

Asthma in HUSKY A Recipients

Reports on asthma and asthma-related health care for children under age 21 who are enrolled in Connecticut's Medicaid program, HUSKY A, are prepared periodically by Connecticut Voices for Children (CVC). In this section, CVC's findings about asthma prevalence, health care utilization, and quality of asthma care for HUSKY A recipients for the year 2007, published in *Asthma and Asthma Related Health Care for Children Enrolled in HUSKY A: 2007* (Lee & Learned 2009), are discussed.

Methods

For 2007 data analyses, CVC researchers updated the method they had previously used for estimating asthma prevalence in order to improve precision and make findings comparable to those in other states that use Medicaid claims data to monitor asthma. Therefore, the measures generated for 2007 are not comparable to those from previous years. The CVC 2007 case definition of a child with asthma was any continuously enrolled child under age 21 who received *any care for a primary diagnosis of asthma or four or more prescriptions for medication used to control or treat asthma.*²⁴ A child with persistent asthma was defined as one who, within the current measurement year, had: at least one hospital admission; or at least one asthma ED visit; or at least four asthma outpatient visits plus at least two asthma medication prescriptions; or at least four prescriptions for asthma treatment/control (Table 13). The types of health care utilization among children with asthma for asthma-related care that were examined were: visits for ambulatory care; office or clinic visits; ED visits; and hospitalizations.

Table 13. 2007 Case Definitions Used for Estimation of Asthma and Persistent Asthma Prevalence Among HUSKY A Children

Child with asthma	Child with persistent asthma
<p>< 21 years old who was continuously enrolled in HUSKY A in 2007 plus: Any care for a primary diagnosis of asthma OR ≥ 4 prescriptions for asthma medications</p>	<p>< 21 years old who was continuously enrolled in HUSKY A in 2007 plus: ≥ 1 asthma hospital admission OR ≥ 1 asthma ED visit OR ≥ 4 asthma outpatient visits plus ≥ 2 prescriptions for asthma medications OR ≥ 4 prescriptions for asthma medications</p>

²⁴ For 2005 and 2006, the prevalence estimate included HUSKY A enrollees who received any care for a primary diagnosis of asthma or any prescriptions for asthma medication listed by the National Committee for Quality Assurance (NCQA) for managed-care performance monitoring.

Asthma Prevalence in HUSKY A Recipients

In 2007, there were 160,227 persons less than 21 years old who were continuously enrolled in HUSKY A. Of these, 18,126 received health care for a primary diagnosis of asthma or had at least four prescriptions for asthma medication. Thus, the estimated prevalence of asthma in the HUSKY A child population for 2007 was 11.3%. Of the children who met the case definition for asthma, 12,855 (71%) also met the case definition for a child with persistent asthma. Thus, the estimated prevalence of persistent asthma in the Connecticut Medicaid population under 21 years old was 8% in 2007.

Asthma prevalence in 2007 was higher among males (12.8%) than females (9.8%). Asthma was most prevalent among children 1 - 5 years old (12.7%) compared to children < 1 year old (6.1%), 6 - 14 year olds (11.8%), and 15 - 20 year olds (8.5%). With respect to race/ethnicity, asthma prevalence was highest among Hispanics (12.1%) compared to non-Hispanic Blacks (11.5%), non-Hispanic Whites (10.8%), and non-Hispanic Others (8.4%). Children of Spanish-speaking households were more likely than children of English- or other primary language- speaking households to have received asthma care or medication (risk ratio [RR] = 1.13 [95% confidence interval[CI]: 1.10, 1.17]). Children living in Bridgeport were more likely than children in other Connecticut towns to have had asthma care or medication in 2007 (RR = 1.10 [95%CI: 1.05, 1.15]).

Health Care Utilization and Quality of Asthma Care

In 2007, 66.4% of children with asthma enrolled in HUSKY A made an average of 3.8 office or clinic visits for asthma care, 41.3% had more than one asthma office or clinic visit, and 15.1% had asthma ED visits. The average number of ED visits per child was 1.3, with one in five children who received ED care making two or more visits. Of the 2,741 HUSKY A enrollees under age 21 who received emergency care for asthma in 2007, fewer than one in four (24.4%) received follow-up care within two weeks of their ED visit in accordance with asthma management guidelines. On at least one occasion, 467 (2.6%) children with asthma were hospitalized in 2007 for an average of 1.3 hospitalizations per child. Among children who were ever hospitalized for asthma, 18% were hospitalized more than once. Half (52.0%) of children hospitalized for asthma or an asthma-related diagnosis received follow-up care within the recommended two weeks of discharge.

With respect to the use of long-term or quick relief asthma medications, among HUSKY A children with asthma who had at least one encounter with the healthcare system in 2007 (i.e., clinic or office visit, ED visit, or hospitalization), 12,027 (66.4%) had at least four prescriptions for asthma medication. Among the HUSKY A children who met the case definition for a child with asthma but had no healthcare system encounter for asthma in 2007, 4,861 (26.8%) had at least four prescriptions for asthma medication. With regard to long-term asthma control medication use, among the 12,855 children who met the case definition for persistent asthma, 82.1% of prescriptions for preferred

therapies were filled for 5 - 17 year olds, in accordance with National Committee for Quality Assurance guidelines.

Table 14. Estimated Asthma Prevalence and Asthma Care Among HUSKY A Children, 2007

Continuously enrolled children < 21 years old	160,227
No. individuals meeting case definition for a child with asthma	18,126
<u>Estimated asthma prevalence</u>	
Asthma (overall)	11.3%
Persistent asthma	8.0%
<u>Characteristics of children with asthma</u>	
<i>Sex</i>	
Male	12.8%
Female	9.8%
<i>Age Group</i>	
Children < 1 year old	6.1%
Children 1 – 5 years old	12.7%
Children 6 –14 years old	11.8%
Children 15 – 20 years old	8.5%
<i>Race</i>	
Black	11.5%
White	10.8%
Hispanic	12.1%
Other	8.4%
<u>Measures of health care utilization and quality of asthma care among children with asthma</u>	
Average number of office or clinic visits	3.8
Percent with any asthma visit who had > 1 visit	41.3%
Percent with any emergency care	15.1%
Average number of ED visits	1.3
Percent with follow up within two weeks after ED visit	24.4%
Percent ever hospitalized	2.6%
Average number of hospitalizations	1.3
Percent with follow-up within two weeks after hospital discharge	52.0%

Limitations

In 2007, the Connecticut Department of Social Services (DSS) directed the four managed care organizations (MCOs) that administered HUSKY A to use the National Provider Identifier (NPI), a ten-digit number that uniquely identifies health care providers. One MCO did not implement the NPI. As a result, 67% of the data from that MCO on client encounters with the healthcare system from September to December 2007 were not uploaded into the DSS encounter database. CVC researchers estimated for that MCO, the monthly average number of encounters for the last four months of 2007 was reduced by 82% for inpatient care, 81% for clinic visits, and 55% for office visits. Please refer to the full CVC report for additional statements about the 2007 Medicaid data quality issues and limitations.