CONNECTICUT VOICES FOR CHILDREN

Asthma and Asthma-Related Health Care for Children Enrolled in HUSKY A: 2006

Executive Summary

April 2008

Purpose

To describe the prevalence of asthma and asthma-related health care among children enrolled in HUSKY A and to identify trends and factors associated with access to care.

This report is the ninth annual report on asthma and asthma-related health care in HUSKY A (Medicaid managed care). [1]

Findings

There were 157,178 children under 21 who were continuously enrolled in HUSKY A in CY 2006.

Asthma prevalence: In 2006, 32,957 children (21%) received care for a primary diagnosis of asthma or a prescription for a medication used to treat asthma.[2] This rate is similar to the previous year (20%). Asthma prevalence in 2006 was associated with age, gender, race/ethnicity, primary language, and residence (Table 1). The prevalence of asthma was significantly higher among:

- Children under 6, compared to all older children;
- Boys, compared to girls;
- Hispanic children, compared to African-American or White children;
- Spanish-speaking children, compared to English-speaking or other language-speaking children;
- Children living in Hartford compared with children living in other towns.

Among all continuously enrolled children, 7,843 (5%) had persistent asthma, down from the previous year (7%).[3] The number of children with persistent asthma represents nearly 24 percent of children with any asthma care (32,957).

Asthma-related health care utilization: In 2006, children with asthma made an average of three office or clinic visits for asthma care (Table 2). Nearly one in five children (18%) with any outpatient visits made more than one visit, as recommended by national guidelines for asthma care.[4] Among children with asthma, 3,208 children (nearly 10%) made 4,257 visits for emergency care (average 1.3 per child); 25 percent of them were seen in the emergency room more than once. The emergency care utilization rate among asthmatic children who changed health plans was higher than the rate for children who did not change plans (12% and nearly 10%, respectively).

In 2006, 553 children (nearly 2% of those with asthma) were hospitalized at least once for asthma.

Table 1. Children with Treatment for Asthma

		CY 2006 (n=157,178)	
		Number	Percent
Total		32,957	21.0%
Gender:	Female	13,402	18.8%
	Male	16,029	22.4%*
Age (years):	<1	369	23.4%*
	1-5	11,248	24.3%*
	6-14	15,747	20.7%
	15-20	5,593	16.9%
Race/ethnicity:			
	African-American	7,118	19.8%
	White	10,080	19.5%
	Hispanic	11,658	22.6%*
	Other	575	15.7%
Residence:			
	Bridgeport	3,231	21.4%
	Hartford	3,977	22.2%*
	New Haven	2,622	17.6%
	Other towns	23,127	21.2%
Language:	English	27,891	20.7%
	Spanish	3,095	23.5%*
	Other languages	203	20.7%
	Unknown	1,768	21.4%
Health Plan:	BlueCare	13,914	21.8%
	CHNCT	5,566	20.6%
	Health Net	8,393	20.2%
	Preferred One	2,993	19.4%
	Changed Plans	2,091	22.6%

*Indicates significantly higher rate ($p<0.05$) compared to all other children.

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Table 2. Asthma health care utilization

Office/clinic visits (average)	3.0
Children with asthma who:	
Received any emergency care	9.7%
Were hospitalized at least once	1.7%

Follow-up after emergency care and hospitalization: Fewer than one in four children (23%) who had emergency care for asthma in 2006 received follow-up care within 2 weeks of the visit, as recommended. Just over half of children hospitalized for asthma (52%) were seen in the 2 weeks following discharge. Rates varied by managed care plan, with Preferred One's rates lower than the program average for follow-up after an ED visit and hospital discharge (Table 3).

Preferred Medications: Among children with persistent asthma, 83% filled prescriptions for long-term control medications.[5] Among health plans, this rate was lowest for Preferred One (78%) and highest for HealthNet (86%).

The rates for children 5 to 9 (88%) and 10 to 17 (87%) compared favorably to rates for Medicaid managed care plans nationwide (90% and 87%, respectively).[6]

Table 3. Follow-up Treatment for Asthma

	Seen within 2 weeks [a]	
	After emergency visit	**After hospital discharge**
Total	23.1%	51.5%
BlueCare	23.5%	46.7%
CHNCT	23.5%	64.1%
Health Net	26.1%	52.3%
Preferred One	17.7%	47.5%
Changed plans	20.3%	46.5%

[a] Office or clinic visits for asthma or related diagnosis

Conclusions

- One in five children in HUSKY A received health care for asthma in 2006;
- The proportion of children who received timely follow-up care after emergency visits or hospitalization was well below treatment guidelines;
- Most but not all children with persistent asthma received appropriate medications for long-term control of symptoms.

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[1] Connecticut Voices for Children is a non-profit organization that conducts research and policy analysis on children's issues. This report on asthma was prepared under a contract between the Connecticut Department of Social Services and the Hartford Foundation for Public Giving, with a grant from the Hartford Foundation to Connecticut Voices. Connecticut Voices for Children contracts with MAXIMUS, Inc. for data management and data analysis. This report was prepared by Mary Alice Lee, Ph.D., Karen M. Sautter, M.P.H., and Amanda Learned, B.A. This publication does not express the views of the Department or the State of Connecticut. The views and opinions expressed are those of the authors. The detailed report and earlier reports are available online at www.ctkidslink.org.

[2] **Estimating asthma prevalence**: Using HUSKY A enrollment data, children under 21 years of age who were continuously enrolled from January 1 through December 31, 2006, were identified. Encounter data were searched for records corresponding to outpatient, inpatient, and emergency care with a primary diagnosis of asthma (ICD-9-CM code 493.0-493.9). HUSKY pharmacy data were searched for prescriptions for any of one of the medications on a list developed by the National Committee for Quality Assurance (NCQA) for managed care plan performance monitoring. The prevalence of pediatric asthma was estimated by determining the proportion of all continuously enrolled children who received any care for a primary diagnosis of asthma or any prescriptions for asthma medication.

[3] **Determining which children had persistent asthma**: Children with persistent asthma were those with: (1) had at least one hospital admission for asthma; or (2) had at least one emergency visit for asthma; or (3) had at least four outpatient visits and two or more prescriptions for asthma; or (4) received at least four prescriptions for asthma. The National Committee for Quality Assurance developed this definition for measuring managed care plan performance.

[4] National Heart, Lung, and Blood Institute. Guidelines for diagnosis and management of asthma. Bethesda, MD: NHLBI, 2007. Available at: http://www.nhlbi.nih.gov/guidelines/asthma/.

[5] **Determining whether children with persistent asthma had appropriate medication**: The number of children with persistent asthma who filled prescriptions for long-term control medications (numerator) was compared to the total number of children with persistent asthma, including those who with long-term and short-acting medications (denominator). Methods developed by the National Committee for Quality Assurance for measuring managed care plan performance were modified for this study (see detailed report).

[6] National Committee for Quality Assurance. The state of health care quality 2007. HEDIS measures of care. Washington, DC: NCQA, 2007. Available at: http://www.ncqa.org/Portals/0/Publications/Resource%20Library/SOHC/SOHC_07.pdf.