CONNECTICUT VOICES FOR CHILDREN

Children's Health Care in the HUSKY Program: Impact of Converting from Risk-Based Managed Care to an Administered Fee-for-Service Medicaid Program

June 2015

Key Findings

In 2012, Connecticut's HUSKY Program for children and families (Medicaid and CHIP) changed from a risk-based managed care program with three participating health plans to a single, administered fee-for-service program. After a competitive selection process, the Connecticut Department of Social Services contracted for administrative services with Community Health Network, Inc., a not-for-profit health plan, and began paying providers on a fee-for-service basis according to the Medicaid fee schedule and other payment methodologies. The administrative services include enhanced customer service, enhanced support for providers, service coordination and intensive care management, as needed, and Early and Periodic Screening, Diagnostic and Treatment (EPSDT) requirements. This model has also been adopted for behavioral health services (effective January 2006) and dental services (effective September 2008).

In keeping with the charge to monitor HUSKY Program performance as it relates to children's health services, Connecticut Voices for Children conducted a descriptive study of utilization before and after the program changes. Overall, enrollment increased dramatically over the seven-year period and the percentage of children who were enrolled for a full 12 months increased steadily. Changes in administrative and fiscal arrangements for the program had a modest impact thus far on trends in children's medical care utilization in 2012 and 2013, compared with 2007-2011. Specifically, we found that:

- **Primary care:** In 2013, 90 percent of children had at least one ambulatory care visit with providers who submitted claims for reimbursement. Over time, the distribution across primary care visits shifted toward well-child care, with fewer children having had problem-oriented care only.

- **Well-child care:** In 2013, two of every three children (66.2%) had well-child care, up from the five-year average in the final years of risk-based managed care (60.6%). Since 2007, the year-to-year increases were steady, albeit modest. Over the entire period, young children ages 2 to 5 were most likely to have well-child care, compared to children in other age groups. Hispanic children were most likely to have had well-child care, although racial/ethnic-specific rate differences were far smaller than age-related differences.

- **Emergency care:** In 2013, nearly 39 percent of children had at least one emergency room visit, essentially unchanged from the five-year average under risk-based managed care (38.2%) but down slightly from the highest rate reported in recent years (41.6% in 2009). Among children with any emergency care, 36 percent visited the emergency room in 2013 for a condition that could have been adverted or treated in a clinic or office setting, a percentage that has remained remarkably unchanged over the years. Young children under age five were more likely than older children to use the emergency room for any diagnosis and for care of ambulatory care-sensitive conditions. Similarly, Hispanic children had higher emergency care rates than children of other racial/ethnic groups. Age- and race/ethnicity- related differences are essentially unchanged from the differences that existed in 2011 and earlier under managed care.

The impact of additional program enhancements may not have been fully realized in the first two years since these administrative and financing changes. In addition, reimbursement for primary care increased in 2014 under the Affordable Care Act. The Department and its contractors should continue to track trends in children's health care utilization, with additional studies of high emergency care utilization rates.

INTRODUCTION

Beginning in 2006, Connecticut's HUSKY Program (Medicaid or HUSKY A for families; HUSKY B or CHIP for uninsured children) was converted from a risk-based managed care program to administered fee-for-service programs for behavioral health care (2006), dental care (2008), and medical care (2012). Under managed care, Connecticut had contracted with as many as eleven managed care companies that were paid per-member-per month for all care (medical, dental, behavioral health, and pharmacy), ancillary services (transportation, care coordination, and other member services) and plan administration for children, parents and pregnant women. In 2012, the move away from Medicaid managed care was completed when Connecticut contracted for medical administrative services only with Community Health Network of Connecticut, a not-for-profit health plan with many years' experience in the HUSKY Program. These administrative services include member support, general and targeted outreach, care coordination and intensive care management as needed, and provider network development. Medicaid-enrolled providers are paid fee-for-service according to Medicaid fee schedules and Connecticut Department of Social Services' payment methodologies for reimbursement.

In 2012, the HUSKY Program also expanded to cover administrative services for elderly and disabled adults in Medicaid (HUSKY C) and low income adults without dependents (HUSKY D). Previously, their care had been paid fee-for-service by Medicaid but was not managed or supported program-wide. The new administrative services organization was charged with identifying clients with intensive care needs and providing assistance with care coordination and support services.

This brief examines the impact of program changes on utilization of health care services by children in HUSKY A (Medicaid). Health care services utilization in 2012 and 2013 (under administered fee-for-service) are compared to enrollment and utilization trends for 2007 through 2011(under risk-based managed care) to determine if program changes are suggestive of changes in access to preventive care (well-child care) and emergency services. We describe trends by age and racial/ethnic group over time before and after the end of managed care of medical services. Significant and meaningful differences detected in 2012 and 2013 utilization rates for children in HUSKY A may suggest ways in which the program has been successful and areas for monitoring program improvement in the future.

METHODS

Using a retrospective cohort design, we described enrollment and children's ambulatory care and emergency care utilization in the HUSKY Program by year for 2007 to 2011 (under risk-based managed care) and 2012 and 2013 (under administered fee-for-service program). Specifically, the focus of this report is on HUSKY A (Medicaid for children and families) because children in HUSKY A make up most of the children in the HUSKY Program (95% of all children who were enrolled on January 1, 2012, at the time of the program transition; just 5 percent were enrolled in HUSKY B, Connecticut's separate CHIP program).[1] Care for children in HUSKY A is delivered at no cost to the families and is based on federal requirements under Medicaid's Early and Periodic Screening, Diagnostic and Treatment (EPSDT) program and a periodicity schedule in accord with professional guidelines and adopted by the State of Connecticut.

As part of a larger state-funded project for independent performance monitoring, Connecticut Voices for Children obtains client-level data on children, parents, and pregnant women who are enrolled in Connecticut's HUSKY Program.[2] These data are analyzed for reporting on key indicators of program performance, including enrollment trends, utilization of preventive care (well-child visits, developmental screening, dental care), emergency care, and births to mothers with Medicaid coverage.

Using HUSKY A enrollment data obtained from the Connecticut Department of Social Services (DSS), we identified children ages 0 to 20 who were enrolled in the HUSKY program for one month or more between January

1 and December 31 of each year. For context, we described enrollment trends in terms of the percentages of ever-enrolled children who were continuously enrolled for 12 months in the calendar year.

Using HUSKY A encounter data obtained from the participating managed care plans and compiled by the Connecticut Department of Social Services, we searched for records corresponding to ambulatory care and emergency care received by continuously enrolled children in 2007 to 2011.[3] Likewise, we obtained HUSKY A claims data and searched for services obtained in 2012 and 2013. Encounter records and claims were searched for selected procedure codes corresponding to health services indicative of access to primary care (annual routine well-child visits for children 2 to 19 and problem-oriented visits for acute or chronic conditions).[4] We also searched for records indicating that children obtained emergency care in any year 2007 through 2013.[5] The methods used to determine utilization rates are the same as those used in other Connecticut Voices reports on utilization of ambulatory, dental, and emergency care.

Health services utilization was described by age (as of 12/31) and by race/ethnicity (self-reported on applications for coverage). The results are shown in terms of unadjusted utilization rates, calculated by comparing the numbers of children with care to the numbers who were continuously enrolled during the time period. Utilization rates are reported for any ambulatory care, well-child care, emergency department care, and emergency department care for conditions which could have been prevented by other ambulatory care (Ambulatory Care Sensitive Conditions, or ACSC). Utilization rates are shown graphically, by age and by race/ethnicity, over time.

These analyses are focused on children with care and not on services. We do not report on utilization rates for ever-enrolled children nor do we report counts for all services delivered in the one-year periods. Service utilization is not reported in terms of cost or trends in program spending. Utilization rates are based on individuals who were continuously enrolled for one year and received care. These individuals may not be representative of all those who were ever enrolled that year, including those who experienced gaps or lost coverage. No longitudinal analyses were conducted for utilization by individual children who may have been enrolled for more than one year at a time. No results are reported for children in HUSKY B or those who changed between HUSKY A and HUSKY B in any one-year period.

Data were disaggregated by age, and in order to maintain consistency with previous Connecticut Voices for Children reports on ambulatory, emergency, and dental care, different age groupings are used for each respective type of care.[6] As a result, enrollment and utilization data are not comparable across care types (e.g. this report should not be used to compare dental utilization from other reports to emergency care utilization). Data were also disaggregated by race/ethnicity.[7] The results are reported in terms of unadjusted utilization rates, calculated by comparing the numbers of children or parents with care to the numbers who were continuously enrolled for all 12 months during the period. Differences in utilization rates associated with race/ethnicity and age over time are shown graphically for children in HUSKY A.

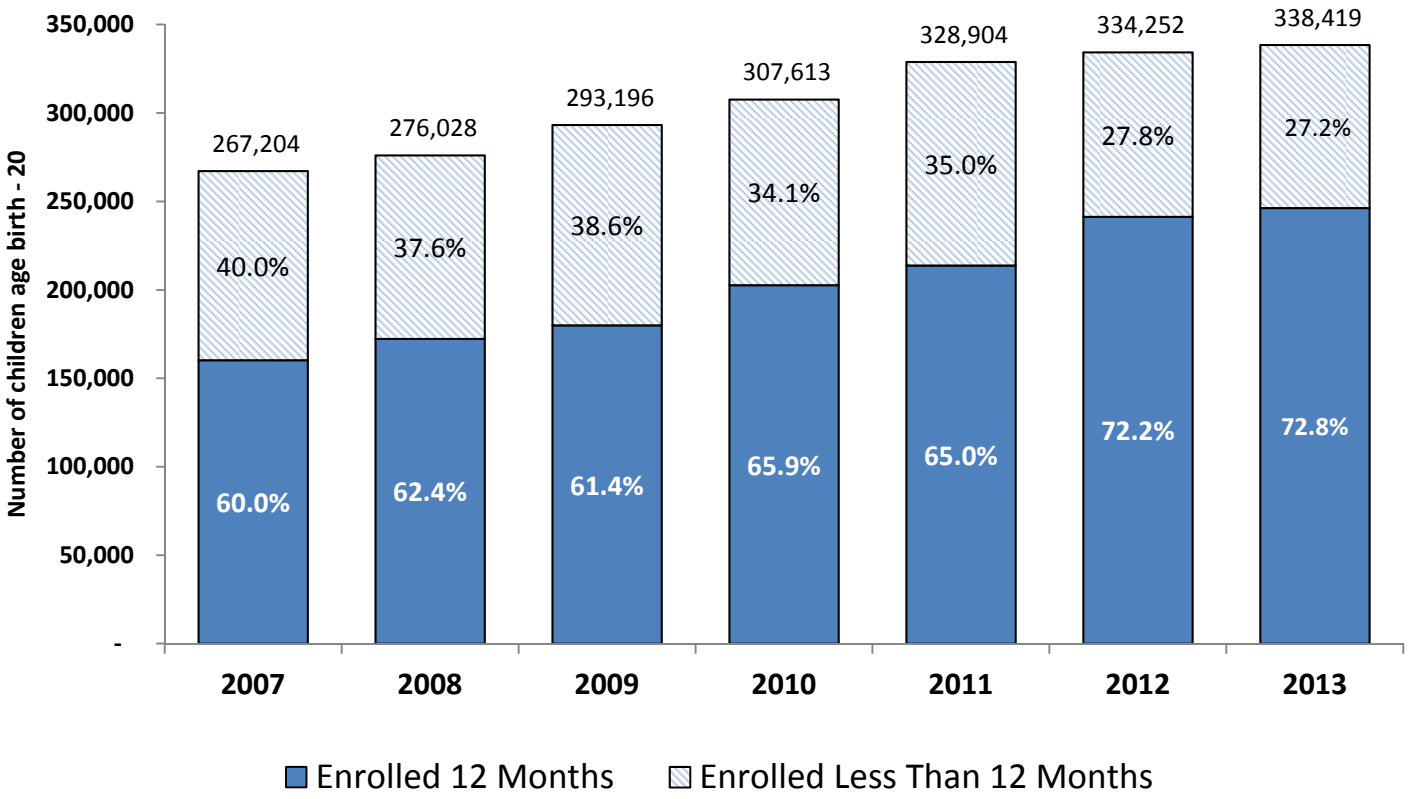
The findings are subject to certain limitations associated with secondary analysis of administrative data and availability of data for this study: The encounter and claims datasets are checked systematically against historical data for total record volume and records per enrollee; however, we do not conduct any other more formal audit for completeness or accuracy. To the extent that the counts and rates reported herein might differ from counts and rates in other reports, the differences may be due to methods (i.e., continuously enrolled v. ever enrolled, calendar year v. federal fiscal year) and/or when and how the datasets were created by the Department for the respective analyses. It was not possible to determine which if any of the HUSKY enrollees in our sample had medical services that were covered by third party payers or delivered by providers who did not submit claims. We did not study health services utilization by adults in HUSKY A (parents, care taker relatives, and pregnant women) nor could we study health services utilization by adults in HUSKY C (elderly and/or disabled adults) or D (low income childless adults). Despite these limitations, the findings can provide state agency staff and contractors, policy makers, providers, foundations, and health advocates with data for assessing the effect of the end of risk-based managed care on the utilization of preventive care and emergency care by children in HUSKY A.

RESULTS

Enrollment

Analyses of changes in enrollment over time provide context for understanding how access to care has changed or not over time.[8] The number of children ages birth to 20 who were ever enrolled in HUSKY A over the course of the year increased steadily through the study period, from over 267,000 in 2007 to over 334,000 in 2012, and 338,000 in 2013 (Figure 1). The program grew by over 43,500 children (14.9%), compared to the five-year average in the last years of risk-based managed care. The percentage of children who were continuously enrolled for 12 months also increased steadily from a five-year average of 63 percent to over 72 percent in 2012 and 2013.

Figure 1: HUSKY A Enrollment, 2007-2013

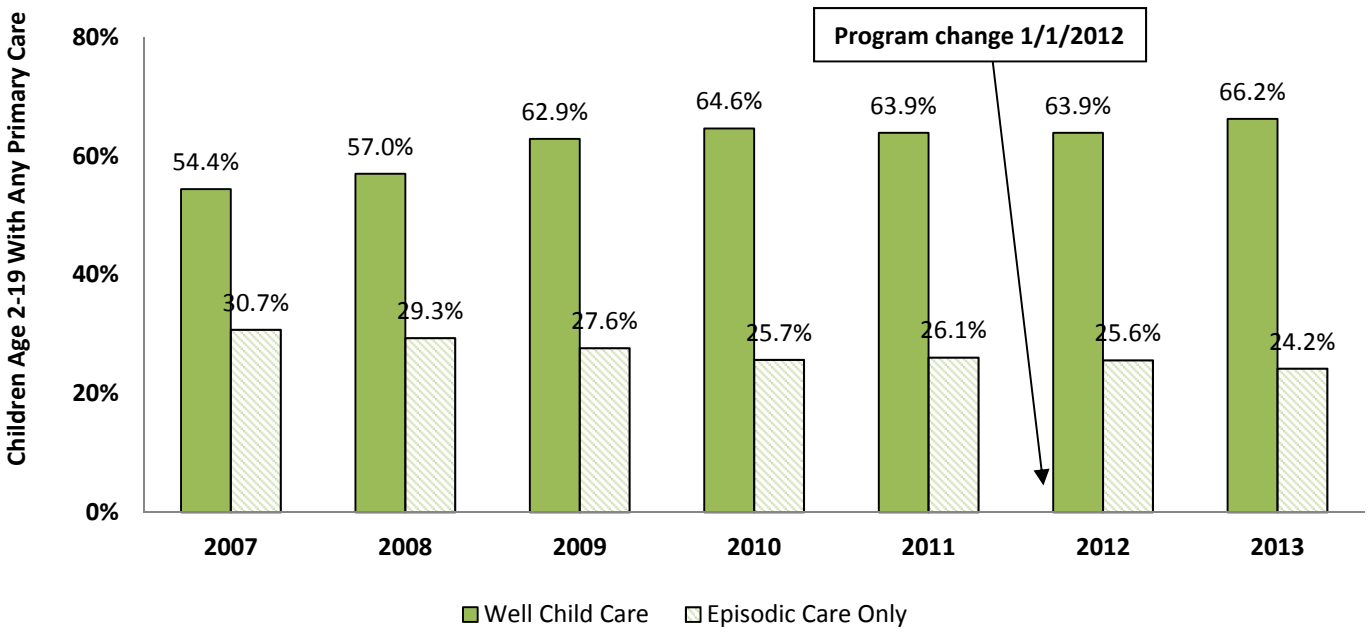


Source: Connecticut Voices for Children's analysis of HUSKY A Program data from the Connecticut Department of Social Services.

Ambulatory Care

In 2013, 90 percent of children had at least one ambulatory care visit for well-child care or problem-oriented care (Figure 2). Two-thirds of children (66.2%) had a well-child visit, an increase of more than five percentage points over the five-year average under risk-based managed care (60.6%). The percent of children with well-child care has increased by nearly 12 percentage points since 2007, but the increases have been modest in recent years. The percentage of children who received episodic ambulatory care only, i.e. problem-oriented visits without comprehensive preventive care, declined steadily over the study period from the five-year average of 28 percent. As a result, children with any well-child visits made up a greater share of children with ambulatory visits in 2013 than they did seven years before.

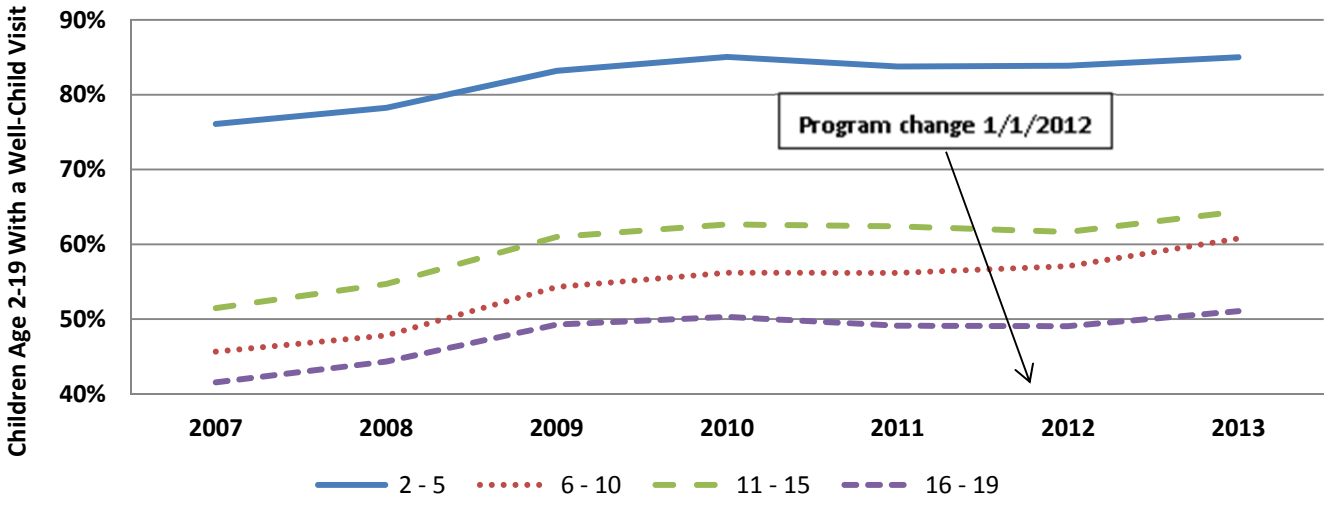
Figure 2: Primary Care, 2007-2013



Note: Figure shows percent of all children with primary care by type of care, including children with at least one well-child visit and children with no well-child visit who had at least one episodic visit for problem-oriented care. Some children with well-child care also had emergency care and some children with episodic care only may have received their episodic care in the emergency department.
Source: Connecticut Voices for Children's analysis of HUSKY A Program data from the Connecticut Department of Social Services.

Well-child care utilization rates increased modestly for all age groups, mainly before 2009 (Figure 3). Well-child care utilization was highest for the youngest children age 2 to 5 and tended to decline with age. As a result, utilization differences between age groups were essentially unchanged from 2011 to 2013.

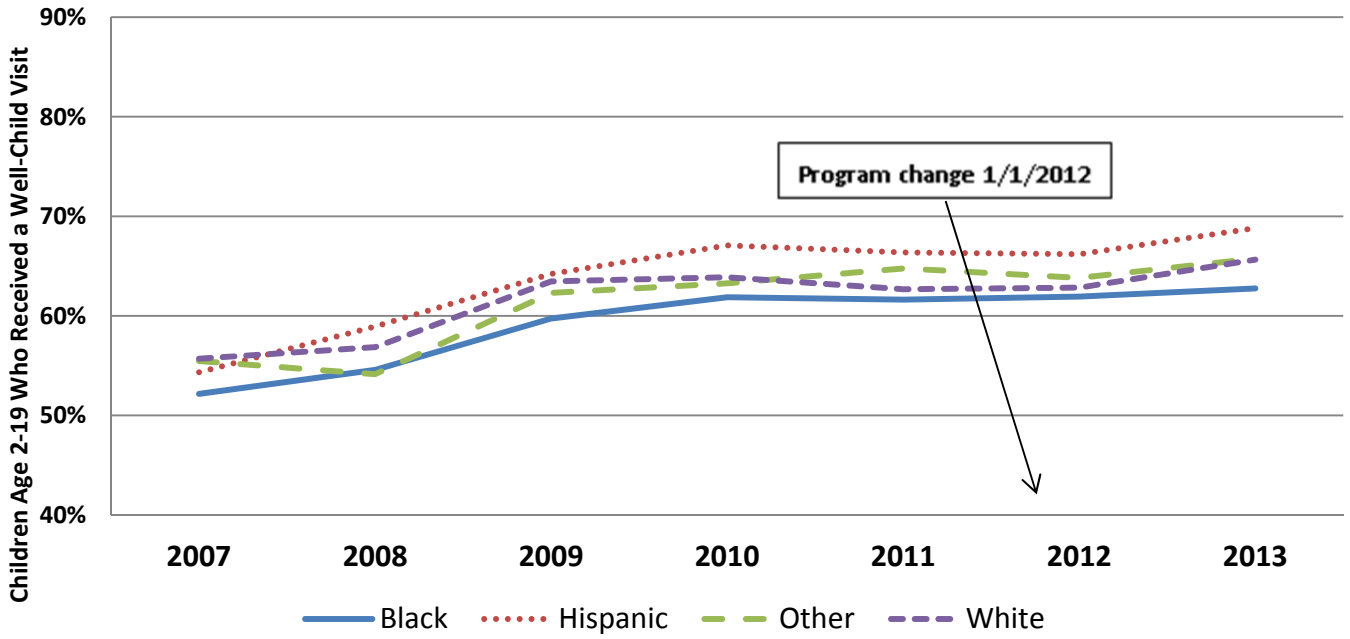
Figure 3: Well Child Care by Age, 2007-2013



Note: Scale is enlarged for better visualization of differences and trends associated with age.
Source: Connecticut Voices for Children's analysis of HUSKY A Program data from the Connecticut Department of Social Services.

In 2008, Hispanics surpassed Whites as the racial/ethnic group most likely to have had well-child visits and remained the most likely in both 2012 and 2013 (Figure 4). Blacks were least likely to receive well-child care. The magnitude of these differences remained small and essentially unchanged over recent years.

Figure 4: Well-Child Care by Race/Ethnicity, 2007-2013

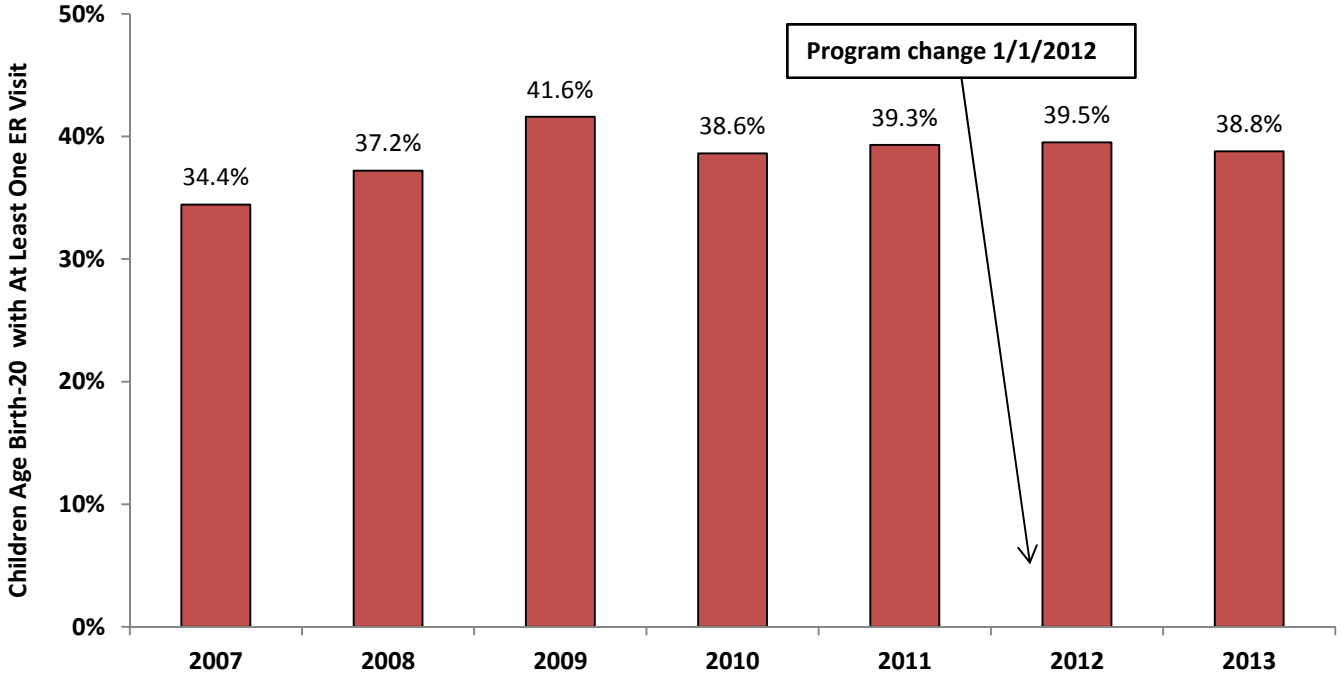


Note: Scale is enlarged for better visualization of differences and trends associated with race/ethnicity.
Source: Connecticut Voices for Children's analysis of HUSKY A Program data from the Connecticut Department of Social Services.

Emergency Care

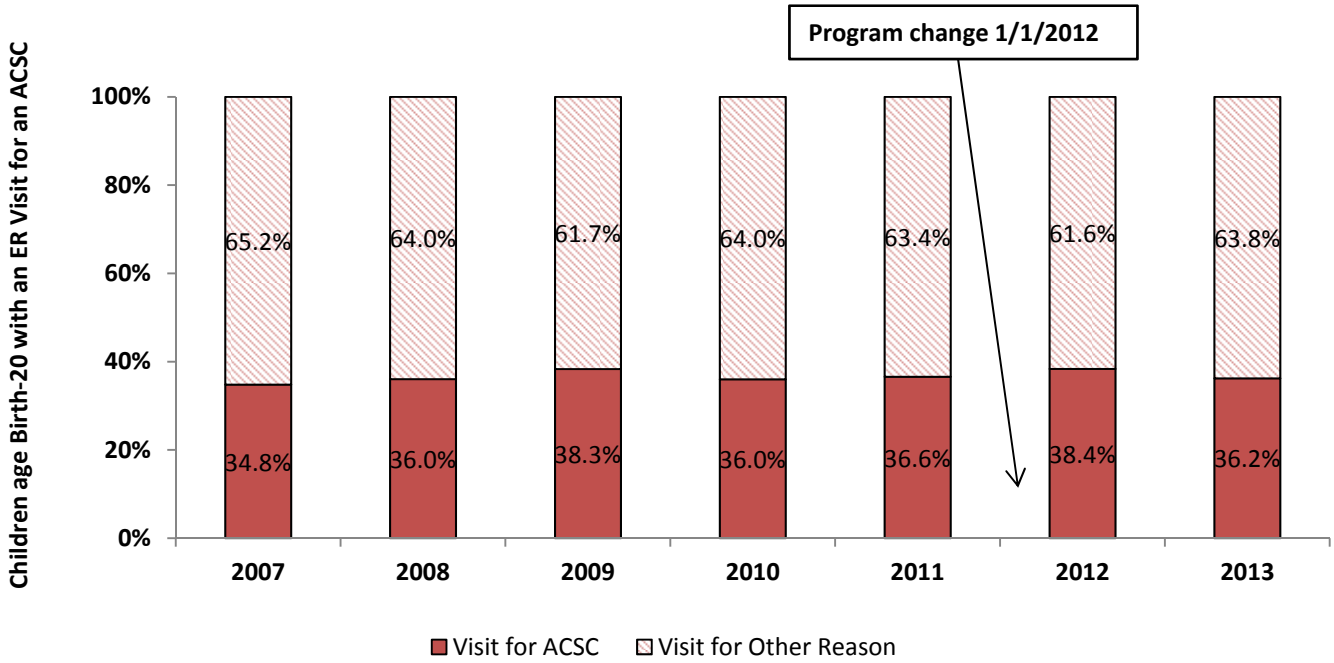
In 2013, nearly 39 percent of children had an emergency room visit, a rate essentially unchanged from the last five years of risk-based managed care (38.2% on average) (Figure 5). The rates in 2012 and 2013 are down from the peak in 2009. Nearly two of every five children who had any emergency care had an emergency department visit for an ambulatory care-sensitive condition (ACSC), a rate that was essentially the same throughout this period (Figure 6).

Figure 5: Emergency Care, 2007-2013



Source: Connecticut Voices for Children's analysis of HUSKY A Program data from the Connecticut Department of Social Services.

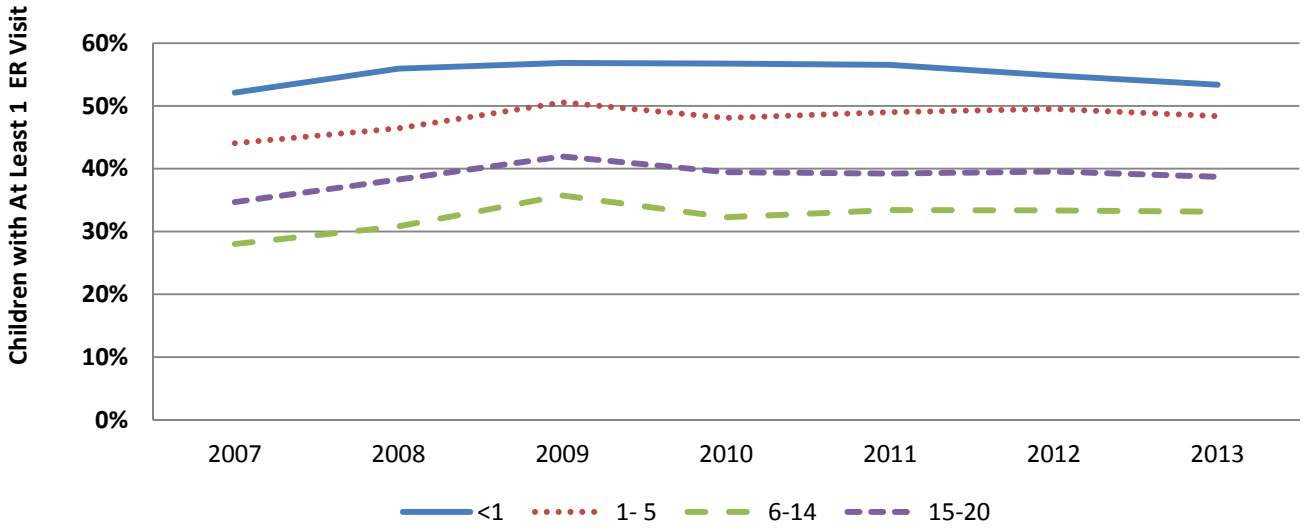
Figure 6: Emergency Care for Ambulatory Care Sensitive Conditions, 2007-2013



Source: Connecticut Voices for Children's analysis of HUSKY A Program data from the Connecticut Department of Social Services.

Children under age 1 were most likely to receive emergency care; children age 6-14 were least likely to receive emergency care. These utilization differences have remained relatively unchanged over time, although the gap between children under one and other young children may be narrowing (Figure 7).

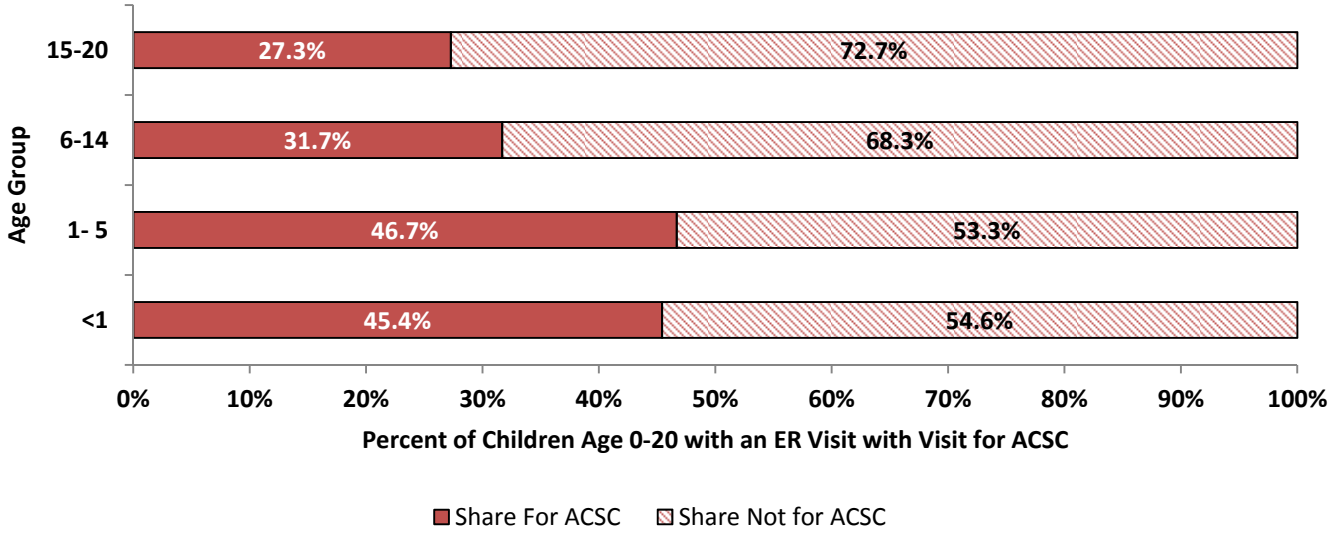
Figure 7: Emergency Care by Age, 2007-2013



Source: Connecticut Voices for Children's analysis of HUSKY A Program data from the Connecticut Department of Social Services.

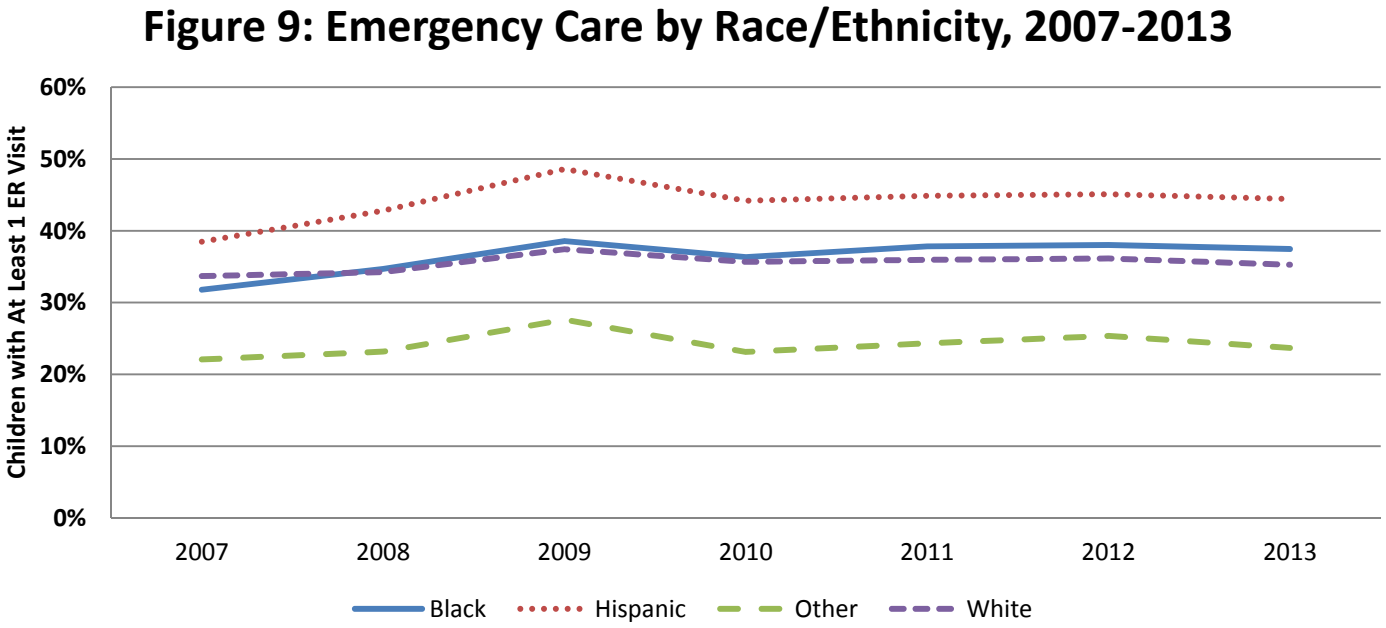
In 2013 (as in prior years), among children with at least one emergency room visit, young children under age 6 were more likely to have had a visit for an ambulatory care sensitive condition than children age 7 and older.

Figure 8: Emergency Care Utilization for Ambulatory Care Sensitive Conditions by Age, 2013



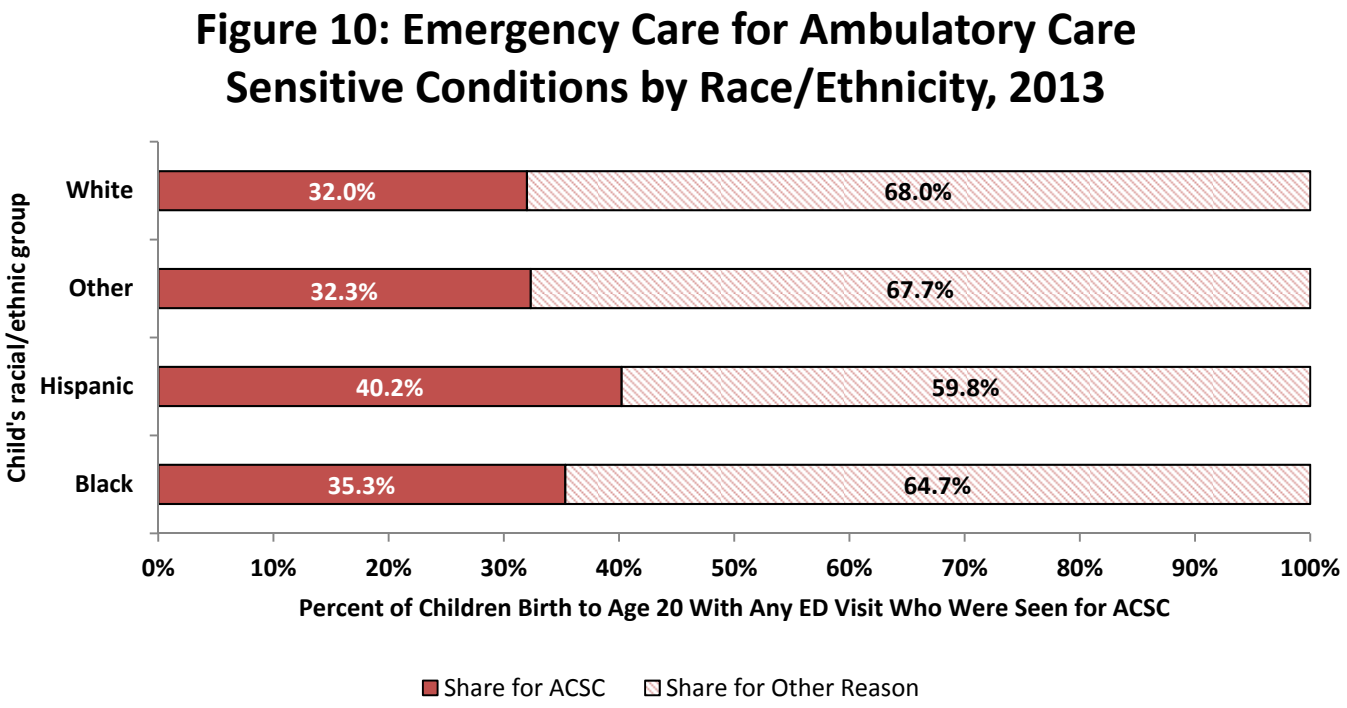
Source: Connecticut Voices for Children's analysis of HUSKY A Program data from the Connecticut Department of Social Services.

There were ethnic disparities in the use of emergency care that remained roughly constant over the seven year period from 2007 to 2013. Hispanic children were most likely to have received emergency care, and children of other racial/ethnic groups (not White, Black, or Hispanic) were least likely to have received emergency care (Figure 9).



Source: Connecticut Voices for Children's analysis of HUSKY A Program data from the Connecticut Department of Social Services.

Among children with at least one emergency room visit, Hispanic children were also most likely to have visited the emergency room for an ambulatory sensitive condition. As was the case with ambulatory care, race-related disparities tended to be smaller than age-related disparities.



Source: Connecticut Voices for Children's analysis of HUSKY A Program data from the Connecticut Department of Social Services.

DISCUSSION AND RECOMMENDATIONS

During the first two years following the transition from Medicaid managed care to an administered fee-for-service program, the number of children enrolled in the HUSKY program increased by nearly 10,000 children or about three percent. Of greater import is the fact that children enrolled in 2012 and 2013 were much more likely to remain continuously enrolled than children in enrolled in earlier years. This change provides important context for understanding trends in utilization. As we have previous reported, the longer children remain enrolled in the HUSKY Program, the greater the likelihood that they will have a well-child visit or other preventive services.[9] Since the program change in 2012, more children who are insured by the HUSKY program have access to care throughout the year.

Since the administrative program changes effective January 1, 2012, utilization of well child care and emergency care did not change remarkable compared with the last years of Medicaid managed care. With respect to preventive services, modest increases over time certainly trend in the right direction. However, emergency care utilization is essentially unchanged.

Use of the emergency room has not declined since the end of risk-based managed care. Over the years included in this report, about four of every ten children in HUSKY A have at least one emergency visit each year. Among all those with emergency care, about one in three seek emergency care for conditions that might have been averted or treated in primary care settings.

Connecticut's experience with similar administrative changes to the dental program shed some light on the potential for increasing access to care. As the result of a lawsuit settlement in 2008, dental services were "carved-out" of risk-based managed care for children and families. Provider reimbursement increased significantly to double or more the fees that had been paid for the most common child services. Provider recruitment intensified to the point that today, about two-thirds of all practicing dentists in Connecticut are active in the Medicaid provider network. Outreach and member services were enhanced. The result was that utilization of preventive services increased remarkably for both children and adults in the year following the program changes. Recent evidence based on utilization by continuously enrolled children and adults suggests that the rate of increased utilization may have stalled.[10]

In contrast, provider reimbursement for pediatric primary care services did not increase in 2012 or 2013. According to a Kaiser Family Foundation analysis of data collected by the Urban Institute, in 2012, Medicaid rates for primary care in Connecticut were on average only 71 percent of Medicare rates, a lower percentage than 25 other states (although higher than the national average).[11] While the reimbursement rate for pediatric primary care providers was higher than this statewide average across all types of care, it was still less than what Medicare would pay for the same procedure codes. Under provisions of the Affordable Care Act, pediatric primary care provider reimbursement rates increased to 100 percent of the Medicare rates in 2014, after this study period.

Initiatives to Increase Access to Primary Care and Reduce Emergency Care

Community Health Network (CHNCT), the State's contractor for administering the medical benefits in the HUSKY Program, has taken steps to improve access to primary care and reduce emergency department utilization. Most of these initiatives were implemented in 2013 or later, so the potential for improving care has yet to be realized. These initiatives address the various quality domains in health care—availability, accessibility, acceptability, accountability—and include:

- **Linking members with primary care providers:** Under managed care, members were assigned or defaulted to primary care providers, often with little evidence of any ongoing patient-provider relationship. In 2013, CHNCT began reviewing 15-month claims histories for members to determine who the member has seen for primary care. CHNCT follows up with members and providers to encourage establishing a

primary care home. Throughout the year, CHNCT targets outreach efforts to members without identified primary care providers, informing them about the benefits of an ongoing relationship with a provider and encouraging them to contact Members Services for help in designating a provider of their choice. As described by CHNCT staff, attribution is "a living, breathing thing," on-going and dynamic to suit the members' and providers' needs. About 72 percent of current members have primary care providers. According to CHNCT, the number of pediatric primary care providers (general pediatricians, pediatric nurse practitioners, and pediatric adolescent medicine providers) increased over 30 percent between 2012 and 2014.[12]

- **Encouraging timely use of preventive care:** A 2006 "mystery shopper" survey, commissioned by the Department of Social Services, showed that members did not always get help when they called managed care plans for assistance scheduling appointments.[13] In contrast, CHNCT began calling all new members and encouraging them to complete the health risk questionnaire available on the web site. A vendor makes calls--live person calls—to new families eight times over the first 15 months of a baby's life to remind parents about the importance of well-baby care. Since 2014, CHNCT has distributed cell phones to over 56,000 households who, in exchange for unlimited texting, agree to get age-appropriate text messages reminding them about preventive visits, immunizations, and age-appropriate screening exams. All member "touches," including calls to or from the member for any reason, include advice about timely preventive care.

- **Supporting primary care providers:** Under managed care, providers complained about getting lists of patients they did not know from managed care plans that would then hold them responsible for the patient care. In contrast, CHNCT has used its attribution process to engage providers and report regularly to them on well-child and well-person visits for the children and adults in their care. Providers register for access to client-level data through a secure web portal. Reports to providers include practice- and provider-level data for comparing their performance to other providers. Beginning in 2013, providers who notify CHNCT about missed appointments can rely on CHNCT to make follow-up calls to members (17,000 calls in the past year). CHNCT actively recruits provider practices to serve as Primary Care Medical Homes (PCMH) and supports them through the 18 to 24-month process to obtain PCMH recognition through the National Committee on Quality Assurance. PCMH providers must agree to coordinate care, provide after-hours care and open access to care, and to participate in quality improvement efforts. Over time, providers can expect enhanced payments for improvement against their own past performance. CHNCT makes annual visits to PCMHs to encourage compliance with practice improvements.

- **Reducing use of emergency care:** Under managed care, participating health plans sponsored nurse advice lines to support members and to help avert unnecessary emergency department visits. The plans complained that they were unable to get data in real-time for follow-up with members. CHNCT has improved on these approaches to reducing use of emergency care. In addition to strengthening the relationship between members and providers, CHNCT operates a nurse advice lines (24 hours a day, seven days a week) and actively promotes the availability of this services with posters in large provider sites, brochures, and signs on buses in Connecticut's largest cities last year. Every day, CHNCT reviews calls to the nurse advice line and follows up with any members who were advised to go for emergency care. CHNCT has begun to follow up with members without PCPs after the first emergency department visit in a rolling 12-month period. Since 2014, CHNCT has worked with the Connecticut Hospital Association to ensure timely transfer of data on emergency visits. Members with complex conditions and frequent emergency department visits are systematically identified and offered assistance with care management and information about their conditions. Intensive care management involves follow-up with members and their families, links to PCPs and support services like transportation, as well as member education on self-management and needed care. Nurses from the Transitional Care Unit follow-up with members within a few days after hospital discharge and offer intensive care management as well as assistance with scheduling

appointments, transportation if needed. CHNCT has also worked with day care centers around the state to ensure that their staffs are familiar with the health information that is available to them and HUSKY members on CHNCT's web site.

In the absence of a concurrent provider fee increase, as occurred in the dental program when services were "carved-out" of managed care, expansion of the primary care provider network may take a while to develop. Significant changes in primary care utilization and reductions in emergency care utilization may take even longer. Under the Affordable Care Act, increased primary care provider reimbursement in 2014 may help to increase utilization. Enhanced member services and close attention to program performance at the provider and practice level bode well for the future. Indeed, the federal Centers for Medicare and Medicaid Services recently commended Connecticut and five other states for measuring program performance and reporting rates for child health care in the top quartile for many of the standardized measures.[14]

RECOMMENDATIONS

- Continue to monitor the impact of program enhancements and increased primary care provider reimbursement on utilization of children's health services.

- Conduct further study of emergency services utilization to monitor trends and identify effective interventions for reducing reliance on emergency care, especially for preventable or avoidable conditions.

Acknowledgements

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Children's Health Care in the HUSKY Program: Enrollment, Primary Care, and Emergency Care Utilization, 2013

Table 1. Enrollment in HUSKY A by Age Group, 2013

Age	Ever Enrolled	Continuously Enrolled	Percent Continuously Enrolled
2 - 5	72,849	56,579	77.7%
6 - 10	87,434	70,615	80.8%
11 - 15	79,550	64,404	81.0%
16 - 19	56,498	36,959	65.4%
Total	296,331	228,557	77.1%
<1	18,008	1,432	8.0%
1- 5	91,760	70,348	76.7%
6-14	151,396	122,467	80.9%
15-20	77,255	51,984	67.3%
Total	338,419	246,231	72.8%

Source: Connecticut Voices for Children's analysis of HUSKY A Program data from the Connecticut Department of Social Services.

Table 2. Ambulatory Care for HUSKY A Children by Age Group and Race/Ethnicity, 2013

	Continuously Enrolled Children	Any Ambulatory Care		Well Child Care		Episodic Care Only	
		Count	Rate	Count	Rate	Count	Rate
Total	228,557	206,598	90.4%	151,351	66.2%	55,247	24.2%
Age							
2 - 5	56,579	54,446	96.2%	48,099	85.0%	6,347	11.2%
6 - 10	70,615	63,089	89.3%	42,915	60.8%	20,174	28.6%
11 - 15	64,404	57,263	88.9%	41,464	64.4%	15,799	24.5%
16 - 19	36,959	31,800	86.0%	18,873	51.1%	12,927	35.0%
Total	228,557	206,598	90.4%	151,351	66.2%	55,247	24.2%
Race/Ethnicity (grouped)							
Black	48,908	42,806	87.5%	30,689	62.7%	12,117	24.8%
Hispanic	85,804	79,015	92.1%	59,039	68.8%	19,976	23.3%
Other	7,637	6,717	88.0%	5,022	65.8%	1,695	22.2%
White	86,148	78,003	90.5%	56,560	65.7%	21,443	24.9%
Unknown	60	57	95.0%	41	68.3%	16	26.7%
Total	228,557	206,598	90.4%	151,351	66.2%	55,247	24.2%

Source: Connecticut Voices for Children's analysis of HUSKY A Program data from the Connecticut Department of Social Services.

Table 3. Emergency Care for HUSKY A Children by Age and Race Ethnicity, 2013

	Continuously Enrolled Children	Any Emergency Care		Ambulatory Care Sensitive Conditions	
		Count	Rate	Count	Rate
Total	246,231	95,511	38.8%	34,594	36.2%
Age					
<1	1,432	764	53.4%	347	45.4%
1- 5	70,348	34,030	48.4%	15,890	46.7%
6-14	122,467	40,590	33.1%	12,866	31.7%
15-20	51,984	20,127	38.7%	5,491	27.3%
Total	246,231	95,511	38.8%	34,594	36.2%
Race/Ethnicity (grouped)					
Black	52,669	19,730	37.5%	6,971	35.3%
Hispanic	92,156	40,950	44.4%	16,472	40.2%
Other	8,163	1,933	23.7%	625	32.3%
White	93,176	32,872	35.3%	10,518	32.0%
Unknown	67	26	38.8%	8	30.8%
Total	246,231	95,511	38.8%	34,594	36.2%

Source: Connecticut Voices for Children's analysis of HUSKY A Program data from the Connecticut Department of Social Services.

[1] Income eligibility levels for HUSKY A (Medicaid): children and parents living in families with household income less than 185% of the federal poverty level (FPL); pregnant women with household income less than 250% FPL. Income eligibility levels for HUSKY B (CHIP): uninsured children under 19 living in households with income between 185% and 300% FPL (subsidized coverage, with graduated cost-sharing) or over 300% FPL (unsubsidized coverage).

[2] Independent performance monitoring in the HUSKY Program has been state-funded since 1995 under a contract between the Department of Social Services and the Hartford Foundation for Public Giving acting as fiscal intermediary (contract #064HFP-HUO-04/13DSS1001ME for 7/1/13-6/30/15). With a grant from the Hartford Foundation, Connecticut Voices for Children monitors access to care and children's health service utilization. Under an agreement with Connecticut Voices, MAXIMUS, Inc. conducts data management and analyses. This publication does not express the views of the Department of Social Services or the State of Connecticut. The views and opinions expressed are those of the authors.

[3] Utilization estimates are based on the experience of continuously enrolled (v. ever enrolled) children for the following reasons: 1) all children had uniform periods of eligibility, 2) utilization measures (percentage of children with care) are relatively simple to calculate and easy to communicate to policy makers, 3) the HUSKY Program can best be held accountable for children who were enrolled for one entire calendar year and not those who may have lost coverage for part of the year or changed programs. Utilization rates for continuously enrolled children are likely to be higher than rates for children with part-year coverage, especially those with unintended gaps in coverage.

[4] **Well-child care (EPSDT screening exams):** Encounter records with CT-4 codes for preventive care (99381-5, 9938R, 9938T, 99382, 99391-5 ,9939R, 9939T, 99431, 9943R, 9943T) when accompanied by any diagnosis code; UB-92 revenue codes (092, 093, 094) when accompanied by any diagnosis code; CPT-4 codes for evaluation and management (99201-5, 99211-5, 99432) and clinic codes (510, 515) when accompanied by a well-child diagnosis (v20 series, v70, v70.0, v70.3-v70.90). For this study, an annual well-baby visit for children under 2 was not determined because a simple annual rate would not capture adherence to EPSDT and professional recommendations for well-baby visits that should occur at 2-4 and 2 weeks, then 2, 4, 6, 9, 12, 15, and 18 months of life. **Episodic primary care:** Encounter records with CPT-4 codes (99201-5, 99201-99205, 99211 - 99215, 99432-3), clinic codes (510, 514, 515, 516, 519, 3000Y), or UB-92 revenue codes (450, 456, 459), clinic codes (510, 514, 515, 516, 519, 3000Y, T1015), or UB-92 revenue codes (450, 456, 459) with any diagnosis other than well-child care.

[5] **Emergency care:** CPT-4 codes (99281, 99282, 00283, 99284, 99285), and IB-92 revenue codes (450, 456, 459). **Ambulatory-care sensitive conditions:** ICD-9-CM code 090 (congenital syphilis); 033, 037 (immunization preventable conditions); 345, 780.3) (grand mal status and other epileptic convulsions); 493 (asthma); 382, 462, 463, 465, 472.1, 20.01 (severe ear, nose, and throat infections); 481, 482.2, 482.3, 482.9, 483, 485, 486 (bacterial pneumonia); 011-018 (tuberculosis); 250.0-250.3, 250.8, 250.9 (diabetes A, B, and C); 251.2 (hypoglycemia); 681-683, 686 (cellulitis); 558.9 (gastroenteritis); 590, 599.0, 599.9 (kidney or urinary infection); 276.5 (dehydration); 280.1, 280.8, 280.9 (iron deficiency anemia); 260-262, 268.0, 268.1 (nutritional deficiencies); and 783.4 (failure to thrive). These diagnoses were selected based on a review of the literature, including reports such as: Gadomski A., Jenkins P., Nichols M. (1998). "Impact of Medicaid primary care provider and preventive care on pediatric hospitalization." Pediatrics 101(3): E1.

[6] For ambulatory care, we examine age children 2-19. For this study, an annual well-baby visit for children under 2 was not determined because a simple annual rate would not capture adherence to EPSDT and professional recommendations for well-baby visits that should occur at 2-4 and 2 weeks, then 2, 4, 6, 9, 12, 15, and 18 months of life.

[7] DSS has changed its race categorizations several times over the five year period examined. In 2007, 2012, and 2013 the race category "unknown" was available, but this category was unavailable in other years. As a result, race categories may not line up exactly from year to year; however, because of the small number of participants with "unknown" race/ethnicity, historical utilization trends disaggregated by race/ethnicity are still examined here.

[8] Child eligibility criteria did not change over this period; however, parents' income eligibility level was raised from 150% FPL to 185% FPL effective July 1, 2007, thereby aligning the income eligibility levels for children and parents. The income eligibility level for pregnant women increased from 185% FPL to 250% FPL, effective January 1, 2008. These changes may have affected child enrollment and coverage continuity.

[9] Lee MA, Feder K, Langer S. Coverage Continuity in the HUSKY Program increases children's preventive medical and dental utilization. New Haven CT: Connecticut Voices for Children, March 2015. Available at: http://www.ctvoices.org/publications/coverage-continuity-husky-program-increases-childrens-preventive-medical-and-dental-care.

[10] Lee MA, Feder K. Dental services for children and parents in the HUSKY Program in 2013: Utilization is improved over 2008, but unchanged from 2012. New Haven CT: Connecticut Voices for Children, February 2015. Available at http://www.ctvoices.org/publications/dental-services-children-and-parents-husky-program-2013-utilization-improved-over-2008-.

[11] Medicaid to Medicare Fee Index, Henry J. Kaiser Family Foundation. Available at Stephen Zuckerman and Dana Goin, "How Much Will Medicaid Physician Fees for Primary Care Rise in 2013? Evidence from a 2012 Survey of Medicaid Physician Fees," Urban Institute and Kaiser Commission on Medicaid and the Uninsured, December 2012. Data from Stephen Zuckerman and Dana Goin, "How Much Will Medicaid Physician Fees for Primary Care Rise in 2013? Evidence from a 2012 Survey of Medicaid Physician Fees," Urban Institute and Kaiser Commission on Medicaid and the Uninsured, December 2012.

[12] Correspondence from Gail Digioia, Vice President of Member and Provider Services, CHNCT; May 29, 2015.

[13] Connecticut Department of Social Services. Mystery shopper project. Report to Medicaid Managed Care Oversight Council, November 17, 2006.

[14] Centers for Medicaid and Medicare Services. Correspondence from Marsha Lillie-Blanton, DrPH, to Connecticut Department of Social Services, May 19, 2015.