

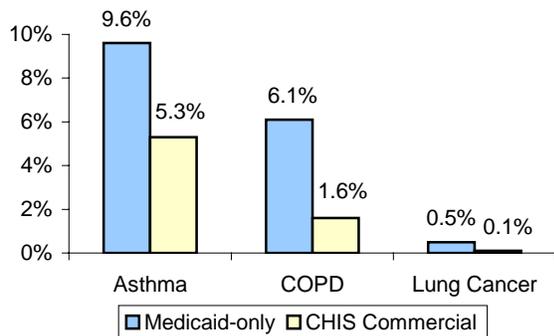


Chronic respiratory diseases are major contributors to mortality, disability, and medical cost. While death rates nationally for other major diseases (heart, cancer, and stroke) have declined, chronic respiratory disease death rates increased by 53% between 1980 and 2003.

This report provides a detailed evaluation of the prevalence, utilization, and costs associated with chronic respiratory diseases, together with geographic variation observed in this study. The study used New Hampshire (NH) Medicaid and Comprehensive Health Care Information System (CHIS) commercial administrative eligibility and claims data for services rendered during calendar year (CY) 2005 to evaluate three chronic respiratory diseases: asthma, chronic obstructive pulmonary disease (COPD), and lung cancer.

Medicaid members who are also eligible for Medicare are referred to as dual eligibles. Because Medicare is the primary payer and Medicaid does not cover all of the costs for these members, their claims experience is incomplete. In addition, the commercial group comprises a relatively small number of elderly and disabled members. Therefore, while the complete report includes findings for both the dual eligible and Medicaid-only populations, this Brief focuses on Medicaid-only members.

Prevalence of Chronic Respiratory Diseases in New Hampshire, CY2005



Asthma

Medicaid-only members (those not also enrolled in Medicare) had an asthma prevalence rate (9.6%) that was 1.8 times the CHIS commercial member rate (5.3%). For children age 0-18, the Medicaid-only prevalence rate (8.5%) was 1.3 times higher than the CHIS commercial rate (6.3%). Among adults age 19-

64, the Medicaid-only prevalence rate (13.4%) was 2.7 times the CHIS commercial rate (4.9%). For every age group the Medicaid-only prevalence rate was higher than the CHIS commercial prevalence rate.

About half of the NH Medicaid members with asthma were children, while only one-third of CHIS commercial members with asthma were children. This variation is likely due to the fact that NH Medicaid comprises a much larger percentage of children than the commercial population.

The highest rate of asthma prevalence was found in the physically disabled eligibility group (17%).

COPD

During CY2005, Medicaid-only members had a COPD prevalence rate (6.1%) that was 3.8 times the CHIS commercial member rate (1.6%). Twice as many females as males in Medicaid were diagnosed with COPD, whereas the gender breakdown among the CHIS commercial group was nearly equal. The highest rate of COPD prevalence in Medicaid-only involved the physically disabled (18.5%) and elderly (16.9%).

Lung Cancer

The prevalence rate of lung cancer (0.5%) in Medicaid-only was five times the rate in CHIS commercial (0.1%). Prevalence rates of lung cancer increased with age for both the Medicaid and CHIS commercial populations.

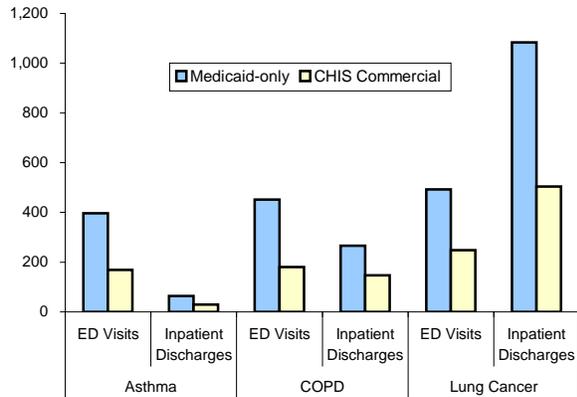
There were more Medicaid-only females (55) with lung cancer than males (40), but the prevalence rate was three times higher for males (0.9%) compared to females (0.3%). The highest prevalence of lung cancer was among the physically disabled (2.1%) and elderly (0.9%).

Utilization and Costs

Standardization for age differences was made in the comparison of Medicaid to commercial population rates. For all three chronic respiratory diseases studied, the age-standardized Medicaid-only outpatient Emergency Department (ED) and inpatient use rates were double the CHIS commercial rates. Office-clinic use for Medicaid-only members with asthma was 5% lower than commercial, while Medicaid-only office-clinic use for COPD and lung cancer was 17% and 26% higher, respectively, than the CHIS commercial group.

Despite relatively lower payments per service in Medicaid compared to CHIS commercial, the age-standardized payment rates per member per month for Medicaid-only were higher for members with asthma or COPD compared to CHIS commercial. Higher hospital use rates for ED or inpatient services among Medicaid members is a factor in these differences.

Age-Standardized Respiratory Disease Utilization, per 1,000 members, CY2005



It should be noted that these payment rates are based only on those claims involving a respiratory diagnosis or respiratory medications. Members with chronic respiratory diseases often have multiple coexisting conditions that contribute to utilization and payments. Medicaid members with COPD, lung cancer, and asthma had high prevalence rates of coexisting conditions (e.g., heart disease, diabetes, mental disorders) and a significant number resided in nursing facilities during the year. For example, Medicaid members with COPD incurred \$102 million in payments during CY2005, of which only \$16.4 million was specific to COPD, other respiratory diagnoses or respiratory medications. Coexisting conditions were less prevalent in the commercial population with these diseases.

Geographic Variation

Disease prevalence and utilization rates were evaluated by the location of the member’s residence. Medicaid prevalence rates of asthma and COPD were higher in northern and more rural New Hampshire regions compared to the southern part of the state. For members with asthma or COPD, a pattern of high outpatient ED

use was found in the northern and more rural New Hampshire regions compared to the southern border towns. This pattern was found in both the Medicaid and CHIS commercial populations (and is consistent with the prior NH CHIS study for CY2005 outpatient ED use).

Limitations

Claims and eligibility data are constructed primarily for administrative purposes, which poses some limitations. Other information, especially diagnoses, may be under-reported. Variances in provider or insurer claims coding, data processing, or reimbursement arrangements may also contribute to the variances shown in this report. Additionally, many members are covered by other third parties, in particular those who are dually eligible for both Medicare and Medicaid (while their Medicaid experience is fully represented, these members will have limited claims experience from other parties and may be under-reported in this analysis).

Conclusion

This study demonstrated that chronic respiratory diseases were much more prevalent in the NH Medicaid population than the commercial population, and that members with chronic respiratory diseases contribute significantly to utilization and costs. Medicaid outpatient ED and inpatient admissions were at higher rates than CHIS commercial. Finally, members with chronic respiratory diseases in Medicaid had complex medical problems as indicated by high rates of coexisting respiratory diseases, other serious medical conditions, and mental disorders.

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 or www.nh.gov/nhchis.