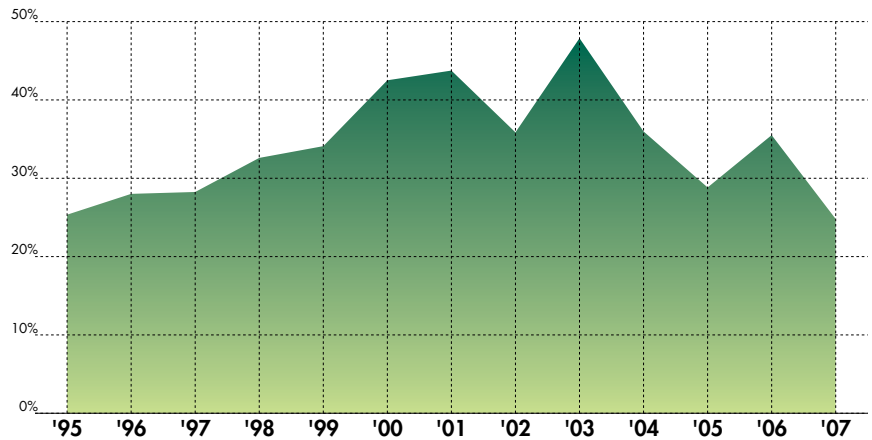
Data source: NAMCS, NHAMCS

# Percentage of Office-based Specialty (Psychiatry) Mental Health Visits

## Children ages 4-17

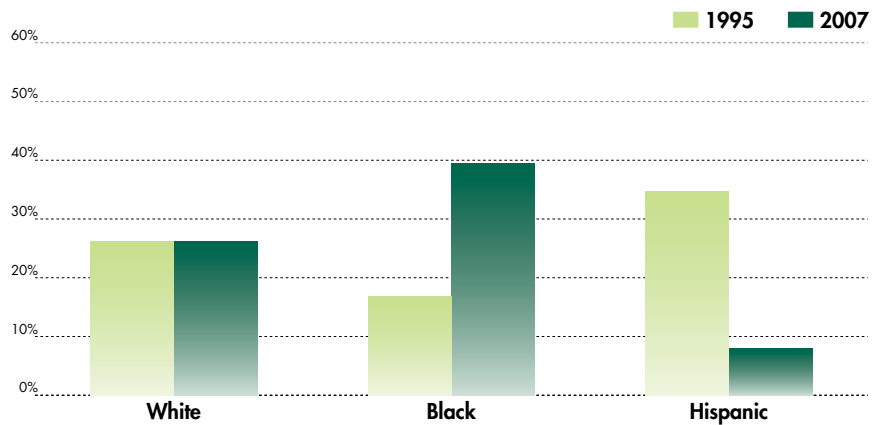
- ◆ The share of specialty visits for children increased significantly until 2003.
- ◆ In 2007, about one-fourth of pediatric mental health visits were office-based specialty.

Office-based specialty mental health visits



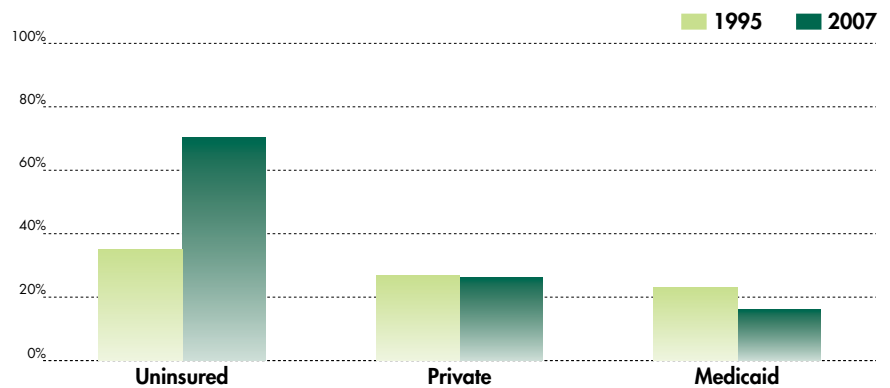
- ◆ Black children are more likely to access care from specialty physicians, while rates for white children were lower by 13 percent in 2007.
- ◆ Hispanic children's specialty care visits made up only eight percent of all visits in 2007. This trend may be due to their small sample size.

Office-based specialty (psychiatry) mental health visits, by race/ethnicity



- ◆ Uninsured children have the highest percentage of specialty care visits and the percentage of office-based specialty care has doubled in the last 12 years.
- ◆ Privately insured children receive specialty care more often than children with Medicaid, and while Medicaid access has shown improvement between 1996 to 2006 (results are not shown), it declined by 16 percent in 2007.

Office-based specialty mental health visits, by insurance type



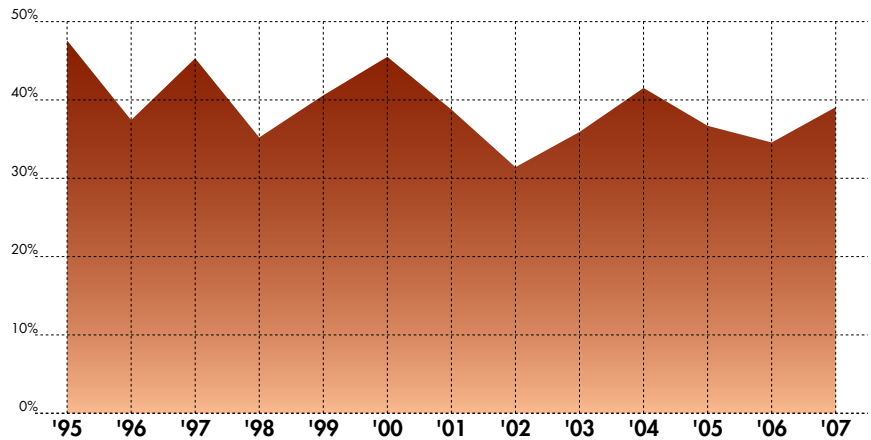
Data source: NAMCS, NHAMCS

## Percentage of Office-based Specialty (Psychiatry) Mental Health Visits

### Adults ages 18-64

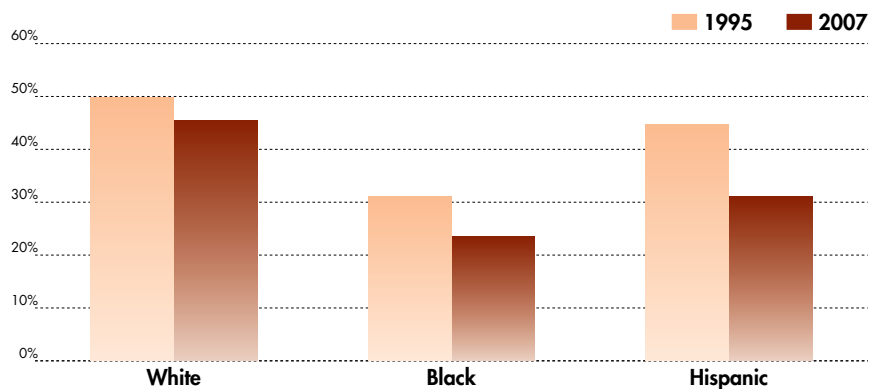
- Office-based specialty mental health visits were highest among this age group at about 40 percent in 2007.

Office-based specialty mental health visits



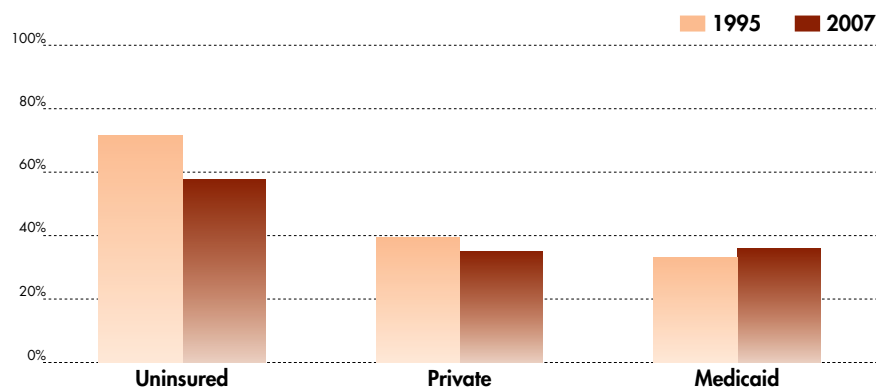
- Errative survey data make it hard to discern any unique trends by race and ethnicity, but in most years whites accessed a greater share of specialty care than blacks and Hispanics overall.
- Hispanic access to specialty care has declined from 45 percent in 1995 to 31 percent in 2007.

Office-based specialty mental health visits, by race/ethnicity



- Uninsured adults have the highest percentage of office-based specialty mental health visits, while the share has declined by 13 percent.

Office-based specialty mental health visits, by insurance type



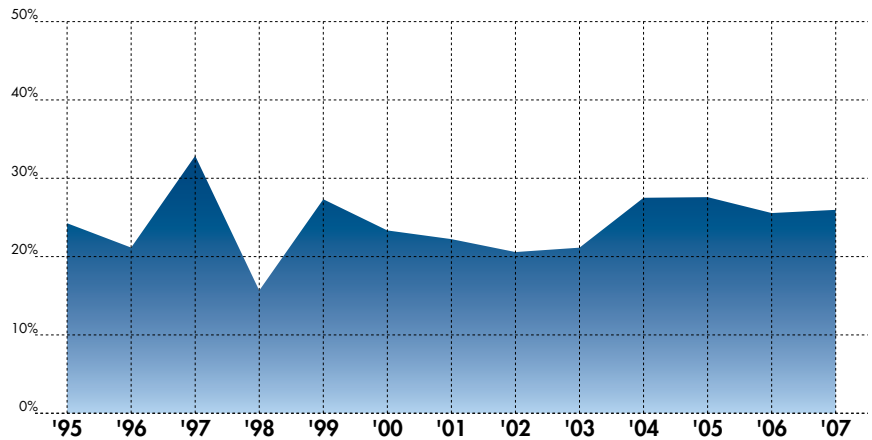
Data source: NAMCS, NHAMCS

# Percentage of Office-based Specialty (Psychiatry) Mental Health Visits

## Adults ages 65+

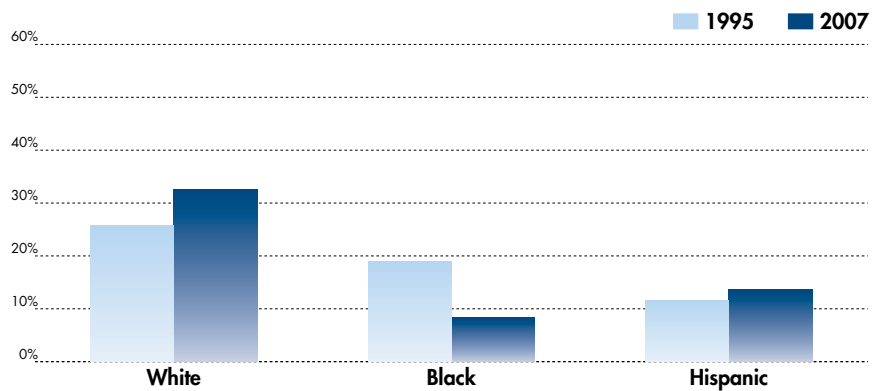
◆ About one-fourth of adults aged 65 or older had office-based specialty mental health visits in 2007, and this trend has been stable over time.

Office-based specialty mental health visits



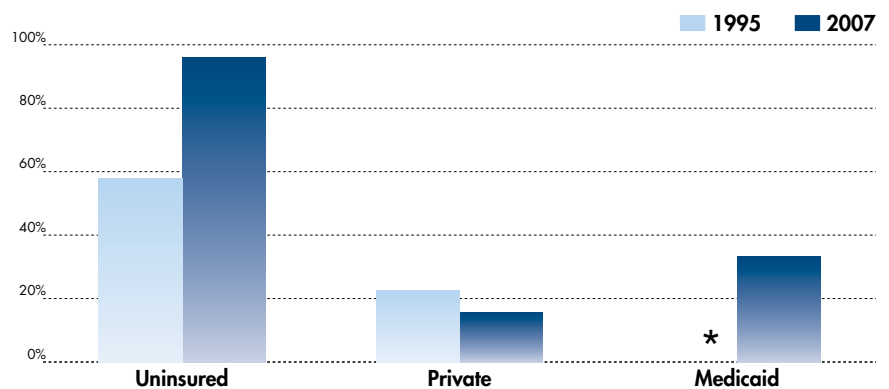
◆ A greater percentage of whites accessed specialty care, and the rates increased among whites and Hispanics while it declined among blacks.

Office-based specialty mental health visits, by race/ethnicity



◆ Among older uninsured adults, the percentage of office-based specialty is close to 96 percent, while only 30 percent of older adults with Medicaid and about 16 percent of adults with private insurance had specialty mental health visits in 2007.

Office-based specialty mental health visits, by insurance type



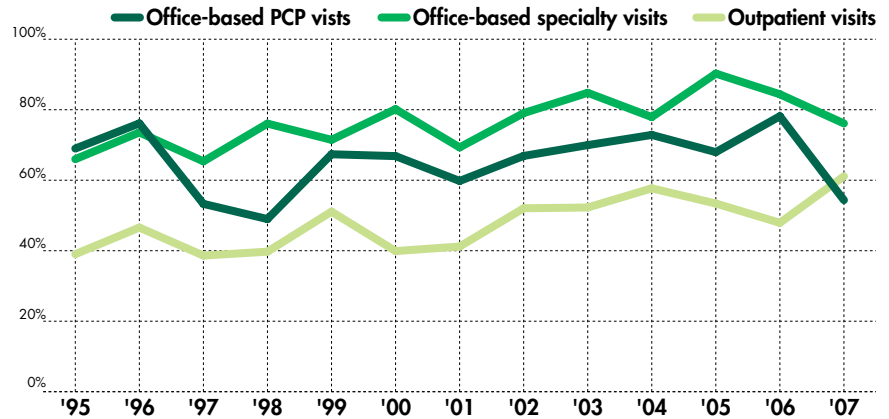
\*Due to a small sample size, we do not have data for those with Medicaid.

Data source: NAMCS, NHAMCS

## Percentage of Visits that Included a Mental Health Diagnosis, with a Mental Health Prescription

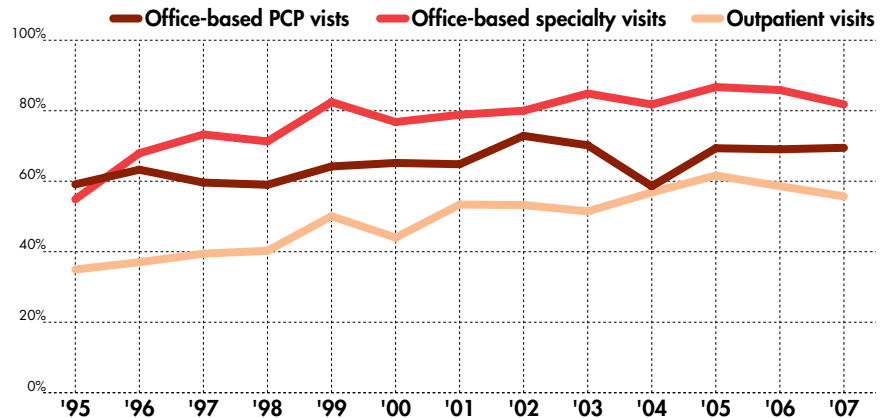
- ◆ The percentage of pediatric visits involving a mental health prescription varied over time and there is no specific time trend, though a considerable decline occurred in 2007 for office-based physician visits.
- ◆ The percentage of outpatient visits with mental health diagnosis that included a prescription has increased overall from 39 percent in 1995 to 61 percent in 2007.

### Children ages 4-17



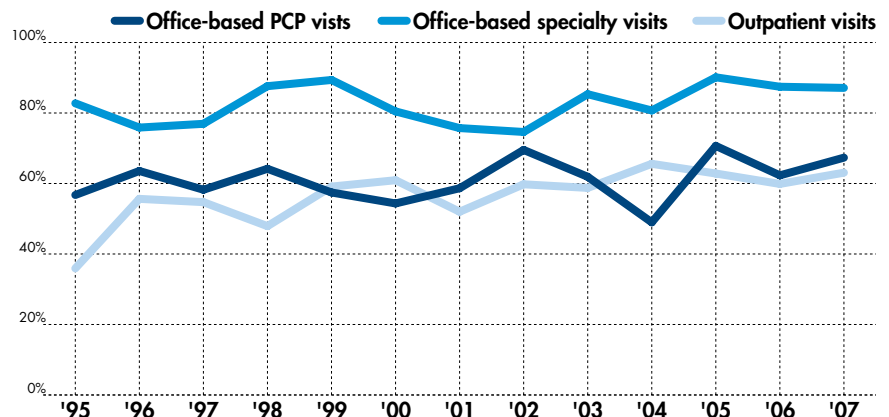
- ◆ The percentage of visits including a prescription in outpatient settings increased steadily until 2005 and then slightly declined after 2006.
- ◆ The percentage of office-based specialty visits with a prescription increased considerably until 1999 and stabilized around 82 percent in 2007.
- ◆ Prescriptions from physician visits increased up to 73 percent in 2002 and became stable around 69 percent in recent years.

### Adults ages 18-64



- ◆ The percentage of visits including a prescription for older adults increased over time for all types of visits.
- ◆ In particular, visits to outpatient settings increased by nearly 30 percent from 1995 to 2007.

### Adults ages 65+

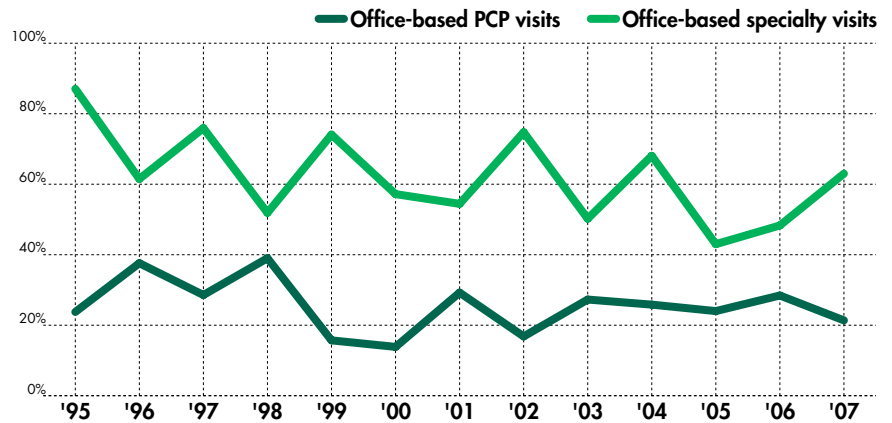


Data source: NAMCS, NHAMCS

## Percentage of Visits that Included a Mental Health Diagnosis, Lasting 30 Minutes or More

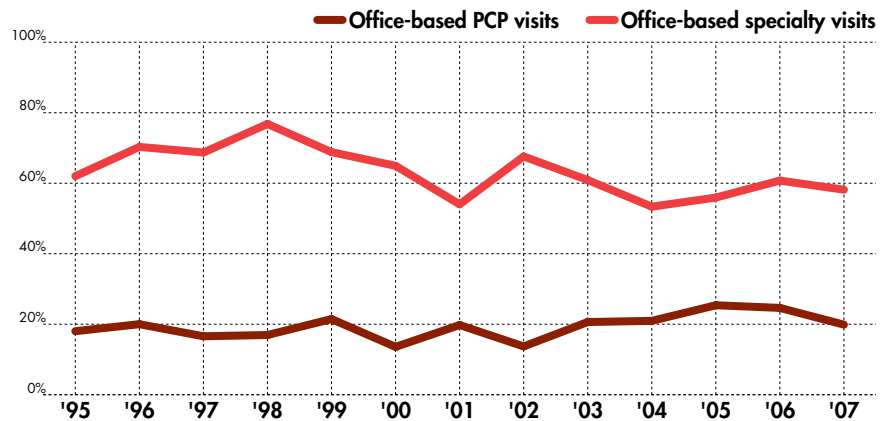
- ◆ The considerable decline in 2007 for office-based pediatric visits with prescriptions does not seem to be complemented by an increased focus on talk-therapy or other treatment during the same period.
- ◆ Overall, office visits lasting over 30 minutes in both treatment settings declined and in particular, office-based specialty visits declined by about 25 percent from 1995 to 2007.

### Children ages 4-17



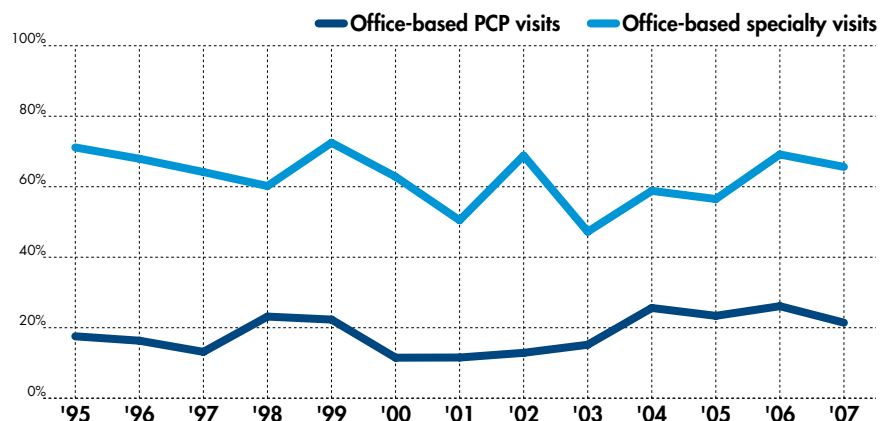
- ◆ For adults, the percentage of visits lasting 30 minutes declined overall and leveled off at around 60 percent for specialty visits and 20 percent for physician visits in 2007.

### Adults ages 18-64



- ◆ For adults over age 65, there was a slight increase in talk therapy, as the percentage of physician visits lasting 30 minutes increased to 21 percent in 2007.
- ◆ Specialty visits declined by about five percent, from 71 percent in 1995 to 65 percent 2007.

### Adults ages 65+



Data source: NAMCS, NHAMCS

# Percentage of People with Mental Health Prescription

◆ While the percentage of children's physician visits with a mental health prescription have declined across treatment settings, the overall increase in the number of such visits and the shift to specialty care, where medication is more often prescribed, has resulted in an increasing number of children with a mental health prescription.

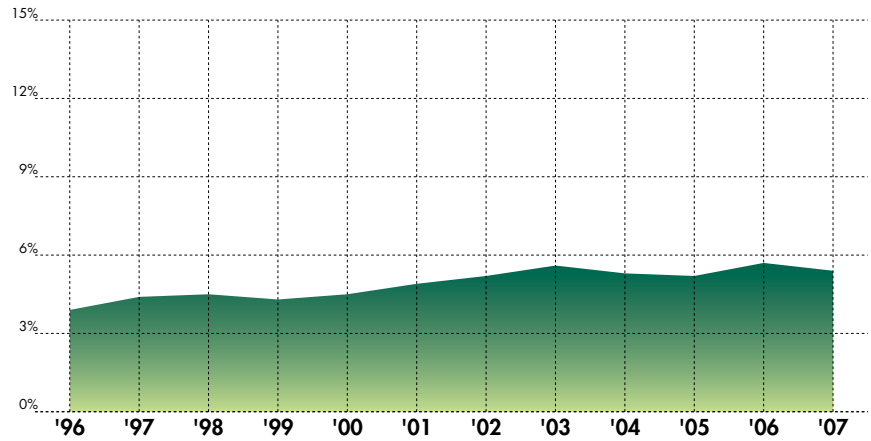
◆ The increase in the percentage of children with a mental health prescription is observed across racial and ethnic groups, but a greater percentage of white children were prescribed medication than minority children in every survey year.

◆ White children are twice as likely to receive a prescription than are Hispanic children, while Black children's prescriptions steadily increased over time, doubling from 2.4 percent in 1996 to 4.9 percent in 2007.

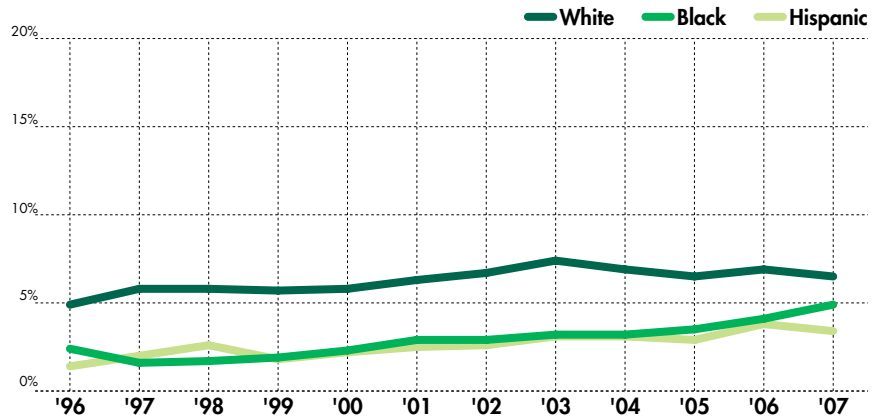
◆ The share of children on Medicaid with a prescription increased from five percent in 1996 to about seven percent in 2007, while the share of children without insurance increased from 0.8 percent in 1995 to nearly four percent in 2007.

◆ The share of children with private insurance is about four percent and stable over time.

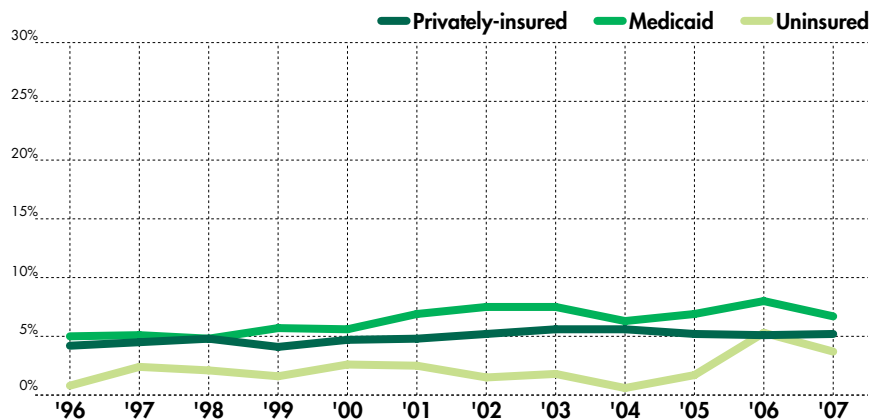
## Children ages 4-17



## Percentage of children with a mental health prescription, by race/ethnicity



## Percentage of children with a mental health prescription, by insurance type

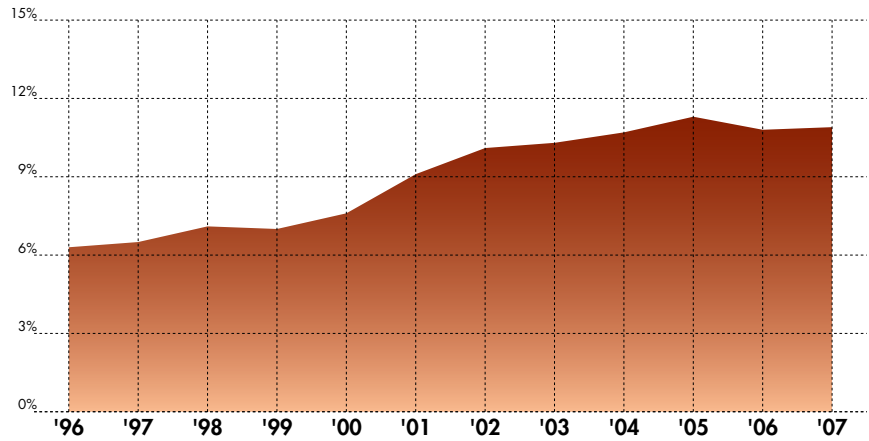


Data source: MEPS

## Percentage of People with a Mental Health Prescription

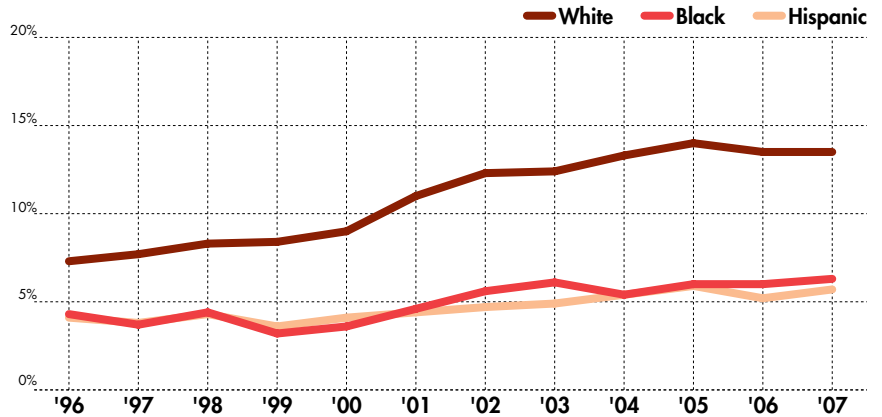
- ◆ The percentage of adults with mental health prescriptions has increased steadily from 1996 to 2007.

### Adults ages 18-64



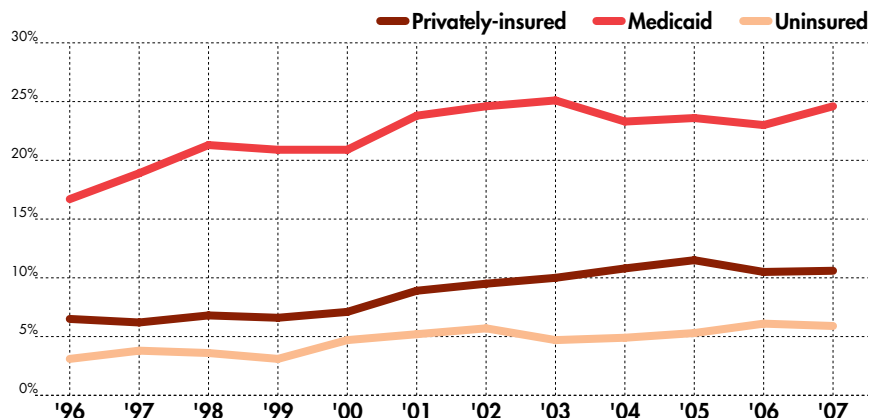
- ◆ Rates for blacks and Hispanics were largely comparable, and about six percent of them have mental health prescriptions.
- ◆ Whites are twice as likely to receive prescriptions than their black and Hispanic counterparts.

### Percentage of adults with a mental health prescription, by race/ethnicity



- ◆ Medicaid beneficiaries were most likely to have a prescription, and the gap between the privately insured and the uninsured widened to about five percent in 2007.
- ◆ Adults with all insurance types saw an increase in mental health prescriptions in 2007.

### Percentage of adults with a mental health prescription, by insurance type



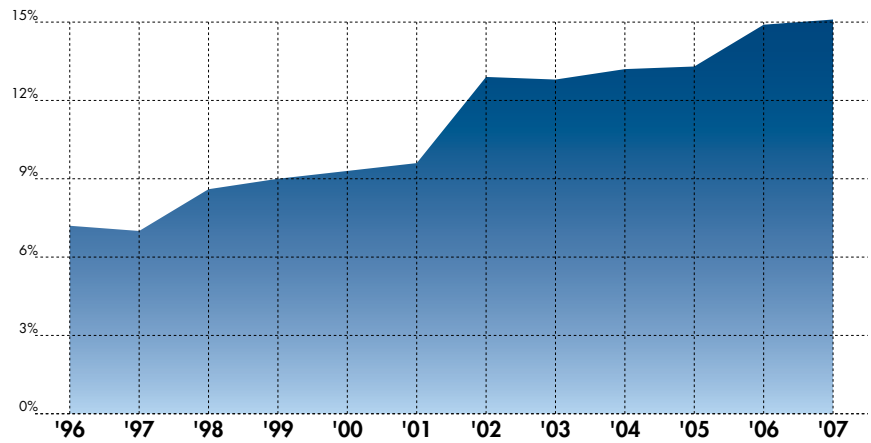
Data source: MEPS



## Percentage of People with a Mental Health Prescription

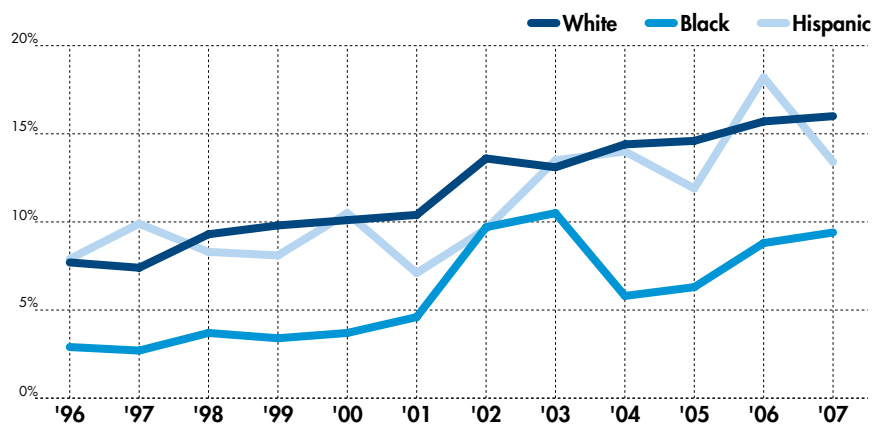
### Adults ages 65+

- ◆ The rate of older adults with a mental health prescription has almost doubled, reaching 15 percent in 2007.



- ◆ The percentage of prescriptions for elderly adults has increased across racial and ethnic groups, with blacks holding the lowest percentage (nine percent in 2007), while whites and Hispanics are more comparable (16 percent and 13 percent, respectively).

### Percentage of adults with a mental health prescription, by race/ethnicity



Data source: MEPS

## SECTION 3

# Patterns of Treatment and Service Use: Emergency and Inpatient Care

There has been an increase over time in the number of emergency department visits where mental health diagnosis is recorded. This increase in total number of visits occurs across all age groups, although the share of mental health emergency visits has been stable across groups. The share of emergency department visits which resulted in admission has declined markedly among children and adults ages 18 to 64, and has increased among adults ages 65 or older.

Fewer children with a mental health diagnosis are hospitalized for treatment, but the percentage has increased slightly for adults, particularly for ages 18 to 64. Length of stay for mental health admissions has declined among adults of all ages, while it increased among children in 2007. Proprietary hospitals have handled an increasing share of mental health discharges for children and older adults, while it is fairly stable among adults ages 18 to 64.

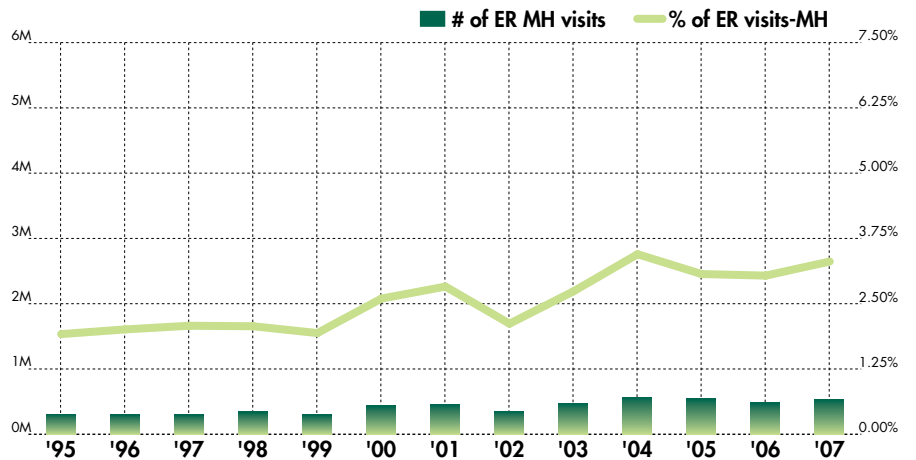


# Mental Health Emergency Department (ER) Visits

## Children ages 4-17

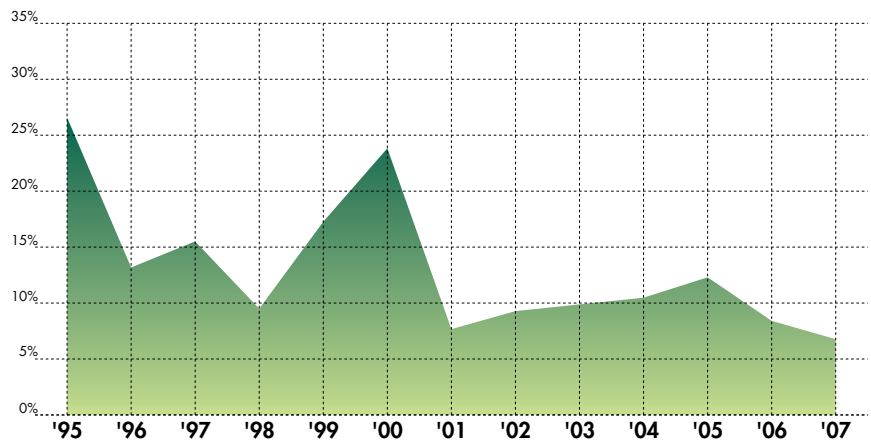
- ◆ The number of children's emergency department visits for mental health problems increased by more than 230,000 visits between 1995 and 2007.
- ◆ While there is a slight decline in the percentage of emergency room visits for mental health problems between 2005 and 2006, they were on the rise again in 2007.

ER visits for mental health problems, in millions and as a share of all pediatric ER visits



- ◆ The share of children's ER visits for a mental health problem that were admitted to the hospital declined significantly, from 26.6 percent in 1995 to seven percent in 2007.

Share of ER visits for mental health problems which resulted in admission



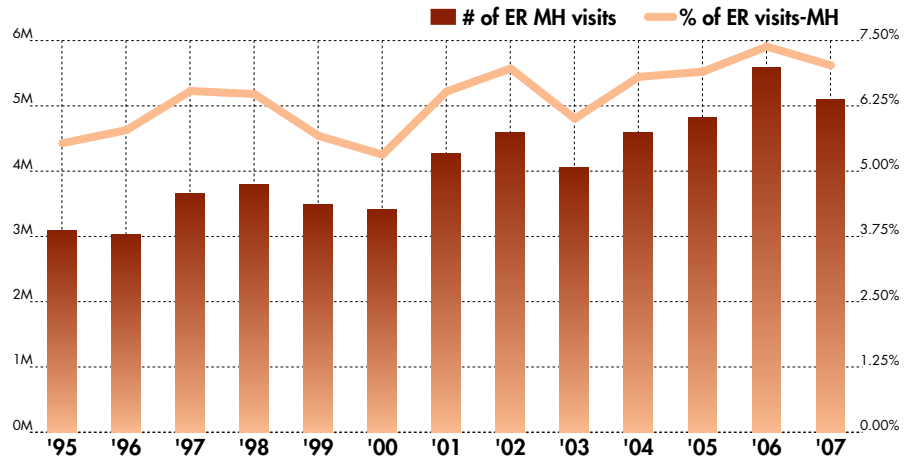
Data source: NHAMCS

# Mental Health Emergency Department (ER) Visits

## Adults ages 18-64

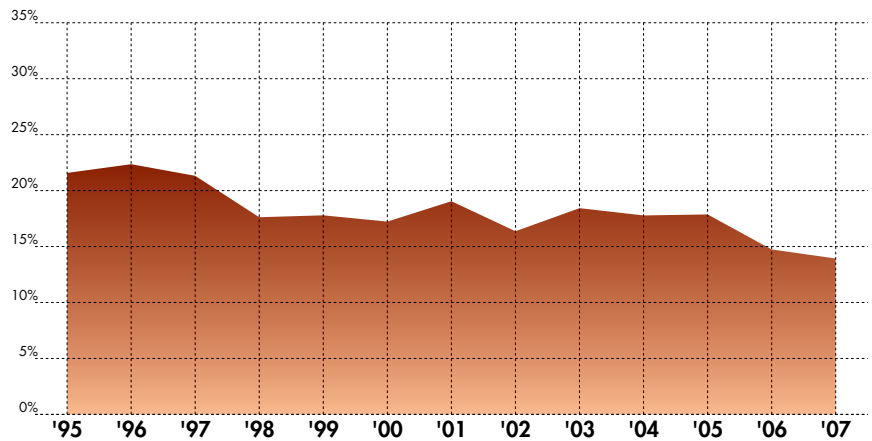
- ◆ The number of adult emergency department visits for mental health problems increased by more than two million between 1995 and 2007.
- ◆ Visits for this age group made up the vast majority of all mental health ER visits and increased the most over the study period. Still, over five million mental health visits represented only seven percent of all ER visits for adults under age 65.

ER visits for mental health problems, in millions and as a share of all ER visits



- ◆ While total number of mental health emergency room visits for adults increased, the share of mental health ER visits that were admitted to the hospital declined from 21.6 percent to 14 percent, indicating that there is an overall increase in ER visits among this age group.

Share of ER visits for mental health problems which resulted in admission



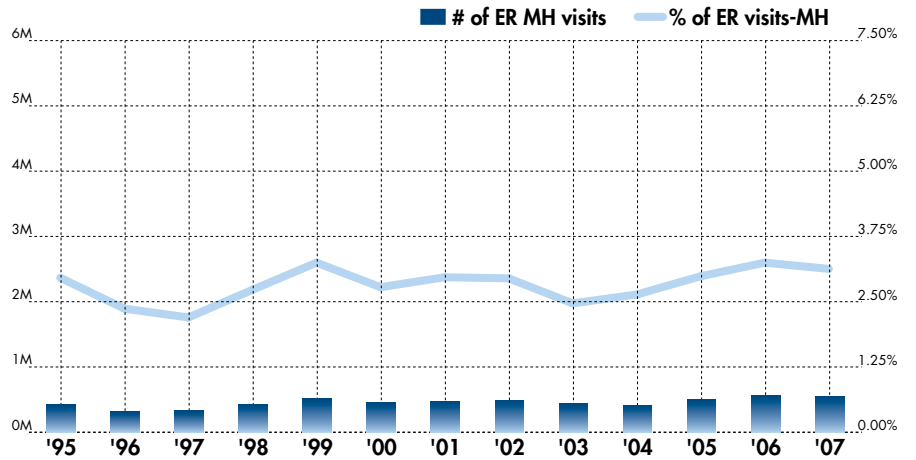
Data source: NHAMCS

# Mental Health Emergency Department (ER) Visits

## Adults ages 65+

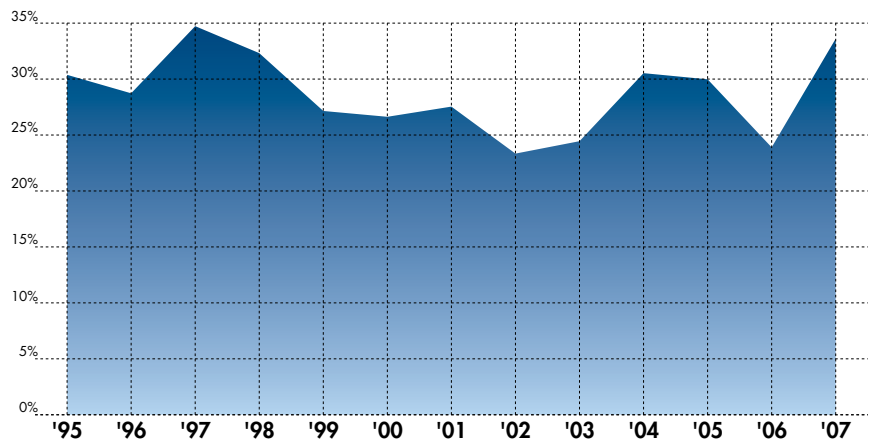
- ◆ The number of emergency department visits for mental health problems by adults over 65 increased by about 130,000 visits between 1995 and 2007.
- ◆ While there is a slight decline in visits between 2003 and 2004, they increased again after 2005.
- ◆ As a share of all ER visits, mental health visits remained flat at around three percent.

ER visits for mental health problems, in millions and as a share of all ER visits



- ◆ The share of ER visits for mental health problems resulting in admission is highest among older adults. The share slightly increased in 2007.

Share of ER visits for mental health problems which resulted in admission



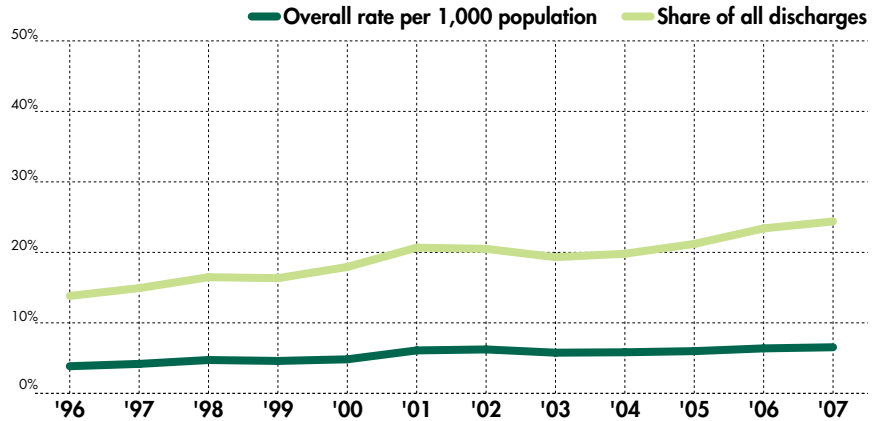
Data source: NHAMCS

# Mental Health Hospitalizations

◆ Discharges that included a mental health diagnosis for children have increased slowly but steadily, both as a population rate and as a share of all discharges for children.

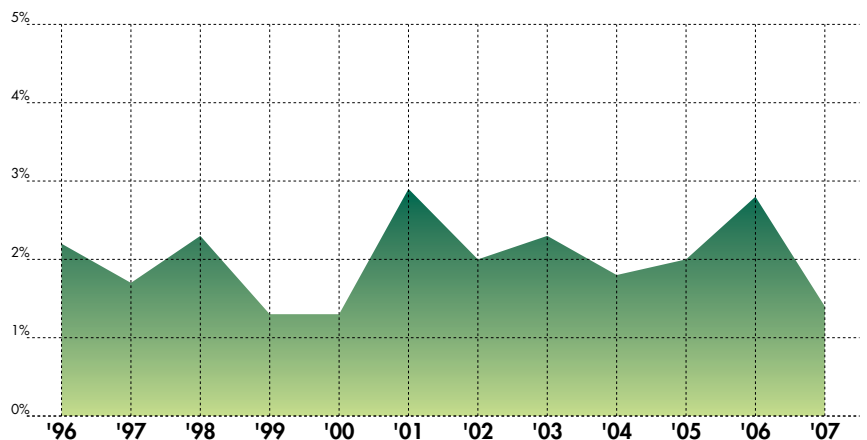
## Children ages 4-17

**Hospital discharges which included a mental health diagnosis, per 1,000 population and as a share of all pediatric discharges**



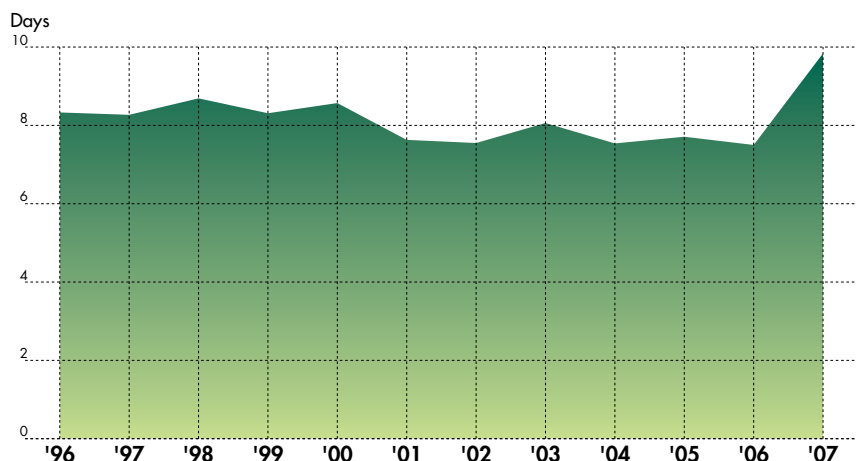
◆ In 2007, 1.4 percent of children with a mental health diagnosis experienced a mental health hospitalization, showing a slight decrease from 2.2 percent in 1996. This is the lowest rate of any age group.

**Percentage of children with a mental health diagnosis who experienced a mental health hospitalization in the prior year**



◆ Between 1996 and 2006, the length of stay for pediatric discharges was steady at about eight days, but in 2007, it increased to close to 10 days.

**Length of stay for hospital discharges which included a mental health diagnosis**



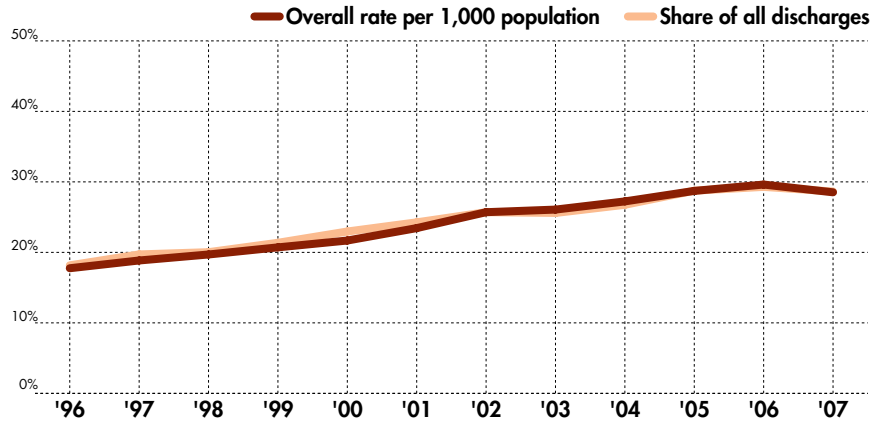
Data source: NHDS, MEPS

# Mental Health Hospitalizations

◆ As with children, the rate of adult mental health hospitalization has increased steadily, both as a population rate and as a share of all discharges for adults.

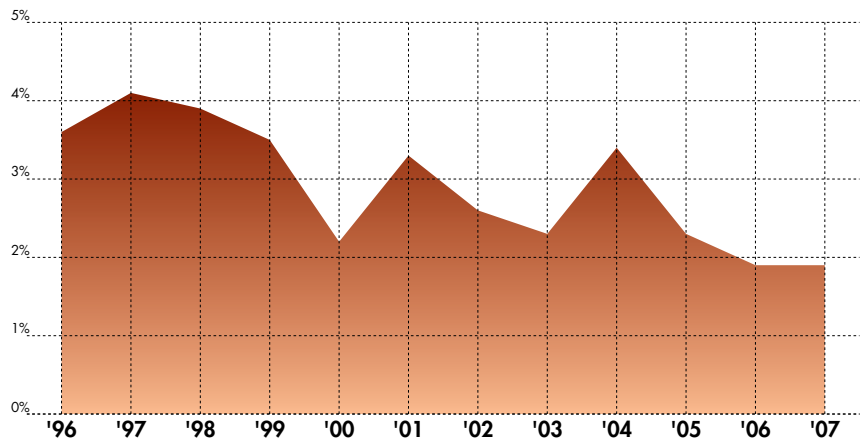
## Adults ages 18-64

**Hospital discharges which included a mental health diagnosis, per 1,000 population and as a share of all pediatric adult discharges**



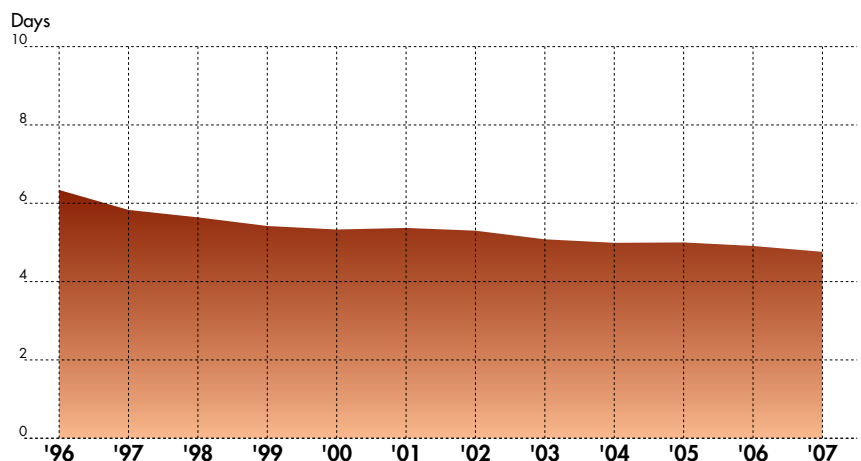
◆ The percentage of adults with a mental health diagnosis who experienced a mental health hospitalization declined almost by half, from 3.6 percent in 1996 to 1.9 percent in 2007.

**Percentage of adults with a mental health diagnosis who experienced a mental health hospitalization in the prior year**



◆ Between 1996 and 2007, the average length of stay for adult mental health hospitalizations fell by more than one day, from 6.3 days in 1995 to 4.8 days in 2007.

**Length of stay for hospital discharges which included a mental health diagnosis**



Data source: NHDS, MEPS

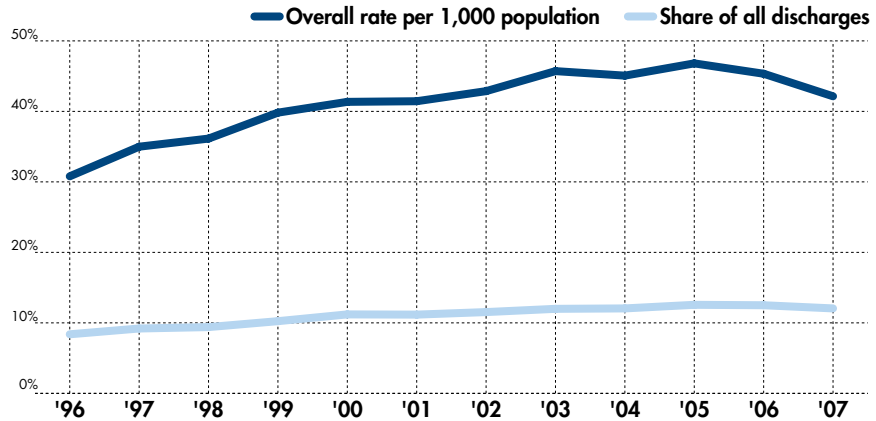
# Mental Health Hospitalizations

## Adults ages 65+

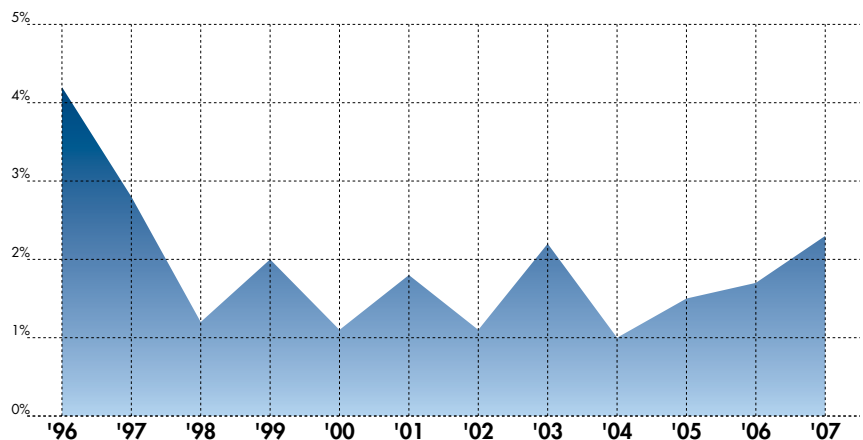
- ◆ Older adults experienced the highest annual rates of mental health inpatient hospitalization. They also represent the lowest share of discharges. However, this may represent older Americans' reliance on hospitals for their general health care.
- ◆ Between 1996 and 2007, both the rate and the share measures increased.
- ◆ The percentage of older adults with a mental health diagnosis who experienced a mental health hospitalization also declined by half, from 4.2 percent in 1996 to 2.3 percent in 2007.

- ◆ The length of stay for mental health hospitalization of older adults has fallen by nearly two days since 1996, decreasing to 5.3 days in 2007.
- ◆ This is the largest decrease in length of stay among the three age groups.

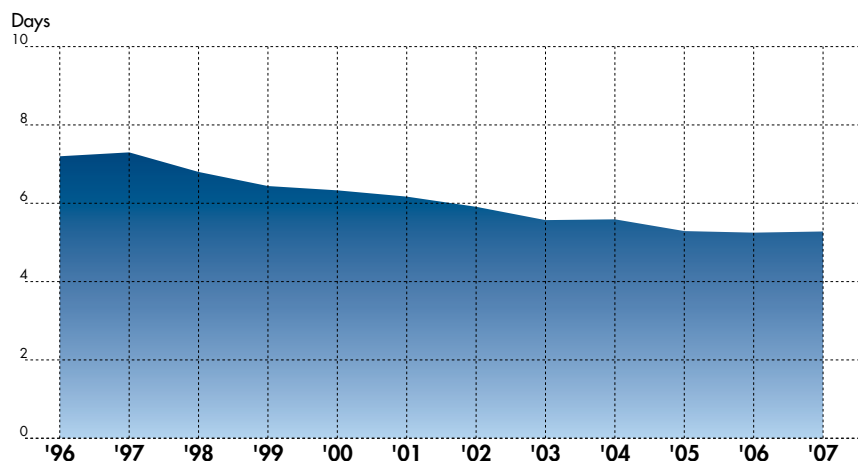
**Hospital discharges which included a mental health diagnosis, per 1,000 population and as a share of all adult discharges**



**Percentage of adults with a mental health diagnosis who experienced a mental health hospitalization in the prior year**



**Length of stay for hospital discharges which included a mental health diagnosis**



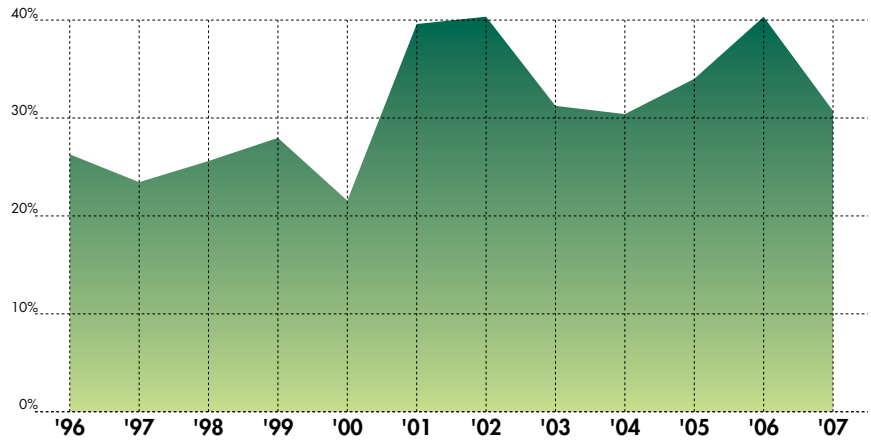
Data source: NHDS, MEPS



# Proprietary Hospital Share of All Hospital Discharges with a Mental Health Diagnosis

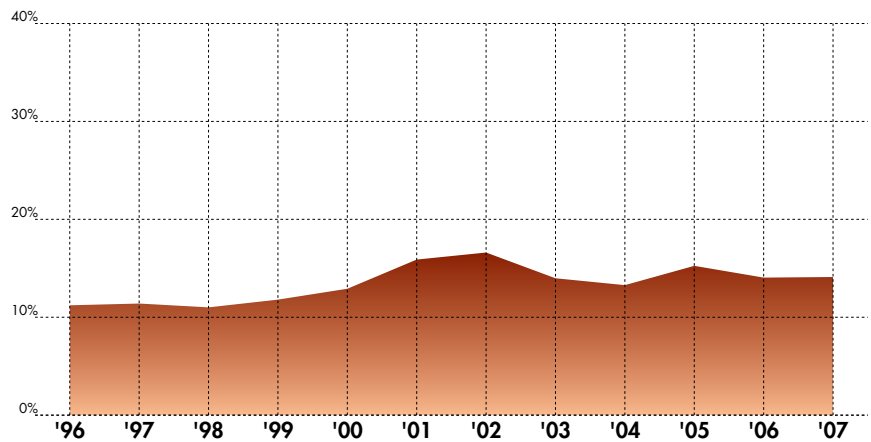
## Children ages 4-17

- ◆ One-quarter to one-third of all children's mental health inpatient hospitalization occurred in proprietary hospitals. This is the highest proprietary share of any age group.
- ◆ This rate increased by nearly five percent over the study period, peaking at over 40 percent in 2002.
- ◆ In 2007, the rate was about 31 percent.



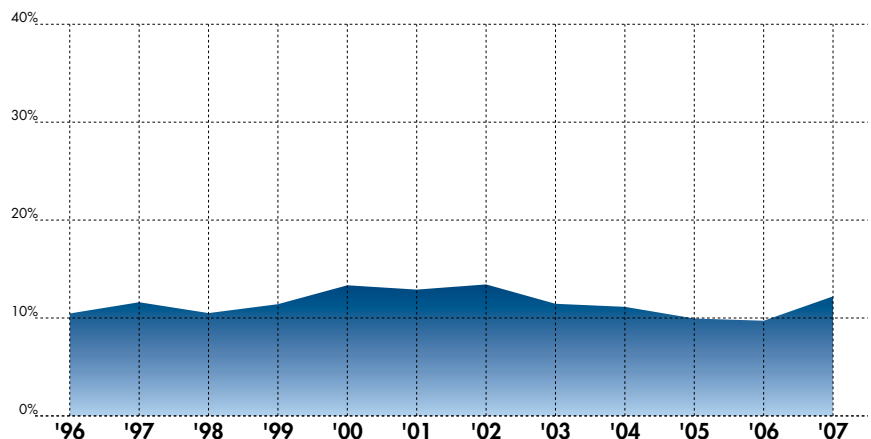
## Adults ages 18-64

- ◆ The proprietary hospital share of adults' mental health hospital discharges has also increased slightly since 1996, peaking at 16.6 percent in 2002.
- ◆ In 2007, the rate was 14 percent.



## Adults ages 65+

- ◆ The proprietary hospital share of mental health hospital discharges for adults 65 and older has only slightly increased over time and has been the most stable across age groups.
- ◆ In 2007, the rate was 12 percent.



Data source: NHDS

## SECTION 4

# Cost of Mental Health Care

Per capita mental health spending for Americans with a mental health diagnosis has increased among children, peaking in 2006. For adults, the spending has been more stable. The majority of users ages 18 to 64 are covered by private insurance, while among children, there is an increasing share of Medicaid/SCHIP coverage.

Out-of-pocket spending has declined both for general mental health services as well as high-expenditure cases for all age groups. Despite these trends, affordability of mental health care services has not improved, particularly among families with children, while the affordability of prescription drugs has improved slightly in recent years.



## System-level Spending

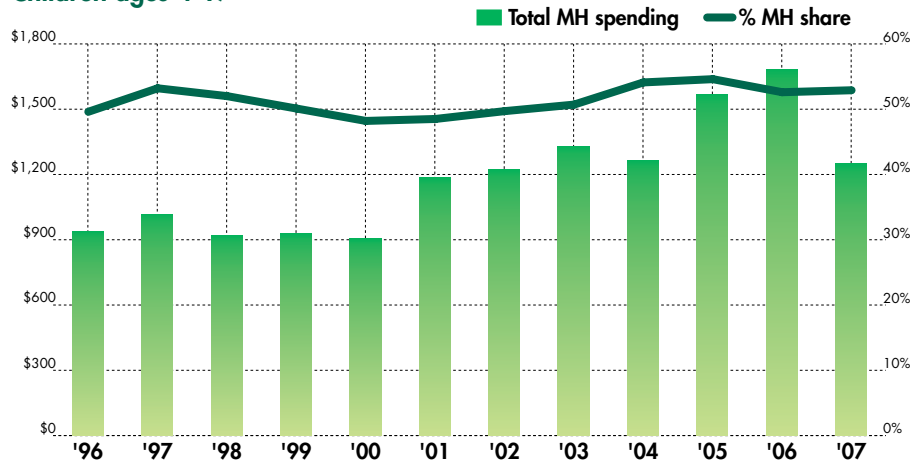
- ◆ Per capita mental health spending for Americans with a mental health diagnosis, in 2005 dollars, has increased among pediatric service users, reaching \$1,684.60 in 2006 from \$938.42 in 1996. The greatest increase in spending occurred after 2000, though it declined slightly in 2007.
- ◆ As a share of total health spending, however, mental health expenditures for children have been relatively stable. Children's mental health accounts for the largest share of total health spending for any age group.

- ◆ Adult mental health spending (in 2005 dollars), has remained fairly stable since 1996. As a share of total health spending, however, mental health costs have declined slightly, from nearly 28 percent to 25 percent.
- ◆ While this age group used to have the higher per capita, children's per capita mental health spending has been increasing and now accounts for a higher share than adults.

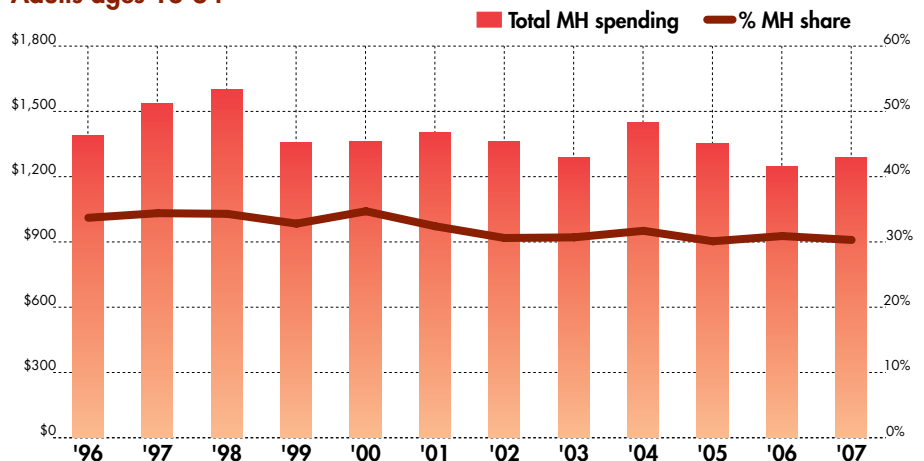
- ◆ Older adults' mental health spending, as measured in 2005 dollars, has remained fairly stable since 1996, ranging from around \$600 to \$1,200.

Per capita mental health spending for people with a mental health diagnosis in 2005 dollars and as a share of total health spending

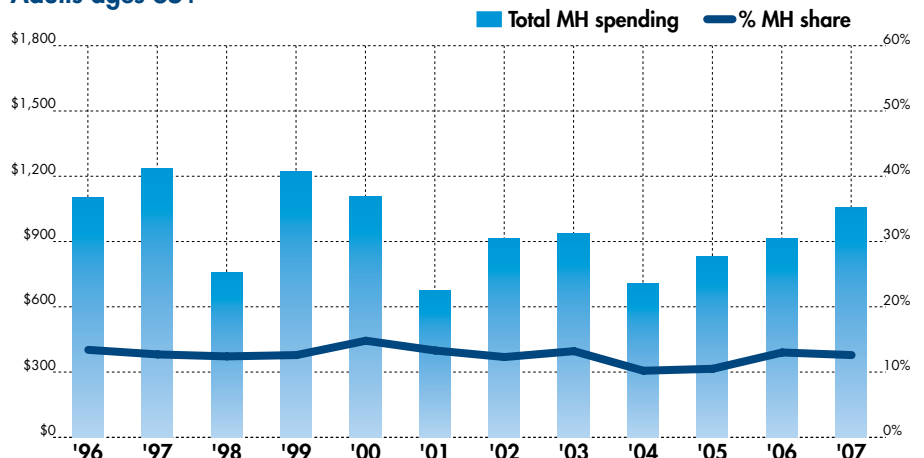
### Children ages 4-17



### Adults ages 18-64



### Adults ages 65+



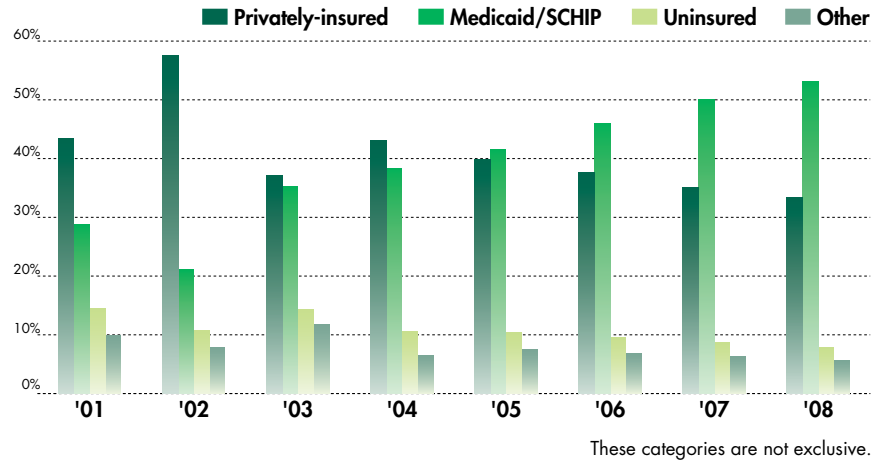
Data source: MEPS

# Health Insurance Coverage

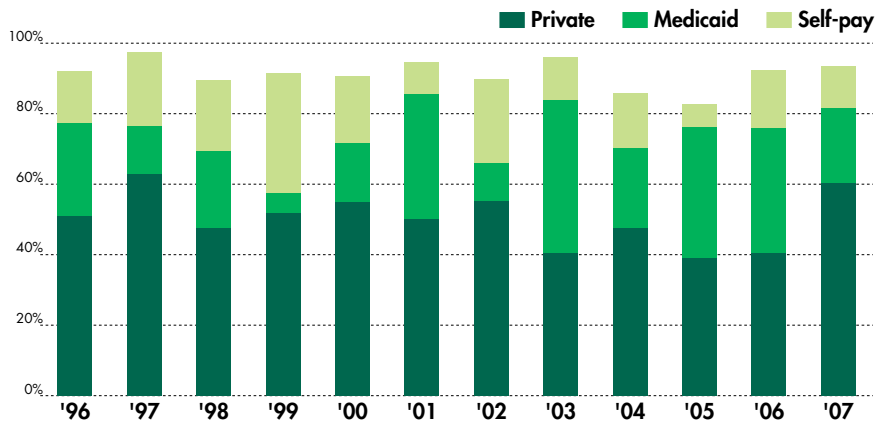
## Children ages 4-17

- ◆ Since 2001, there has been a shift from private insurance coverage to Medicaid, and more than half of children with a mental health problem were covered by Medicaid in 2008.
- ◆ The percentage of uninsured children with a mental health problem also reduced by half from 15 percent in 2001 to eight percent in 2008.
- ◆ The share of children's psychiatrist visits paid by private insurance declined from 1996 to 2006, but increased again in 2007.
- ◆ In contrast, the share of Medicaid has increased from about 26 percent in 1996 to about 44 percent in 2003; however, it has since declined by about half.
- ◆ The share of self-pay declined slightly from 1996 to 2007, varying considerably over time.
- ◆ The share of pediatric mental health hospitalizations paid by private insurance has been stable over time and is still the most common payment method for inpatient mental health services.
- ◆ The share of Medicaid payments has increased slightly over time to about 24 percent in 2007 from 20 percent in 1996.

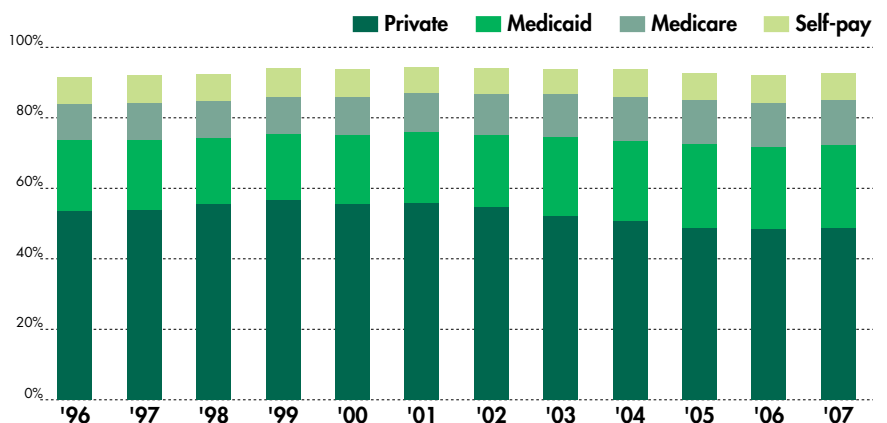
### Health insurance coverage of children with a mental health problem



### Coverage of psychiatrist visits for children, by payor



### Coverage of mental health hospitalizations for children, by payor



Data source: MEPS, NAMCS and NHDS

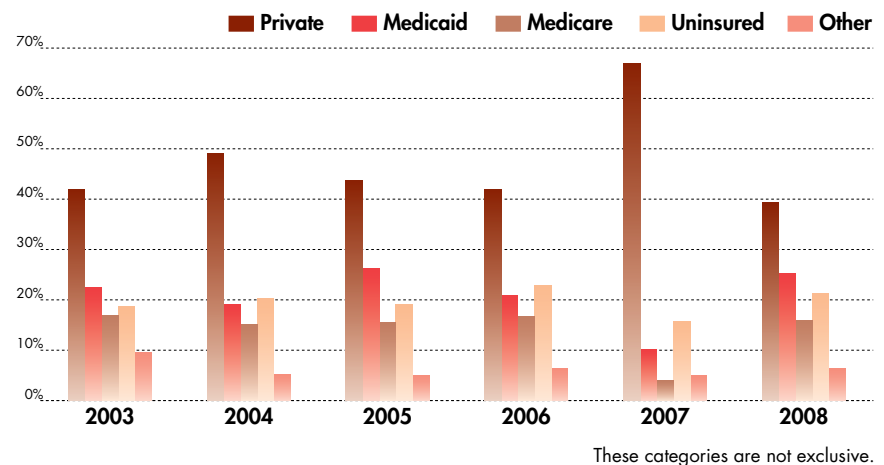
# Health Insurance Coverage

- ◆ Unlike children's health insurance coverage, about one-fourth of adults with a mental health problem are covered by Medicaid, and this trend is stable over time (except 2007).
- ◆ About 40 percent of adults were covered by private insurance in 2008; there was a slight increase in the share of uninsured from 19 percent in 2003 to 21 percent in 2008.
- ◆ The share of adult mental health care covered by private insurance has increased for psychiatric visits. Private insurance is the majority payor of adult mental health services, covering more than half of psychiatric visits since 2001.
- ◆ Self-pay coverage has declined from 35 percent in 1995 to 19 percent in 2007.
- ◆ The share of Medicare has been relatively stable, below 10 percent in most years; while the share of Medicaid has been increasing over time, from nine percent in 1995 to about 15 percent in 2007.
- ◆ Similar to the trends among children, the share of adult mental health hospitalization care covered by Medicaid has increased slightly, from 20 percent in 1996 to 24 percent in 2007.
- ◆ Overall, the share of private insurance for covering adult mental health hospitalization declined from 54 percent in 1996 to 49 percent in 2007.

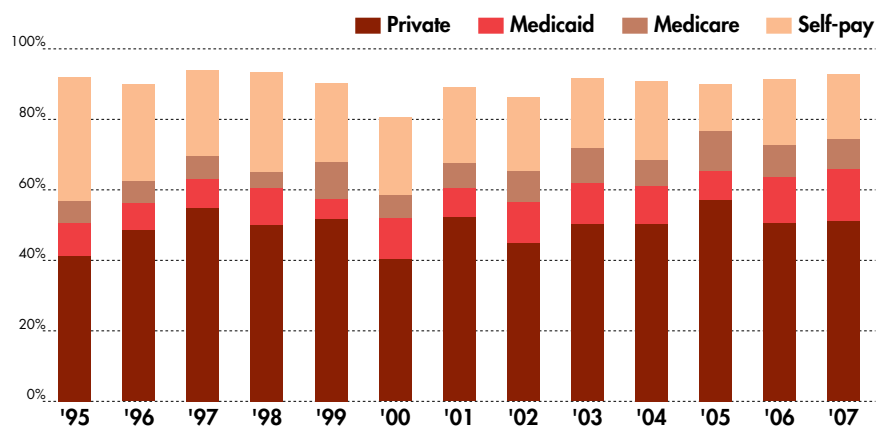
Data source: NAMCS and NHDS

## Adults ages 18-64

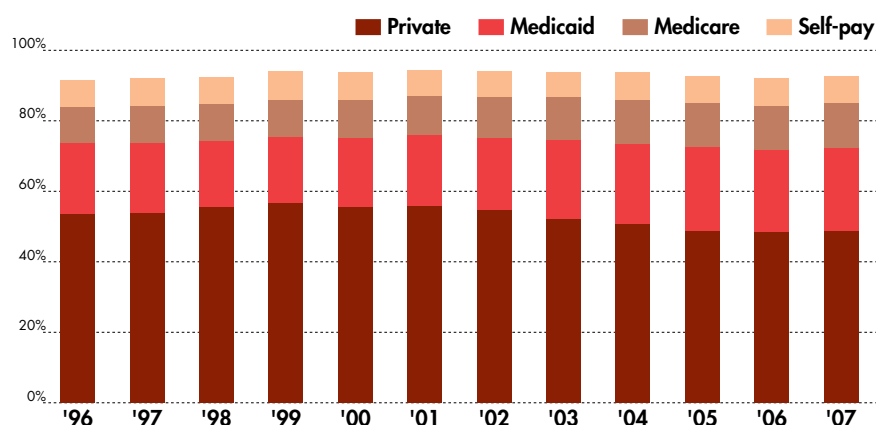
Health insurance coverage of adults with a mental health problem



Coverage of psychiatrist visits for adults, by payor



Coverage of mental health hospitalizations for adults, by payor

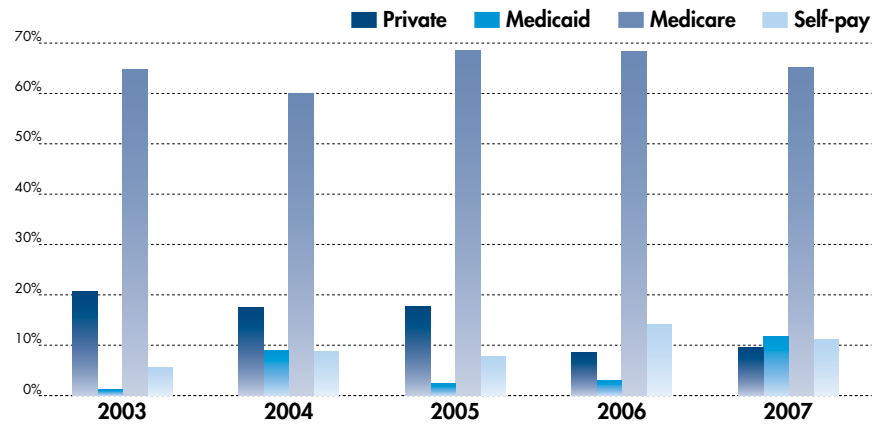


# Health Insurance Coverage

- ◆ The share of psychiatric visits for older adults paid by private insurance declined by half, from 21 percent in 2003 to 10 percent in 2007.
- ◆ The share of self-pay increased from six percent in 2003 to 11 percent in 2007.
- ◆ The share of Medicaid coverage varies considerably by survey year, but in 2007, the share was 11 percent.

## Adults ages 65+

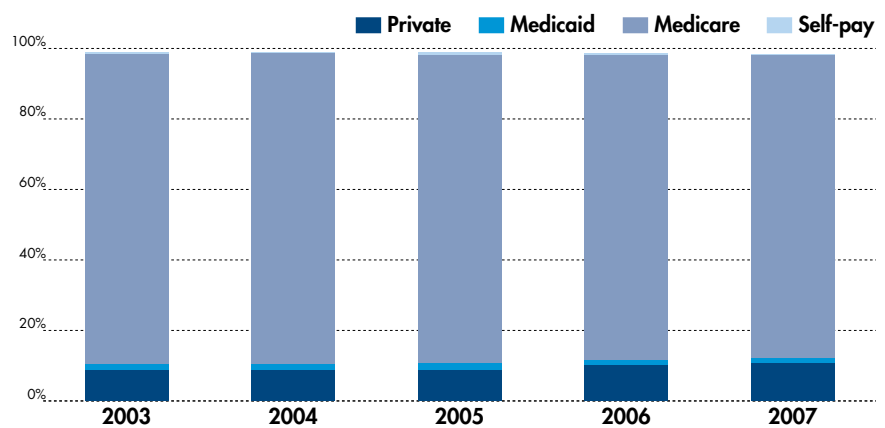
Coverage of psychiatrist visits for adults, by payor



These categories are not exclusive.

- ◆ The coverage of mental health hospitalization for older adults has been stable over time and the majority is covered by Medicare.

Coverage of mental health hospitalizations for adults, by payor



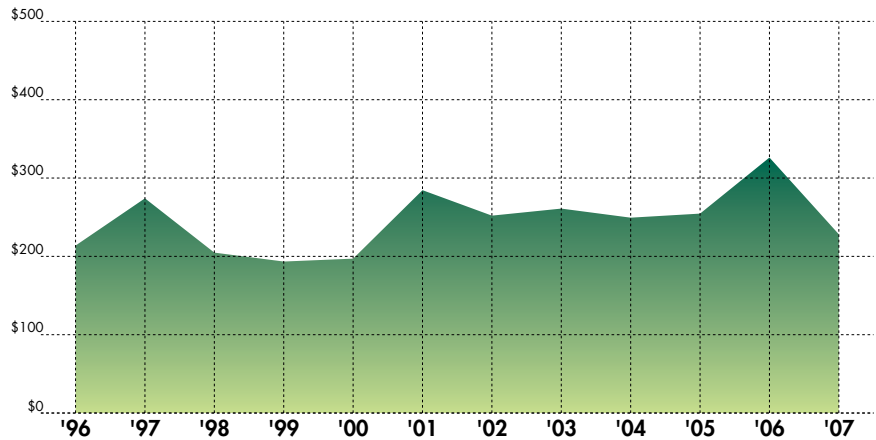
Data source: NAMCS and NHDS

# Mental Health Out-of-Pocket Spending with a Mental Health Diagnosis

## Children ages 4-17

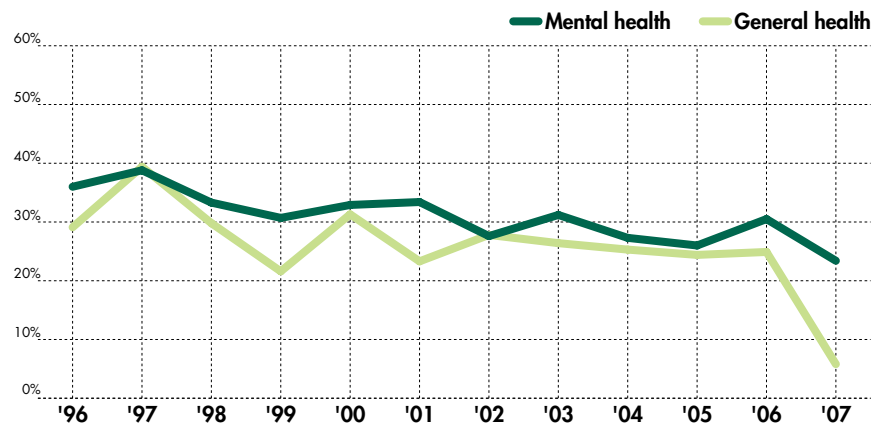
◆ Mental health out-of-pocket spending for children increased slightly between 1996 to 2007 from \$214 to \$228.

**Mental health out-of-pocket spending with a mental health diagnosis, in 2005 dollars**



◆ While children's mental health out-of-pocket spending has increased in absolute dollars, spending as a percentage of mental health spending and total health out-of-pocket spending has declined. In 2007, there was a considerable decline, which may be due to the survey data.

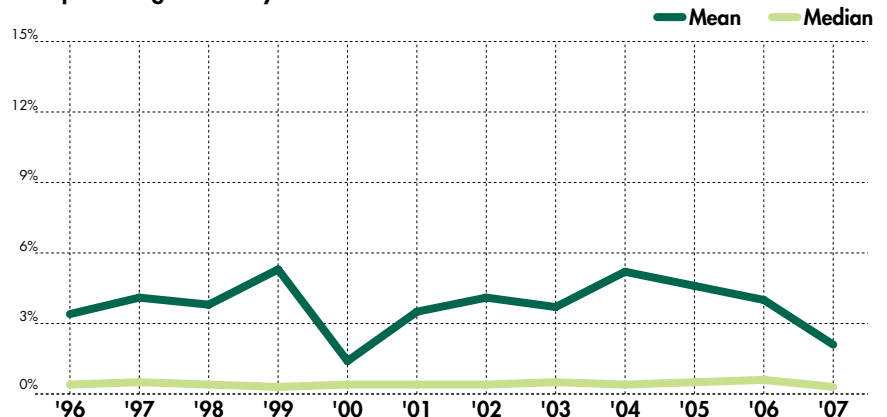
**Mental health out-of-pocket spending with a mental health diagnosis, as a share of mental health and total health out-of-pocket spending**



◆ In 2007, the out-of-pocket share was approximately one quarter of mental health spending for children.

◆ Total out-of-pocket spending for children with a mental health diagnosis as a share of percentage of family income represented about three to five percent in average between 1996 and 2006, then declined to two percent in 2007.

**Mental health out-of-pocket spending with a mental health diagnosis, as a percentage of family income**



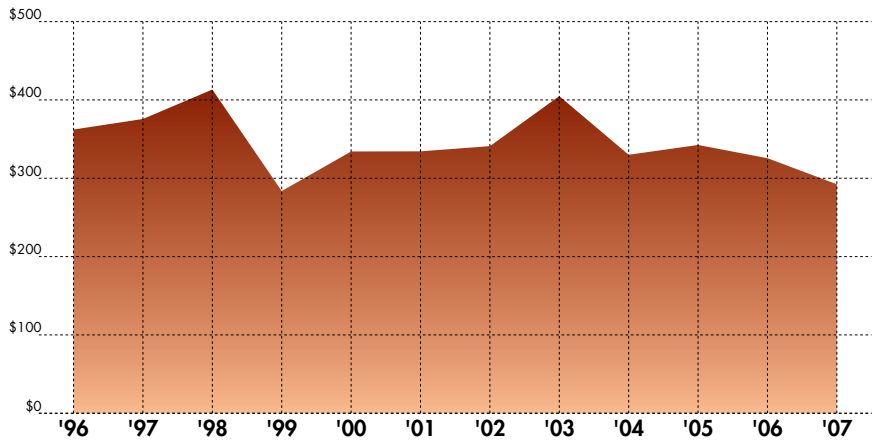
Data source: MEPS

# Mental Health Out-of-Pocket Spending with a Mental Health Diagnosis

## Adults ages 18-64

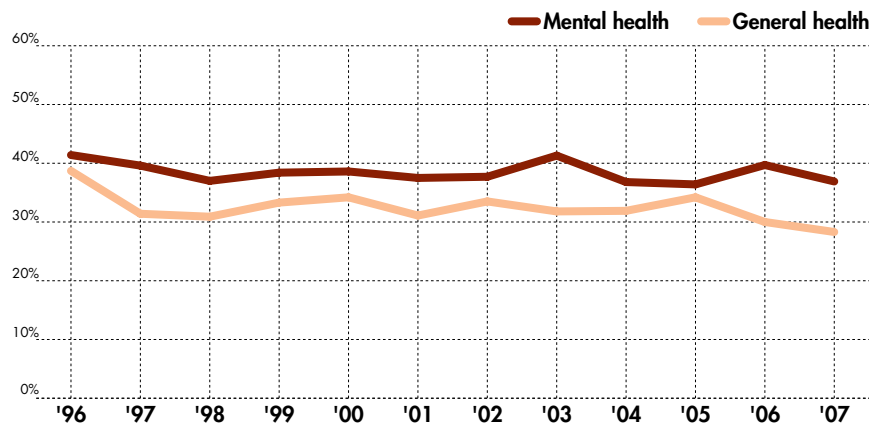
◆ The out-of-pocket spending for adult mental health care was \$300 in 2007, the highest among the age groups.

**Mental health out-of-pocket spending with a mental health diagnosis, in 2005 dollars**



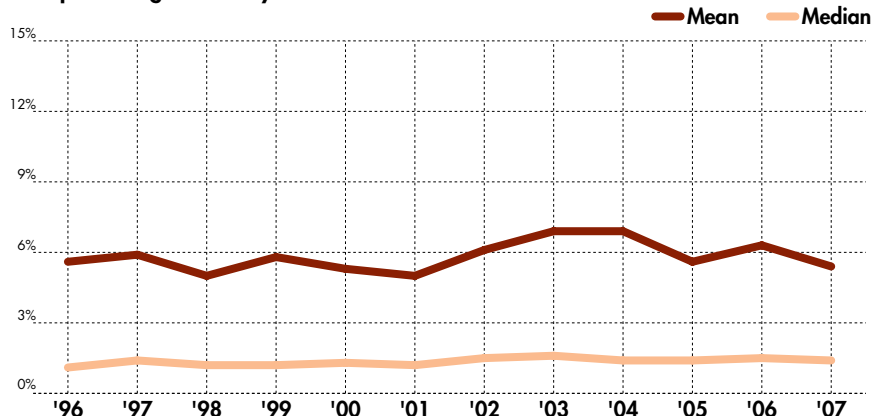
◆ As a share of mental health spending, adult mental health out-of-pocket costs have been stable, declining from 42 percent in 1996 to 37 percent in 2007.

**Mental health out-of-pocket spending with a mental health diagnosis, as a share of mental health and total health out-of-pocket spending**



◆ As a share of general health spending, adult mental health out-of-pocket costs have declined considerably, from 38 percent in 1996 to 28 percent in 2007.

**Mental health out-of-pocket spending with a mental health diagnosis, as a percentage of family income**



◆ As a percentage of household income, both adult median and mean out-of-pocket costs have been stable, around one to 1.5 percent and five to six percent, respectively.

Data source: MEPS

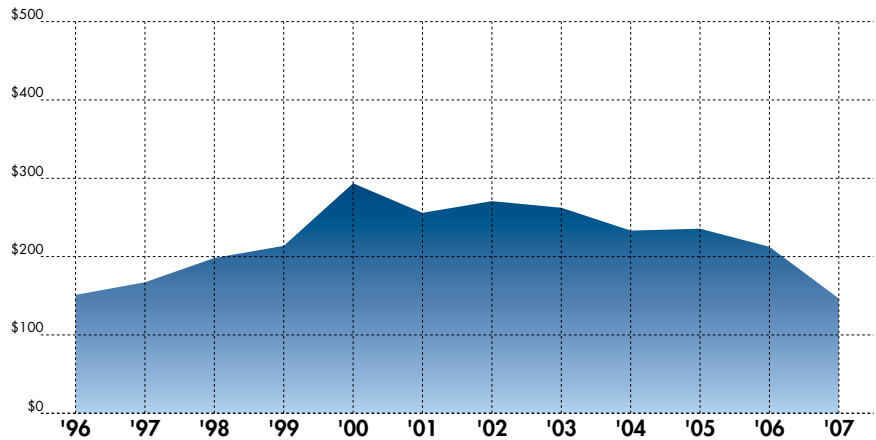


# Mental Health Out-of-Pocket Spending with a Mental Health Diagnosis

## Adults ages 65+

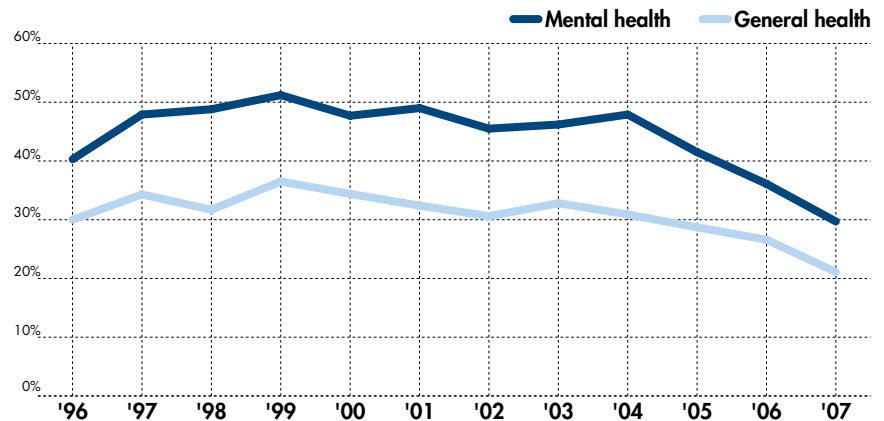
- ◆ Mental health out-of-pocket spending for older adults rose most dramatically from 1996 to 2000, then declined steadily.
- ◆ In 2007, the average mental health out-of-pocket spending was \$146.

**Mental health out-of-pocket spending with a mental health diagnosis, in 2005 dollars**



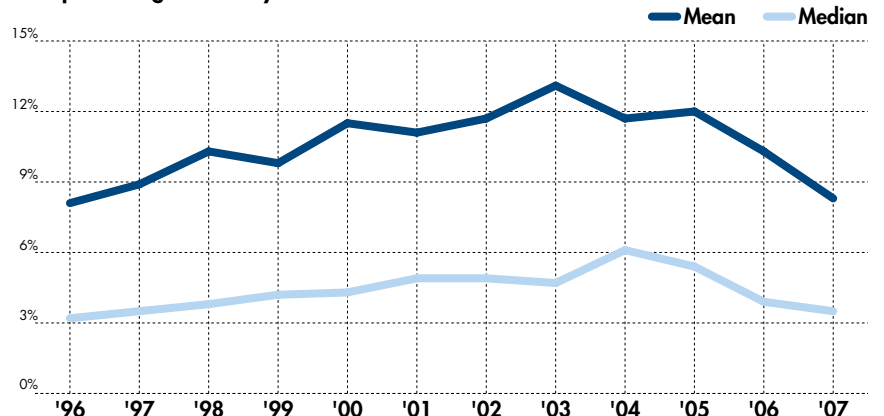
- ◆ The out-of-pocket cost for mental health services for older adults, as a share of mental health and total out-of-pocket health spending, declined from 40 percent in 1996 to 30 percent in 2007.

**Mental health out-of-pocket spending with a mental health diagnosis, as a share of mental health and total health out-of-pocket spending**



- ◆ Both median and mean out-of-pocket spending as a share of family income for older adults with a mental health diagnosis are highest compared with other age groups.
- ◆ The mean out-of-pocket spending increased from 1996 to 2005 and then declined to the same level in 2007 (around eight percent).

**Mental health out-of-pocket spending with a mental health diagnosis, as a percentage of family income**



Data source: MEPS

## Out-of-Pocket Share for High Expenditure Mental Health Care

◆ The seventy-fifth percentile for out-of-pocket spending with a mental health diagnosis, who held private insurance full-year had mental health expenditures greater than \$300 in 2005 dollars.

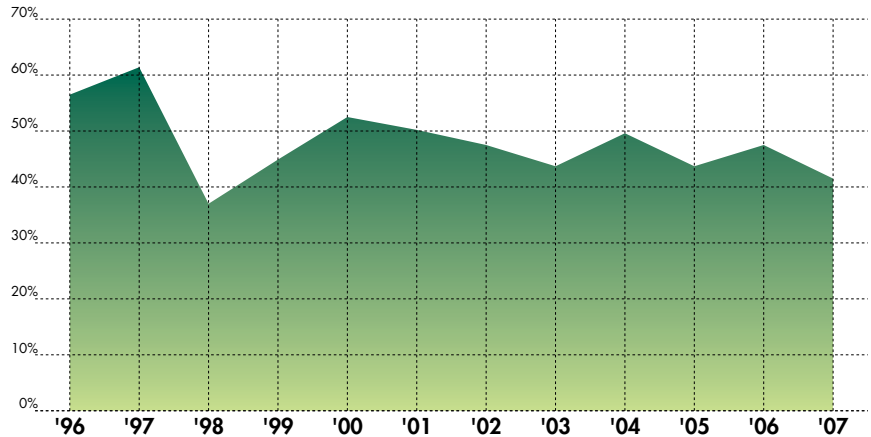
◆ High expenditure mental health care for children declined from 57 percent in 1996 to 42 percent in 2007.

◆ High expenditure mental health care for adults, ages 18 to 64, declined from 50 percent in 1996 to 36 percent in 2007.

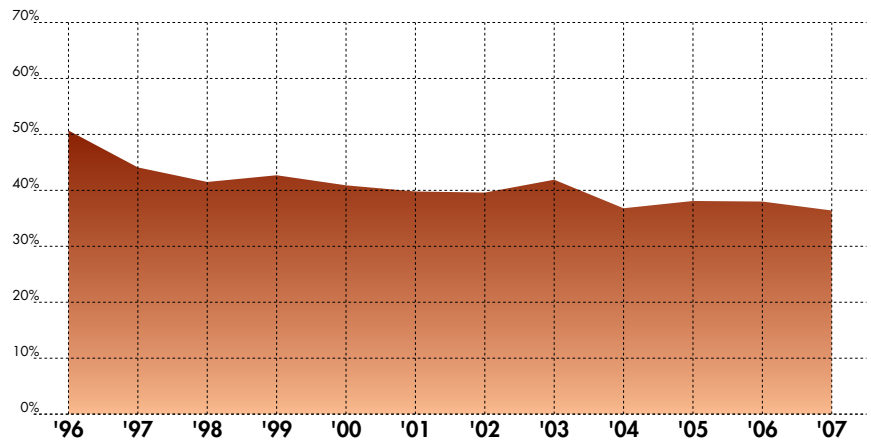
◆ High expenditure mental health care for older adults declined from 44 percent in 1996 to 28 percent in 2007. This was the largest decline among all age groups.

### High expenditure mental health out-of-pocket spending

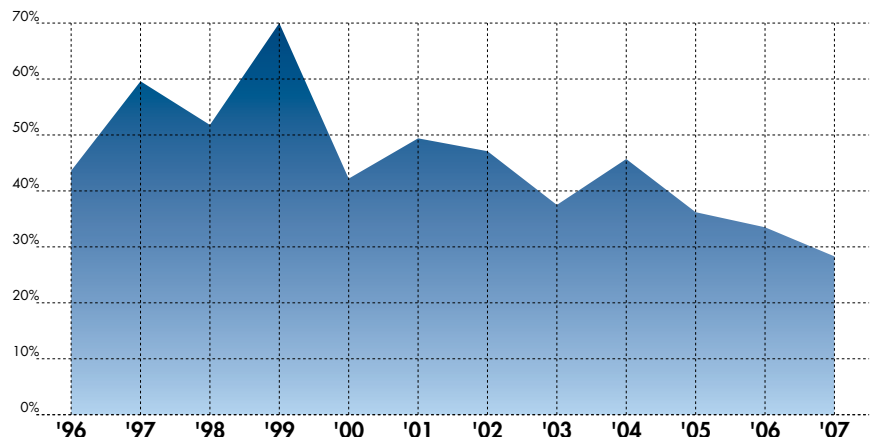
#### Children ages 4-17



#### Adults ages 18-64



#### Adults ages 65+



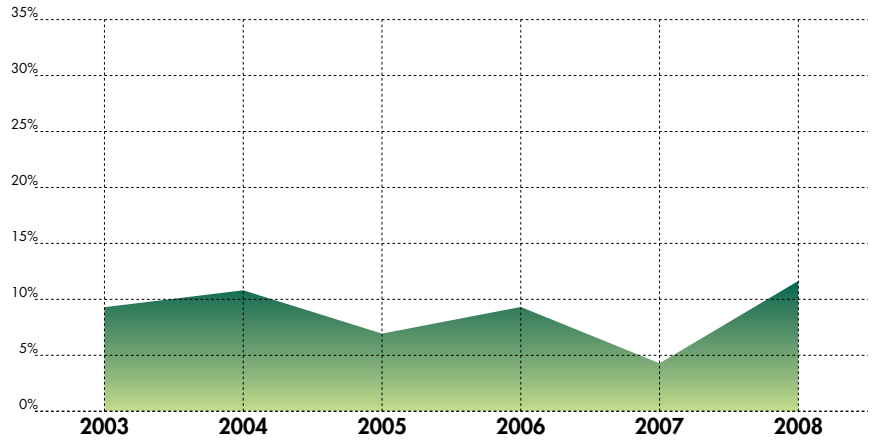
Data source: MEPS

# Affordability of Professional Services

## Children ages 4-17

◆ There is an increasing percentage of families with a child with a mental health problem reporting difficulty in affording mental health professional care. This reached its peak in 2008 at 12 percent.

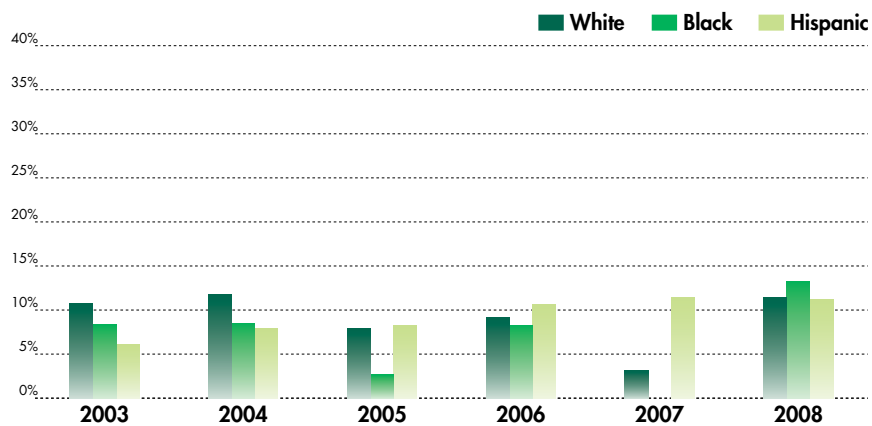
**Percentage of children with a mental health problem reporting difficulty in affording mental health professional care**



◆ Overall, the increasing rate for difficulty in affording mental health professional care for children does not differ by race/ethnicity in 2008.

◆ For Hispanic children, the reported difficulty in affording professional services increased gradually, while for white and black children, it varied considerably by survey year.

**Percentage of children with a mental health problem reporting difficulty in affording mental health professional care, by race/ethnicity**



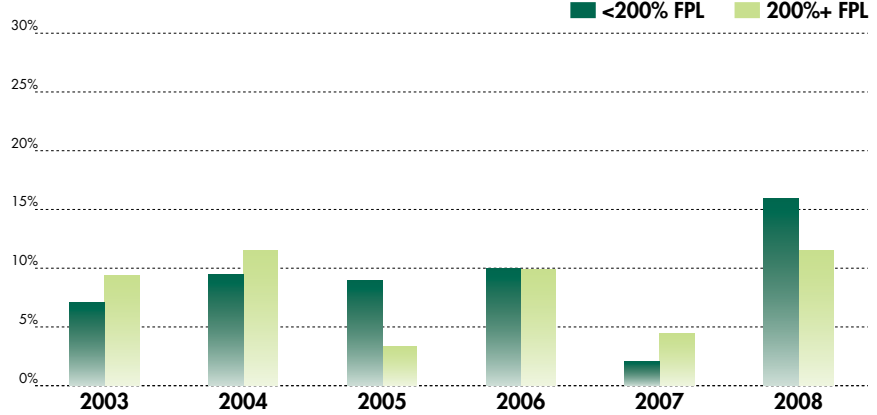
Data source: NHIS

# Affordability of Professional Services

## Children ages 4-17

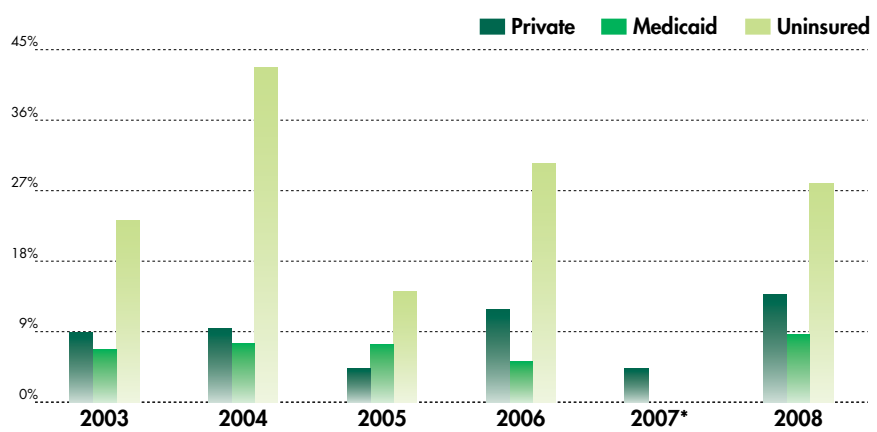
- ◆ Low-income families with children were more likely to experience difficulties in paying for mental health professional care for their children than higher-income families in 2008.
- ◆ The affordability of professional mental health services for children worsened regardless of family income status, doubling for low-income families and increasing by four percent for higher-income families from 2003 to 2008.

Percentage of children with a mental health problem reporting difficulty in affording mental health professional care, by income level



- ◆ Rates of difficulty in affording care have increased across all insurance types, while those with Medicaid experienced the lowest increase from 2003 to 2008.
- ◆ Close to one-third of children without insurance experienced difficulty in affording mental health care in 2008.
- ◆ Rates of difficulty in affording care has more than doubled among those with private insurance from 2003 to 2008.

Percentage of children with a mental health problem reporting difficulty in affording mental health professional care, by insurance type



\*No data available for Medicaid and Uninsured.

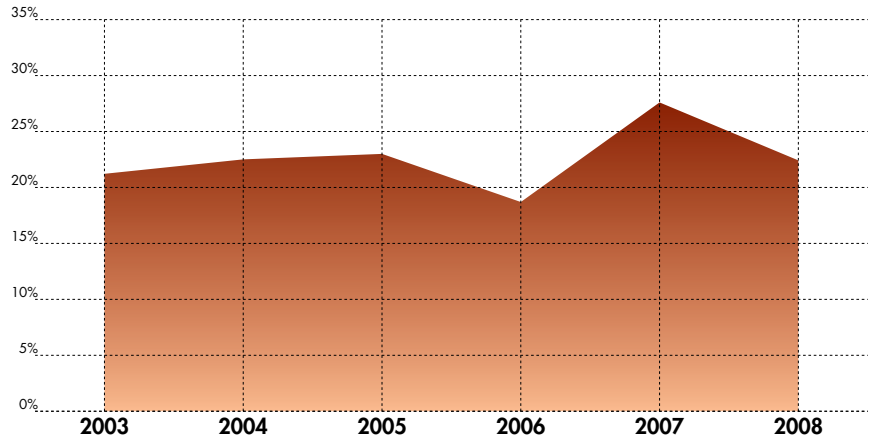
Data source: NHIS

## Affordability of Professional Services

### Adults ages 18-64

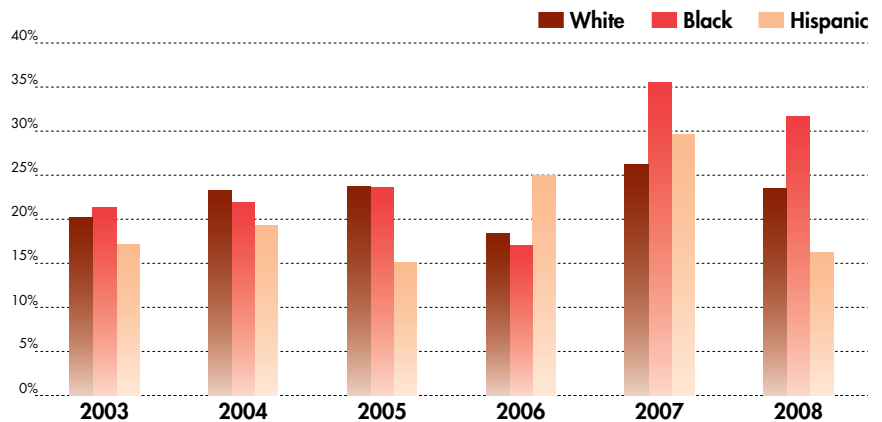
- ◆ Of all age groups, adults ages 18 to 64 most frequently reported difficulty in affording the care they need. While the rates have increased at various points, they remained relatively between 2003 and 2008, around 20 percent.

Percentage of adults with a mental health problem reporting difficulty in affording mental health professional care



- ◆ There are increasing rates of difficulty in affording mental health care for whites and blacks, while it has become more stable among Hispanic adults.
- ◆ In 2008, the rate of difficulty for blacks was 32 percent, while only 23 percent for whites and 16 percent for Hispanics.

Percentage of adults with a mental health problem reporting difficulty in affording mental health professional care, by race/ethnicity



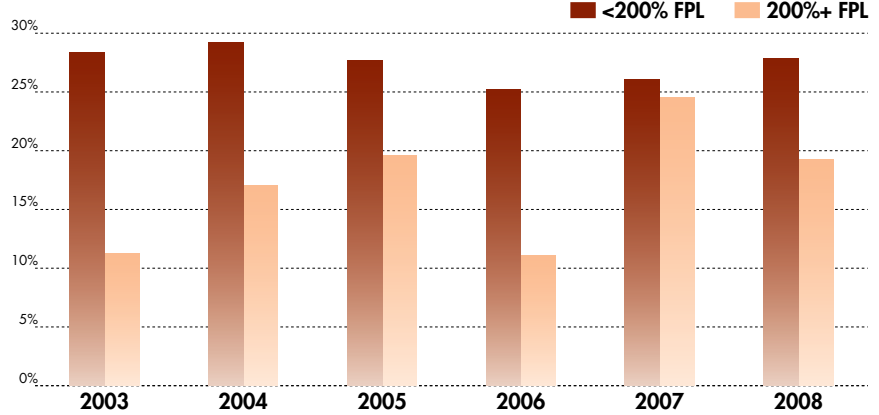
Data source: NHIS

# Affordability of Professional Services

## Adults ages 18-64

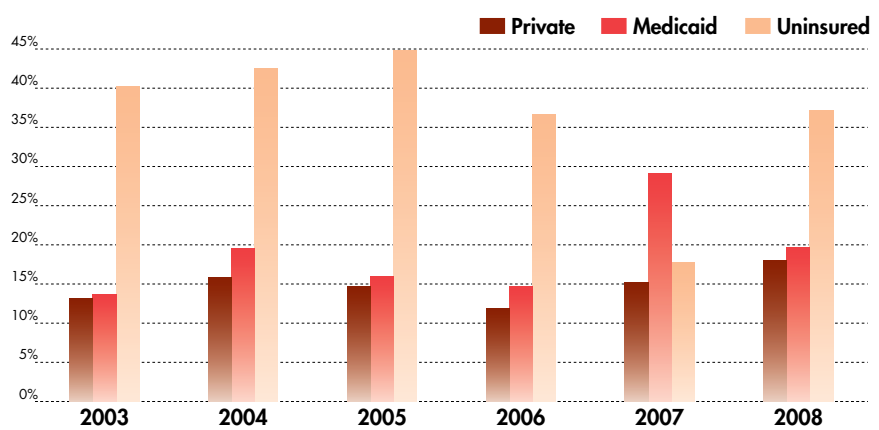
- ◆ Close to one-third of low-income adults reported having difficulty in affording professional care in 2008.
- ◆ The rates for higher income adults were close to 20 percent in 2008, and increased about eight percent after 2003.

Percentage of adults with a mental health problem reporting difficulty in affording mental health professional care, by income level



- ◆ The uninsured reported much higher rates in difficulty affording professional care than did adults with private insurance or Medicaid.
- ◆ The rates of reporting difficulty among the privately or publicly insured have both increased from 13 percent in 2003 to nearly 20 percent in 2008.

Percentage of adults with a mental health problem reporting difficulty in affording mental health professional care, by insurance type



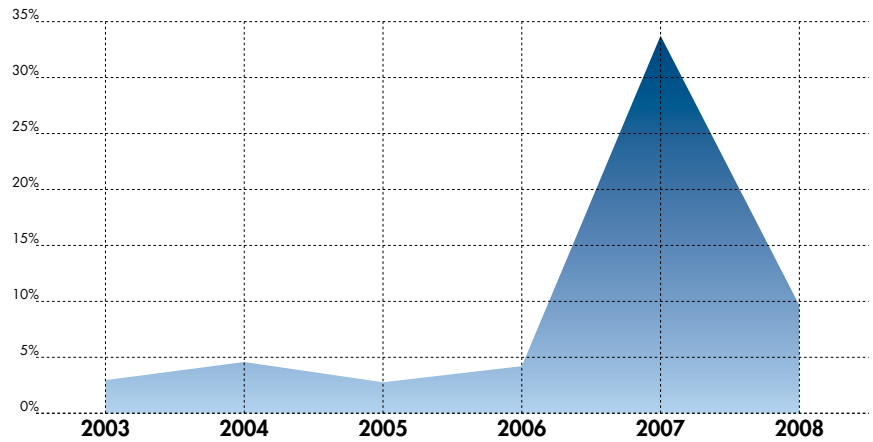
Data source: NHIS

## Affordability of Professional Services

### Adults ages 65+

- ◆ Of all age groups, older adults reported the lowest rates of difficulty in affording care, about 10 percent in 2008.

Percentage of adults with a mental health problem reporting difficulty in affording mental health professional care



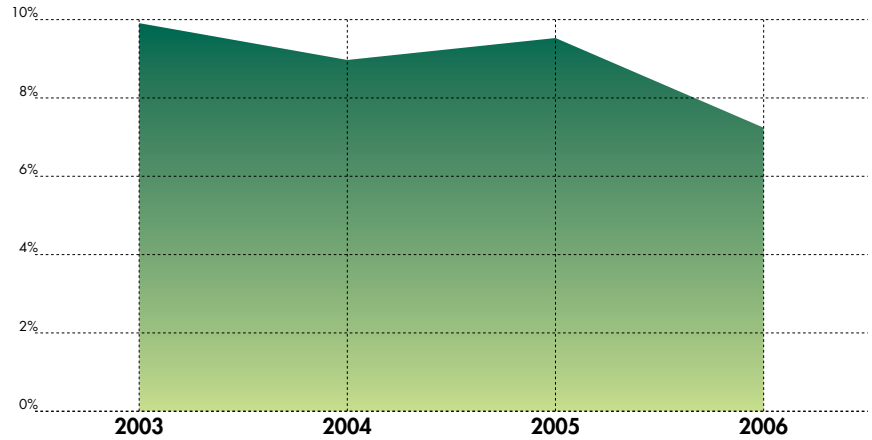
Data source: NHIS

# Affordability of Mental Health Prescription Drugs

## Children ages 4-17

- ◆ The percentage of families with a child reporting difficulty in paying prescription drugs remained stable at less than 10 percent during all the survey year periods.

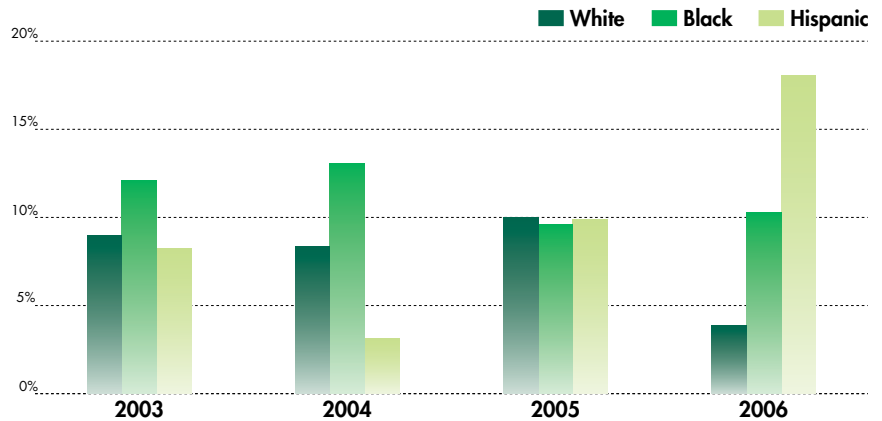
**Percentage of children with a with a mental health problem reporting difficulty in affording prescription drugs**



No data for 2007 and 2008 were available due to small sample size.

- ◆ Hispanic households with a child were more likely to report having difficulty in affording mental health medication in 2006.
- ◆ About 10 percent of black households with a child reported difficulty in paying for medication; the rates have slightly declined, from 12 percent in 2003 to 10 percent in 2006.
- ◆ The percentage of white households with a child reporting difficulty in affording medication has declined from about nine percent in 2003 to only four percent in 2006.

**Percentage of children with a mental health problem reporting difficulty in affording prescription drugs, by race/ethnicity**



Data source: NHIS



# Affordability of Mental Health Prescription Drugs

## Children ages 4-17

- ◆ Not surprisingly, low-income families with children are more likely to report difficulty in affording prescription drugs than their higher-income counterparts, but the gap is declining.
- ◆ In 2006, about 10 percent of low-income families with children reported difficulty, but the rate has declined since 2003.

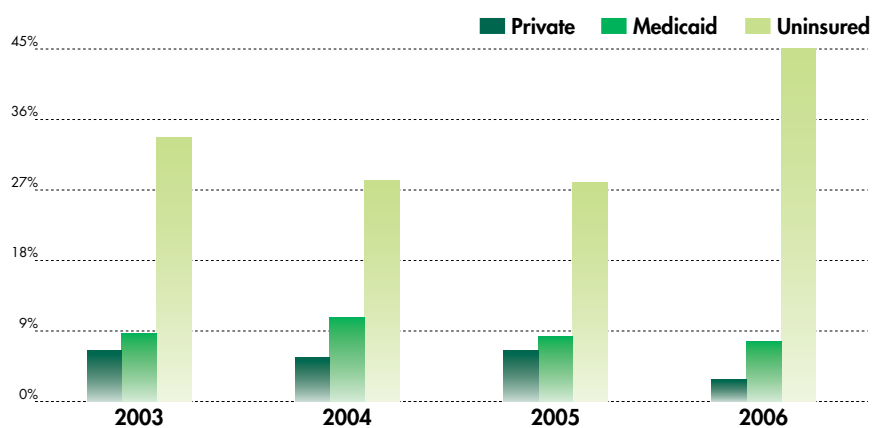
Percentage of children with a mental health problem reporting difficulty in affording prescription drugs, by income level



No data for 2007 and 2008 were available due to small sample size.

- ◆ There are increasing rates of difficulty in affording prescription drugs among uninsured children, from about 33 percent in 2003 to 45 percent in 2006.
- ◆ The reported rate of difficulty remained stable among children with Medicaid, while among children with private insurance, the rate has declined from six percent to three percent in 2006.

Percentage of children with a mental health problem reporting difficulty in affording prescription drugs, by insurance type



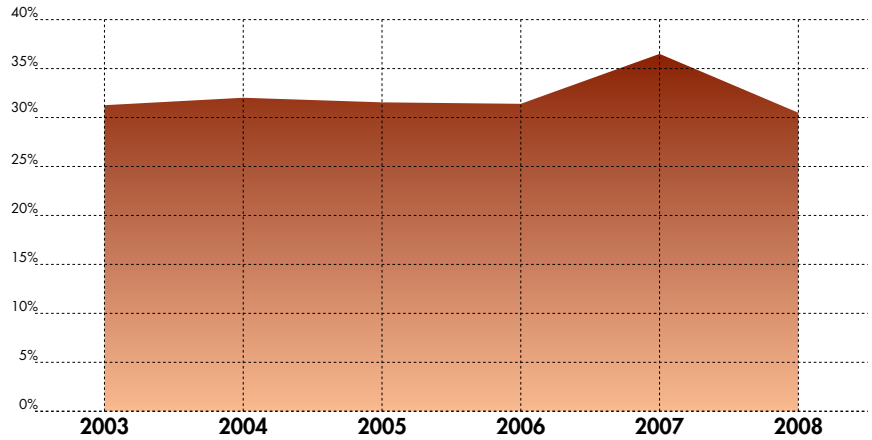
Data source: NHIS

# Affordability of Mental Health Prescription Drugs

## Adults ages 18-64

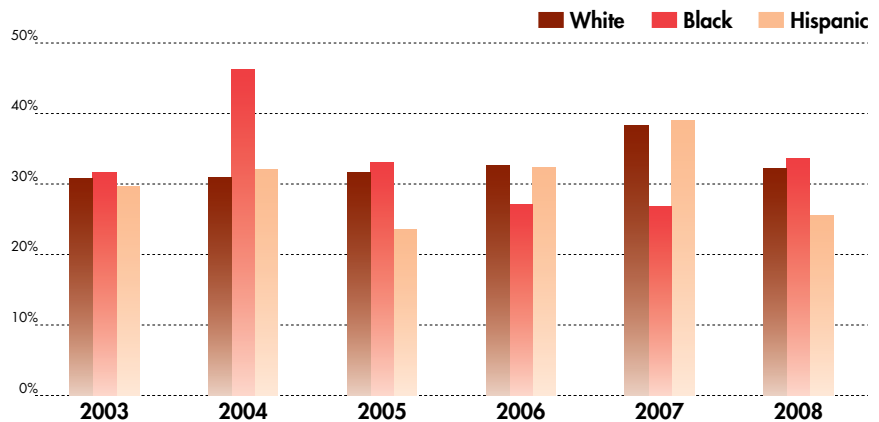
- ◆ Adults were more likely to experience difficulty in affording care than any other age group. The rate was about 30 percent and stable between 2003 and 2008.

Percentage of adults with a mental health problem reporting difficulty in affording prescription drugs



- ◆ White and black adults were more likely to report difficulty in paying for prescription drugs than Hispanic adults.
- ◆ In 2008, the rates were 33 percent for blacks, 32 percent for whites and 25 percent for Hispanics.

Percentage of adults with a mental health problem reporting difficulty in affording prescription drugs, by race/ethnicity



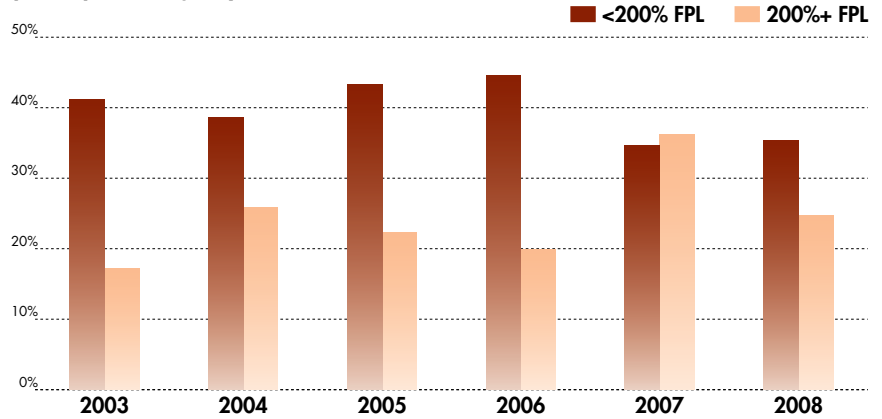
Data source: NHIS

# Affordability of Mental Health Prescription Drugs

## Adults ages 18-64

◆ Low-income adults were more likely to report difficulty than higher-income adults, though the rates of difficulty declined among low-income adults and increased among higher-income adults over the survey period.

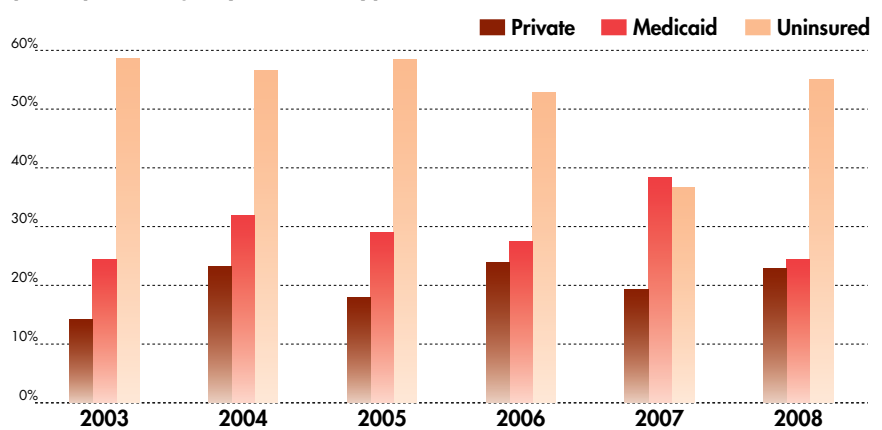
Percentage of adults with a mental health problem reporting difficulty in affording prescription drugs, by income level



◆ More than half of uninsured adults reported experiencing difficulty in affording prescription drugs.

◆ The rates for adults with private insurance have increased from 14 percent in 2003 to 23 percent in 2008, while the rates among those with Medicaid have been stable around 25 percent.

Percentage of adults with a mental health problem reporting difficulty in affording prescription drugs, by insurance type



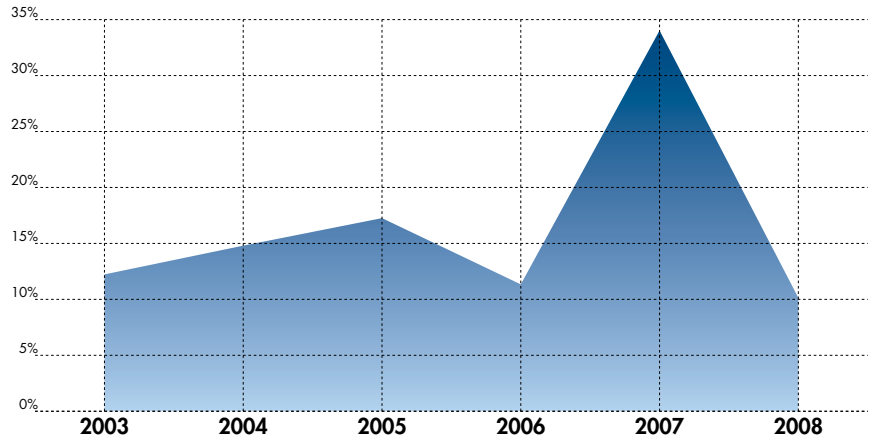
Data source: NHIS

# Affordability of Mental Health Prescription Drugs

## Adults ages 65+

- ◆ The rates of reporting difficulty in affording prescription drugs have been somewhat stable among older adults with a noticeable spike in 2007.

Percentage of adults with a mental health problem reporting difficulty in affording prescription drugs



Data source: NHIS

## SECTION 5

### Quality of Care

Various surveys suggest that quality of mental health care has improved over the past decade; use of restraints in inpatient care has decreased or remained stable while the share of people receiving appropriate care for depression, bipolar disorder, and schizophrenia has increased.

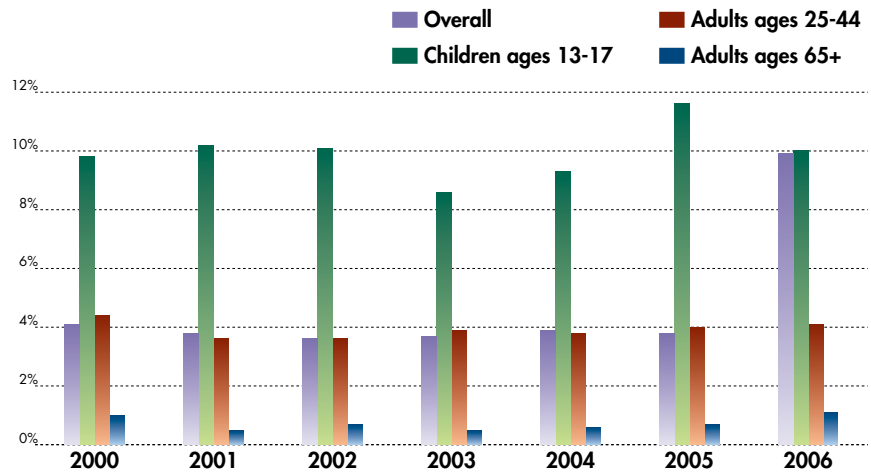
Unfortunately, national survey data on quality measures is not available, so we are forced to rely on local data (here, Florida Medicaid) to reach these conclusions. It is possible that this local data may only reflect local patterns of care, rather than representing a national trend.



## Quality of Inpatient Mental Health Care

- ◆ Overall, year-end rates of restraint use in inpatient psychiatric patients were stable over time.
- ◆ Restraint use declined between 2000 and 2005, a change largely driven by reduced rates among adult patients.
- ◆ Data among children was less stable over time than the adult pattern. The rates for children are about 10 percent, while less than five percent among adults.

Percentage of mental health patients that were restrained

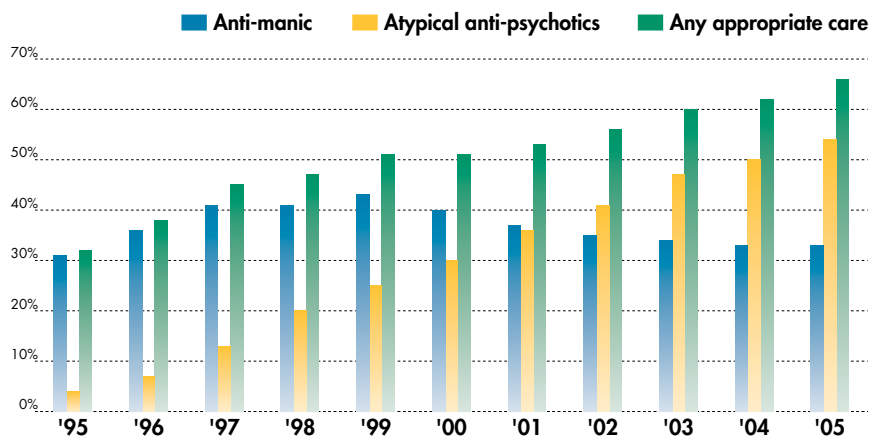


Data source: NASMHPD Resource Institute

## Quality of Care in Bipolar Treatment

- ◆ The share of Florida Medicaid beneficiaries with bipolar disorder that received appropriate medications improved markedly between 1995 and 2005.
- ◆ Overall, the percentage of bipolar patients receiving a recommended drug more than doubled from 32 percent to 66 percent over the period. The increase was driven largely by the expanded use of atypical antipsychotic agents, whose use in treating bipolar patients increased from four percent in 1995 to 54 percent in 2005.

Percentage of bipolar patients treated with appropriate medication



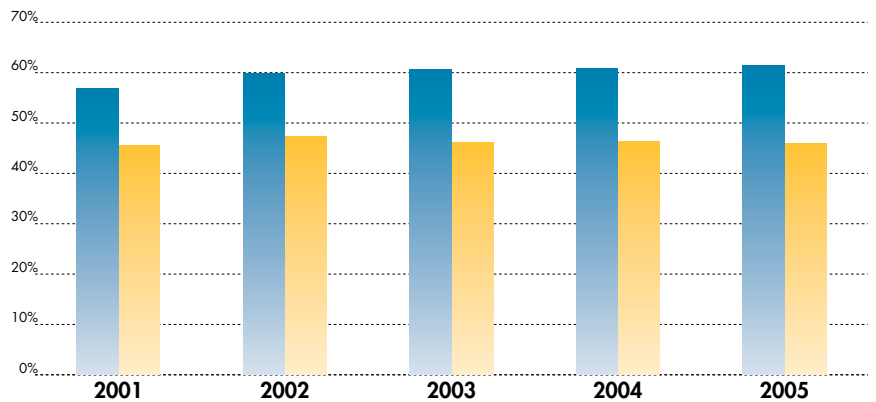
Data source: Florida Medicaid

## Quality of Care in Depression Treatment

- ◆ Trends suggest that there has been some improvement in the management of antidepressant acute care for privately insured patients, yet most of the improvements occurred between 1998 and 2002. Since then only slight improvement has occurred.
- ◆ Treatment rates for Medicaid patients have been flat at around 46 percent.

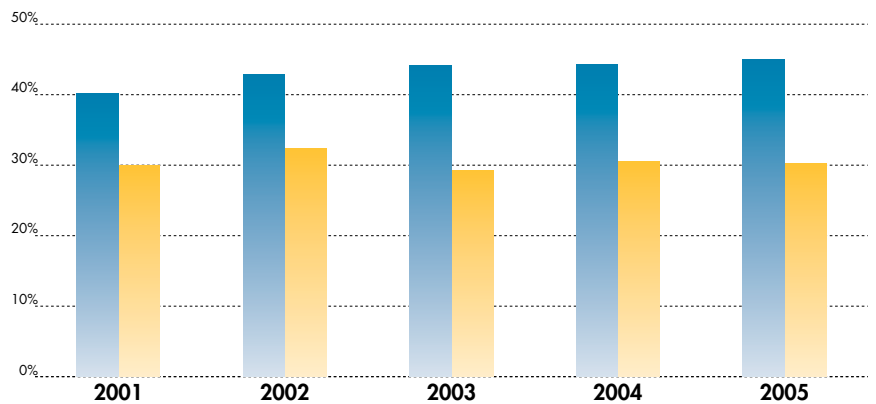
### Patient insurance status

#### Patients receiving acute treatment for depression



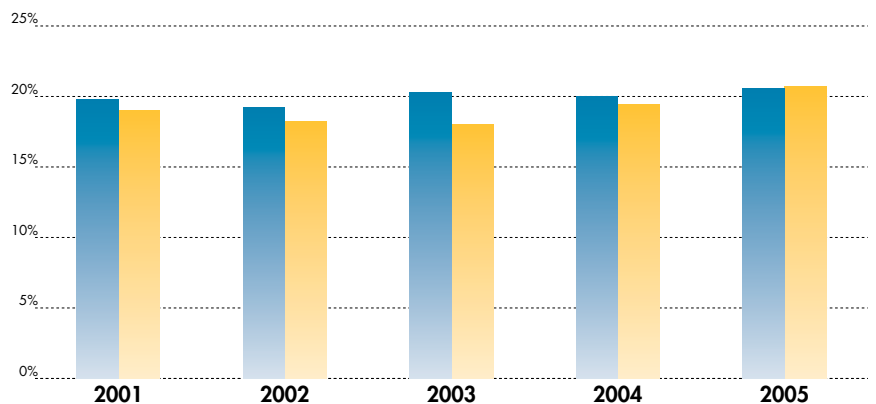
- ◆ Similarly, evidence exists for slight improvement in depression continuation treatment, with greater improvement for the privately insured (from 40 percent to 45 percent).
- ◆ Medicaid treatment rates have been flat over the study period, around 30 percent.

#### Patients receiving appropriate continuation treatment for depression



- ◆ In the provider-contact dimension of care, little improvement has occurred in depression treatment.
- ◆ Treatment rates for Medicaid beneficiaries increased only slightly, from 19 percent in 2001 to 21 percent in 2005.
- ◆ Among the privately insured, the rate has been stable at around 20 percent.

#### Patients receiving appropriate provider contact

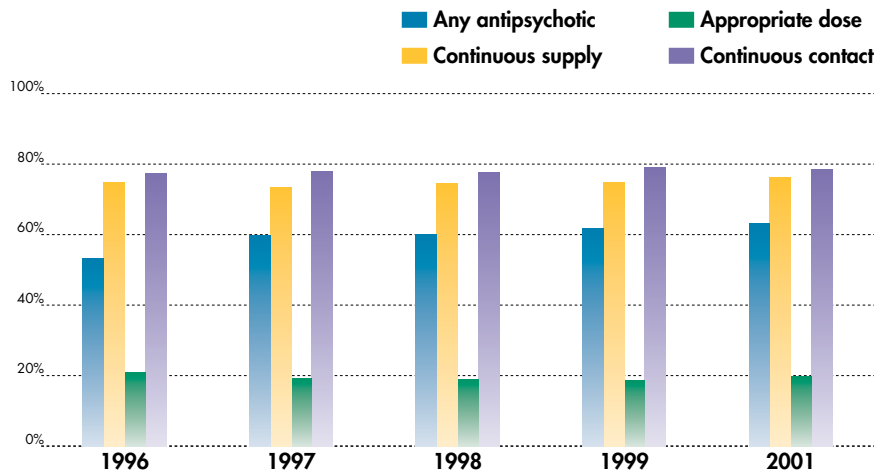


Data source: HEDIS

## Quality of Schizophrenia Treatment

- ◆ According to Florida Medicaid claims data, there has been a notable improvement in the share of schizophrenic patients that receive antipsychotic medications: 63.2 percent in 2001 as compared to 53.2 percent in 1996. There have been few improvements in other areas of care. However, because the continuous supply and dosing measures are measured conditionally on receiving an antipsychotic drug, this increase means that more people are receiving quality care across each dimension of care.

Quality of schizophrenia treatment



Data source: Florida Medicaid



## SECTION 6

### Quality of Life Measures

Regular trend data is not available for many measures that might describe the quality of life for Americans living with mental illness. Due to the lack of longitudinal studies focusing on individuals with mental health, we rely on government records and apply reasoned assumptions to data on the general population to determine the likely financial and social health of these Americans.

Overtime, payments from SSI and SSDI for mental health disability have increased. This available income, however, has failed to keep pace with rising costs, particularly in the housing market. Basic housing remains unaffordable to many with serious and persistent mental illness. Not surprisingly, rates of homelessness have increased over the study period, as have incarceration rates. The overall picture from the data is one of decaying financial and social status for many living with mental illness.

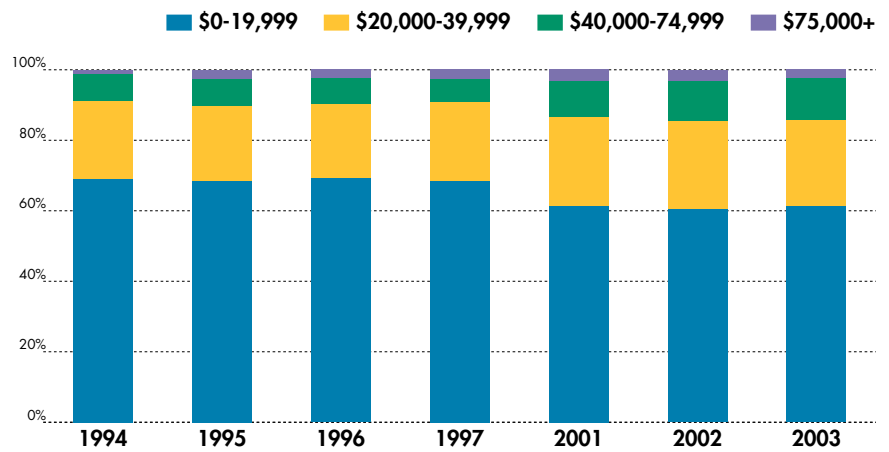


## Income

- ◆ The income of people with mental illness has remained relatively stable since 1994.
- ◆ Trends largely reflect economy-wide income distribution changes.
- ◆ The vast majority of people with mental health problems have an income of below \$20,000 per year.

Data source: NSDUH

Income distribution of people with a mental health problem

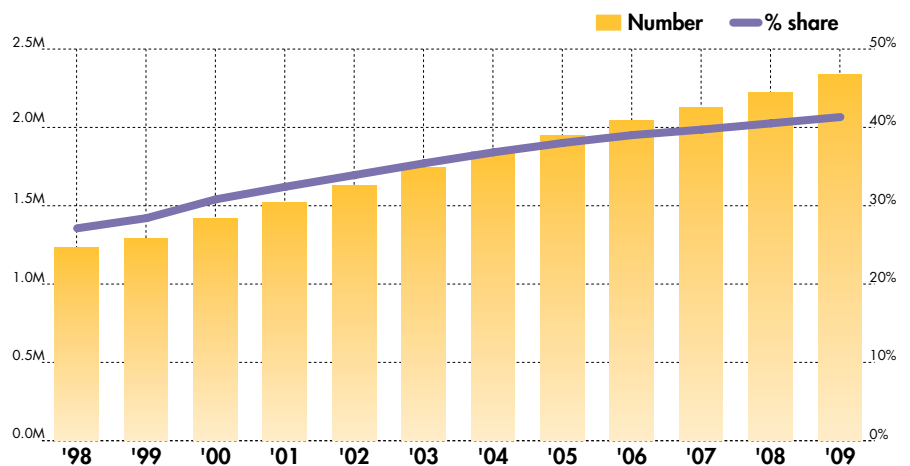


No data for 1998, 1999, and 2000.

- ◆ Since 1996, payments to individuals with a mental health diagnosis have increased, both in total number and as a percentage of all SSI payments.
- ◆ In fact, the number of Americans receiving payments due to a mental health diagnosis have nearly doubled to just over two million since 2006.
- ◆ From 1998, the share of SSI due to mental health diagnosis increased from 27 percent to 40 percent.

Data source: SSI Annual Report 2009

Recipients of SSI payments due to mental health diagnosis (excluding mental retardation) and as a share of all SSI recipients

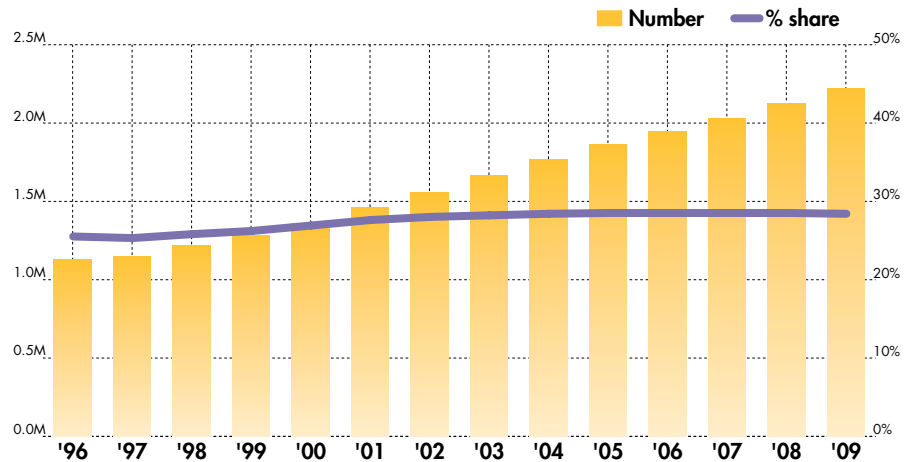


## Income

- ◆ Social Security disability insurance (SSDI) is a payroll tax-funded federal insurance program. People with a mental health diagnosis can be eligible.
- ◆ Since 1996, SSDI payments to individuals with a mental health diagnosis have increased in total number but remained stable as a percentage of all active beneficiaries.

Data source: SSDI Annual Report 2009

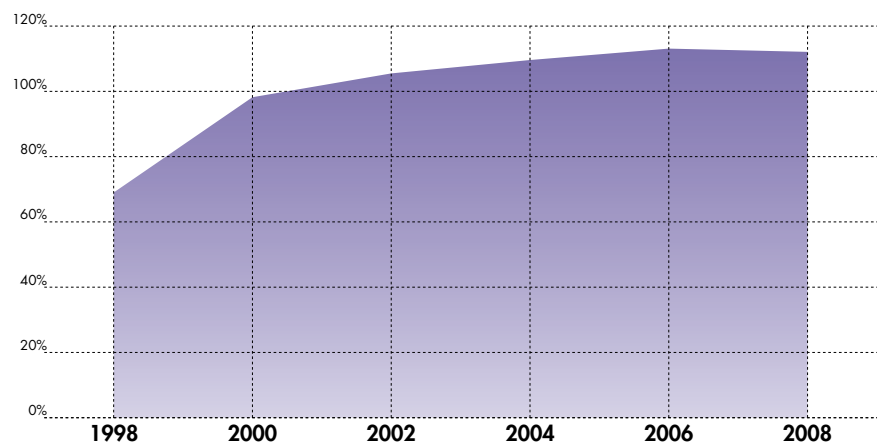
**Recipients of SSDI payments due to mental health diagnosis (excluding mental retardation) and as a share of all active beneficiaries**



- ◆ Since 1998, the affordability of basic housing has decreased significantly. In 1998, 69 percent of SSI payments were needed to rent a one-bedroom housing unit, on average across the United States.
- ◆ Since 2000, a SSI beneficiary could no longer afford a one-bedroom unit: the national average housing price reached 113 percent of SSI payments in 2008.
- ◆ Given the low income of many Americans with a mental health diagnosis, price is a major barrier to an independent housing arrangement.

Data source: Priced Out: Technical Assistance Collaborative 1998-2008

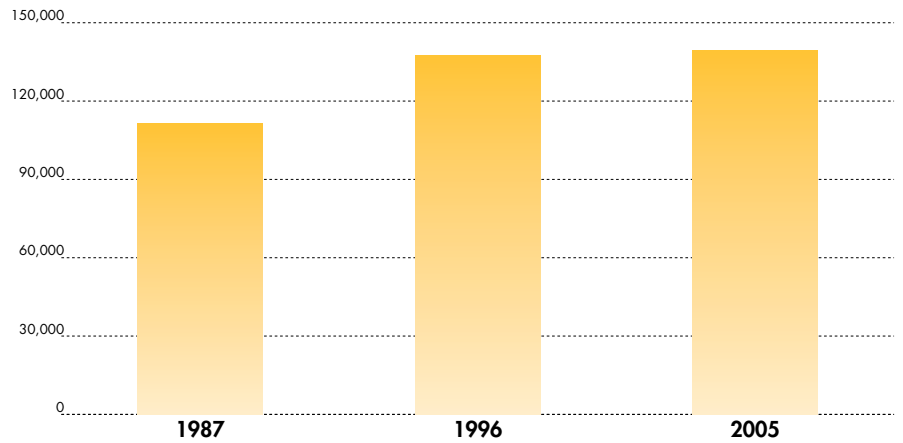
**Percentage of SSI benefits needed to rent a one-bedroom housing unit, national average**



## Housing

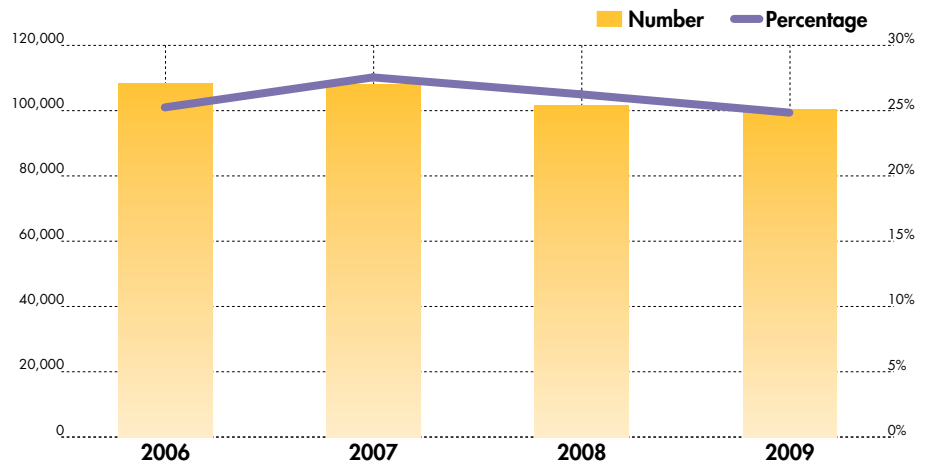
- ◆ In 2005, approximately 750,000 were homeless. Roughly 62 percent of these were single adults, and approximately 30 percent of this group suffered from Serious and Persistent Mental Illness (SPMI).
- ◆ The number of homeless adults suffering from mental illness increased significantly between 1987 and 1996 but has remained stable since then, with close to 140,000 people in 2005.

**Number of homeless single adults with SPMI**



- ◆ In 2008, there was an estimated 643,067 homeless people nationwide (in point-in-time estimates). Among those, 63 percent were sheltered (403,308 people).
- ◆ Among sheltered homeless people, from 2006 to 2009, about one-quarter were those with severe mental illness, and the prevalence has been stable.

**Percentage and number of people with severe mental illness among sheltered homeless**

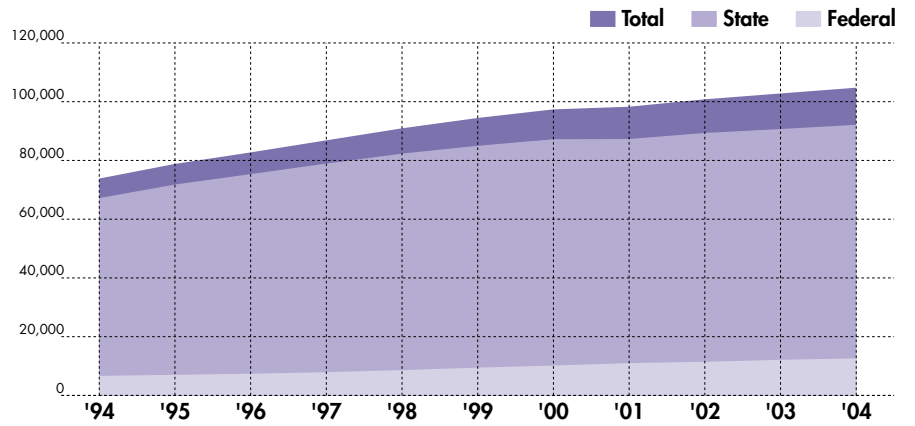


Data source: HUD Annual Homelessness Assessment 2004

## Incarceration

- ◆ In 2005, nearly 1.5 million people were incarcerated, the vast majority in state facilities. Approximately seven percent of prisoners have some form of mental illness.
- ◆ As incarceration rates have increased, so have the number of prisoners with mental illness. In 2004, nearly 105,000 Americans with serious and persistent mental illness (SPMI) were in jail or prison.

Prisoners with SPMI under state or federal jurisdiction at year end



Data source: Bureau of Justice Statistics  
National Prisoner Statistics, 2004