



*Commonwealth of Virginia
Department of Medical Assistance Services*

*Calendar Year 2009
Child Health Studies*

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Delmarva Foundation

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Executive Summary

The Department of Medical Assistance Services (DMAS) is the Commonwealth of Virginia's (the Commonwealth) agency that administers Medicaid and the State Child Health Insurance Program (CHIP). It is also responsible for ensuring the quality and integrity of the Medicaid and CHIP programs. DMAS recognizes that providing children access to quality health services is vital to ensure the timely delivery of preventive health services.

DMAS oversees programs that provide medical coverage for children in the Commonwealth. The focus of this study included children and adolescents in three distinct DMAS programs:

- FAMIS (CHIP, under Title XXI of the Social Security Act)
- FAMIS Plus (Virginia's traditional Medicaid program for children)
- Medicaid Expansion program for uninsured children 6 through 18 years of age not eligible for traditional Medicaid within certain family income guidelines

The study was conducted to assess whether children enrolled in FAMIS, FAMIS Plus, or Medicaid Expansion programs during calendar year 2009 had the recommended child health care services appropriate for their age groups. During 2009 approximately 866,480 children were enrolled for some period of time in the FAMIS, FAMIS Plus, or the Medicaid Expansion programs. Standardized measures were used to ascertain the quality of care received by the enrollees.

The results of the measures of children's services that were studied during 2009 were compared with one of the most widely used sets of health care performance measures, the National Committee for Quality Assurance's (NCQA) Healthcare Effectiveness Data and Information Set (HEDIS®)¹ 2010 National Medicaid Managed Care Averages. A sub-set of the entire HEDIS® measurement set was studied - the percentage of:

- well-child visits by age groups for all programs
- children aged 24 months who received all required components of the Combinations 2 and 3 immunization series
- children diagnosed with persistent asthma, who were prescribed medication for asthma

¹ HEDIS® is a registered trademark of the National Committee on Quality Assurance.

- children and adolescents who had a visit with a primary care practitioner (PCP) during 2009.

Findings

A subset of NCQA HEDIS[®] measures was used for measurement and comparative purposes. Key results from the study include:

Well-Child Visits

Age 15 months

- Well-child visit rates for children in FAMIS exceeded the HEDIS[®] 2010 National Medicaid Managed Care Average while the rate for FAMIS Plus was unfavorable when compared with this benchmark.

Ages 3 – 6 years

- Both FAMIS and FAMIS Plus rates outperformed the HEDIS[®] 2010 National Medicaid Managed Care Average for this age group.

Ages 7 – 11 years

- Both the FAMIS Plus and Medicaid Expansion program results exceeded the HEDIS[®] 2010 National Medicaid Managed Care Average while FAMIS is only slightly below this benchmark.

Ages 12 – 20 years

- Well-child rates for children and adolescents in all three programs outperformed the HEDIS[®] 2010 National Medicaid Managed Care Average for this age group.

Combinations 2 and 3 Immunization Series

- FAMIS and FAMIS Plus results for both Combinations 2 and 3 immunization series compared favorably with the HEDIS[®] 2010 National Medicaid Managed Care Average.

Asthma Management

Ages 5 – 11 and 12 - 50 Years

- Children enrolled in FAMIS and Medicaid Expansion were appropriately prescribed medication for asthma at higher rates than the HEDIS® 2010 National Medicaid Managed Care Average.

Access to Primary Care Practitioners

- Virginia children and adolescents 1-19 years of age in all three programs visited the PCP at rates that generally exceeded the HEDIS® 2010 National Medicaid Managed Care Averages.

Recommendations

Improving the percentage of children receiving recommended preventive well-child services is a complex issue and a collaborative approach should be used for identifying barriers and prioritizing interventions. Quality improvement efforts must be designed to target identified barriers, including family dynamics, access, and socio-economic issues.

While meeting or exceeding the HEDIS® National Medicaid Managed Care Averages is a commendable accomplishment, DMAS should improve their comparable quality benchmarks in order to meet the HEDIS® 90th percentile.

DMAS should enhance the current collaborative efforts with the MCOs to:

- Increase the forum of the statewide MCO Collaborative for individual MCOs to present and share evidence of “best practices” to external stakeholders.
- Identify gaps and barriers in subsets of enrollees to determine targeted interventions.
- Provide “care coordination” for both preventive and disease management services.
- Establish liason with the Virginia Chapter, American Academy of Pediatrics (AAP) to explore mutual opportunities and educational approaches in quality improvement techniques to improve performance results.
- Additionally, DMAS should identify opportunities to replicate best practices in those programs that fall short of benchmarks.

Section I: Overview of CY 2009 Child Health Studies

Introduction

The Department of Medical Assistance Services (DMAS) is the Commonwealth of Virginia's (the Commonwealth) agency that administers Medicaid and the Child Health Insurance Program (CHIP). The Children's Health Insurance Program Reauthorization Act of 2009 (CHIPRA) enacted in February 2009 provides states with increased funding and incentives to cover low-income children, with a particular focus on those already eligible but not enrolled. The Commonwealth, through aggressive program development, implementation, and outreach campaigns enrolled eligible uninsured or underinsured children across three programs to ensure access to health care services: FAMIS, FAMIS Plus, and Medicaid Expansion.

The Virginia CHIP, under Title XXI of the Social Security Act, is known in Virginia as the Family Access to Medical Insurance Security (FAMIS) program. FAMIS was created to assure that children, not eligible for Medicaid and not covered under another insurance plan or the state employee benefit plan, could gain access to health insurance. FAMIS covers eligible children from birth through age 18 in families with a gross income greater than 133 percent but less than or equal to 200 percent of the federal poverty level (FPL). FAMIS provides a comprehensive benefit package with no cost sharing for well-child care and preventive services.

Under Title XIX of the Social Security Act, FAMIS Plus, Virginia's traditional Medicaid program for children, provides medical services to children less than 6 years of age whose gross family income is less than 133 percent of the FPL, and to children ages 6 through 20 with family income of less than 100 percent of the FPL. FAMIS Plus enrollees receive the full comprehensive Medicaid benefit package, which includes preventive care such as well-child visits and immunizations.

The Medicaid Expansion program covers uninsured children 6 through 18 years of age not eligible for traditional Medicaid whose gross family income is greater than 100 percent but less than or equal to 133 percent of the FPL.

During calendar year (CY) 2009 approximately 866,480 children were enrolled for some period of time in FAMIS, FAMIS Plus, or the Medicaid Expansion programs. These three programs are at the core of the focus study analysis.

Purpose and Objectives

The purpose of conducting the 2009 child health studies was to collect both qualitative and quantitative information about the extent to which Commonwealth children enrolled in the FAMIS, FAMIS Plus, and Medicaid Expansion programs are: up to date on recommended childhood immunizations, obtaining well-child visits according to recommended guidelines, receiving appropriate medications for treatment of asthma, and having access to primary care practitioners. The Delmarva Foundation (Delmarva), an independent external quality review organization, contracted with DMAS to objectively evaluate the quality of, access to, and timeliness of services provided to this vulnerable population in key areas of child health.

The overarching objective was to make recommendations to DMAS for potential program changes that may positively impact the percentage of FAMIS, FAMIS Plus, and Medicaid Expansion children receiving appropriate preventive health care services and treatment. The methodologies for the studies did not include any comparative analysis by delivery systems.

Methodology

HEDIS[®] is one of the most widely used sets of healthcare performance measures in the United States and forms the foundation for the studies presented in this report on health care services provided in calendar year 2009. The HEDIS[®] 2010 Volume 2: Technical Specifications describes how to collect data for each measure, as well as general guidelines for data calculations and sampling.

Data specifications for the administrative methodology define the collection and calculation of a measure using only administrative data. Administrative data is data gathered from claims, encounters, enrollment, or provider systems. The data specifications include a description of the eligible population (denominator), the numerator requirements (i.e., the indicated treatment or service), and any exclusion allowed for the measure. The administrative methodology was used for the Use of Appropriate Medications for People with Asthma (ASM) and the Children and Adolescents' Access to Primary Care Practitioners (CAP) measures.

The HEDIS[®] hybrid method calculates the measure using data gathered from both administrative data sources and the medical record. Specifications include sampling requirements for the denominator population, medical record documentation requirements for the numerator, and any exclusion(s) allowed for the measure. Eligible members who did not receive the service, were non-compliant, refused a service, or for whom a medical record cannot be found are counted as a numerator failure.

The hybrid methodology was used to conduct the Childhood Immunization Status (CIS) and the Well-Child Visits studies. The remainder of this report provides in-depth descriptions about the relevance of each study, methods, findings, conclusions, and recommendations for improvement by topic area.

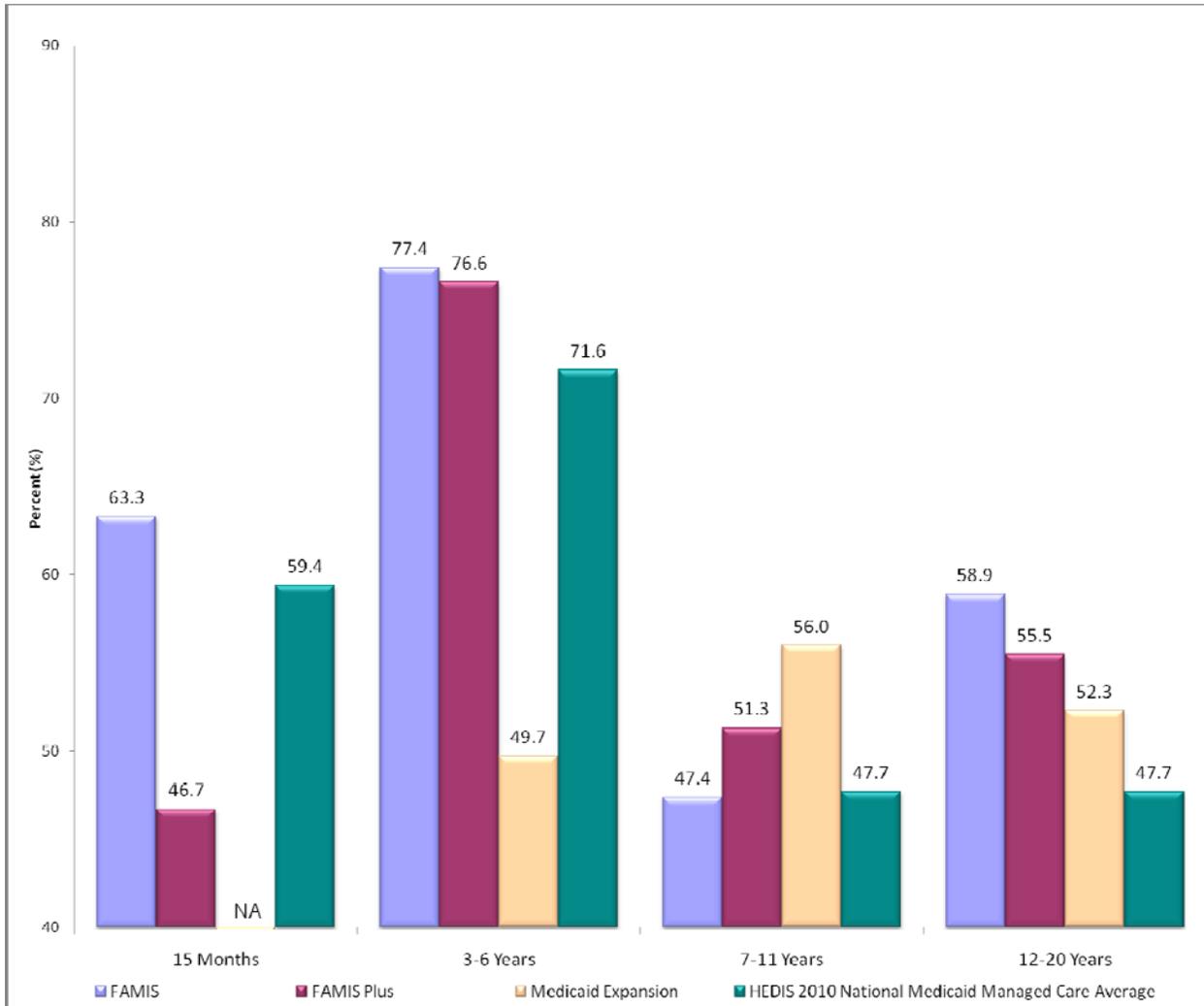
The results of the indicator components of Child Health Care services during 2009 are presented and compared with the HEDIS[®] 2010 National Medicaid Managed Care Averages based upon 2009 data.

Well-Child Visits

The American Academy of Pediatrics (AAP) recommends children visit their pediatrician for a well-child check-up on a periodic basis starting at birth and until twenty-one years of age. During a well-child visit, preventive care includes an assessment of the physical, behavioral, developmental, and emotional well-being of a child. A well-child visit is critical for detecting developmental delays or disabilities. Early detection can lead to timely interventions that might lessen the future impact on both the child and family.

Figure 1 presents the well-child visit rates by age group for FAMIS, FAMIS Plus, and the Medicaid Expansion programs as compared with the 2010 HEDIS[®] National Medicaid Managed Care Average.

Figure 1. Well-Child Visit Percentages by Age Group*



*Medicaid HEDIS[®] 2010 measures represent CY 2009 reported data.

Note: Well-Child Visit rate from 15 month age group is based on 6+ visits; the Well-Child Visit rate for 3-20 year age groups is based on at least one visit in the measurement period.

Age 15 months

- The percentage of children in FAMIS who received the number of recommended well-child visits exceeded the HEDIS[®] 2010 National Medicaid Managed Care Average while results for those in FAMIS Plus were unfavorable when compared with this benchmark.

Ages 3 – 6 years

- Both FAMIS and FAMIS Plus results outperformed the HEDIS[®] 2010 National Medicaid Managed Care Average for this age group.
- The Medicaid Expansion results include only children that were 6 years old because the program only includes children ages 6 through 8.

Ages 7 – 11 years

- Both the FAMIS Plus and Medicaid Expansion program rates exceeded the HEDIS[®] 2010 National Medicaid Managed Care Average while FAMIS is only slightly below this benchmark.

Ages 12 – 20 years

- Well-child rates for children and adolescents in all three programs outperformed the HEDIS[®] 2010 National Medicaid Managed Care Average for this age group.

Immunization Results

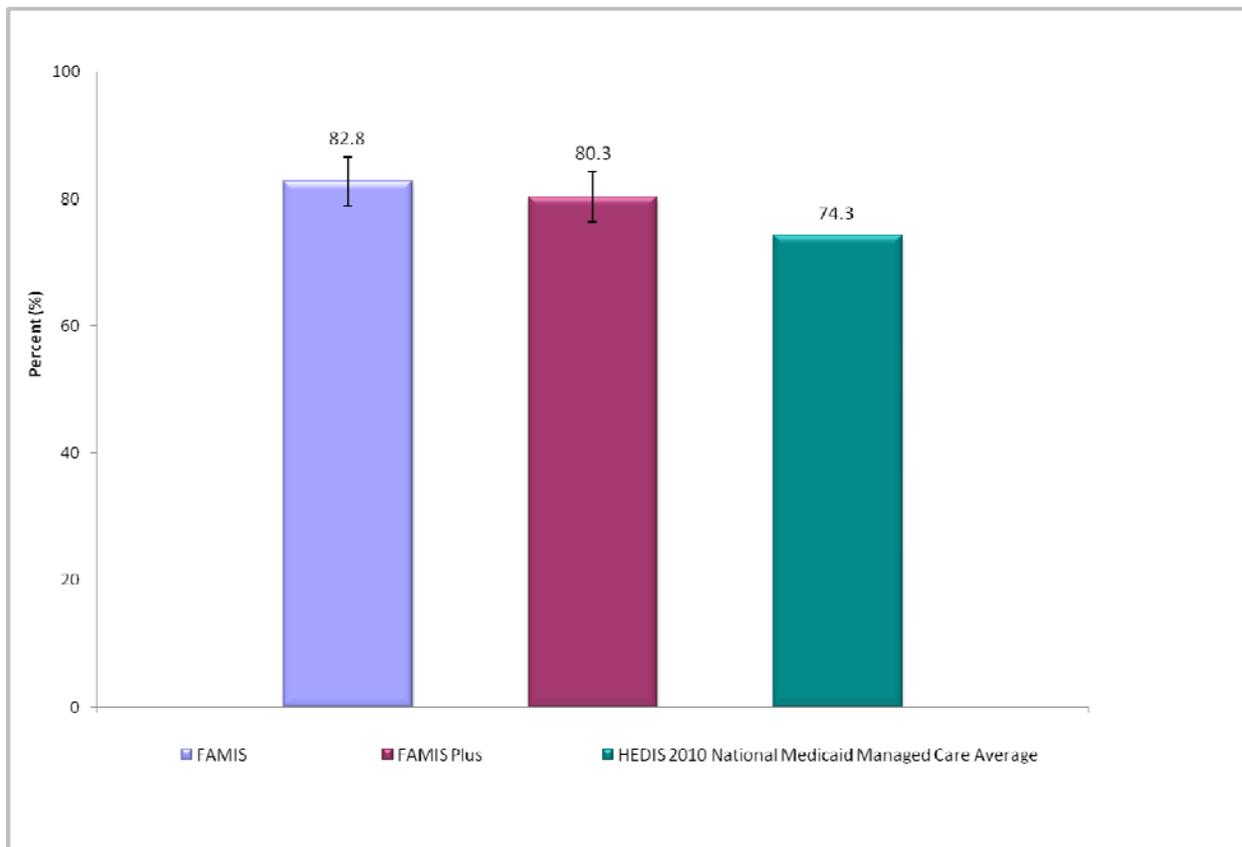
The Commonwealth's immunization initiatives promote access, timeliness, and performance improvement. Immunization rates are a useful outcome measure for assessing health care quality because the technical standard of care that defines the type and timing of an appropriate immunization regimen is well established. The Advisory Committee on Immunization Practices (ACIP), the American Academy of Pediatrics' Committee on Infectious Disease, and the American Academy of Family Physicians endorse the periodicity schedule for the immunization and vaccination of children.

Because appropriate immunizations are strongly associated with reductions in preventable disease rates, DMAS has emphasized that children receive timely immunizations as a cost-effective and highly beneficial component of childhood preventive care.

Combination 2 Results

The rates of compliance with the Combination 2 immunization series for the FAMIS and FAMIS Plus programs are displayed in Figure 2 along with national comparative data. The percent of children who received the full Combo 2 series in both programs was more favorable than the 2010 HEDIS[®] National Medicaid Managed Care Average.

Figure 2. Percentage of cases with Combination 2 immunization series, by program as compared to the HEDIS[®] 2010 National Medicaid Managed Care Average*



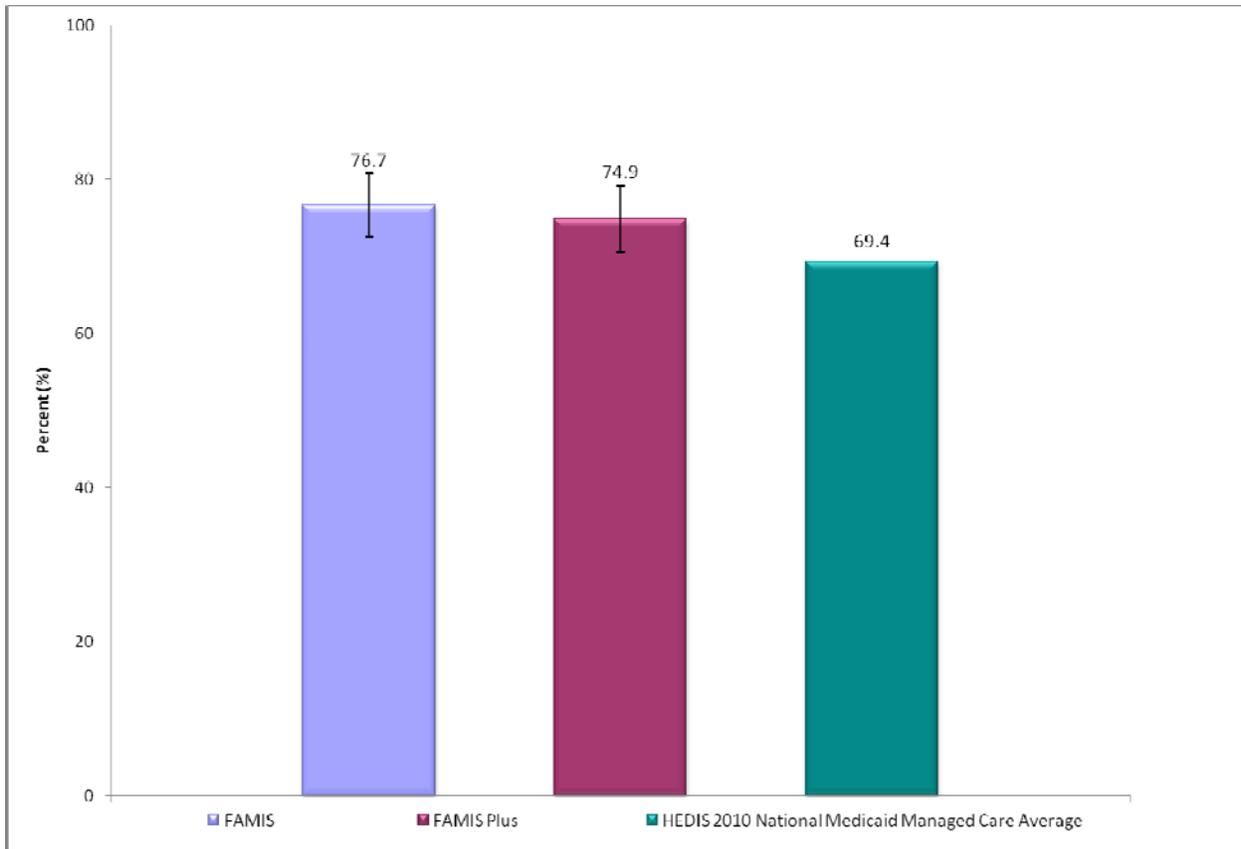
*National Medicaid HEDIS[®] 2010 measures represent 2009 reported data.

┆ =95% Confidence Interval - The confidence level is the estimated probability a population parameter lies within a given confidence interval.

Combination 3 Results

The Combination 3 immunization series all the antigens listed in Combination 2 and four pneumococcal conjugate vaccinations (PVC) by 24 months of age. Results for the FAMIS and FAMIS Plus programs are displayed in Figure 3 along with national comparative data. Combination 3 immunization rates compared favorably with the 2010 HEDIS[®] National Medicaid Managed Care Average.

Figure 3. Percentage of cases with Combination 3 immunization series, by program as compared to the HEDIS® 2010 National Medicaid Managed Care Average*



*National Medicaid HEDIS® 2010 measures represent 2009 reported data

┆ =95% Confidence Interval

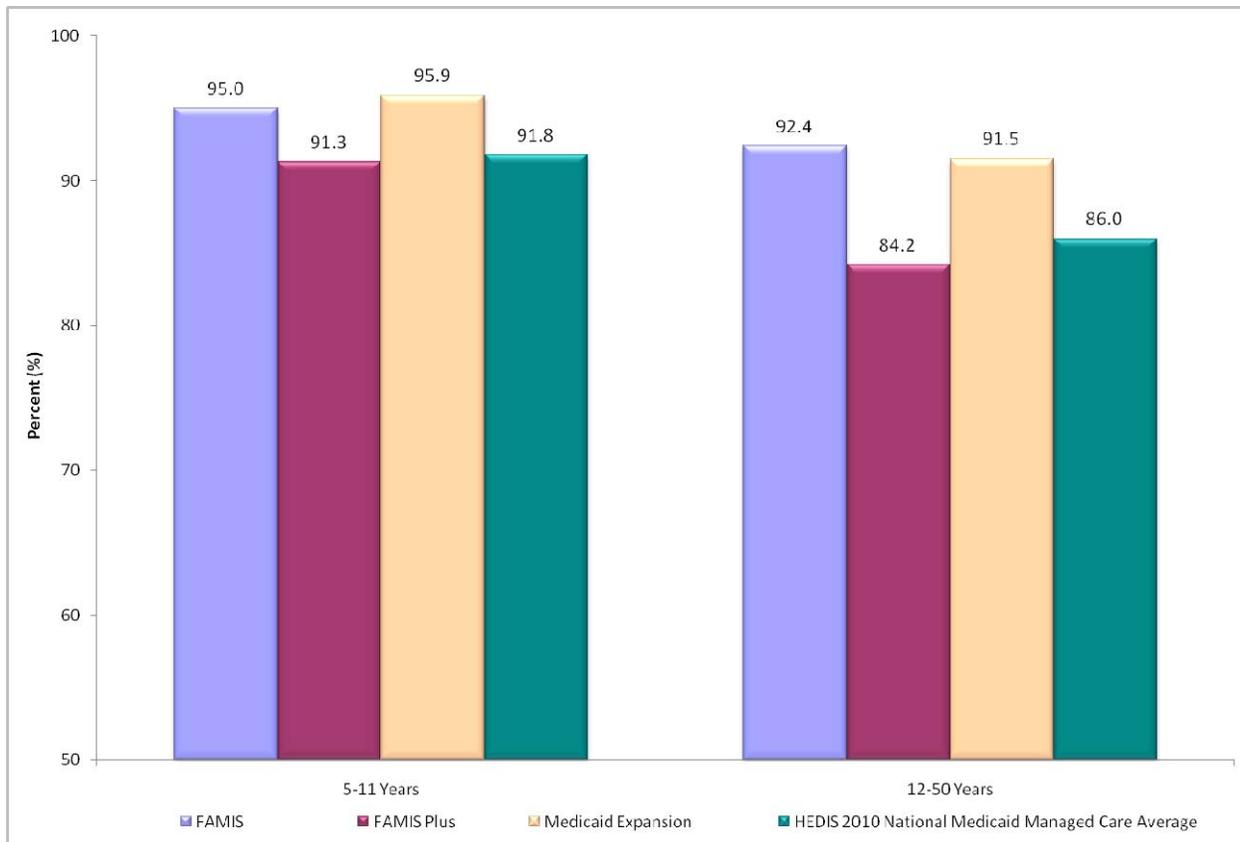
Children with Asthma

Asthma is the most frequently diagnosed chronic disease in children and the most frequent reason for their visits to Emergency Departments (ED). Low income families are more likely to use the ED for acute care, making asthma an important concern for Medicaid programs. The National Heart Lung and Blood Institute’s (NHLBI) National Asthma Education and Prevention Program (NAEPP) promulgated clinical guidelines that promote use of appropriate controller medications as best practices.

For enrollees diagnosed with asthma, the goal is to assist them in taking control of their disease by improving medication use and eliminating symptom triggers. Asthma medications play an important role in managing asthma. Long-term controller medications keep asthma under control on a day-to-day basis. Quick-relief (rescue) medications treat symptoms once they start.

Children in FAMIS, FAMIS Plus, and Medicaid Expansion programs received appropriate medications for asthma at rates that exceeded the national averages. Figure 4 displays these data and compares the results with national Medicaid averages.

Figure 4. Use of Appropriate Medications for Children with Asthma by program and age group*



*National Medicaid HEDIS® 2010 measures represent 2009 reported data

Ages 5 – 11 Years and Ages 12 – 50 Years

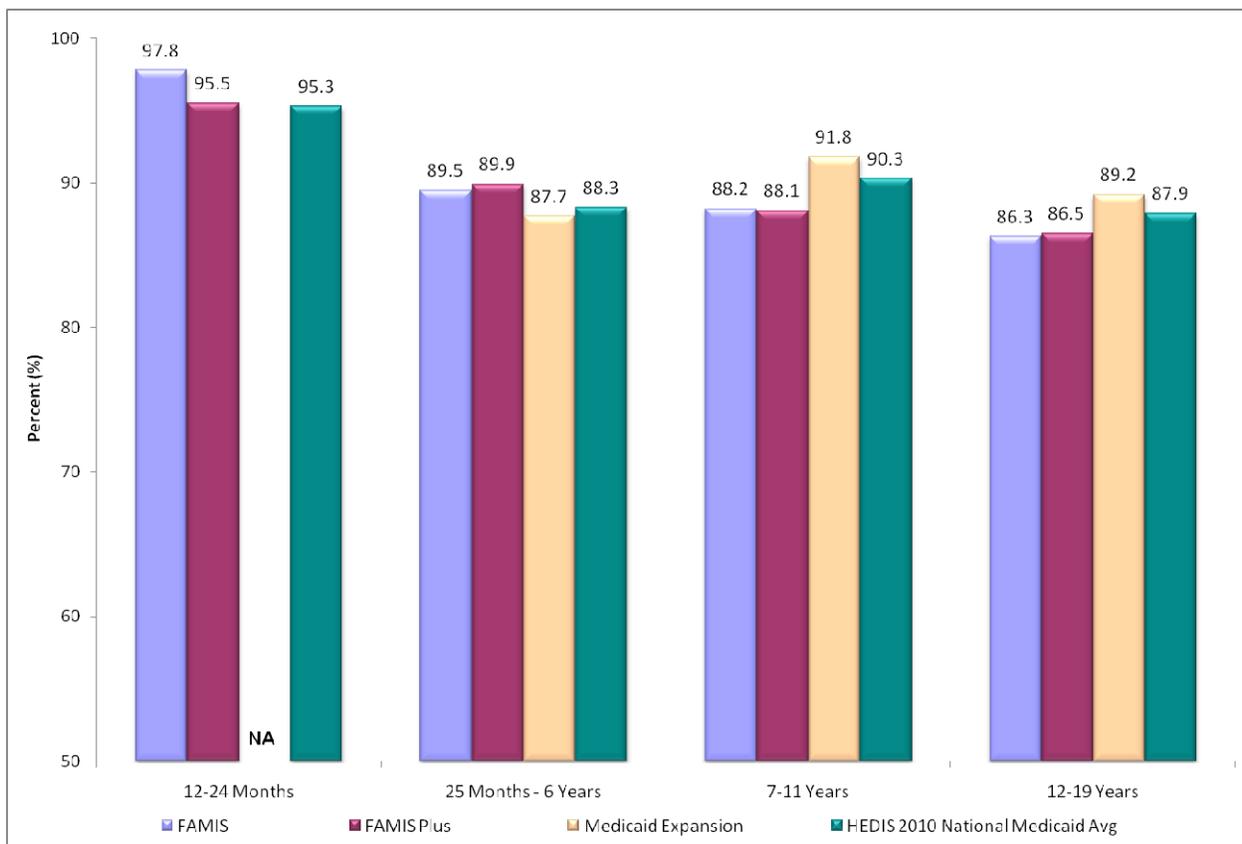
- FAMIS and Medicaid Expansion rates outperformed the HEDIS® 2010 National Medicaid Managed Care Average in both age groups, while FAMIS Plus results were slightly below the national benchmark.

Children and Adolescents' Access to Primary Care Practitioners

The AAP recommends that children and adolescents visit their primary care practitioner (PCP) regularly for a thorough screening and assessment of health and developmental problems including anticipatory guidance. Although sick visits may allow some opportunities to provide preventive care, they generally do not provide the time necessary for the PCP to conduct all components required for a comprehensive well-care visit.

This performance measure assessed whether children and adolescents enrolled in FAMIS, FAMIS Plus, or Medicaid Expansion had at least one visit with a PCP, for any reason during the CY 2009 study period. Virginia children and adolescents in these three programs visited their PCP at rates that generally exceeded the HEDIS[®] 2010 National Medicaid Managed Care Average. Comparative results are shown in Figure 5.

Figure 5. Children and Adolescents' Access to Primary Care Practitioners by Program and Age Group



Note: Due to eligibility requirements, the 12 to 24 month age group is not included for the Medicaid Expansion population and only 6 year olds are included in the Medicaid Expansion 25 months-6 year age group.

Ages 12 - 24 months and 25 months - 6 years

- FAMIS and FAMIS Plus children PCP visit rates exceeded the HEDIS[®] 2010 National Medicaid Managed Care Averages in both age categories.
- Due to eligibility requirements, the percentage of Medicaid Expansion enrollees receiving PCP visits is for only children that were six years old. This group had a small denominator of 155 enrollees when compared with the population numbers in both the FAMIS and FAMIS Plus categories.

Ages 7 - 11 and 12 - 19 years

- Medicaid Expansion outperformed the HEDIS[®] 2010 National Medicaid Managed Care Average for these two age groups.
- FAMIS and FAMIS Plus results were slightly below the national average for Medicaid Managed Care.

Section II: Immunization Status at 24 Months

Introduction

The Commonwealth has taken steps to create programs that minimize over/under-immunization of children, yet promote timeliness and accessibility. A key initiative is the consolidation of vaccination records from multiple providers into one record in the statewide immunization registry. This systematic process for capturing and tracking immunization data promotes provider vaccine management and accountability.

Another initiative, the Vaccines for Children (VFC) program, a federal program established to help raise childhood immunization rates, focuses on reducing cost and barriers to access to immunizations. The VFC program provides federally purchased vaccines at no cost to health care providers for administering to eligible children. Currently the Virginia VFC program has approximately 800 public and private providers participating to ensure that children will receive needed vaccines and avoid missed opportunities to vaccinate.

Purpose and Objectives

This study was undertaken to assess compliance with clinical guidelines related to early childhood immunization practices. During the study period, two distinct DMAS programs, FAMIS (SCHIP, under Title XXI of the Social Security Act) and FAMIS Plus (Virginia's traditional Medicaid program for children) operated in Virginia. These programs strive to ensure that uninsured or underinsured children in the state received age-appropriate preventive care, including recommended immunizations.

The study was designed primarily to profile the immunization services provided under each of these programs and to offer recommendations to DMAS for programmatic performance improvement. Performance is assessed for each program by age group. National immunization guidelines and immunization performance benchmarks for children are well established.

Methodology

Immunization performance is a standard quality of care measure emphasized in national and state goals for both CHIP and Medicaid eligible children. While no single approach to the collection and reporting of immunizations can be considered a “gold standard,” this study utilizes the standard HEDIS^{®1} hybrid approach (i.e., use of administrative data as well as data obtained from medical records) that is generally well accepted and can provide useful quantitative information related to the key quality indicators.

HEDIS[®] 2010 forms the foundation for the studies presented in this report on health care services provided in calendar year 2009. The identification of new topics and the development of potential performance measures is an ongoing and comprehensive activity performed by NCQA. Potential new or changes to existing measures are subject to literature review and undergo both scientific soundness and feasibility studies before field testing and final specifications. Any changes to existing measures or new measures are subject to public comment.

Results for organizations collecting data for the first year of reporting will be collected and audited, but not publicly reported. The first year measure will be evaluated to decide if the measure is ready for public reporting. Every HEDIS[®] measure is reevaluated at least every three years. The recommended immunization schedule includes seven first year measures that are not publicly reported for this time period. The new combinations of four through ten are identified by an * in the below listing:

- DTaP (diphtheria, tetanus, acellular pertussis)—four doses by age 24 months
- HBV (hepatitis B)—three doses by age 24 months
- Hib (*Haemophilus influenzae* type b)—two doses by age 24 months
- MMR (measles, mumps, rubella)—one dose by age 24 months
- IPV (injected polio)—three doses by age 24 months
- VZV (varicella)—one dose by age 24 months
- PCV (pneumococcal conjugate)—four doses by age 24 months
- HepA (hepatitis A) —two doses by age 24 months*
- RV (rotavirus) —two or three doses by age 24 months*
- Flu (influenza) vaccines—two by age 24 months*
- Combination 2—4 DTaP; 3 IPV; 1 MMR; 2 Hib; 3 HBV; and 1 VZV by age 24 months
- Combination 3—Children who received all antigens listed in Combination 2 *and* received four PCV by age 24 months

¹ HEDIS[®] is a registered trademark of the National Committee on Quality Assurance.

- Combination 4—Children who received all antigens listed in Combination 3 *and* received two Hep A by age 24 months*
- Combination 5— Children who received all antigens listed in Combination 3 *and* received two or three RV by age 24 months*
- Combination 6— Children who received all antigens listed in Combination 3 *and* received two Flu by age 24 months*
- Combination 7— Children who received all antigens listed in Combination 4 *and* received two or three RV by age 24 months*
- Combination 8— Children who received all antigens listed in Combination 4 *and* received two Flu by age 24 months*
- Combination 9— Children who received all antigens listed in Combination 3 *and* received two or three RV and two Flu by age 24 months*
- Combination 10— Children who received all antigens: 4 DTaP; 3 IPV; 1 MMR; 2 Hib; 3 HBV; 1 VZV; 4 PVC; 2 Hep A; 2 or 3 RV; and 2 Flu*.

Medical Record Sample Selection

The eligible population was identified using enrollment data files provided by DMAS; subsequently, a random sample of enrollees was identified from the study population for both the FAMIS and FAMIS Plus programs. The study was designed to provide an estimate of the rates of immunization within each of the designated programs. HEDIS[®] specifications for sampling were followed to ensure that the target sample size selected for each program was sufficient to ensure a 95 percent confidence interval (CI) with a maximum allowable sampling error of 5 percent. A 20 percent over-sample was drawn in an effort to ensure adequate sample sizes.

After the samples were drawn for each program, the demographic data were sent to DMAS for matching against the immunization registry. Upon receipt of the registry files, analysts verified children with complete immunizations history using administrative data. For those children with incomplete immunizations history using only administrative data, the immunization record/medical record was requested from the primary provider. The purpose of this request was to augment the administrative data by providing supplemental medical record data for evaluating compliance with childhood immunization guidelines.

*Combinations 4—10 are new first year HEDIS[®] measures for 2009 and are not reportable for this time period

Identifying the primary provider of medical services for individuals in the sample was essential for requesting medical records. The method for determining the primary provider relied on identifying the provider that appeared to be most involved with the care of the child, or who was associated with a claim for vaccine administration. Providers identified in the following specialty categories were considered appropriate for purposes of this study: family practice; general practice; internal medicine; preventive medicine; pediatric neonatology; family, pediatric, and neonatal nurse practitioners; case management; school practitioner and qualified health center.

Requests for medical records were mailed to each provider of record. Non-responders were contacted twice by mail with follow-up telephone calls and faxes. In the event that the identified provider was no longer associated with a particular practice or involved in the treatment of the child, an effort was made to obtain additional information that would facilitate identifying an appropriate service provider. For those individuals receiving care through the Medallion II managed care system, which utilizes contracted MCOs, the health plan in which the child was enrolled was asked to identify the primary provider and provide updated contact information.

Medical Record Data Collection

Pertinent immunization data were abstracted by registered nurse reviewers and entered into an electronic data collection system. Nurse reviewers were trained to use the data collection system. Detailed abstraction guidelines/rules were used during the medical record abstraction to ensure that the data were collected in an objective and reliable manner, thereby reducing the potential for variability in interpreting the information documented in the immunization records. Reviewers were supervised by a registered nurse with extensive experience in medical record abstraction. Inter-rater reliability testing was 96.5% and conducted immediately following reviewer training.

Performance measures were collected for each individual vaccination as well as for the combination of vaccinations (taken as a measure that the individual was completely up-to-date with immunizations at age 24 months). A medical record was scored to be compliant for a given indicator if the documentation indicated the date the vaccine was given; otherwise, the record was scored as noncompliant. In cases where a requested medical record was not submitted, credit for immunizations was given only for those immunizations found through administrative data.

Study Indicators

The study design utilized random samples drawn from children age 24 months during CY 2009 and enrolled in FAMIS or FAMIS Plus programs. The data included in the analysis was administrative claims/encounter and relevant immunization registry data as well as the information abstracted from the review of any required medical records to assess performance on the following immunizations:

- DTaP (diphtheria, tetanus, acellular pertussis)—four doses by age 24 months
- HBV (hepatitis B)—three doses by age 24 months
- Hib (*Haemophilus influenzae* type b)—two doses by age 24 months
- MMR (measles, mumps, rubella)—one dose by age 24 months
- IPV (injected polio)—three doses by age 24 months
- VZV (varicella)—one dose by age 24 months
- PCV (pneumococcal conjugate)—four doses by age 24 months
- HepA (hepatitis A) —two doses by age 24 months*
- RV (rotavirus) —two or three doses by age 24 months*
- Flu (influenza) vaccines—two by age 24 months*
- Combination 2—4 DTaP; 3 IPV; 1 MMR; 2 Hib; 3 HBV; and 1 VZV by age 24 months
- Combination 3—Children who received all antigens listed in Combination 2 *and* received four PCV by age 24 months

Study Population

The study population includes FAMIS and FAMIS Plus children who:

- Had a date of birth between January 1, 2007 and December 31, 2007 (i.e., turned 2 years of age during the 2009 measurement year)
- Were continuously enrolled for 12 months prior to the second birthday in one of the designated programs with no more than one (31 day) gap in enrollment in the 12 months prior to the child's second birthday
- Were enrolled on their second birthday.

Findings

The calendar year (CY) 2009 antigen specific immunizations performance rates are presented in Figures 1-8. The FAMIS and FAMIS Plus program results are compared to the HEDIS® 2010 National Medicaid Managed Care Average. This comparative benchmark represents data collected, validated, and submitted to the NCQA for similar populations in CY 2009. HEDIS® has become the national standard for measuring immunization rates as well as providing normative data for benchmarking purposes. In this comparison, national Medicaid managed care immunization rates are used as the benchmark, but it is understood that these rates include CHIP enrollees and the rates are not purely comparable.

As an interpretive aid, error bars indicating the limits of the 95 percent confidence level for each reported rate are also presented in these results. The confidence level is the estimated probability a population parameter lies within a given confidence interval (CI), which is an estimated range of values calculated from a given set of sample data. Based on a statistically valid sampling of the enrollee population, a hybrid methodology used a combination of both administrative claims/encounter data and medical records review to determine the rate of immunizations received by these two groups of enrollees.

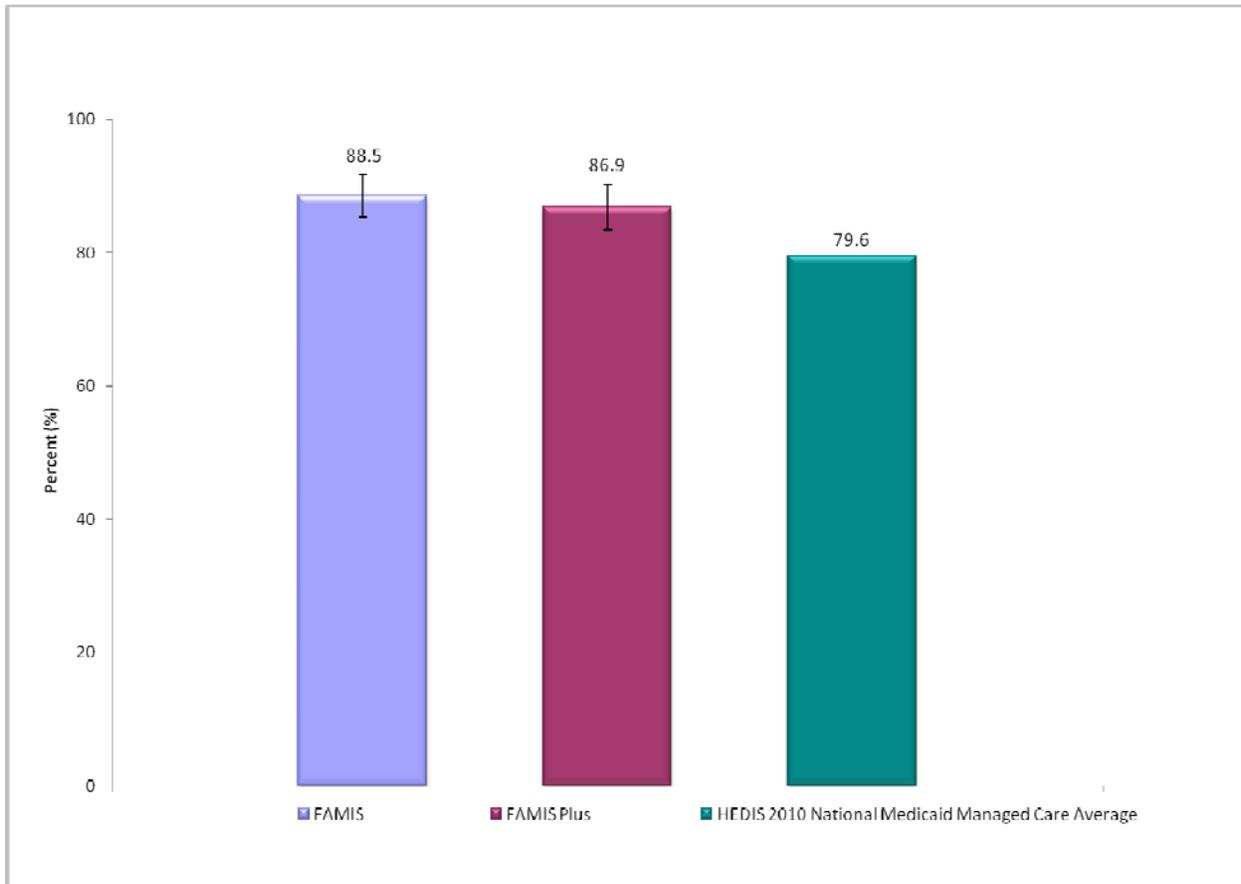
As an example, the estimate is that 88.5 percent of FAMIS enrollees completed the DTaP immunization. There is 95 percent certainty that enrollees within the upper and lower limits of the confidence interval (85.3 percent, 91.7 percent) will complete the immunization. The statistical sample size also influences the degree of confidence and if more information were reviewed the results would be the same 95 percent of the time.

Results by Immunization

Each result is reported as a statistically valid estimate with an accompanying 95% confidence interval which is compared to the HEDIS® 2010 National Medicaid Managed Care Average.

Figure 1 presents the rates of compliance with the DTaP (diphtheria, tetanus, and acellular pertussis) immunization for the FAMIS and FAMIS Plus programs as compared with the HEDIS[®] 2010 National Medicaid Managed Care Average.

Figure 1. Percentage of enrollees with complete DTaP immunization, by program as compared to the HEDIS[®] 2010 National Medicaid Managed Care Average*



*National Medicaid HEDIS[®] 2010 measures represent CY 2009 reported data

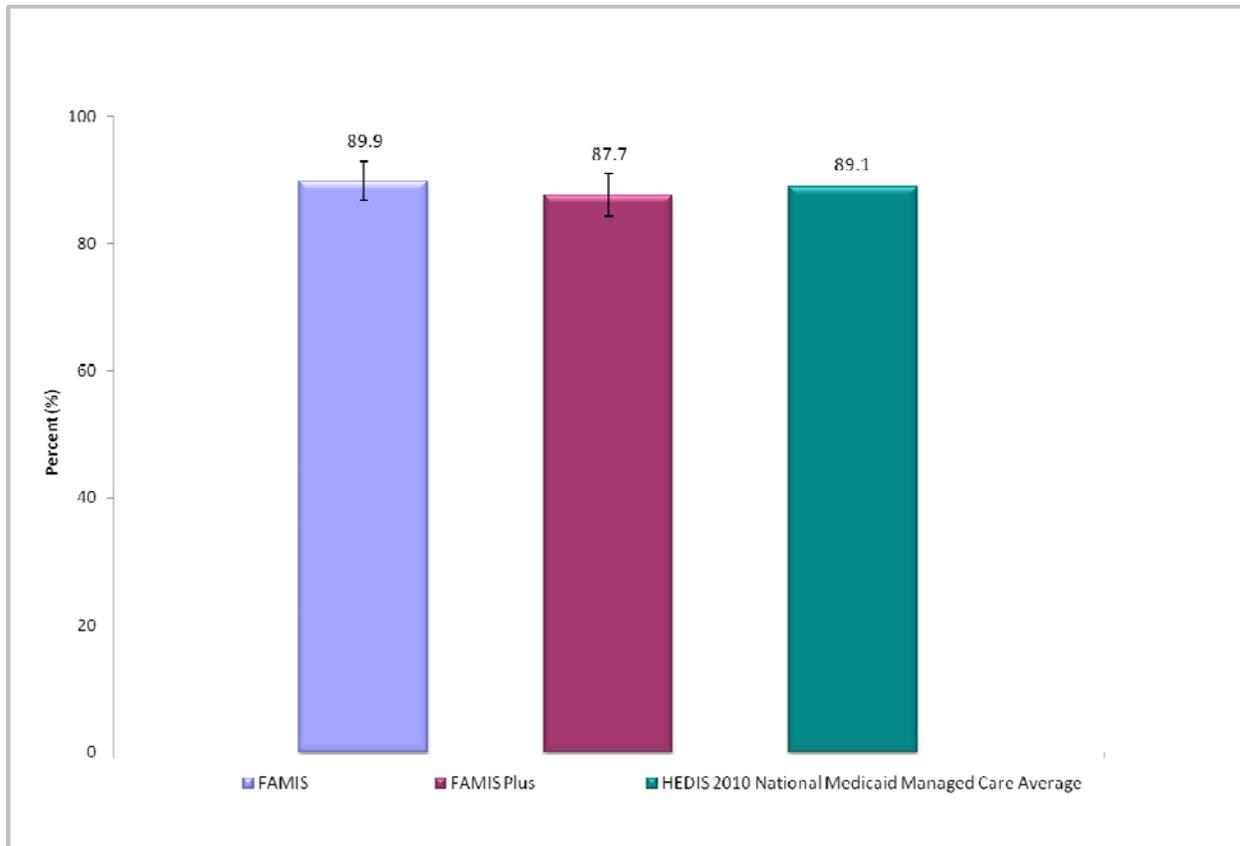
I = 95% Confidence Interval

DTaP Results

- Rates for both FAMIS and FAMIS Plus children that received DTaP compare favorably with the HEDIS[®] 2010 National Medicaid Managed Care Average.

Figure 2 presents the rates of compliance with the HBV (hepatitis B) immunization for FAMIS and FAMIS Plus programs as compared with the HEDIS[®] 2010 National Medicaid Managed Care Average.

Figure 2. Percentage of enrollees with complete HBV immunization, by program as compared to the HEDIS[®] 2010 National Medicaid Managed Care Average*



*National Medicaid HEDIS[®] 2010 measures represent CY 2009 reported data

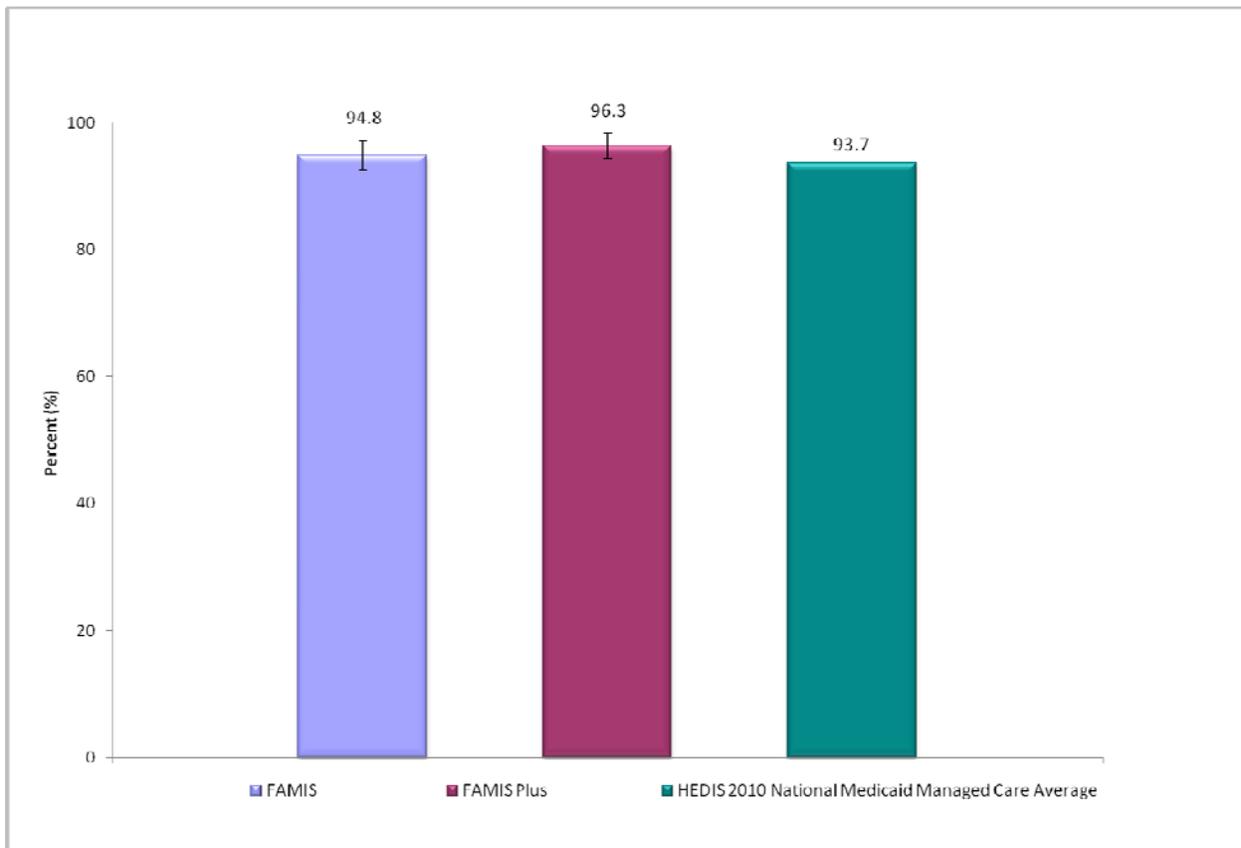
I 95% Confidence Interval

HBV (Hepatitis B) Results

- FAMIS Hepatitis B rates compare favorably with the HEDIS[®] 2010 National Medicaid Managed Care Average while FAMIS Plus rates are lower than the benchmark.

Figure 3 presents the rates of compliance with the Hib (Haemophilus influenza type b) immunization by the FAMIS and FAMIS Plus programs as compared with the HEDIS® 2010 National Medicaid Managed Care Average.

Figure 3. Percentage of enrollees with complete Hib immunization, by program as compared to the HEDIS® 2010 National Medicaid Managed Care Average*



*National Medicaid HEDIS® 2010 measures represent CY 2009 reported data

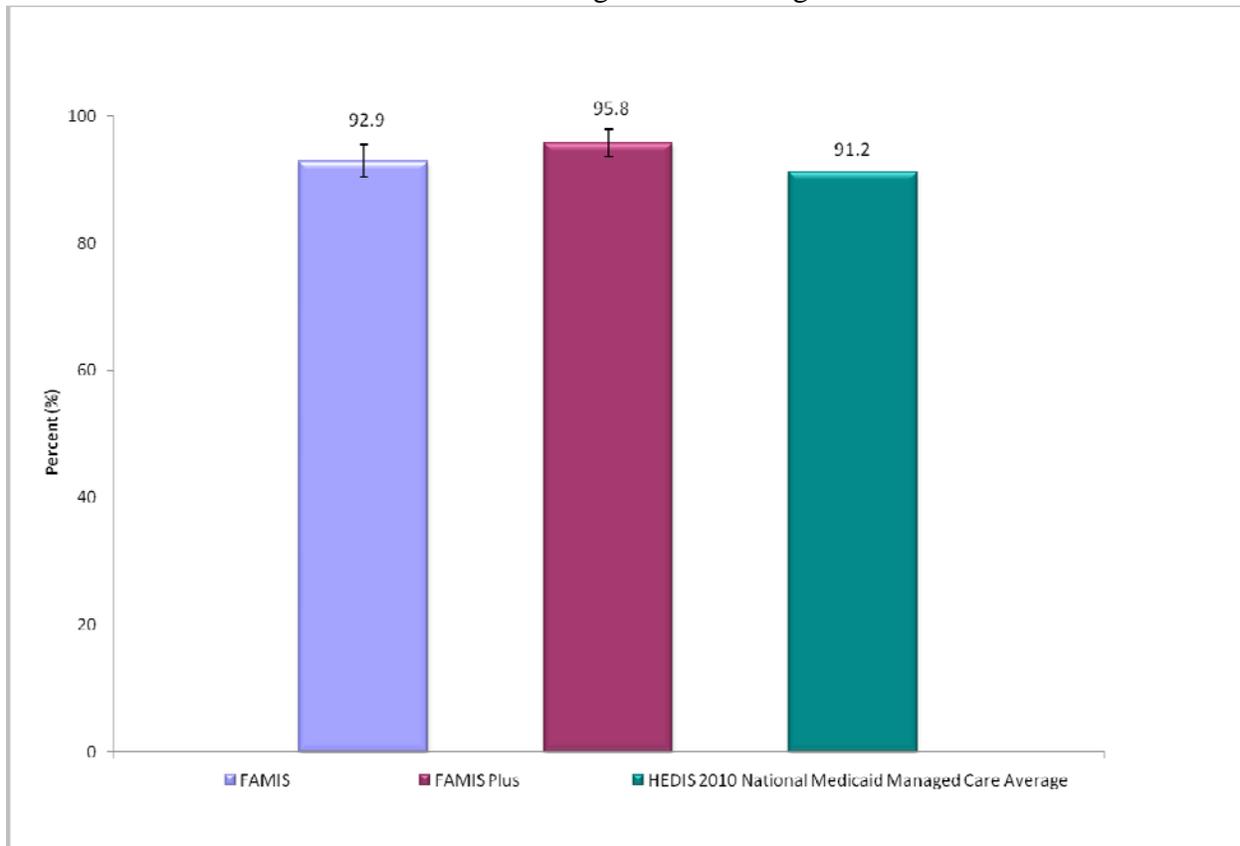
I = 95% Confidence Interval

Hib (Haemophilus influenza type b) Results

- Rates for both FAMIS and FAMIS Plus influenza immunization compare favorably with the comparative benchmark of HEDIS® 2010 National Medicaid Managed Care Average.

Figure 4 presents the rates of compliance with the MMR (measles, mumps, rubella) immunization for the FAMIS and FAMIS Plus programs studied as compared with the HEDIS[®] 2010 National Medicaid Managed Care Average.

Figure 4. Percentage of enrollees with complete MMR immunization, by program as compared to the HEDIS[®] 2010 National Medicaid Managed Care Average*



*National Medicaid HEDIS[®] 2010 measures represent CY 2009 reported data

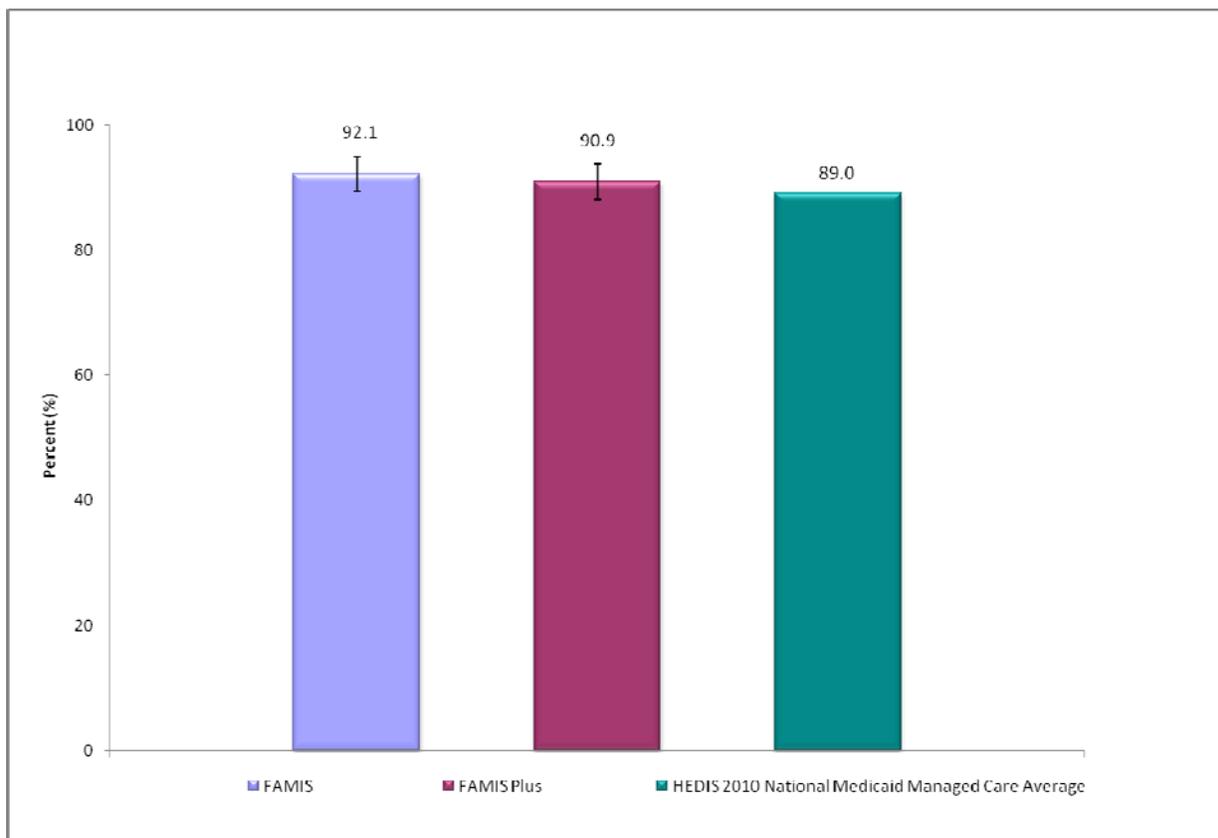
I = 95% Confidence Interval

MMR (measles, mumps, rubella) Results

- Both the FAMIS and FAMIS Plus MMR rates compare favorably with the HEDIS[®] 2010 National Medicaid Managed Care Average.

Figure 5 presents the rates of compliance with the IPV (injected polio) immunization for the FAMIS and FAMIS Plus programs as compared with the HEDIS[®] 2010 National Medicaid Managed Care Average.

Figure 5. Percentage of enrollees with complete IPV immunization, by program as compared to the HEDIS[®] 2010 National Medicaid Managed Care Average*



*National Medicaid HEDIS[®] 2010 measures represent CY 2009 reported data

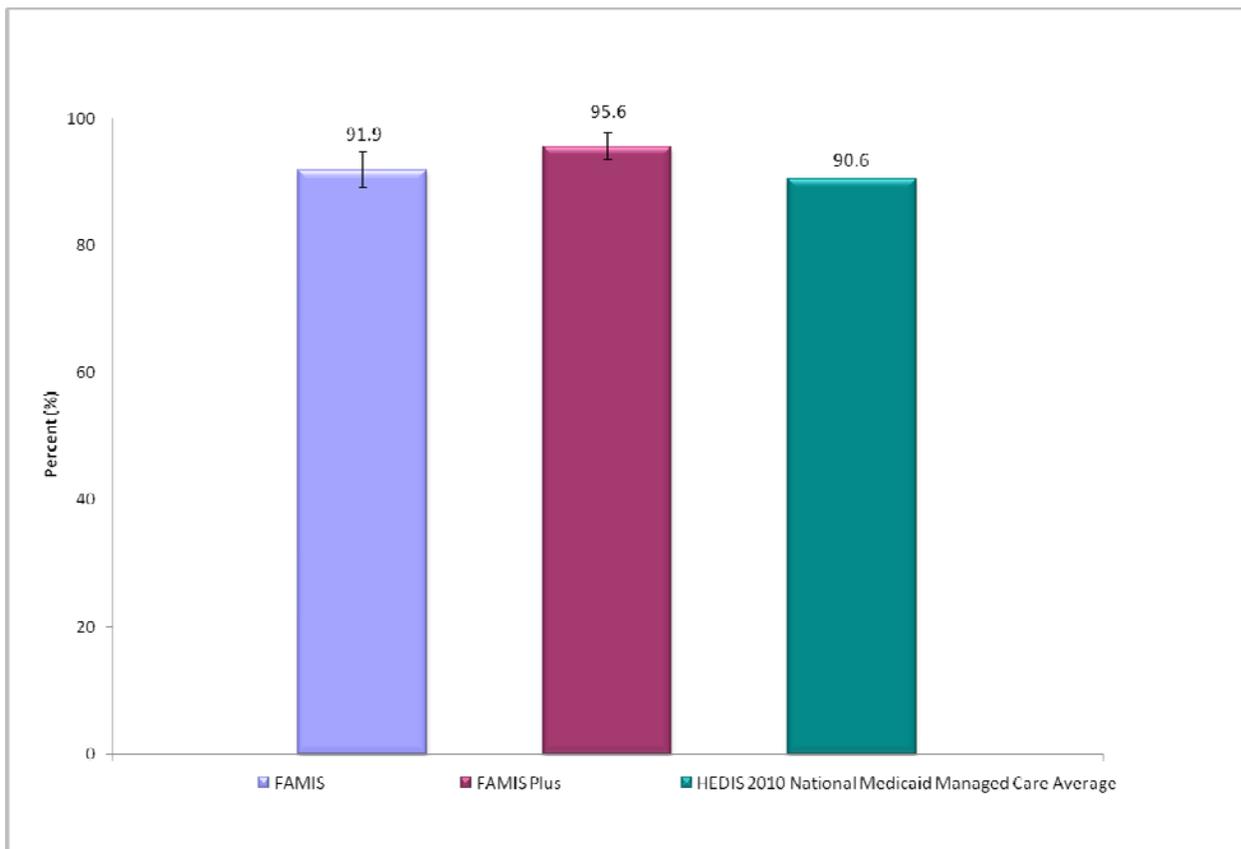
I = 95% Confidence Interval

IPV (Injected Polio) Results

- Both FAMIS and FAMIS Plus rates for polio vaccine out performed the HEDIS[®] 2010 National Medicaid Managed Care Average for CY 2009.

Figure 6 presents the rates of compliance with the VZV (varicella) immunization for the FAMIS and FAMIS Plus programs as compared with the HEDIS[®] 2010 National Medicaid Managed Care Average.

Figure 6. Percentage of enrollees with complete VZV immunization, by program as compared to the HEDIS[®] 2010 National Medicaid Managed Care Average*



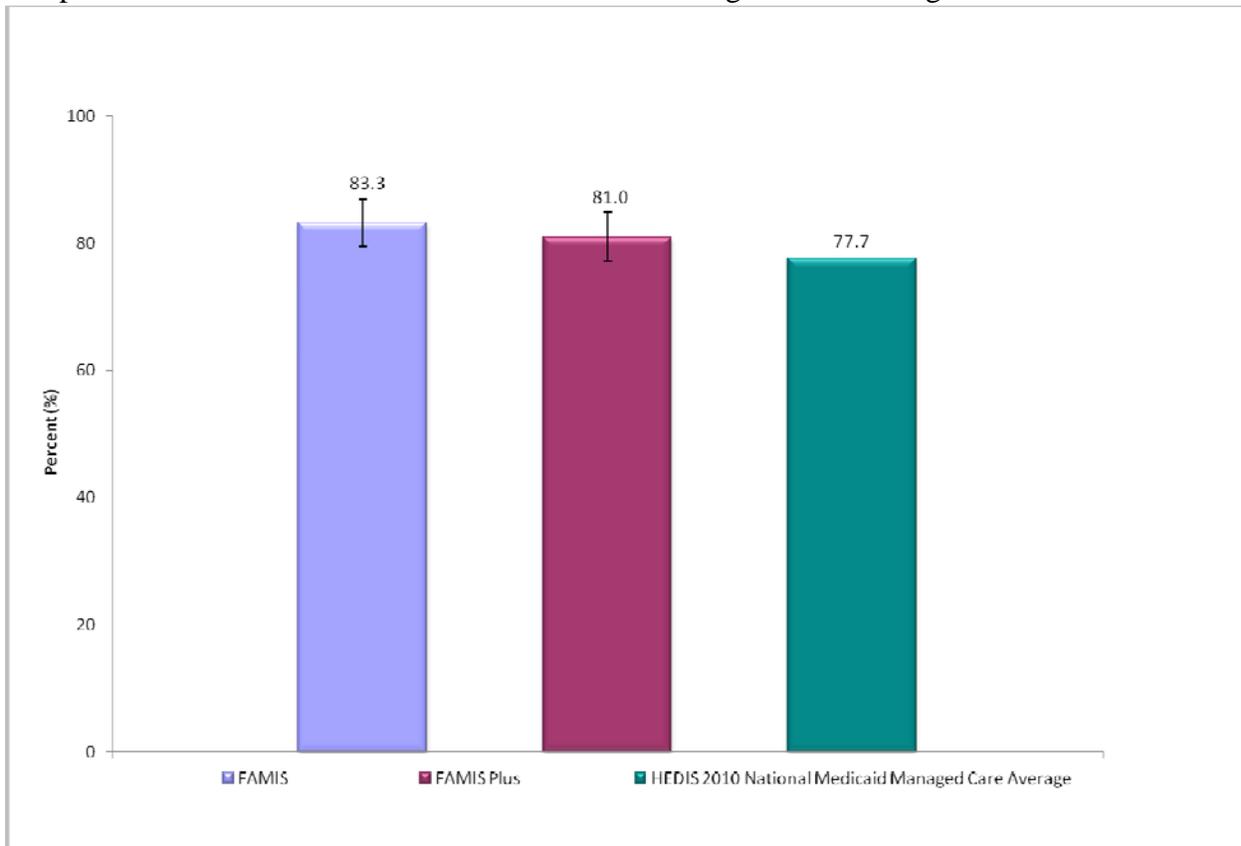
*National Medicaid HEDIS[®] 2010 measures represent CY 2009 reported data
I = 95% Confidence Interval

VZV (Varicella) Results

- Both FAMIS and FAMIS Plus rates for the chickenpox are favorable when compared with the HEDIS[®] 2010 National Medicaid Managed Care Average.

Figure 7 presents the rates of compliance with the PCV (pneumococcal conjugate) immunization for the FAMIS and FAMIS Plus programs as compared as the HEDIS[®] 2010 National Medicaid Managed Care Average.

Figure 7. Percentage of enrollees with complete PCV immunization series, by program as compared to the HEDIS[®] 2010 National Medicaid Managed Care Average*



*National Medicaid HEDIS[®] 2010 measures represent CY 2009 reported data

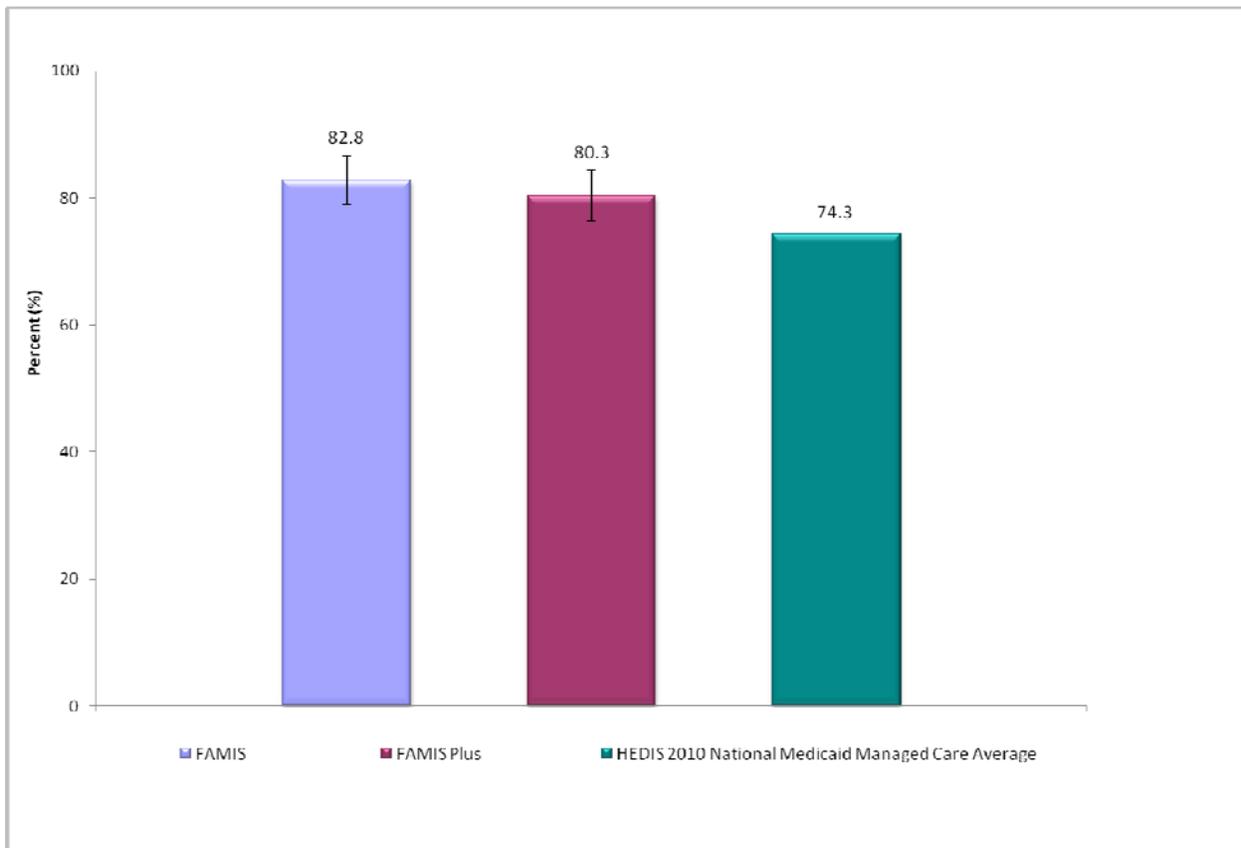
I = 95% Confidence Interval

PCV (Pneumococcal Conjugate) Results

- FAMIS and FAMIS Plus rates for PCV compared favorably with the HEDIS[®] 2010 National Medicaid Managed Care Average.

Figure 8 presents the rates of compliance with the Combination 2 immunization series (4 DTaP/ 3 IPV/ 1 MMR/ 2 Hib/ 3 HBV/ 1 VZV by 24 months of age) for the FAMIS and FAMIS Plus as compared with the HEDIS[®] 2010 National Medicaid Managed Care Average.

Figure 8. Percentage of enrollees with Combination 2 immunization series, by program as compared to the HEDIS[®] 2010 National Medicaid Managed Care Average*



*National Medicaid HEDIS[®] 2010 measures represent CY 2009 reported data

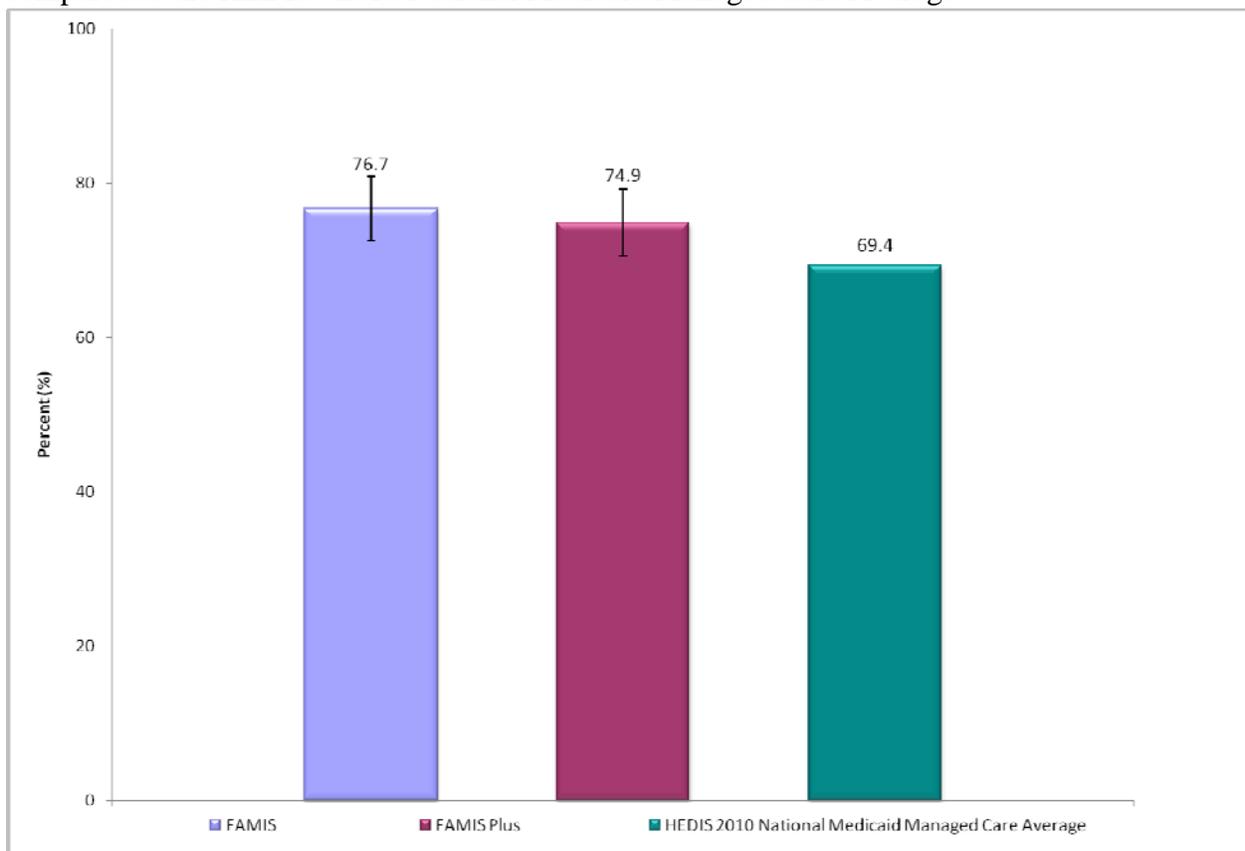
I = 95% Confidence Interval

Combination 2 Results

- Both FAMIS and FAMIS Plus rates for the Combination 2 immunization series compared favorably with the HEDIS[®] 2010 National Medicaid Managed Care Average.

Figure 9 presents the rate of compliance with the Combination 3 immunization series (Children who received all antigens listed in Combination 2 and four pneumococcal conjugate vaccinations by 24 months of age) for the programs studied as well as the 2010 HEDIS[®] National Medicaid Managed Care Average.

Figure 9. Percentage of enrollees with Combination 3 immunization series, by program as compared to the HEDIS[®] 2010 National Medicaid Managed Care Average*



*National Medicaid HEDIS[®] 2010 measures represent CY 2009 reported data

I = 95% Confidence Interval

Combination 3 Results

- Combination 3 immunization rates for both FAMIS and FAMIS Plus compared favorably with the HEDIS[®] 2010 National Medicaid Managed Care Average.

Conclusions

Overall, the immunization rates for both the FAMIS and FAMIS Plus programs compared favorably with the HEDIS[®] 2010 National Medicaid Managed Care Averages for all individual antigens. Both FAMIS and FAMIS Plus rates for both the Combinations 2 and 3 immunization series exceeded the national benchmark.

Virginia's goal is to be in the top quartile of the current year's national HEDIS scores for Medicaid/CHIP. The goals for Healthy People 2020 (U.S. Department of Health and Human Services) include increasing the proportion of children aged 19 to 35 months who receive the recommended vaccines and eliminating all cases of vaccine-preventable diseases. Targeted and systematic interventions along with the development of innovative approaches to improving immunization rates will support DMAS's ability to achieve its long-term immunization goals.

Recommendations

The MCO Collaborative offers a consistent and cooperative forum for DMAS to encourage and enhance statewide performance goals. While there are recent advances in vaccines delivery and immunization rates, challenges remain. There are disparities in children who are members of poorer socio-economic categories and newer public confidence concerns about vaccine safety. DMAS should consider the following recommendations to increase the percentage of enrollees receiving all recommended immunizations:

- Increase the statewide performance goals to target the HEDIS[®] National Medicaid Managed Care 90th Percentile versus the current HEDIS[®] National Medicaid Managed Care Average rates.
- Identify gaps in existing programs that contribute to immunization rates that are lower than the national benchmarks and target interventions to improve.
- Encourage all MCOs to consider proven strategies to improve performance in the percentage of children receiving immunizations. These include: enhanced outreach, provider prompts during visits, sharing HEDIS[®] results with providers, and expanding parental education to include newer concerns, i.e. vaccines and autism.
- Establish liason with the Virginia Chapter of the AAP to consider educational opportunities to ensure that children without a valid contraindication receive all recommended childhood immunizations.

Appendix

Table 1. Childhood Immunization Status for Those Turning 24 Months in CY 2009

Childhood Immunization Status For Those Turning 24 Months in 2009						
	Administrative Numerator	Immunization	Hybrid Numerator	Administrative Rate	Rate	[95% CI]
FAMIS (Denominator 407)	233	DTaP	360	57.2	88.5	[85.3, 91.7]
	264	IPV	375	64.9	92.1	[89.4, 94.8]
	335	MMR	378	82.3	92.9	[90.3, 95.5]
	327	Hib	386	80.3	94.8	[92.5, 97.1]
	143	Hepatitis B	366	35.1	89.9	[86.8, 93.0]
	326	VZV	374	80.1	91.9	[89.1, 94.7]
	235	Pneumococcal Conjugate*	339	57.7	83.3	[79.6, 87.0]
	121	Hepatitis A**	254	29.7	62.4	[57.6, 67.2]
	167	Rotavirus**	242	41.0	59.5	[54.6, 64.4]
	187	Influenza**	244	45.9	60.0	[55.1, 64.9]
	112	Combination 2	337	27.5	82.8	[79.0, 86.6]
	106	Combination 3	312	26.0	76.7	[72.5, 80.9]
FAMIS PLUS (Denominator 406)	232	DTaP	353	57.1	86.9	[83.5, 90.3]
	261	IPV	369	64.3	90.9	[88.0, 93.8]
	338	MMR	389	83.3	95.8	[93.7, 97.9]
	336	Hib	391	82.8	96.3	[94.3, 98.3]
	150	Hepatitis B	356	36.9	87.7	[84.4, 91.0]
	334	VZV	388	82.3	95.6	[93.5, 97.7]

Childhood Immunization Status For Those Turning 24 Months in 2009						
	Administrative Numerator	Immunization	Hybrid Numerator	Administrative Rate	Rate	[95% CI]
	211	Pneumococcal Conjugate*	329	52.0	81.0	[77.1, 84.9]
	99	Hepatitis A**	226	24.4	55.7	[50.7, 60.7]
	141	Rotavirus**	194	34.7	47.8	[42.8, 52.8]
	156	Influenza**	222	38.4	54.7	[49.7, 59.7]
	112	Combination 2	326	27.6	80.3	[76.3, 84.3]
	101	Combination 3	304	24.9	74.9	[70.6, 79.2]
All Programs (Denominator 815)	465	DTaP	713	57.2	87.7	[85.4, 90.0]
	525	IPV	744	64.6	91.5	[89.5, 93.5]
	673	MMR	767	82.8	94.3	[92.6, 96.0]
	663	Hib	777	81.6	95.6	[94.1, 97.1]
	293	Hepatitis B	722	36.0	88.8	[86.6, 91.0]
	660	VZV	762	81.2	93.7	[92.0, 95.4]
	446	Pneumococcal Conjugate*	668	54.9	82.2	[79.5, 84.9]
	220	Hepatitis A**	480	27.1	59.0	[55.6, 62.4]
	308	Rotavirus**	436	37.9	53.6	[50.1, 57.1]
	343	Influenza**	466	42.2	57.3	[53.8, 60.8]
	224	Combination 2	663	27.6	81.6	[78.9, 84.3]
	207	Combination 3	616	25.5	75.8	[72.8, 78.8]

*Combination 3 includes Pneumococcal Conjugate, but all additional vaccine results identified by ** are provided only for information purposes since they are 1st year HEDIS® measures and not publically reportable for this time period.

Section III - Well-Child Visits

Introduction

The AAP recommends that children visit their pediatrician for a well-child check-up as a newborn, by 1 month, at 2, 4, 6, 9, 12, 15, 18, 24, and 30 months, and once a year from ages 3 to 21. During a well-child visit, preventive care is provided by assessing the physical, behavioral, developmental and emotional well-being of a child. A well-child visit is a critical opportunity for detecting a developmental delay or disability. Early detection can lead to timely interventions that might lessen the future impact on both the child and family.

Older children may experience problems after starting school that could benefit from early detection and management by their health care provider. Annual well-child visits give the primary care physician the opportunity to screen for school problems including learning disabilities, attention difficulties, changes in mood, or anxiety disorders. These visits are an opportunity to provide the child with health information and anticipatory guidance that promote healthy behaviors.

Well Child Visit – Best Practice

Bright Futures is a national initiative dedicated to help every child achieve optimal health through collaboration with the AAP and various state projects. The AAP recommendations for preventive pediatric health care are detailed in the *Performing Preventive Services: A Bright Futures Handbook*. A comprehensive personal and family medical history assists the provider in determining health risks and providing appropriate laboratory testing and anticipatory guidance. Personal history includes medical, developmental, psychosocial, and mental health information, as well as the immunization record. The perinatal history, collected up to two years of age, consists of a history of the pregnancy and birth outcome.

Family history includes information about both the medical and mental health of immediate and extended family members, which may affect the health and well being of the child. Psychosocial history consists of family constellation and dynamics, housing, assessment of support systems, and exposure to family and/or community violence, which may adversely affect the child's mental health. Documented annual updates of the personal, family, and psychosocial histories are required in the chart to ensure the most current information is available.

Developmental, mental health and substance abuse assessments determine the need for referral and/or follow-up services. Developmental assessments for infants and young children include evaluating developmental milestones. For school-age children, this assessment incorporates cognitive, social, and emotional development. The mental health assessment provides an overall view of the child's personality, behavior, social interactions, affect, and temperament.

Every preventive health visit should include an unclothed physical examination with documentation of assessments of nutrition, environment, sleep habits, elimination, developmental status and immunization compliance. To determine overall health status, a comprehensive physical examination is also a Medicaid requirement for Early Periodic Screening, Diagnosis, and Treatment (EPSDT) services. It should be noted that EPSDT services are not a FAMIS benefit.

Health education enables the patient and family to make informed decisions about their own health. Anticipatory guidance provides the family with information on what to expect in terms of the child's current and next developmental phase. Information should be provided about the benefits of healthy lifestyles and practices, as well as injury and disease prevention.

Purpose and Objectives

The focus of this study included children and adolescents in three distinct DMAS programs:

- FAMIS (CHIP, under Title XXI of the Social Security Act)
- FAMIS Plus (Virginia's traditional Medicaid program for children)
- Medicaid Expansion program for uninsured children 6 through 18 years of age not eligible for traditional Medicaid within certain family income guidelines

The study was conducted to assess whether children enrolled in FAMIS, FAMIS Plus, or Medicaid Expansion programs during calendar year 2009 had the recommended number of well-child visits for their appropriate age group and whether all required health care components were received by these children and adolescents.

Study Indicators

The study indicators selected included the HEDIS[®] 2010 well-child measures, which are calculated using 2009 data. The measures are described below:

- The percentage of enrolled members who turned 15 months old during the measurement year, who received one, two, three, four, five, or six or more well-child visits with a primary care practitioner during their first 15 months of life.
- The percentage of members who were three, four, five, or six years of age during the measurement year who received one or more well-child visits with a primary care practitioner during the measurement year.

Delmarva also calculated the percentage of adolescent well-child visits for enrollees 12 through 20 years of age who received at least one comprehensive well-care visit with a PCP or OB/GYN practitioner during the measurement year. The HEDIS[®] 2010 Technical Specifications, Volume 2 for the adolescent well-child measure were also used to collect and report data for the 7 through 11 year age group.

Study Population

The study population included all children continuously enrolled in the FAMIS, FAMIS Plus, and Medicaid Expansion Programs whose age during January 1, 2009 – December 31, 2009 was between 15 months and 20 years. The age groups consisted of enrollees who turned 15 months old during the CY 2009 and those age groups of 3-6, 7-11 and 12-20 years as of December 31 of the measurement period and who were continuously enrolled during that year.

For comparability with national HEDIS[®] rates, HEDIS[®] 2010 technical specifications were used to determine eligibility requirements and to classify children with respect to age. A gap of no more than 31 days during the continuous enrollment period was allowed for all study age groups. The specifications excluded children who had more than one gap in enrollment during this period or who had one gap of more than 31 days.

Methodology

Program enrollment data provided by DMAS was used to identify members of the study population and to classify them with respect to age and program membership. Children between the ages of 3 and 20 years were identified based on their status as of December 31, 2009. Children that were 15 months old at any point during calendar year 2009 were placed into the 15-month age group.

The HEDIS® hybrid methodology was employed to determine the number of well-child visits within the study period. Both administrative claims data and medical record data were used to count the number of well-child visits for this study. Claims data for FAMIS, FAMIS Plus, and Medicaid Expansion children were screened to identify all well-child visits that each child obtained within the study period. Well-child visits were established using the age appropriate sets of Current Procedural Terminology (CPT) and the International Statistical Classification of Diseases and Related Health Problems 9th Revision (ICD-9) visit codes listed in the HEDIS® 2010 technical specifications.

For those children who did not have a well-child visit according to administrative claim data, a medical record review was conducted to determine if well-child visits occurred within the study timeframe. For the 15-month old group, the total number of well-child visits, from one month after birth through 15-months of age, was counted. For older age groups, children were classified as having received (or not received) one or more well-child visits during the measurement period. Table 1 provides the CPT and ICD-9 codes used to identify well-child visits by age groups in the administrative data.

Table 1. Well-Child Visit Codes by Age Groups

Description	CPT Codes	ICD-9 Codes
15 months	99381, 99382, 99391, 99392, 99432, 99461	V20.2, V70.0, V70.3, V70.5, V70.6, V70.8, V70.9
3-6 years	99382, 99383, 99392, 99393	V20.2, V70.0, V70.3, V70.5, V70.6, V70.8, V70.9
7-20 years	99383-99385, 99393-99395	V20.2, V70.0, V70.3, V70.5, V70.6, V70.8, V70.9

For all age groups, the primary care practitioner did not have to be the practitioner assigned to the child. Primary care practitioners are defined as physicians and non-physician, mid-level practitioners whose primary or secondary specialty are of the preventive care specialties and defined by the MCO and DMAS as primary care practitioners. HEDIS® specifications also allow the MCO to count visits to physician assistants, nurse practitioners in primary care practitioner

offices (even if the practitioner is not listed as a primary care practitioner in the MCO directory) as long as the practitioner provided any service specified in the CPT and/or ICD-9-CM codes for this measure.

Inpatient, emergency room, and specialist visits (with the exception of OB/GYN for the 12-20 age groups) were excluded and not counted. The intent of this exclusion is to capture comprehensive well-child visits only.

Medical record review captured a well-child visit if the medical record documentation included a visit to a primary care practitioner, the date of that visit, and a progress note indicating a health and developmental history (physical and mental), a physical exam, health education, and age-appropriate anticipatory guidance. Table 2 provides the medical record documentation required for a positive numerator hit.

Table 2. Well-Child Visit Documentation in the Medical Record

Medical Record	<p>Documentation from the medical record must include a note indicating a visit with a primary care practitioner, the date the well-child visits occurred, and evidence of all of the following:</p> <ul style="list-style-type: none"> ▪ A health and developmental history (physical and mental) ▪ A physical exam ▪ Health education/anticipatory guidance <p>Each component of the well-child visit may have occurred on different dates within the measurement year</p>
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Well Child Visits by Age Group

For the first study age group, seven separate numerators were calculated, corresponding to the number of members who received zero, one, two, three, four, five, or six or more well-child visits with a primary care practitioner during their first 15 months of life. A child was included in only one numerator (e.g., a child receiving six well-child visits will not be included in the rate for five or fewer visits).

The remaining study population, ages 3-20, was divided into three age groups: 3-6, 7-11, and 12-20. A separate numerator was calculated for each age group indicating the number of members that had at least one well-care visit with a primary care practitioner during the measurement year.

While standards for well-child health care services vary for children of different ages, the NCQA HEDIS[®] measure specifications were used as outlined in HEDIS[®] 2010 Technical Specifications, Volume 2.

Table 3. Well-Child Visit Guidelines

Child's Age	Number of Well-Child Visits By Age
1 Month	1
2 Months	2
4 Months	3
6 Months	4
9 Months	5
12 Months	6
15 Months	7
18 Months	8
3-6 Years	Annually
7-20 Years	Annually

Findings

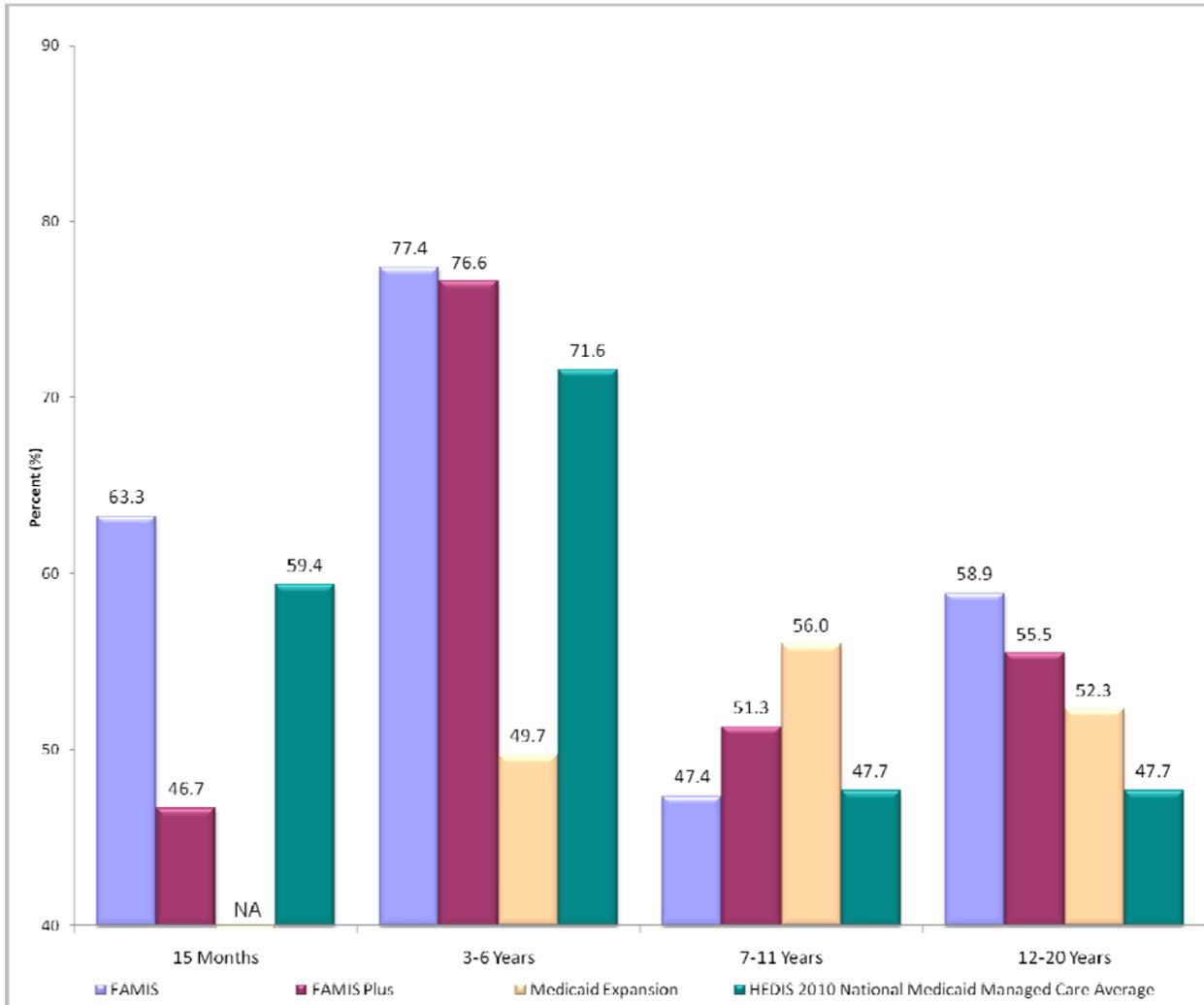
The findings for the well-child indicators are summarized in Figure 1 and Tables 4 through 8. These results were compared with HEDIS[®] 2010 National Medicaid Managed Care Average. This comparative benchmark represents data collected, validated, and submitted to the NCQA for Medicaid managed care populations in calendar year 2009. HEDIS[®] has become the national standard for measuring performance results, including well-child visits. In this comparison, Medicaid managed care rates are used as the national benchmark.

Using a statistically valid sampling of the enrollee population, a hybrid methodology was used that included both administrative data and medical records review. Data from both sources was used to determine the rate of well-child visits received by these groups of enrollees. As an interpretive aid, the limits of the 95 percent confidence level for each reported rate are also presented in these results. The confidence level (CI) is the estimated probability a population parameter lies within a given CI. The CI is an estimated range of values calculated from a given set of sample data. As an example, the estimate is that 77.4 percent of FAMIS children (ages 3-6 years) received the recommended number of well-child visits. There is 95 percent certainty that enrollees within the upper and lower limits of the confidence interval (73.2 to 81.6 percent) will receive these visits and achieve the same results.

Results of Well-Child Visits by Age Group

The FAMIS, FAMIS Plus, and the Medicaid Expansion program rates by age group are displayed in Figure 1 and all results are compared to the HEDIS[®] 2010 National Medicaid Managed Care Average at the 95 percent confidence level.

Figure 1 presents the well-child visit rates by age group for FAMIS, FAMIS Plus, and the Medicaid Expansion Programs as compared with the HEDIS® 2010 National Medicaid Managed Care Averages. Figure 1. Well-Child Visit Rates by Age Group*^o



*Medicaid HEDIS® 2010 measures represent CY 2009 reported data.

Note: Well-Child Visit rate for 15 month age group is based on 6+ visits; the Well-Child Visit rate for 3-20 year age group is based on at least one visit during the measurement period.

Age 15 Months

- FAMIS rates outperformed the HEDIS® 2010 National Medicaid Managed Care Average.
- Results for the FAMIS Plus population were significantly lower than this benchmark.

^o See Tables 4 - 8 for Confidence Intervals and HEDIS® 2010 National Medicaid Managed Care 90th percentiles

Ages 3 – 6 years

- Both FAMIS and FAMIS Plus performed significantly better when compared with the HEDIS® 2010 National Medicaid Managed Care Average.
- Medicaid Expansion results were not as favorable and included only the eligible age 6 enrollees in this category which may explain the disparity.

Ages 7 – 11 years

- The FAMIS results were slightly below the national benchmark while both FAMIS Plus and Medicaid Expansion outperformed the HEDIS® 2010 National Medicaid Managed Care Average.

Ages 12 – 20 years

- FAMIS, FAMIS Plus, and Medicaid Expansion well- child visit rates outperformed the HEDIS® 2010 National Medicaid Managed Care Average.

Bright Futures is an AAP-sponsored initiative that promotes preventive health services. The program addresses the health care needs of children in the context of the family and community. Many states have implemented *Bright Futures* principles, guidelines, and tools to strengthen the connections between state and local programs, pediatric primary care, families, and local communities.

Based on the *Bright Futures* guidelines and utilizing the HEDIS® 2010 hybrid methodology, Delmarva completed an analysis on the number of well-child visits recorded for children age 15 months in the FAMIS and FAMIS Plus programs during the study year of CY 2009. The detailed results are outlined in Tables 4 and 5 and include the confidence intervals and the HEDIS® 2010 National Medicaid Managed Care Mean (Average) along with the 50th, 75th, and 90th percentiles*. Similar results are presented for FAMIS, FAMIS Plus, and Medicaid Expansion children and adolescents, ages 3-20 years in Tables 6, 7, and 8.

Table 4. Percentage of FAMIS Enrollees by number of Well-Child Visits Age 15 Months

Number of Visits	VA FAMIS Rate CY 2009	95% Confidence Interval	HEDIS® 2010 National Medicaid Managed Care *			
			Average	50 th Percentile	75 th Percentile	90 th Percentile
6 or More	63.3%	[58.5, 68.1]	59.4%	60.4%	69.4%	76.3%
5	17.0%	[13.2, 20.8]	16.5%	16.6%	18.9%	22.2%
4	9.0%	[6.1, 11.9]	10.7%	10.3%	12.6%	15.3%
3	5.8%	[3.4, 8.2]	5.7%	5.4%	7.4%	9.5%
2	2.7%	[1.0, 4.4]	3.4%	2.8%	4.6%	5.9%
1	1.5%	[0.2, 2.8]	2.1%	1.6%	2.9%	4.4%
0	0.7%	[0.0, 1.6]	2.3%	1.4%	3.1%	5.1%

*HEDIS® 2010 rates are based on CY 2009 data

According to the *Bright Futures* and AAP guidelines, by age 15 months, a child should have seven documented well-child visits. The FAMIS rate of children who received six or more well-child visits in 2009 was higher than the HEDIS® 2010 National Medicaid Managed Care Average but lower than the HEDIS® 90th percentile. A child was included in only one numerator (e.g., a child receiving six well-child visits will not be included in the rate for five or fewer visits).

Table 5. Percentage of FAMIS Plus Enrollees by number of Well-Child Visits Age 15 Months

Number of Visits	VA FAMIS Plus Rate CY 2009	95% Confidence Interval	HEDIS® 2010 National Medicaid Managed Care *			
			Average	50 th Percentile	75 th Percentile	90 th Percentile
6 or More	46.7%	[41.8, 51.6]	59.4%	60.4%	69.4%	76.3%
5	17.5%	[13.7, 21.3]	16.5%	16.6%	18.9%	22.2%
4	12.2%	[8.9, 15.5]	10.7%	10.3%	12.6%	15.3%
3	6.8%	[4.2, 9.4]	5.7%	5.4%	7.4%	9.5%
2	5.8%	[3.4, 8.2]	3.4%	2.8%	4.6%	5.9%
1	9.5%	[6.5, 12.5]	2.1%	1.6%	2.9%	4.4%
0	1.5%	[0.2, 2.8]	2.3%	1.4%	3.1%	5.1%

*HEDIS® 2010 rates are based on CY 2009 data

The FAMIS Plus rate does not compare favorably to either the HEDIS® 2010 National Medicaid Managed Care Average or the HEDIS® 90th percentile.

Table 6. Percentage of Well-Child Visits for FAMIS Enrollees Age 3-6 Years, 7-11 Years, and 12-20 Years

Measure	VA FAMIS Rate CY 2009	95% Confidence Interval	HEDIS® 2010 National Medicaid Managed Care *			
			Average	50th Percentile	75th Percentile	90th Percentile
Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life	77.4%	[73.2, 81.6]	71.6%	71.7%	77.2%	82.5%
Well-Child Visits in the 7th Through 11th Years of Life	47.4%	[42.5, 52.3]	47.7%**	46.9%**	55.9%**	63.2%**
Well-Child Visits in the 12th Through 20th Years of Life	58.9%	[54.0, 63.8]	47.7%**	46.9%**	55.9%**	63.2%**

*HEDIS® 2010 rates are based on CY 2009 data

**HEDIS® 2010 Rate for Adolescent Well-Care Visits

The FAMIS rates for ages 3-6 and 12-20 years were significantly better when compared with the HEDIS® 2010 National Medicaid Managed Care Averages. However, in the 7-11 age group, FAMIS results were slightly lower but comparable to this national benchmark. All FAMIS rates remain below the HEDIS® 90th percentile.

Table 7. Percentage of Well-Child Visits for FAMIS Plus Enrollees Age 3-6 Years, 7-11 Years, and 12-20 Years

Measure	VA FAMIS Plus Rate CY 2009	95% Confidence Interval	HEDIS [®] 2010 National Medicaid Managed Care *			
			Average	50th Percentile	75th Percentile	90th Percentile
Well-Child Visits in the 3 rd , 4 th , 5 th , and 6 th Years of Life	76.6%	[72.4, 80.8]	71.6%	71.7%	77.2%	82.5%
Well-Child Visits in the 7 th Through 11 th Years of Life	51.3%	[46.3, 56.3]	47.7%**	46.9%**	55.9%**	63.2%**
Well-Child Visits in the 12 th Through 20 th Years of Life	55.5%	[50.6, 60.4]	47.7%**	46.9%**	55.9%**	63.2%**

*HEDIS[®] 2010 rates are based on CY 2009 data

**HEDIS[®] 2010 Rate for Adolescent Well-Care Visits

FAMIS Plus performed better than the HEDIS[®] 2010 National Medicaid Managed Care Averages for children in all groups, 3 through 20 years of age, but are lower than the HEDIS[®] 90th percentile.

Table 8. Percentage of Well-Child Visits for Medicaid Expansion Enrollees Age 3-6 Years, 7-11 Years, and 12-20 Years

Measure	VA Medicaid Expansion Rate CY 2009	95% Confidence Interval	HEDIS [®] 2010 National Medicaid Managed Care *			
			Average	50th Percentile	75th Percentile	90th Percentile
Well-Child Visits in the 3 rd , 4 th , 5 th , and 6 th Years of Life	49.7%	[41.5, 57.9]	71.6%	71.7%	77.2%	82.5%
Well-Child Visits in the 7 th Through 11 th Years of Life	56.0%	[51.1, 60.9]	47.7%**	46.9%**	55.9%**	63.2%**
Well-Child Visits in the 12 th Through 20 th Years of Life	52.3%	[47.3, 57.3]	47.7%**	46.9%**	55.9%**	63.2%**

*HEDIS[®] 2010 rates are based on CY 2009 data

**HEDIS[®] 2010 Rate for Adolescent Well-Care Visits

Medicaid Expansion rates for the 3-6 age category include only eligible 6-year-old children. The resultant data limitations may explain why the results were unfavorable when compared with the HEDIS[®] 2010 National Medicaid Managed Care Average. Medicaid Expansion rates for ages 7-20 years are better than the national average, while all age groups remain below the HEDIS[®] 90th percentile.

Conclusions

15 Months

Children in the FAMIS program received six or more well-child visits at a rate higher than the HEDIS[®] 2010 National Medicaid Managed Care Average but lower than the HEDIS[®] 90th percentile. The FAMIS Plus rate is significantly lower when compared to either the HEDIS[®] 2010 National Medicaid Managed Care Average or the HEDIS[®] 90th percentile.

Ages 3 – 6 years

Both FAMIS and FAMIS Plus outperformed the HEDIS[®] 2009 National Medicaid Managed Care Average (71.6%), but remained below the HEDIS[®] 90th percentile of 82.5%.

Ages 7 – 11 years

FAMIS rates for ages 7 -11 years were slightly below the HEDIS[®] 2010 National Medicaid Managed Care Averages, while both FAMIS Plus and Medicaid Expansion results exceeded this national benchmark (47.7%). All program rates in this age group remained below the 2010 HEDIS[®] 90th percentile of 63.2%.

Ages 12 – 20 years

All programs for this age group compared favorably and outperformed the HEDIS[®] 2010 National Medicaid Managed Care Average (47.7%), but remained below the HEDIS[®] 90th percentile of 63.2%.

Recommendations

Increasing the number of children who receive the recommended number of well-child visits has been a challenge for state Medicaid agencies. Visits may be coded as a well-child visit but may not contain all the required assessment and examination components. Improvement efforts must address the goal of improving both the rate and the quality of well-child visits. There are also missed opportunities when a child visits a practitioner more than once during the year, but does not receive all components of a comprehensive well-child visit over the course of all visits.

Children progress through many developmental stages during normal healthy growth patterns. Each stage of development is important in the transition to the next growth period and includes physical, emotional, and cognitive milestones. Measurement of status must be appropriate to each age and stage of this growth journey.

Improving the percentage of children receiving recommended preventive well-child services is a complex issue and should include a collaborative approach for identifying barriers and prioritizing interventions.

In order to enhance the existing collaborative approach, DMAS and the MCOs should:

- Increase the forum of the statewide MCO Collaborative for individual MCOs to present and share evidence of “best practices” with proven results.
- Leverage proven interventions that target enrollee/parent education designed to increase self-management.
- Conduct detailed root-cause analyses to identify gaps and barriers among subsets of enrollees to determine targeted interventions, i.e. specific access barriers.
- Provide “care coordination” to include both primary/preventive care services in addition to disease management programs.
- Evaluate recommendations by Rand Health to address major barriers in the pediatric health care system. Their Fact Sheet, “*Voltage Drops*” in *Children’s Health Care* summarizes actions to address barriers, expand access, and enhance quality of care.
- Review the ABCD Projects coordinated by the National Academy for State Health Policy (NASHP) for opportunities in Virginia. The state activities, data and materials are available at: www.abcdresources.org.
- Establish a partnership with the Virginia Chapter, AAP to explore mutual opportunities and educational approaches in quality improvement techniques to improve performance results.

Appendix

Table 1. Well-Child Visits in CY 2009

Well-Child Visits in 2009							
	Age Group	Administrative Numerator	Denominator	Hybrid Numerator	Administrative Rate	Rate	[95% CI]
FAMIS	3 – 6 yrs.	300	411	318	73.0	77.4	[73.2, 81.6]
	7 – 11 yrs.	174	411	195	42.3	47.4	[42.5, 52.3]
	12 – 20 yrs.	200	411	242	48.7	58.9	[54.0, 63.8]
FAMIS PLUS	3 – 6 yrs.	294	411	315	71.5	76.6	[72.4, 80.8]
	7 – 11 yrs.	181	411	211	44.0	51.3	[46.3, 56.3]
	12 – 20 yrs.	198	411	228	48.2	55.5	[50.6, 60.4]
Medicaid Expansion	3 – 6 yrs.	69	155	77	44.5	49.7	[41.5, 57.9]
	7 – 11 yrs.	201	411	230	48.9	56.0	[51.1, 60.9]
	12 – 20 yrs.	183	411	215	44.5	52.3	[47.3, 57.3]
All Programs	3 – 6 yrs.	663	977	710	67.9	72.7	[69.9, 75.5]
	7 – 11 yrs.	556	1,233	636	45.1	51.6	[48.8, 54.4]
	12 – 20 yrs.	581	1,233	685	47.1	55.6	[52.8, 58.4]

Table 2. Well-Child Visits For Children Turning 15 Months in CY 2009

Well-Child Visits for Children Turning 15 Months in 2009						
	Administrative Numerator	Visit Count	Hybrid Numerator	Administrative Rate	Rate	[95% CI]
FAMIS	4	0	3	1.0	0.7	[0.0, 1.6]
	7	1	6	1.7	1.5	[0.2, 2.8]
	14	2	11	3.4	2.7	[1.0, 4.4]
	24	3	24	5.8	5.8	[3.4, 8.2]
	46	4	37	11.2	9.0	[6.1, 11.9]
	73	5	70	17.8	17.0	[13.2, 20.8]
	243	6+	260	59.1	63.3	[58.5, 68.1]
FAMIS	12	0	6	2.9	1.5	[0.2, 2.8]
	52	1	39	12.7	9.5	[6.5, 12.5]
	23	2	24	5.6	5.8	[3.4, 8.2]
	33	3	28	8.0	6.8	[4.2, 9.4]
	48	4	50	11.7	12.2	[8.9, 15.5]
	68	5	72	16.5	17.5	[13.7, 21.3]
	175	6+	192	42.6	46.7	[41.8, 51.6]
All	16	0	9	1.9	1.1	[0.3, 1.9]
	59	1	45	7.2	5.5	[3.9, 7.1]
	37	2	35	4.5	4.3	[2.9, 5.7]
	57	3	52	6.9	6.3	[4.6, 8.0]
	94	4	87	11.4	10.6	[8.4, 12.8]
	141	5	142	17.2	17.3	[14.7, 19.9]
	418	6+	452	50.9	55.0	[51.5, 58.5]

Section IV - Asthma Management

Introduction

According to the 2009 National Health Interview Survey, 8 percent of adult Americans 18 years and older currently have asthma. This chronic disease has increased and affected over 10 million U.S. children and adolescents aged 17 and under. A current diagnosis of asthma is reported by 7.1 million (10%) under the age of 18 years. Children in poor families are more likely to have asthma (14%) than children in families that are not poor (8%). Prevalence of asthma also remains higher among non-Hispanic black children than among Hispanic and non-Hispanic white children.

The National Heart, Lung, and Blood Institute's (NHLBI) National Asthma Education and Prevention Program (NAEPP) published clinical practice guidelines to encourage the wider use of best practices for all persons diagnosed with asthma. Two types of medications are used for asthma: quick relief (rescue) and controller medications. Quick relief medications are taken when asthma symptoms flare. Controller medications help reduce airway inflammation and prevent asthma symptoms. Controller medications should be taken every day (as prescribed) whether a person is symptomatic or not in order to prevent attacks. Unfortunately, controller medications are not always prescribed or are not being used as prescribed.

The goal for enrollees diagnosed with asthma is to assist them in managing their condition in order to improve the quality of their life. Techniques may include the use of controller and quick relief medications as well as environmental changes that can be made in the home to help avoid asthma triggers.

Uncontrolled asthma can lead to emergency room visits and hospitalizations. Due to the number of children with asthma, the lack of asthma control, and the expense associated with severe, acute attacks, monitoring for use of controller medications in children with asthma has become a national health priority.

Purpose and Objectives

The focus of this study included children and adolescents in three distinct DMAS programs:

- FAMIS (CHIP, under Title XXI of the Social Security Act)
- FAMIS Plus (Virginia's traditional Medicaid program for children)
- Medicaid Expansion program for uninsured children 6 through 18 years of age not eligible for traditional Medicaid within certain family income guidelines

NCQA periodically evaluates and modifies their recommendations for performance measures. The Use of Appropriate Medications for People with Asthma (ASM) measure was modified for use in the HEDIS[®] 2010 Technical Specifications, Volume 2. The age stratifications were modified in the indicators: from 5 to 9 in HEDIS[®] 2009 to 5 to 11 years in HEDIS[®] 2010 and from 10 to 17 to 12 to 50 years of age in the same time periods. During the measurement year (CY 2009), this assessment examined the use of appropriate asthma medications in children and adolescents from 5 to 9 and 12 to 50 years of age. Those diagnosed with persistent asthma were evaluated to determine if preferred medication therapy for long-term asthma control was prescribed.

Study Indicators

The measure is defined as the percentage of the eligible population ages 5 to 11 years and 12 to 50 years who were identified as having persistent asthma and appropriately prescribed medication during the measurement year. The denominator consists of the eligible population. The numerator includes members who were appropriately prescribed at least one of the preferred classes (Table 2) of asthma therapy medications.

Study Population

The study population is defined as children diagnosed with persistent asthma that, during the measurement year and the year prior to the measurement year 2009, had any of the following:

- At least one Emergency Department (ED) visit based on the visit codes* with asthma (ICD-9 code 493) as the principal diagnosis.
- At least one acute inpatient discharge (claim/encounter) based on the visit codes* with asthma as the principal diagnosis.

*Codes to identify asthma encounters are located in Table 3.

- At least four outpatient asthma visits based on the visit codes* with asthma as one of the listed diagnoses and at least two asthma medication dispensing events.
- At least four asthma medication dispensing events (i.e., an asthma medication was dispensed on four occasions).

For a member identified as having persistent asthma because of at least four asthma medication dispensing events, where leukotriene modifiers were the sole asthma medication dispensed, the member must:

- Meet any of the other three criteria stated above, or
- Have at least one diagnosis of asthma in any setting in the same year as the leukotriene modifier or in year prior to the measurement year

Enrollees were eligible for the study population if they had continuous enrollment in both the measurement year 2009 and in the prior year 2008 with a gap in enrollment of no more than 31 days during each year of enrollment. The anchor date for enrollment was December 31, 2009. Enrollees diagnosed with emphysema, Chronic Obstructive Pulmonary Disease (COPD), acute respiratory failure and cystic fibrosis were excluded from the study population. It should be noted that while this focused study is about services for children, adults are included in the asthma population, due to adherence to the HEDIS® 2010 Technical Specifications.

Methodology

Using the administrative methodology as outlined in the HEDIS® 2010 Technical Specifications, Volume 2 the indicators for the 5 to 11 and 12 to 50 year age groups were calculated. The ICD-9 diagnosis code for asthma is displayed in Table 1.

Table 1. Asthma Diagnosis

Description	ICD-9-CM Diagnosis Code
Asthma	493

Table 2 includes the list of asthma medications used to define an appropriate medication for the persistent asthma study population. These classifications of medication are considered preferred therapy for asthma treatment and are counted in the measure’s numerator. The eligible population must be dispensed at least one prescription for a preferred therapy during the measurement year in order to qualify as a positive numerator hit.

Table 2. Asthma Medications

Description	Prescription
Preferred Therapy	• Antiasthmatic combinations
	• Antibody inhibitor
	• Inhaled steroid combinations
	• Inhaled corticosteroids
	• Leukotriene modifiers
	• Mast cell stabilizers
	• Methylxanthines

Table 3 contains the CPT and Revenue codes used to determine acute inpatient, emergency department, and outpatient asthma visits/encounters.

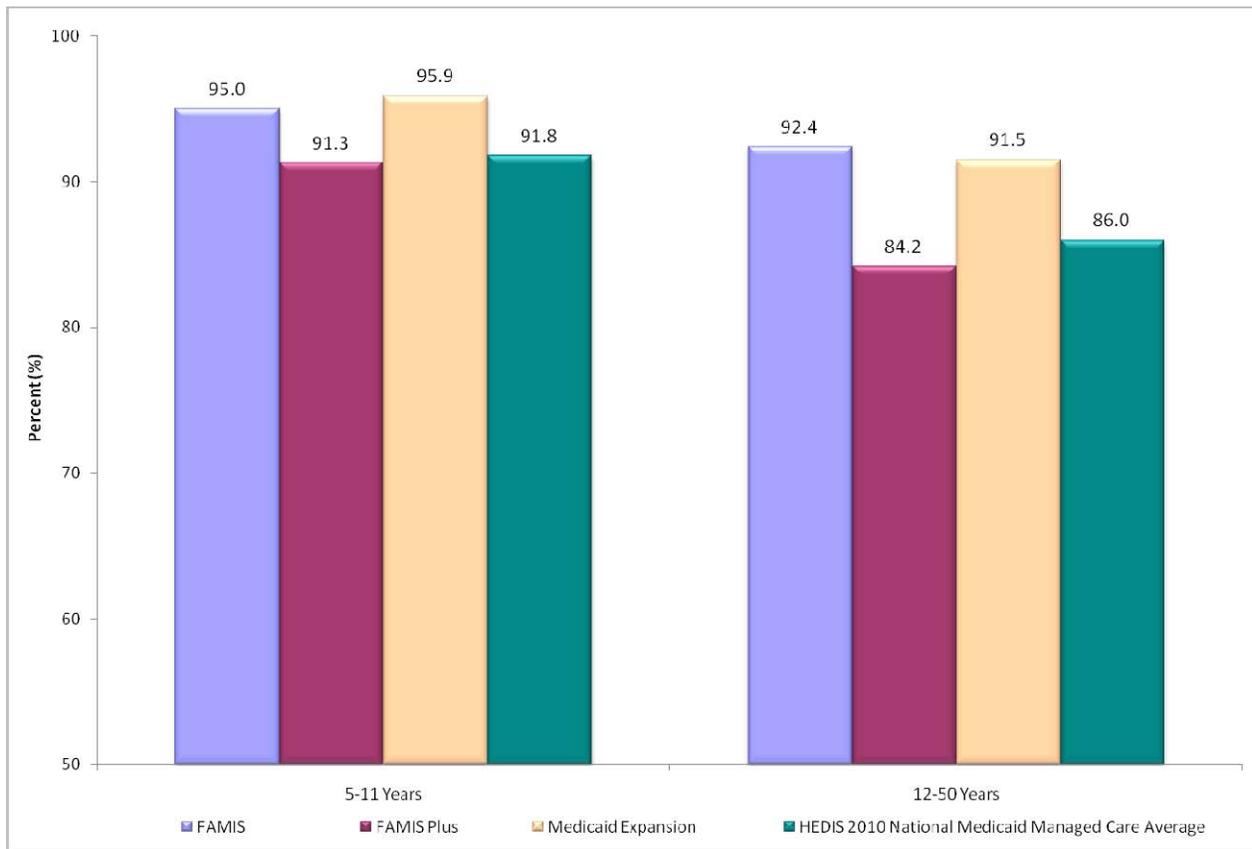
Table 3. Codes to Identify Emergency Department and Inpatient Asthma Encounters

Description	CPT Codes	UB Revenue Codes
Acute Inpatient	99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99291	010x, 0110-0114, 0119, 0120-0124, 0130-0134, 0139, 0140-0144, 0149, 0150-0154, 0159, 016x, 020x-022x, 072x, 0987
ED Services	99281-99285	045x, 0981
Outpatient	99201-99205, 99211-99215, 99217-99220, 99241-99245, 99341-99345, 99347-99350, 99382-99386, 99392-99396, 99401-99404, 99411, 99412, 99420, 99429	051x, 0520-0523, 0526-0529, 077x, 0982, 0983

Findings

The rates of appropriate medication received by children with asthma for all three DMAS programs exceeded the HEDIS[®] 2010 National Medicaid Managed Care Average. The Medicaid Expansion program for children from 5-11 years of age was the only group to outperform both the national average and the HEDIS[®] 90th percentile benchmarks. The use of appropriate medication for children with asthma by age group for FAMIS, FAMIS Plus, and Medicaid Expansion is presented in Figure 1.

Figure 1. Use of Appropriate Medications for People with Asthma*



*National Medicaid HEDIS[®] 2010 measures represent 2009 reported data

Ages 5 - 11 Years

- Children enrolled in FAMIS and Medicaid Expansion were appropriately prescribed medication for asthma at higher rates than the HEDIS[®] 2010 National Medicaid Managed Care Average, while rates for FAMIS Plus children were slightly less than this benchmark.
- Only the Medicaid Expansion population rate exceeded the HEDIS[®] 2010 90th percentile of 95.5 percent.*

Ages 12 - 50 Years

- Enrollees in FAMIS and Medicaid Expansion were appropriately prescribed medication for asthma at higher rates than the HEDIS[®] 2010 National Medicaid Managed Care Average, while the rate for FAMIS Plus was less than this benchmark.
- Rates for both FAMIS and Medicaid Expansion exceeded the HEDIS[®] 2010 90th percentile of 90.7 percent.*

* See Tables 4-6 for HEDIS[®] 2010 National Medicaid Managed Care 50th, 75th, and 90th percentiles

Conclusions and Recommendations

The use of appropriate medications for children diagnosed with persistent asthma in the 5-11 year age group exceeded those of the HEDIS[®] 2010 National Medicaid Managed Care Average for FAMIS and Medicaid Expansion enrollees. FAMIS Plus children were slightly below this benchmark while only the Medicaid Expansion population rate exceeded the HEDIS[®] 2010 90th percentile of 95.5 percent.

FAMIS and Medicaid Expansion enrollees in the 12-50 year age category were appropriately prescribed medication for asthma at higher rates than the HEDIS[®] 2010 National Medicaid Managed Care Average, while the rate for FAMIS Plus was less than this benchmark. Rates for both FAMIS and Medicaid expansion exceeded the HEDIS[®] 2010 90th percentile of 90.7 percent.

Both FAMIS and Medicaid Expansion represent the smallest populations of these three programs and both either almost meet or exceeded the HEDIS[®] 2010 90th percentile for CY 2009. This national benchmark should be the goal for the largest population category, FAMIS Plus.

Since asthma is a chronic disease that may exhibit variable symptoms over time, continued monitoring is an essential component of sustaining control. Patient and family self-management is an important and ongoing technique that should be encouraged across all health care settings. These performance rates indicate that most providers are aware of clinical guidelines and practice according to these standards.

Delivery systems and health plans could further evaluate their enrollees with asthma to determine if enrollees are using therapy as prescribed and whether preventive medications are used during times when they are asymptomatic. Patients at lower socio-economic levels and poor adherence to medication regimens may respond to direct and targeted education and feedback to assist in determining gaps between prescribed medications and actual practice. Managed care plans should consider using pharmacy refill profiles with integration into their case/disease management programs. Targeting gaps in performance or compliance can be most effective when rates are high. The ultimate goal remains that every enrollee is prescribed and adheres to appropriate medication regimens for persistent asthma to achieve optimal control of this chronic condition.

Appendix

Table 4. Use of Appropriate Medications for Children with Asthma, FAMIS CY 2009

Measure	Population	Numerator/ Denominator	Rate	HEDIS [®] 2010 National Medicaid Managed Care*			
				Average	50 th Percentile	75 th Percentile	90 th Percentile
Use of Appropriate Medications For Children with Asthma	5-11 Years	361/380	95.0%	91.8%	92.2%	93.9%	95.5%
	12-50 Years	195/211	92.4%	86.0%	86.4%	89.1%	90.7%

*National Medicaid HEDIS[®] 2010 measures represent 2009 reported data

Table 5. Use of Appropriate Medications for Children with Asthma, FAMIS Plus Population CY 2009

Measure	Population	Numerator/ Denominator	Rate	HEDIS [®] 2010 National Medicaid Managed Care*			
				Average	50 th Percentile	75 th Percentile	90 th Percentile
Use of Appropriate Medications For Children with Asthma	5-11 Years	4,047/4,431	91.3%	91.8%	92.2%	93.9%	95.5%
	12-50 Years	2,575/3,060	84.2%	86.0%	86.4%	89.1%	90.7%

*National Medicaid HEDIS[®] 2010 measures represent 2009 reported data

Table 6. Use of Appropriate Medications for Children with Asthma, Medicaid Expansion Population CY 2009

Measure	Population	Numerator/ Denominator	Rate	HEDIS [®] 2010 National Medicaid Managed Care*			
				Average	50 th Percentile	75 th Percentile	90 th Percentile
Use of Appropriate Medications For Children with Asthma	5-11 Years	141/147	95.9%	91.8%	92.2%	93.9%	95.5%
	12-50 Years	172/188	91.5%	86.0%	86.4%	89.1%	90.7%

*National Medicaid HEDIS[®] 2010 measures represent 2009 reported data

Section V – Children and Adolescents’ Access to Primary Care Practitioners

Introduction

The American Academy of Pediatrics (AAP) recommends that children visit their pediatrician for a well-child check-up ten times starting as a newborn through 24 months of age. For older children, AAP recommends a well care visit once a year from ages 3 to 21 years. Because well-child visits are scheduled less frequently for school-age children, providers often see this group only for acute care visits. Unfortunately, older children also experience problems after starting school that would benefit from early detection and management by their healthcare providers.

Although acute care visits (sick visits) may allow some opportunities to provide preventive care, time constraints do not permit the primary care practitioner to conduct a thorough screening for health and developmental problems or to offer anticipatory guidance. In spite of this, children who are at least seen by their providers once a year for acute care are more likely to have problems detected than children who do not see a health professional at all during the year.

Purpose and Objectives

The focus of this study included children and adolescents in three distinct DMAS programs:

- FAMIS (CHIP, under Title XXI of the Social Security Act)
- FAMIS Plus (Virginia’s traditional Medicaid program for children)
- Medicaid Expansion program for uninsured children 6 through 18 years of age not eligible for traditional Medicaid within certain family income guidelines.

This study was conducted to assess whether children enrolled in FAMIS, FAMIS Plus, or Medicaid Expansion programs had at least one visit with a primary care practitioner, for any reason, during the measurement year (CY 2009). The results of this study are compared with similar populations using the HEDIS[®] 2010 National Medicaid Average rates.

Study Indicators

The HEDIS® 2010 Children and Adolescents' Access to Primary Care Practitioners (CAP) measure forms the basis for this study. The selected indicators include:

- The percentage of FAMIS and FAMIS Plus enrollees ages 12 through 24 months and 25 months through 6 years who had a visit with a primary care practitioner during the measurement year.
- The percentage of Medicaid Expansion enrollees, 6 years of age, who had a visit with a primary care practitioner during the measurement year.
- The percentage of FAMIS, FAMIS Plus, and Medicaid Expansion enrollees ages 7 through 11 and 12 through 19 years who had a visit with a primary care practitioner during the measurement year or the year prior to the measurement year.

Study Population

The eligible study population for the first two indicators was comprised of FAMIS, FAMIS Plus, and Medicaid Expansion enrollees ages 12 through 24 months (born on or between December 1, 2007 and December 31, 2008) and 25 months through 6 years (born on or between January 1, 2003 and November 30, 2007) who were continuously enrolled during the measurement period calendar year 2009.

The eligible population for the third indicator consisted of children ages 7 through 11 years and 12 through 19 years as of December 31, 2009, who were continuously enrolled during both the measurement year and the year prior to the measurement year. Enrollees were allowed no more than one enrollment gap of 31 days during each year of continuous enrollment.

Methodology

The HEDIS® 2010 Technical Specifications, Volume 2 and guidelines for the CAP measure were followed to identify the eligible study populations and continuous enrollment spans. The administrative data consisted of electronic claims and encounter data that were analyzed to produce the results presented in this study. To count toward the measure and as a positive numerator event:

- The enrollee, 12-24 months, 25 months-6 years: must have had one or more visits with a PCP during the measurement year.

- The enrollee, 7-11 years, and 12-19 years: must also have had one or more visits with a PCP during the measurement year or the year prior to the measurement year.

HEDIS[®] guidelines define a primary care practitioner as those physician or non-physician providers defined by the organization who offer primary care ambulatory or preventive care medical services to their enrollees. For purposes of this study, any of the following specialty types were classified as primary care: OB/GYN; family practice; general practice; internal medicine; preventive medicine; pediatric neonatology; family, pediatric, adult and neonatal nurse practitioners; case management; school practitioner and qualified health center.

Table 1 contains the technical specifications used to assess compliance with the HEDIS[®] performance measure. Detailed results of the CAP indicator are presented for each program and age group in Tables 2-4 in the Appendix. Results are displayed with the comparative rates from the HEDIS[®] 2010 Medicaid Managed Care Averages along with the HEDIS[®] 50th, 75th and 90th percentiles for this measure.

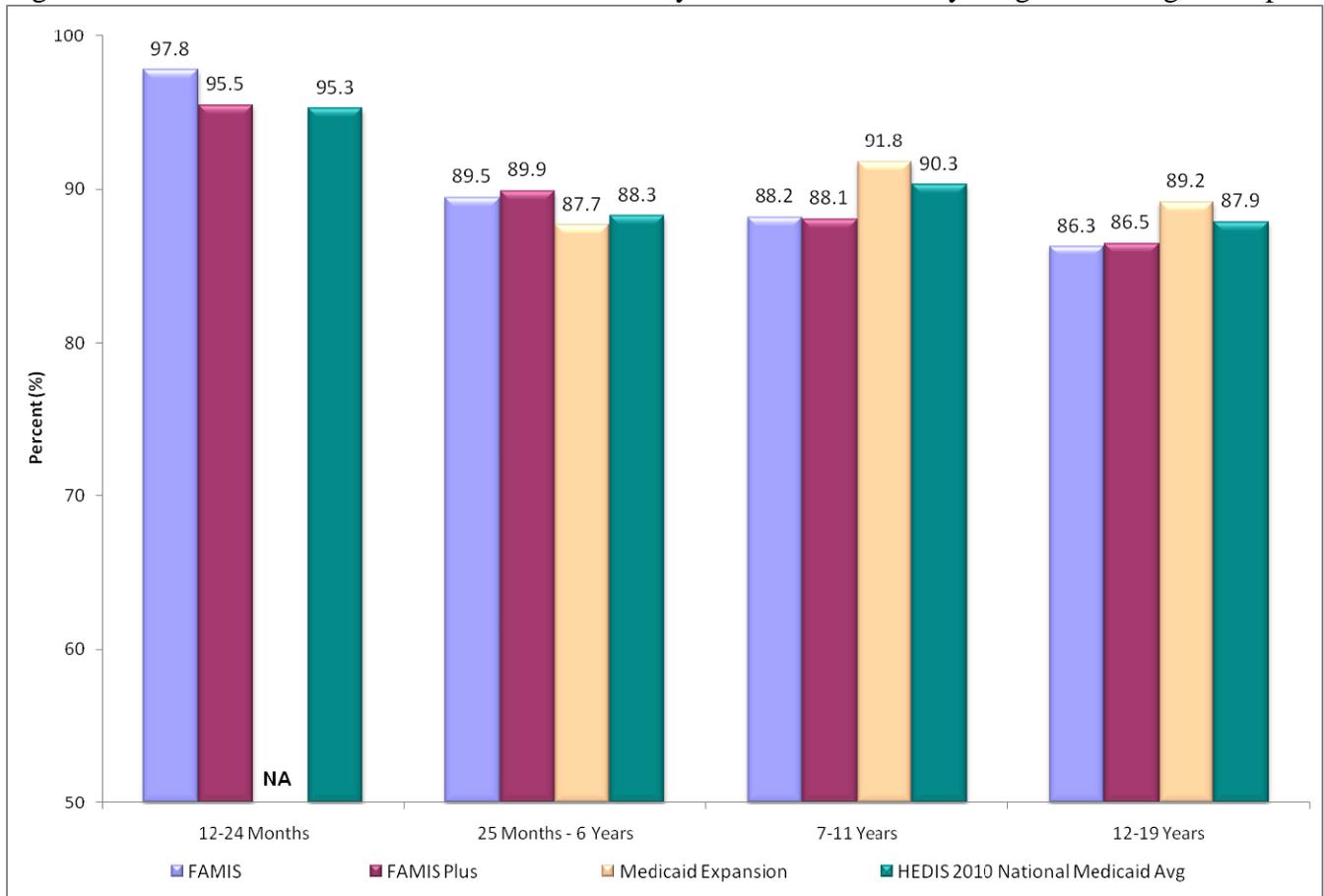
Table 1: Codes for Identifying Ambulatory or Preventive Care Visits (CAP CY 2009)

Description	CPT	ICD-9-CM Diagnosis
Office or other outpatient services	99201-99205, 99211-99215, 99241-99245	
Home services	99341-99345, 99347-99350	
Preventive Medicine	99381-99385, 99391-99395, 99401-99404, 99411-99412, 99420, 99429	
General Medical Examination		V20.2, V70.0, V70.3, V70.5, V70.6, V70.8, V70.9

Findings

Children in both FAMIS and FAMIS Plus visited their PCPs at rates that exceeded the HEDIS[®] 2010 National Medicaid Managed Care Average for age categories up to 6 years. Medicaid Expansion eligibility includes only 6 year old children. The results for the 25 month-6 year category is lower than the national average. The Medicaid Expansion program contains small denominators when compared with the other categories, and outperformed the HEDIS[®] 2010 National Medicaid Managed Care Averages for ages 7 to 19 years. All program results in all age categories remain lower when compared with the HEDIS[®] 90th percentiles.

Figure 1. Children and Adolescents' Access to Primary Care Practitioners by Program and Age Group



Note: Due to eligibility requirements, the 12 to 24 month age group is not included for the Medicaid Expansion population and only 6 year olds are included in the Medicaid Expansion 25 months-6 year age group.

Ages 12 – 24 months

- Children in both FAMIS and FAMIS Plus visited PCPs at rates that exceeded the HEDIS[®] 2010 National Medicaid Managed Care Average, while both programs remain below the HEDIS[®] 90th percentile* of 98.5 percent.

Ages 25 months – 6 years

- FAMIS and FAMIS Plus rates also exceeded the HEDIS[®] 2010 National Medicaid Managed Care Average rate for this age group.
- Medicaid Expansion, with a small denominator of 155, had a rate below the national benchmark.
- All programs were lower when compared with the HEDIS[®] 90th Percentile* of 94.1 percent.

* See Appendix Tables 2 – 4 for HEDIS[®] 2009 National Medicaid Managed Care 90th Percentiles

Ages 7 - 11 years

- Medicaid Expansion children, with a denominator of 2,813*, visited PCPs at rates that outperformed the HEDIS® 2010 National Medicaid Managed Care Average.
- The FAMIS Plus program (denominator of 58,438)* rate of 88.1 percent was below the national benchmark of 90.3 percent.
- All program results remain lower when compared with the HEDIS® 90th percentile* of 95.6 percent.

Ages 12 – 19 years

- Similar to the 7-11 age groups, rates for PCP visits for Medicaid Expansion outperformed the HEDIS® 2010 National Medicaid Managed Care Average.
- The FAMIS Plus program (denominator of 64,505)* rate of 86.5 percent was slightly lower than the national benchmark of 87.9 percent.
- All programs performed below the HEDIS® 90th percentile* of 93.7 percent.

Conclusions and Recommendations

Children and adolescents in the FAMIS program visited their PCPs at least once per year at rates that exceeded the HEDIS® 2010 National Medicaid Managed Care Average in all age categories. The FAMIS Plus rates were better than the national benchmarks for age categories up to 6 years but lower than the national benchmarks from 7-19 years of age.

Due to eligibility requirements, only 6 year olds are included in the Medicaid Expansion 25 months-6 year age group. Results for this entire denominator of only 155 enrollees were below the national benchmark. However, Medicaid Expansion rates exceeded the national averages in the 7-19 year age groups.

In identifying strategies for improvement, DMAS should consider the following recommendations:

- Increase the benchmark goal from the HEDIS® National Average to the 90th percentile.
- Identify specific “gaps” for targeted interventions designed to address barriers to access.
- Consider partnerships with external stakeholders such as the Virginia Chapter of the AAP for shared provider education and quality improvement initiatives.

* See Appendix Tables 2 – 4 for HEDIS® 2009 National Medicaid Managed Care 90th Percentiles

Appendix

Table 2. Children and Adolescents' Access to Primary Care Practitioners by Age Group, FAMIS CY 2009

Measure	Population	Numerator/ Denominator	Rate	National Medicaid HEDIS® 2010*			
				Average	50 th Percentile	75 th Percentile	90 th Percentile
FAMIS Children and Adolescents' Access to Primary Care Practitioners	12-24 Months	1,210/1,237	97.8%	95.3%	96.8%	97.9%	98.5%
	25 Months- 6 Years	8,806/9,843	89.5%	88.3%	89.8%	92.2%	94.1%
	7-11 Years	4,873/5,524	88.2%	90.3%	91.3%	93.4%	95.6%
	12-19 Years	6,129/7,099	86.3%	87.9%	88.8%	91.8%	93.7%

*Medicaid HEDIS® 2010 measures represent CY2009 reported data

Table 3. Children and Adolescents' Access to Primary Care Practitioners by Age Group, FAMIS Plus CY 2009

Measure	Population	Numerator/ Denominator	Rate	National Medicaid HEDIS® 2010*			
				Average	50 th Percentile	75 th Percentile	90 th Percentile
FAMIS Plus Children and Adolescents' Access to Primary Care Practitioners	12-24 Months	32,636/34,178	95.5%	95.3%	96.8%	97.9%	98.5%
	25 Months- 6 Years	107,590/ 119,674	89.9%	88.3%	89.8%	92.2%	94.1%
	7-11 Years	51,502/58,438	88.1%	90.3%	91.3%	93.4%	95.6%
	12-19 Years	55,771/64,505	86.5%	87.9%	88.8%	91.8%	93.7%

*Medicaid HEDIS® 2010 measures represent CY2009 reported data

Table 4. Children's Access to Primary Care Practitioners by Age Group, Medicaid Expansion CY 2009

Measure	Population	Numerator/ Denominator	Rate	National Medicaid HEDIS® 2010*			
				Average	50 th Percentile	75 th Percentile	90 th Percentile
Medicaid Expansion Children and Adolescents' Access to Primary Care Practitioners	25 Months- 6 Years**	136/155	87.7%	88.3%	89.8%	92.2%	94.1%
	7-11 Years	2,583/2,813	91.8%	90.3%	91.3%	93.4%	95.6%
	12-19 Years***	4,342/4,868	89.2%	87.9%	88.8%	91.8%	93.7%

*Medicaid HEDIS® 2010 measures represent CY2009 reported data

**Includes only children 6 years of age due to program eligibility requirements

*** Does not include 19 year old children due to program eligibility requirements