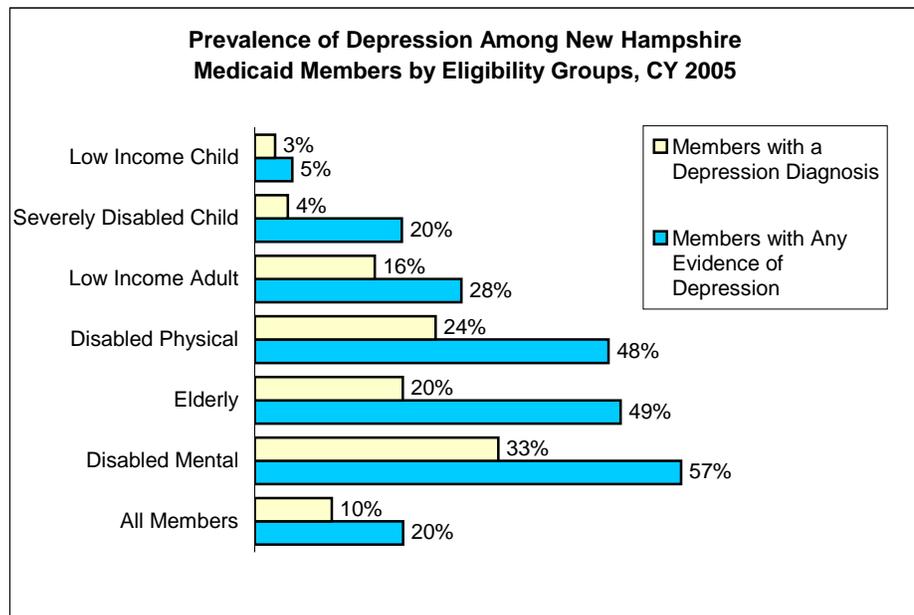




Depression is one of the most common psychological problems and a leading cause of disability. In the United States, over 17 million adults and 2 million adolescents report having a major depressive episode annually. Once identified, depression is treatable; however, over two thirds of people with depression do not get proper treatment.

Depression can interact with other medical and mental health conditions in many ways. Medical illness can cause or aggravate depression through the direct biologic effects of medical conditions, medications and treatments, or through the distress of dealing with a prognosis, pain, or incapacity. Conversely, depression can significantly increase the overall burden of illness in patients with chronic medical conditions and it can diminish a patient's ability or will to adhere to a doctor's treatment recommendations. Studies have shown a 50 to 100% increase in health service use and costs for individuals with chronic medical conditions and depression.

had some evidence of depression – 10% identified by diagnosis and another 10% identified by antidepressant use. Members with depression receive treatment, primarily use of antidepressants; however, the majority also see a mental health specialist. Members with depression have substantially higher payments and utilization than members with no evidence of depression. The majority of members with depression have other chronic or comorbid conditions. For members with chronic conditions and depression, a two-fold increase in payments was observed.



This study profiled Medicaid members' health care experience during the period of January 1, 2005 – December 31, 2005. Two methods were used to identify members with depression: a claim with a diagnosis of depression and or use of an antidepressant medication.

**Overall Findings**

Depression is common among all members of NH Medicaid and is not limited to individuals with a mental health disability or individuals traditionally served by behavioral health programs. Overall, 20% of NH Medicaid members

**Prevalence**

Prevalence of depression varied by gender, age and eligibility group. Depression was more prevalent in women than men, with 25% of women and 14% of men having any evidence of depression. The highest percentages observed in females was in their early fifties (62%) and males in their early forties (42%). Depression was also more prevalent in members with a disability due to mental illness (57%). Although low-income children had the lowest prevalence rate of depression, (5%) 57% or 62,000 of NH Medicaid members are children (78,230), thus

3949 members or 15% of those with evidence of depression, were children.

### **Treatment**

Most Medicaid members with evidence of depression received treatment for depression; 88% percent received antidepressant therapy and 61% were also seen by a mental health therapist. Only 3% of members (603) had no evidence of treatment based on the Medicaid claims data.

### **Cost and Use**

Medicaid members with evidence of depression have substantially higher costs than those without depression. While some of this difference might be expected based on the treatment for the disease (i.e., medication and therapy costs), in CY2005, members with evidence of depression averaged 3.8 times higher payments than members with no evidence. Hospitalization rates were 4.7 times higher for members with depression, than those without depression.

Use of the emergency room was 2.5 times the rate for those with depression than for those without. Of hospitalizations related to mental illness, 91% were for members with evidence of depression.

### **Comorbidity**

In addition Medicaid members with depression and other comorbid medical or mental health conditions (60% with any evidence of depression) had substantially higher costs than members with the same comorbid condition without depression. A two-fold increase in payments was observed in members with a comorbid condition when evidence of depression was also present. Those with chronic disease conditions such as congestive heart failure, diabetes, and chronic pulmonary diseases had payment rates ranging from 1.5 to 2.8 times higher when the member had evidence of depression.

### **Limitations and Next Steps**

Claims and eligibility data are constructed primarily for administrative purposes, which poses some limitations. Other information, especially diagnoses, may be under-reported. Additionally many members are covered by other third parties, in particular those who are dually eligible for both Medicare and Medicaid, (although their Medicaid experience is fully represented, these members will have limited claims experience from other parties and may be under-reported in this analysis).

Understanding key drivers for the increased use of services and payments for members with depression particularly those with other comorbid conditions would provide potential opportunities for improvement. Similarly, it would be useful to understand the extent to which depression contributes to higher costs or the extent that costly comorbid conditions contribute to depression.

Greater understanding and identification of improvement opportunities may be gained through the exploration of the impact on costs of Medicaid funding of behavioral health care compared with acute and long-term care.

#### **About the New Hampshire Comprehensive Health Care Information System**

The New Hampshire Comprehensive Health Care Information System (NH CHIS) is a joint project between the New Hampshire Department of Health and Human Services (NH DHHS) and the New Hampshire Insurance Department (NHID). The NH CHIS was created by state statute (RSA 420-G:11-a) to make health care data "available as a resource for insurers, employers, providers, purchasers of health care, and state agencies to continuously review health care utilization, expenditures, and performance in New Hampshire and to enhance the ability of New Hampshire consumers and employers to make informed and cost-effective health care choices." For more information about the CHIS please visit [www.nhchis.org](http://www.nhchis.org) or contact Andrew Chalsma, NH DHHS, [achalsma@dhhs.state.nh.us](mailto:achalsma@dhhs.state.nh.us).