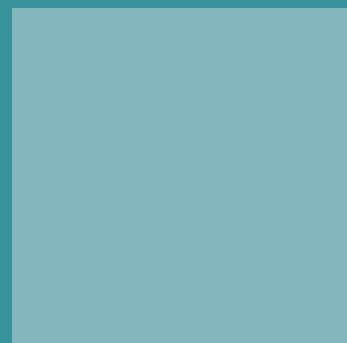


Improving Asthma Care for Children: Best Practices in Medicaid Managed Care

toolkit



Funded through a grant from the Robert Wood Johnson Foundation.

Improving Asthma Care for Children: Best Practices in Medicaid Managed Care



About the Center for Health Care Strategies

The Center for Health Care Strategies (CHCS) is a national non-profit organization devoted to improving the quality of health services for beneficiaries served by publicly financed care, especially those with chronic illnesses and disabilities. CHCS advances its mission by working directly with state and federal agencies, health plans, and providers to design and implement cost-effective strategies to improve health care quality.

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Preface and Acknowledgements

The *Improving Asthma Care for Children: Best Practices in Medicaid Managed Care* toolkit resulted from the creativity, dedication, and knowledge of key individuals and institutions. The Center for Health Care Strategies (CHCS) quality improvement team pays tribute to Stephen A. Somers, PhD, president of CHCS; Richard J. Baron, MD, senior medical consultant and co-director of *Improving Asthma Care for Children (IACC)*; and Seth Emont, PhD, evaluation consultant from White Mountain Research Associates, for leading the development and implementation of projects to demonstrate that asthma care can be improved in a managed care setting for the Medicaid population. We are indebted to the states of California, New York, and Indiana for instituting statewide asthma-related quality improvement projects. CHCS gratefully acknowledges the core funding from the Robert Wood Johnson Foundation that made IACC and the New York and Indiana asthma collaborative projects possible, plus additional support from the California HealthCare Foundation for the California asthma collaborative. Most important, CHCS honors all of the representatives from Medicaid managed care health plans who have participated in IACC and the state collaboratives. They truly believed they could improve asthma care for Medicaid beneficiaries, and they proved it.

FOREWORD: CLOSING THE GAP IN QUALITY ASTHMA CARE



The Institute of Medicine in its “Crossing the Quality Chasm” report identified numerous deficiencies in the way health care is delivered in the United States. The report called for major changes in health care systems at all levels from the patients who experience the care to the government that creates the environment in which health care delivery occurs. The report also outlined what this new system should look like by stating that care should be safe, effective, patient-centered, efficient, timely, and equitable.

It is estimated that 40 percent of the health care dollars spent in the United States are wasted on system inefficiencies. Since the United States spends more on health per capita than any other country, it is unlikely that additional money will be available to create the huge changes called for by the Institute of Medicine. Therefore, shifts must occur in the way we use our limited resources. Such ambitious goals require the development and testing of innovative new approaches.

The Center for Health Care Strategies (CHCS) has a long history of facilitating the development of such approaches. With financial support from the Robert Wood Johnson Foundation and other philanthropies, CHCS has worked with numerous Medicaid health plans to develop and test innovative ways to manage pediatric asthma. The piloted approaches, which go far beyond traditional disease management, stress the development of local infrastructure to improve care delivery; collaboration with providers to determine resource needs; incentives to deliver quality care; and careful attention to measurement of meaningful performance, patient, and financial outcomes.

Health plans occupy an important role in health care delivery. They deliver essential resources to providers and patients that otherwise would be difficult for them to obtain and in doing so have the potential to encourage positive behavior change. To ensure that these changes are indeed beneficial, health plans are able to collaborate with professional medical groups to define what effective care consists of and to create incentives and feedback mechanisms that encourage delivery of quality care. Quality then becomes part of the system.

The main feature that approaches outlined in this toolkit share is a model of care delivery that places patient goals first and empowers providers to deliver care with an emphasis on prevention, use of evidence-based guidelines, and improvement based on measurable outcomes. We must reduce the use of hospital and emergency department services and increase use of health management services. The tools provided in this document represent the combined experience of innovative plans across the country. By summarizing the lessons learned by these health plans, other plans can benefit from their experiences.

It has been said that every system is carefully designed to achieve the outcomes that it gets. The current health care system is not achieving the outcomes that citizens of our country deserve. Therefore, the time is right for a new and innovative approach that can help us to cross the Quality Chasm. The models outlined in this report describe new health management approaches that are designed to do precisely that.

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Improving the Health of Children with Asthma



Asthma is a major public health problem in the United States. More than six million children suffer from asthma, making it the most common chronic childhood illness.¹ Asthma disproportionately affects low income populations and children living in inner cities.² From 1992-1999, the rate of emergency department visits for asthma increased 29 percent, with young children consistently having the highest visitation rates.³ The disease is the third leading cause of hospitalizations among children⁴ and it results annually in nearly 12.8 missed days of school.⁵ The cost of treating the disease in those younger than 18 is estimated at \$3.2 billion per year.⁶

These asthma trends are alarming, especially considering that most, if not all, asthma-related hospitalizations are preventable. Although much has been done in recent years to improve asthma management, challenges remain to ensure that all children with asthma receive appropriate care.

Medicaid health plans are uniquely situated to improve asthma care. Plans can provide education to help parents identify early warning signs and environmental triggers, effectively use control medications, and recognize when prompt medical help is necessary. In addition, plans can help providers identify children at risk, standardize evidence-based treatment practices, and help patients manage their asthma more effectively. By working with members and providers to improve asthma management, plans can improve patients' health outcomes and significantly reduce emergency room and hospital admissions.

Using This Toolkit to Help Improve Asthma Care

The Center for Health Care Strategies (CHCS) published its first asthma toolkit in 2002, based on the best practices of 11 health plans in CHCS' *Achieving Better Care for Asthma* Best Clinical and Administrative Practices (BCAP) workgroup. Since then, CHCS has worked with many health plans and states across the country to develop cost-effective methods to improve asthma management.

This new toolkit includes strategies to improve asthma care tested by a diverse group of health plans serving Medicaid consumers (see *CHCS National Activities to Improve Asthma Care* on page 7). While most of the strategies tested in this toolkit were aimed at children, many of the techniques could be used to improve asthma care for adults. Plans engaged in CHCS initiatives have demonstrated innovative techniques to improve member asthma care, including:

- Developing and creatively using asthma registries.
- Using innovative and persistent methods to reach high-risk members.
- Offering provider education that focuses on member self-management and appropriate prescribing.
- Implementing provider incentives to reward high quality asthma care, e.g., reimbursing providers for conducting member education.

¹ "Asthma and Children Fact Sheet." American Lung Association, July 2005. Viewed at: <http://www.lungusa.org/site/pp.asp?c=dvLUK9O0E&b=44352#one> (June 21, 2006).

² "Asthma's Impact on Children and Adolescents." Centers for Disease Control and Prevention. Viewed at: <http://www.cdc.gov/asthma/children.htm> (June 21, 2006).

³ Mannino D, et al. "Surveillance for Asthma—United States, 1980-1999." *CDC Morbidity and Mortality Weekly Report*, March 29, 2002 / 51(SS01); 1-13.

⁴ "Asthma and Children Fact Sheet," American Lung Association, July 2005. Viewed at: <http://www.lungusa.org/site/pp.asp?c=dvLUK9O0E&b=44352#one> (June 21, 2006).

⁵ "Trends in Asthma Morbidity and Mortality." American Lung Association, Epidemiology & Statistics Unit, Research and Program Services, May 2005.

⁶ "Asthma's Impact on Children and Adolescents." Centers for Disease Control and Prevention. Viewed at: <http://www.cdc.gov/asthma/children.htm> (June 21, 2006).

“Health plans can make a difference in asthma care. That difference can have both favorable financial implications for the plan and favorable clinical implications for members,” says Richard Baron, MD, Improving Asthma Care for Children co-director. “It is worth it to invest in digging into your data to try to understand what is going on and how you can target efforts to improve asthma care.”

Basic Ingredients for Improving Asthma Care: Collaboration + Business Case

There are two central themes throughout this toolkit:

- The need for collaborative approaches to accelerate improvements in asthma care; and
- The value of documenting the business case for improving asthma care practices to support further investments in quality.

Collaboration Accelerates Improvements in Asthma Care

Collaboration in Medicaid managed care is producing notable results in improved asthma outcomes. Health plans not only are working with other plans in areas of asthma care, but also are coordinating with state agencies, providers, and advocacy organizations to better reach members and improve their care. Throughout this toolkit are examples of collaborative activities that are hastening the rate of asthma care improvements.

Collaboration among competing managed care organizations may require extra coordination (e.g., convening a neutral party to handle sensitive data and other issues), but can advance regional improvements in asthma care quality by standardizing provider and patient education, guidelines, asthma action plans, and community outreach. Here is a sampling of the collaborative activities underway in CHCS initiatives in New York and California:

New York

- Twelve health plans are working with the state health department and providers to encourage adherence to a single asthma care guideline to standardize and improve clinical quality.
- Three health plans in New York — Monroe Plan for Medical Care, Preferred Care, and Excellus BlueCross BlueShield — are standardizing approaches for physician profiling of asthma care for Medicaid members between ages 5 and 17. They also developed common billing codes to provide a uniform mechanism to reimburse providers for asthma education in the primary care setting.

California

- Two competing health plans — Molina Health Plan and Inland Empire Health Plan — developed a joint audit tool to identify primary care physicians participating in both networks who are not consistently prescribing appropriate asthma medications to members.
- Alameda Alliance for Health is collaborating with a children’s hospital and the American Lung Association to implement an asthma practice improvement project for Oakland-area pediatricians and family practice providers.
- Contra Costa Health Plan helped form community-based coalitions to work together to improve asthma conditions.

CHCS National Activities to Improve Asthma Care

This toolkit distills the experiences of health plans across the country participating in five CHCS initiatives to improve asthma care. The health plans working with CHCS are collaborating with other health plans, the state Medicaid agency, and primary care providers to develop and test practices for improving asthma outcomes in their memberships.

Improving Asthma Care for Children

This three-year initiative, funded by the Robert Wood Johnson Foundation (RWJF), sought to improve the management of pediatric asthma in high-risk recipients of Medicaid and State Children's Health Insurance Programs under managed care. Projects aimed to improve the health and functional status of children with asthma, develop and sustain partnerships with key community stakeholders, and establish innovative clinical and administrative models for asthma care.

Participants:

- Affinity Health Plan
- Contra Costa Health Plan
- Family Health Partners
- HealthNow NY, Inc.
- Monroe Plan for Medical Care

California Asthma Collaborative

Under a two-year grant funded by the California HealthCare Foundation (CHCF), CHCS worked with Medi-Cal officials, managed care plans, providers, and consumer organizations to develop and implement clinical and administrative best practices to improve asthma care for Medi-Cal enrollees. The participating teams sought to establish practices that improve clinical quality for Medi-Cal enrollees with asthma and maximize resources by coordinating interventions and sharing information across stakeholder groups.

Participants:

- Alameda Alliance for Health
- Central Coast Alliance for Health
- Community Health Group
- Contra Costa Health Plan
- Inland Empire Health Plan
- LA Care Health Plan
- Molina Healthcare of California
- Partnership HealthPlan of California
- San Francisco Health Plan
- Santa Barbara Regional Health Authority
- Universal Care

Improving Asthma Care in New York State

Through RWJF funding, CHCS is working with the New York State Department of Health, 12 health plans, and providers to improve asthma care for Medicaid beneficiaries. The effort seeks to increase adherence to the state's Asthma Care Guideline by coordinating interventions and sharing information across stakeholder groups.

Participants:

- CenterCare
- Community Premier Plus
- Excellus BCBS
- Fidelis Care
- Health Now NY, Inc.
- Hudson Health Plan
- Independent Health
- MetroPlus
- Monroe Plan for Medical Care
- Preferred Care
- Total Care
- Univera Community Health

Improving Asthma Care in Indiana

Indiana's Office of Medicaid Planning and Policy and the state's five Medicaid managed care health plans participated in a one-year asthma collaborative supported by RWJF funding. The project sought to build on Indiana's Chronic Disease Management Program. Project results will be available in early 2007.

Participants:

- CareSource, Indiana
- Harmony Health Plan
- MDwise, Inc.
- Managed Health Services
- Molina Healthcare of Indiana

Plan/Practice Improvement Project

An outgrowth of the *California Asthma Collaborative*, this initiative, funded by CHCF, brings CHCS and an array of national and California-based entities together to assist Medi-Cal health plans in testing practice site improvement models and tools to improve asthma care.

Participants:

- Alameda Alliance for Health
- Blue Cross of CA – State Sponsored Business
- Health Plan of San Mateo
- Inland Empire Health Plan
- LA Care Health Plan
- Molina Healthcare of California
- Partnership HealthPlan of California
- San Francisco Health Plan



Making the Business Case to Improve Asthma Care

Health plans engaged in CHCS initiatives are demonstrating that efforts to better manage the care of children with asthma can improve the health of members and benefit the bottom line.

Documenting the financial benefits for better asthma management can help make the case for improving quality to senior health plan leadership. The Environmental Protection Agency estimates that asthma management programs can reduce emergency department visits and hospitalizations by one-third, saving approximately \$1,200 per year for a child with moderate to severe asthma.⁷

Both Family Health Partners (FHP) of Kansas City, MO, and Monroe Plan for Medical Care in Rochester, NY, found that the bulk of expenditures for treating asthma go toward hospitalizations and emergency room use. These two plans designed interventions to reduce unnecessary asthma-related utilization. The plans focused on enhancing provider awareness of asthma and management of the disease and marshalling resources to help providers better educate patients.

- **Family Health Partners** significantly reduced asthma-related emergency department (ED) visits from about 10 per 1,000 members in 2001 to less than six per 1,000 members by 2004. This decrease represents a 40 percent reduction in ED visits that Family Health Partners directly attributes to its asthma program. Hospitalizations also fell, from two per 1,000 to less than one per 1,000 members. In measuring the cost of care for enrollees with asthma, the plan saw a roughly \$2 per member per month (PMPM) decline in costs. That far exceeded the \$0.43 PMPM cost of the program.
- **Monroe Plan** officials measured the effectiveness of its intervention strategy against a comparison group of children with asthma receiving care without the increased focus on provider and patient asthma management. While asthma specialist costs increased slightly during the Monroe Plan's project, the plan saw overall total asthma-related costs for the intervention group drop from an average of \$35.80 PMPM for children with asthma to \$28.78 PMPM. Meanwhile, costs for the comparison group increased over the course of the project, from \$34.25 PMPM to \$44.10 PMPM by the end of the project.

By demonstrating the return on investment of such efforts, health plans, such as Monroe Plan and Family Health Partners, are documenting the value of, and ensuring the sustainability of, asthma management programs.

⁷ *Asthma-Related Cost Savings Obtained through Asthma Management Plans and Environmental Trigger Avoidance*. US Environmental Protection Agency. Draft report prepared by ABT Associates for the Indoor Environment Division, May 2002.

Caleb's Story: Why Intensely Treating Asthma Pays Off

Like most nine-year-old boys, Caleb Mahan loves to ride his bike. But three years ago, Caleb was rarely allowed outside to play, and bike riding was out of the question. That's because when Caleb was six years old, a severe asthma flare-up landed him in the intensive care unit of Children's Mercy Hospital.

"We had no idea that anything this serious was about to happen," said Caleb's mother, Sharon Blanton. "We don't know what caused the episode, but we knew that we didn't want it to happen again."

Unfortunately, it did happen — again and again. Caleb visited the emergency department almost monthly, was hospitalized five times, and missed many school days. After Caleb's second hospitalization at Children's Mercy, he began seeing doctors and nurses with the Kansas City Children's Asthma Management Program (KC CAMP), a program piloted by Children's Mercy and Caleb's health insurance provider, Family Health Partners, a subsidiary of Children's Mercy.



Family Health Partners placed asthma educators in physician offices to train physicians, office staff, and families in creating and implementing asthma action plans. Families of children like Caleb, whose asthma is difficult to manage, also received the support of a case manager, who provided personal assistance with implementing action plans.

Colleen Pleiss, a KC CAMP outreach worker, helped Caleb and his family learn how to manage his disease. She showed the family how to use Asthma Action Cards, a color-coded tool to help children and their families prevent asthma flare-ups.

Intensive case management helped to reduce the number of trips Caleb made to the hospital. "When Caleb was first diagnosed, we were in the emergency room every month," said Sharon. "Since we began working with KC CAMP and Colleen, Caleb has only had three emergency room visits and two hospitalizations. And it's been almost a year since his last trip to the emergency room."

For many patients, their primary care physicians are the first line of defense in preventing costly emergency room visits and hospitalizations. With the Family Health Partners system, trained educators go to physicians' offices for eight weekly visits to provide asthma education. The goal: to change the way physicians practice and manage the disease, and actually help the doctors and their staffs implement those changes. FHP educators do not just hand the doctor's office a list of guidelines, they help the provider implement those guidelines. They give the provider the tools to better manage this disease. And for those members with difficult-to-manage asthma, like Caleb, intensive case management has made the difference between frequent hospital and emergency room visits, and staying healthy.

Through increased use of appropriate medications, Asthma Action Cards, and a personalized action plan, Caleb now can participate in activities with children his age, play outside, and, of course, ride his bike.

Measuring Quality Improvement Results

Establishing a “culture of measurement” within health plans is critical to providing quality, cost-effective care. Measuring for improvement allows health plans to understand how well or poorly members with asthma (or any other subpopulation) are being cared for, target resources to improve asthma care, track intervention results, and, ultimately, build a business case for quality initiatives.

Building in measurement early, and establishing electronically accessible measures, are critical to sustaining quality improvement activities. Most participants in CHCS health plan workgroups apply the BCAP Quality Framework (see below sidebar) to structure quality improvement activities. The subsequent chapters in this toolkit outline member and provider strategies that correspond to the BCAP Typology categories: identification, stratification, outreach, and intervention. By establishing pilot measures for activities within each of these typology steps, health plans can evaluate the incremental progress of quality initiatives.

This chapter details how health plans can adopt individual pilot and group common measures to gauge the success or failure of asthma quality improvement activities.

BCAP QUALITY FRAMEWORK

The BCAP Quality Framework is a quality improvement methodology designed specifically to address the complex needs of the Medicaid population. Visit www.chcs.org for more information, including case studies, a library of toolkits, and measurement tools.

COMPLEX
MEDICAID = POPULATION
& SYSTEM

TYPOLOGY FOR IMPROVEMENT

Structure quality improvement activities consistently, addressing barriers unique to serving Medicaid enrollees. The categories are:

Identification:	How do you identify members with asthma?
Stratification:	How do you prioritize members with asthma?
Outreach:	How do you reach targeted members with asthma?
Intervention:	What works to improve asthma outcomes?

RAPID CYCLE IMPROVEMENT

Test changes in each of the BCAP Typology categories using the Model for Improvement.⁸ Measure progress early and often to make “real-time” refinements to quality efforts based on preliminary successes or setbacks.

MEASUREMENT AND EVALUATION

Build realistic measures into quality initiatives to establish baseline data, set goals, guide improvement efforts, and demonstrate the success of change strategies.

SUSTAINABILITY AND DIFFUSION

Promote tools to preserve and spread best practices to ensure the long-term success of quality efforts.

⁸ Langley G., Nolan K., Nolan T., Norman C., and Provost, L. *The Improvement Guide: A Practical Approach to Enhancing Organizational Performance*. Jossey-Bass, 1996.

Pilot Measures

Pilot measures are unique to each health plan that undertakes an asthma quality improvement project. These measures assess interventions aimed at improving care for members with asthma and reveal where changes are working and where adjustments are necessary. Ideally, plans should choose measures that are simple to collect and can be gathered at frequent intervals to maintain the momentum of the quality improvement project and to provide regular evaluation of the pilot activity's progress. When selecting pilot measures, it is important to understand the administrative data lag to ensure that measurement reflects the change period accurately.

Examples of pilot measures for asthma include:

- **Identification:** Increase the identification rate to 8 percent for Latino children, age 2-18, by using pharmacy data as well as inpatient and encounter data.

$$\frac{\text{Number of Latino children, age 2-18, with asthma}}{\text{Number of Latino children, age 2-18, who are members of the plan}}$$

- **Stratification:** Stratify 100 percent of the identified Latino children, age 2-18, with asthma into three categories — mild, moderate, or severe persistent asthma — based on numbers of canisters of rescue medication used.

$$\frac{\text{Number of Latino children, age 2-18, with asthma in each category}}{\text{Number of Latino children, age 2-18, with asthma}}$$

- **Outreach:** Invite 100 percent of the families of Latino children, age 2-18, with moderate or severe persistent asthma to participate in a home environmental assessment.

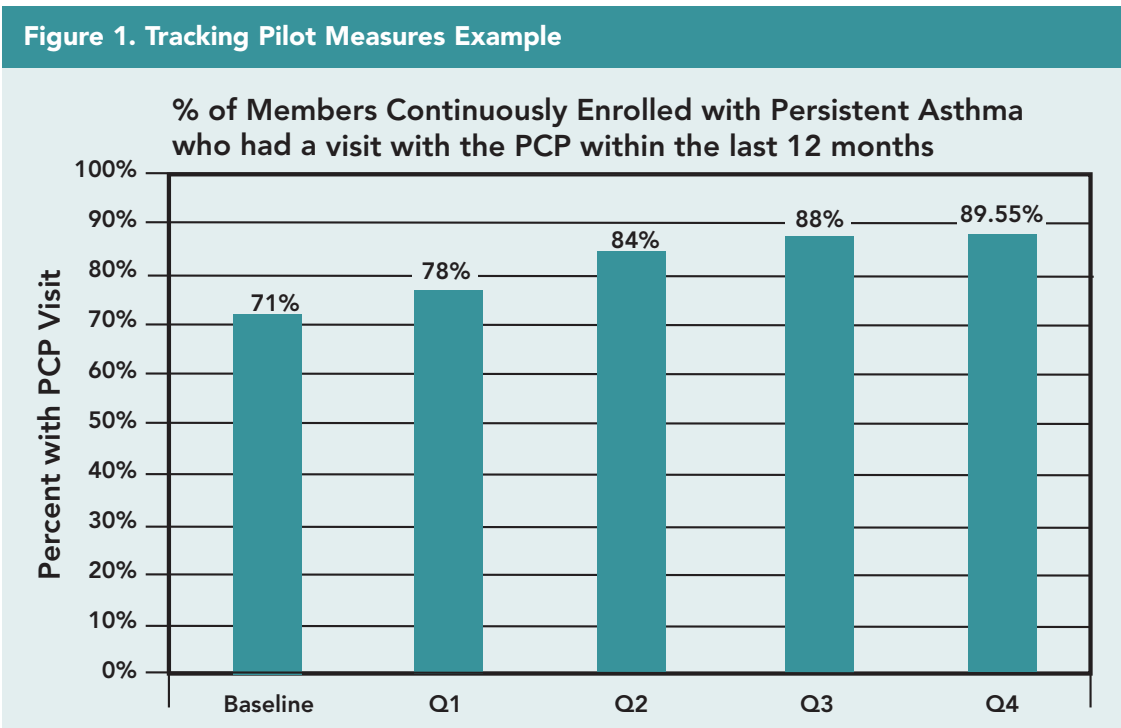
$$\frac{\text{Number of Latino children, age 2-18, who have moderate or severe persistent asthma}}{\text{Number of Latino children, age 2-18, with asthma stratified}}$$

$$\frac{\text{Number of Latino children, age 2-18, with moderate or severe persistent asthma, who are invited to participate in home environmental assessment}}{\text{Number of Latino children, age 2-18, with moderate or severe persistent asthma}}$$

- **Intervention:** Perform a home environmental assessment for 75 percent of Latino children, age 2-18, identified with moderate or severe persistent asthma, who were invited to participate in a home environmental assessment.

$$\frac{\text{Number of Latino children, age 2-18 with moderate or severe persistent asthma, who participated in home environmental assessment}}{\text{Number of Latino children, age 2-18, with moderate or severe persistent asthma, invited to participate in home environmental assessment}}$$

Pilot measures must be quantifiable and include a numerator and denominator. Emphasis should be placed on monitoring the progress made over time and in relation to specific changes in the health plan's intervention. A simple graph is a very powerful tool for documenting quality improvement results (Figure 1).



Common Measures

Medicaid health plans participating in three CHCS asthma collaboratives (in California, New York, and Indiana) have agreed to collect and share the results from a set of Asthma Common Measures to reflect the progress of the initiative beyond their individual pilot projects. Common measures — shared measures across health plans — provide a mechanism to increase system efficiency, improve quality, and systematically collect meaningful comparison data.

The common measures for the three state collaboratives include the asthma measure collected in the National Committee for Quality Assurance's HEDIS® data set as well as new measures developed by plans participating in CHCS' Best Clinical and Administrative Practices workgroups.⁹ These measures provide a common metric for health plans to track progress at the health plan level and to document improvement in the total population with asthma, not just the smaller number of members touched by the pilot interventions. The measures include:

- Identification of members with asthma (by age and race/ethnicity);
- Asthma-related inpatient admissions and days (for total membership and those with asthma);
- Asthma-related emergency department visits (for total membership and those with asthma); and
- HEDIS measure for the appropriate use of controller medications by people with persistent asthma.

Although regional health care quality improvement activities are becoming increasingly familiar, few regional collaboratives have focused on the collection of commonly defined measures to provide comparative data to facilitate intervention design and evaluation. Developing an expanded set of standardized asthma measures within Medicaid can provide essential comparative data that can be used to evaluate the success of asthma quality initiatives. These common measures fill a critical gap in assessing improvements in asthma care within Medicaid. Currently, only one HEDIS measure addresses asthma. In addition, the definition of "persistent" asthma used by HEDIS is based on continuous enrollment of one year and tends to exclude many Medicaid members, who often move in and out of managed care due to changes in their eligibility. The Asthma Common Measures use a "modified" HEDIS definition of asthma to include more people and slightly less severely ill people within the definition. The following requirements were modified to ensure that Medicaid plans are able to identify more consumers with asthma:

- Continuous enrollment was not required, since the population is insured by Medicaid and, therefore, less likely to be enrolled for periods without interruption;
- The number of outpatient visits was reduced from four to two;
- The number of medication dispensing events was reduced from four to two; and
- The diagnosis of asthma (ICD-9-CM code) was allowed to be in any position on the claim (primary, secondary or tertiary).

Following are examples of how health plans and states are applying this set of Asthma Common Measures:

California: The 11 Medi-Cal health plans participating in the *California Asthma Collaborative* are the pioneering plans that developed the Asthma Common Measures. The plans initially submitted baseline data in 2002 and agreed to submit data for three years. The data demonstrate notable accomplishments by the participating health plans when the baseline data are compared to post-intervention data for 2004. In particular, the aggregate data across the health plans submitting data revealed statistically significant improvement in:

⁹ HEDIS® is a registered trademark of the National Committee for Quality Assurance.

- Increased identification of members with asthma in all age groups;
- Decrease in asthma-related hospital admissions in the 10-17, 18-56, and 5-56 year age groups;
- Decreased asthma-related emergency department visits for members with asthma in the 10-17 year, 18-56 year, and 5-56 year age groups; and
- Increased appropriate use of controller medication for the 5-9 year and 5-56 year age groups.

Examples of successful interventions that contributed to these improvements included: systematic improvement in collection and quality of encounter data; patient-level utilization profiles delivered to primary care physicians; use of asthma educators for the physicians and members; identification and intervention with poorly performing physicians; and home visits after an emergency department visit.

New York: CHCS is working with the New York State Department of Health, 11 Medicaid health plans, providers, and consumer organizations in a collaborative to

improve asthma care in the state. The Department of Health is reporting the Asthma Common Measures to CHCS over a three-year period. The state also is running the common measures data for plans that are not participating in the collaborative to compare aggregated outcomes for the participating and non-participating health plans. In addition, some of the participating plans are using the common measures as part of a project to standardize provider profiling activities.

When comparing 2003 baseline data to 2004 data, statistically significant improvement was shown in three of the common measures:

- Decreased asthma-related hospital days for members with asthma in the 5-9 year, 18-56 year, and 5-56 year age groups;
- Decreased asthma-related emergency department visits for members with asthma in the 5-9 year, 18-56 year, and 5-56 year age groups; and
- Increased use of appropriate controller medications for the 5-9 year, 10-17 year, and 5-56 year age groups.

Figure 2. Comparison of Pre- and Post-Intervention Data for New York (2003-2004) and California (2002-2004) Asthma Common Measures

Aggregate Level Impact	Ages	Statistically Significant Change at 0.95 Confidence Interval	
		CAC	NYS
Increase in Identification of Members with Asthma	2-4 years	✓	data not available
	5-9 years	✓	
	10-17 years	✓	
	18-56 years	✓	
	5-56 years	✓	
Decrease in Asthma-Related Hospital Admission per Year for Members with Asthma	10-17 years	✓	
	18-56 years	✓	
	5-56 years	✓	
Decrease in Asthma-Related Hospital Days per Year for Members with Asthma	5-9 years		✓
	18-56 years		✓
	5-56 years		✓
Decrease in Asthma-Related Emergency Department Visits per Year for Members with Asthma	5-9 years		✓
	10-17 years	✓	
	18-56 years	✓	✓
	5-56 years	✓	✓
Increase in Appropriate Medications for People with Asthma (HEDIS)	5-9 years	✓	✓
	10-17 years		✓
	5-56 years	✓	✓

Indiana: CHCS is working with the state to incorporate a value-based purchasing focus into its Medicaid managed care program. In early 2006, Indiana incorporated the Asthma Common Measures into its standard Reporting Manual of regulatory specifications for the five Medicaid health plans in the state. The five plans will collect Asthma Common Measures and submit data to CHCS over a three-year period.

Member Identification and Stratification



Identification

Simply identifying members with asthma is the first step in addressing and reducing risk factors through outreach and intervention strategies. A best practice that Medicaid managed care plans can adopt quickly is thinking about children with asthma as a distinct population.

How can my health plan systematically identify members with asthma?

Plans need to assess the resources necessary to identify members with asthma. Some plans' data systems and information sources may be limited to getting only basic demographic information on members, while others may be more sophisticated and can be marshaled to provide more detailed data that can help plans identify these members.

Plans working with CHCS have identified members with asthma through the following strategies, which can be combined to identify even more members:

- **Examine claims data for emergency department visits, hospitalizations, and doctor visits coded for acute asthma diagnoses.** Run claims data for ICD-9 493.xx codes and examine DRG inpatient codes 088, 096-098, and emergency department visits with CPT codes 99281-99285, 99288, W9045, W9046, W9047. Caution: There can be considerable lag time before a plan gets a provider claim or pays a claim. Thus, the information culled from claims may be of limited use until all of the claims are adjudicated and paid. For most plans, a lag of 90 days allows more than 90 percent of the claims to appear in the claims database. If there is a question about the quality of the coding or completeness of the physician encounter data, these should be addressed separately by the health plan.
- **Perform pharmacy data analysis on all bronchodilators and inhaled steroids.** Pharmacy claims offer some of the fastest and cleanest data a plan can access for identification purposes. Examining pharmacy data can target those members who are filling rapid-relief inhalers and/or controller medication prescriptions.
- **Develop an asthma registry.** An asthma registry can improve a plan's effort to identify new and existing members with asthma, as well as support other improvement activities, such as stratification, monitoring, and care management. Health plans might consider collaborating with other plans to build a regional registry of members with asthma.
- **Partner with schools or school-based health centers** to identify students with asthma using screening questionnaires.

Plans can buttress these identification strategies with other activities, including:

- Performing chart reviews.
- Performing health risk assessments as part of new member welcome calls or assessments performed by enrollment brokers on behalf of the state.
- Searching durable medical equipment claims for asthma-related devices, such as nebulizers and peak flow meters.
- Obtaining information from members through new member surveys, instructions in new member booklets for patients with asthma to inform the health plan, or adding language to the new member welcome call script that would encourage self-identification of members with asthma.
- Establishing partnerships with high-volume hospitals to deliver daily reports of members presenting in the emergency department with asthma exacerbation.

Measuring the appropriate identification rate can be challenging. If the plan's aim is to identify 100 percent of members with asthma, how can it be sure it has identified all such members? Two benchmarks to consider:

- Compare plan's identification rate to local, state, or regional prevalence estimates.
- Effective identification strategies will produce a steady increase in the rate of identification. Over time, the rate will level off and stay steady. At this point the plan can assume it is the true prevalence rate.

Affinity Health Plan: Focusing on Early Identification

Affinity Health Plan, based in New York City, is familiar with the damage that asthma wreaks on youngsters. Children in New York City are almost twice as likely to be hospitalized for asthma as children in the U.S. as a whole. Originally a 30,000-member health plan when it started its asthma management program in the 1990s, plan membership ballooned to more than 100,000 after the purchase of another plan in 1999. Identifying both current and new members with asthma quickly became, and remains, an important business issue, since Affinity's membership has now grown past 200,000.

Affinity focused on initial health risk assessment (HRA) to identify new children with asthma before an asthma flare-up sent a child to the hospital. Affinity developed multi-tiered strategies to facilitate early identification of new members, including:

- Developing a new member health assessment form sent to all newly-enrolled members with enrollment materials and a member handbook.
- Contracting with CareCall, an outbound call vendor, to perform welcome and HRA calls to all new members to identify members with asthma.
- Working closely with Maximus, the Medicaid enrollment broker, to obtain new member HRAs promptly.
- Screening the pharmacy claims database to identify members with asthma.

Responses to all HRAs — from mailed HRAs, CareCall HRAs, and from the enrollment broker — are captured in the plan's member tracking database. An automated referral to Affinity's AIR (Asthma is Relieved) case management program is generated when a new member is identified with asthma.

Identification Pilot Measure Case Study: Affinity Health Plan

Affinity Health Plan sought to identify new members with asthma upon enrollment to target children at risk for hospitalization due to asthma flare-ups.

AIM: Using multiple strategies, identify 100 percent of Affinity’s new members with asthma.

MEASURES:
$$\frac{\text{Number of new members identified with asthma}}{\text{Number of new members}}$$

$$\frac{\text{Number of new members with asthma identified by each data source}}{\text{Number of new members with asthma identified by all data sources}}$$

CHANGE: Instituted multi-tiered approach to identifying members with asthma, including:

1. New member health assessment form;
2. Inpatient concurrent review census;
3. Member self referral to AIR program;
4. Physician referral to AIR program; and
5. Pharmacy, DME, physician claims ICD-9 493.00-493.92.

RESULTS: Affinity is identifying between 300 and 400 new members with asthma each quarter, and through an asthma registry is able to stratify members by asthma severity and quickly refer them for appropriate care.

Figure 3. Affinity Health Plan: Early Identification and Outreach Efforts for New Members with Asthma

	2002	2003	2004
New Members Identified w/Asthma	705	1152	1239
Care Call	N/A	837 (73%)	606 (49%)
Risk Assessment	215 (30%)	529 (46%)	646 (52%)
Level 1	N/A	78 (15%)	127 (20%)
Level 2	N/A	135 (26%)	162 (16%)
Level 3	N/A	136 (26%)	124 (25%)
Level 4	N/A	180 (34%)	233 (39%)
PCP Appointments	77 (11%)	513 (44%)	439 (68%)
Kept	64 (83%)	287 (56%)	246 (58%)
Respiratory Therapy/Home Visit	125 (18%)	334 (29%)	364 (29%)
Visits Made	56 (45%)	143 (43%)	120 (32%)



Benefiting from Asthma Registries

A central asthma registry is a critical tool for identifying members with asthma and tracking their outcomes. Registries, which are typically updated monthly or quarterly, track demographic information, pharmacy and medical utilization, number of school days missed, primary care physician, asthma severity level, and other information. Health plans use registry data to stratify patients by risk and target interventions more effectively.

Contra Costa Health Plan developed an asthma registry to enhance its disease management program. The registry includes a composite screen for each asthma patient that features a “dashboard” summarizing the patient encounter and other information. From this main screen, Contra Costa case managers can access all other screens containing detailed member information.

Partnership HealthPlan of California developed an electronic registry to identify and establish a prevalence rate for members with asthma. The registry, which is updated weekly, helps the plan track the 15 percent of its membership, or about 11,000 enrollees, who suffer from asthma. Health plan officials use the registry to stratify members with asthma, placing an acuity score based on utilization for each member with asthma in the database. Points are assigned for undesirable events, and a severity level is calculated based on:

- Emergency department visits:
 - 1-2 = 1 point
 - ≥ 3 = 2 points
- Inpatient admission = 5 points each
- No follow-up visit post-ED = 1 point
- No controller medication = 3 points
- Number of beta agonist prescription refills in 12 months
 - 5-8 = 1 point
 - 9-12 = 2 points
 - >12 = 3 points

Partnership uses the severity level to target interventions. For example, using the registry, Partnership generates reports by practice site of members with higher severity scores, thereby identifying some practice sites for academic detailing and other sites for less resource-intensive interventions.

Alameda Alliance for Health created an asthma data warehouse to track members with asthma. Alameda’s identification rate of members with asthma was significantly lower than the 10 percent prevalence rate of asthma in its county. The asthma data warehouse was designed to help the 75,000-enrollee plan identify members with persistent asthma, based on the National Asthma Education and Prevention Program (NAEPP) definition. Members are added to the registry based on claims data.

Alameda is using the data warehouse to identify members with asthma and determine asthma severity. The data warehouse can sort information by provider, age, and utilization indicators, such as inpatient, emergency department, outpatient, and medication usage. The plan updates the registry monthly, and now identifies 250 new members a month. The data are used to create profiles of high-risk members that are sent to providers monthly.

Community Collaboration Identifies Kids with Asthma Early and Urgently

Being rushed to the emergency department (ED) as the result of a severe asthma episode is a frightening event for a two-year-old child and a parent. “I didn’t recognize that it was so bad. I should’ve intervened sooner,” says Michelle*, who has since received education on treating her daughter Kari’s asthma. Michelle now regularly visits the asthma clinic at Children’s Hospital Oakland to keep Kari’s asthma under control and recognizes the subtle early warning signs of a flare-up.

Behind the scenes, every time a member like Kari visits the hospital’s emergency room due to an asthma episode, her health plan, Alameda Alliance for Health, is notified. The health plan then works with the primary care provider to facilitate referrals — approximately 60 per week — to the asthma clinic or to community-based asthma case management programs for education and self-management training. Previously, there was a time lag of up to two months between when a child with asthma was seen in the ED and their next provider visit. Through this collaborative effort, Alameda is identifying children quickly and supporting them in getting the care and education they need to stay healthy.



The plan’s asthma data warehouse is central to identifying its target population for appropriate intervention. The database not only identifies members diagnosed with persistent asthma and enables valuable reporting by provider, age, encounter, and pharmacy data, it also flags members who do not have a controller medication, and generates monthly provider reports on a variety of criteria, including members with eight or more beta agonist canisters in the past 12 months. The health plan is then able to stratify this disease-specific population by level of risk and implement appropriate levels of interventions, putting new partnerships to work for members like Michelle and Kari.

As a result of its quality improvement pilot project, Alameda Alliance for Health experienced significant gains in its quality measures for children with asthma. The health plan improved its HEDIS scores for use of appropriate asthma medications by nearly three percent and halved the number of children receiving eight or more beta agonist prescriptions in one year. ED visits and inpatient stays also decreased.

This innovative effort is driving unprecedented partnerships among organizations that traditionally have not collaborated on improving health care quality.

*Names changed to protect identity of members.

Stratification

Once health plans have identified which members have asthma, they need a process for determining which subpopulations would benefit most from aggressive outreach and intervention, which are at the highest risk for not receiving asthma services, and which are at greatest risk for poor health outcomes.

How can my health plan determine which members with asthma can benefit most from interventions?

Common steps to assess risk and severity of members with asthma include:

1. Identifying related risk factors, such as prior asthma-related ED visits, hospitalizations, excessive use of bronchodilators, and smoking;
2. Determining the member's level of risk as low, moderate, or high for future utilization; and
3. Using HEDIS criteria to define persistent asthma or National Asthma Education and Prevention Program (NAEPP) to define asthma severity.

Managed care organizations that invest in this step of fine-tuning member stratification are in a better position to target outreach and intervention strategies to members most in need. One of the health plans participating in the *California Asthma Collaborative*, for example, established a stratification methodology that is scored by the presence of five risk factors:

1. Inpatient admission for asthma;
2. ED visit for asthma;
3. ≥ 5 canisters of beta agonist in 12 months;
4. ≥ 5 canisters of beta agonist with no controller medication; and
5. ED visit, with no follow-up visit with PCP or specialist within 21 days.

Family Health Partners' Five-Level Stratified Interventions

Family Health Partners knows the most effective way to allocate resources is with stratified interventions. FHP stratifies members with asthma to five different levels, and targets interventions appropriately. FHP developed the following stratification categories to effectively distribute asthma resources:

Stratum one members are those who have been screened for a diagnosis of asthma, with the plan looking for members filling asthma medication prescriptions and for members with diagnoses often associated with asthma, such as bronchiolitis, bronchitis, and recurrent pneumonia. Focusing on these individuals has allowed FHP to get them diagnosed and treated earlier.

Stratum two members have a confirmed diagnosis of asthma. They get education and self-management skills in addition to an asthma action plan from their physicians. FHP pays specially trained primary care physicians to provide in-office asthma education for these members.



Stratum three members have persistent asthma. They receive controller medications and are offered an intensive one-on-one intervention with an asthma counselor.

Stratum four members (“frequent fliers”) are identified from FHP’s high utilizer list and receive direct intervention from an asthma case manager. FHP alerts the primary care provider of the member’s enrollment in the plan’s case management and sends them progress reports. Case management is designed to reduce the number of high utilizers of ED visits. Once FHP began identifying and intervening with these members, the number of high utilizers decreased from more than 300 to 200, representing a 60 percent relative reduction over the course of the program.

Stratum five members (“ultra frequent fliers”) are in the upper 0.4 percent of the high-utilizer list. They receive case management and environmental counseling as well as home inspection services.

Figure 4. Family Health Partners: Stratified Interventions

Stratum	Asthma Intervention Resources*
Stratum 1: All members	<ul style="list-style-type: none"> • Initial screening questionnaire • Database search by claims
Stratum 2: Members with asthma	<ul style="list-style-type: none"> • Asthma education by PCP • Asthma Action Plan with Action Cards™ • Payment for education
Stratum 3: Persistent asthma	<ul style="list-style-type: none"> • Controller medications prescribed and filled • Case management for moderate and severe persistent asthma
Stratum 4: Frequent Fliers (80 per case mgr)	<ul style="list-style-type: none"> • Disease-specific case management
Stratum 5: Ultra frequent fliers	<ul style="list-style-type: none"> • Environment assessment and counseling as indicated

*Each consecutive stratified group receives resources for all lower-level strata, e.g., a child identified as a “Frequent Flier” receives resources for Stratum 1-4.

Alameda Alliance for Health: Sharing Stratification Reports with Providers

Alameda Alliance for Health stratifies all members with asthma by hospitalization, emergency department use, and medication use. For example, in its first month of analyzing medication use data, the plan found that 44 percent of current eligible members identified for intervention did not have a controller medication. This figure has leveled off to 32 percent per month through Alameda's intervention efforts.

Using the stratification data, Alameda generates monthly provider reports containing a list of members with eight or more beta agonist canisters per year and individual member reports including ED, inpatient, and pharmacy utilization. Providers appreciate the additional information — otherwise they may never know that a particular patient has been to the ED three times in recent months. Alameda credits the use of its registry in facilitating the creation of these targeted provider reports as critical to improving its asthma-related HEDIS measures.

Stratification Pilot Measurement Case Study: New York State Collaborative

As participants in the New York State Asthma Collaborative, the Monroe Plan for Medical Care, Preferred Care, and Excellus BlueCross BlueShield in Rochester, along with the Regional Community Asthma Network (RCAN), collaborated to implement a modified version of the office-based provider education program designed by Family Health Partners (see page 35). The overall goal was to increase the rate of asthma education by practitioners for Medicaid members with asthma, age 2 to 17, as evidenced by practitioner use of education billing codes.

By participating in the collaborative, providers could register their practices to offer asthma education to children with asthma and their caregivers who participate in Medicaid managed care or Child Health Plus. Physicians, trained staff, as well as certified asthma educators, were offered the opportunity to be reimbursed for this service after participating in a five-hour training program or after providing evidence of asthma educator certification. CME credit was made available for this program.

AIM: Identify the high-volume practices that collectively manage at least 60 percent of members 2-17 years of age with asthma so that the practices could be offered training.

MEASURE: The three plans determined the number of members in the target population seen in each practice, and rank ordered the practices by volume.

CHANGE: Eight practices were identified that account for more than 60 percent of patients. To date, all eight practices have received the intervention.

RESULTS: Collaboration among health plans offered an opportunity to reduce provider and office staff burden, and increase provider satisfaction, by standardizing practice guidelines and communication and billing processes. While providers were enthusiastic about the prospect of being able to bill for asthma education, the take-up rate has, in fact, been relatively low. The plans currently are investigating whether this is because providers are not offering the education or, more likely, that the providers are performing the education and not billing correctly. The plans also are investigating whether limitations of their billing systems may inhibit their ability to process claims for education services appropriately.

Member Outreach



Reaching the Medicaid population is particularly challenging, as low-income families may move frequently, have trouble paying for telephone service, and gain and lose Medicaid eligibility from month to month due to fluctuations in family income. It is challenging for health plans to reach this population, but it is critical if interventions are to succeed.

How does a health plan reach members in need of asthma care?

Plans typically rely on a mix of common outreach strategies, including telephoning members, sending mailings, visiting member homes, and running advertisements. Many of these techniques, however, offer limited success due to frequent relocations among Medicaid members, outdated contact information, and cultural competency issues, among other factors. Strategies pioneered under CHCS initiatives sought to overcome these barriers in variety of ways, including:

- Maintaining alternative addresses and phone numbers in a separate data base, as well as keeping multiple addresses and phone numbers (grandparents, siblings, and cousins) for each member to increase the chance of contacting members during outreach efforts.
- Obtaining discharge summaries/care plans with contact information directly from hospitals at time of discharge.
- Developing outreach programs targeted at grandparents and other relatives who may assume a caretaking role for children with asthma.
- Using multi-lingual asthma outreach staff to relate to members in different ethnic groups.
- Seeking current address/phone number from provider office or pharmacy.

The next two “case studies” outline how the Monroe Plan for Medical Care devised persistent strategies to reach members more effectively.

Outreach Strategies

Monroe: Reaching Members in Their Communities

Monroe Plan sought to identify high utilizers of asthma-related services to participate in a case management program at an asthma center of excellence in Rochester, New York. Monroe Plan found that an initial pilot project to engage children with moderate to severe asthma in the program failed because it relied solely on member outreach via telephone and letters.

Under a revised strategy, an outreach worker visited the last known address and attempted to find the patient/family. If no one was at home, the outreach worker left asthma program information and a phone number for the family to contact the Monroe Plan’s asthma outreach coordinator. Once initial contact was successful, the outreach worker scheduled a home visit. Following this revised approach, the no-show rate of 33 percent for the first visit to the asthma center decreased to 27 percent for the second visit and to 17 percent for the third visit as members became more engaged in their care. To increase the attendance rate even further, the Monroe Plan subsequently hired a bilingual asthma outreach worker to make home visits, coordinate health care and resource services, educate members on issues relating to medical care compliance, and participate in data collection.

Monroe Plan: Persistent Outreach Technique Amplifies Survey Responses

Because Medicaid health plan members can be a difficult group to contact, mailed surveys typically generate only a 15 percent return. Monroe Plan for Medical Care, which was initiating a survey to measure improved health, quality of life, and functional status of members with asthma, sought a better response rate to ensure statistical validity.

Monroe Plan implemented the Dillman Total Design Method¹⁰ to improve survey responses when it started using the Integrated Therapeutics Group (ITG) *Child Asthma Short Form*¹¹ in 2003. Multiple follow-ups were set at prescribed intervals, including two mailings followed by phone surveying to non-respondents. A cover letter clearly explained the value of the survey to the member. The survey packet, which was personalized, was mailed to families four times over the course of the two-year project requesting member feedback regarding the health of their child with asthma.

Figure 5. Monroe Plan for Medical Care: ITG Quality of Life Survey Results for Children with Asthma*				
Scale	Winter 2003 N=224	Summer 2003 N=220	Winter 2004 N=214	Summer 2004 N=232
Daytime Symptoms	61.76	65.49	66.50	66.08
Nighttime Symptoms	58.97	63.90	64.66	67.89
Functional Limitations	72.58	76.68	77.63	78.24
Inhaler Interference	76.70	80.78	79.90	78.88
Family Life Adjustment	65.88	68.52	72.01	70.69

* Key: “1” = lowest possible quality of life; “100” = highest possible quality of life.

¹⁰ Dillman, DA. *Mail and Telephone Surveys: The Total Design Method*. New York, NY. Wiley 1978.

¹¹ Original survey developed by Usherwood, TP, Scrimgeour, A, and Barber, JH. Short form developed by Bukstein, DA, McGrath, MM, Buchner, DA, Landgraf, J, and Goss, TF.



Through this methodology, Monroe Plan achieved a 45 percent survey return rate. With “1” indicating the worst possible quality of life and “100” indicating the best possible quality of life, results of the overall ITG survey for children participating in the intervention indicate improvements from baseline in each of the five scales: daytime symptoms, nighttime symptoms, functional limitations, inhaler interference, and family life adjustment. At the beginning of 2001, the intervention group had the highest proportion of children with moderate to severe asthma (50 percent) compared to those in the comparison delivery network (41 percent) and those with asthma in the unaffiliated group (30 percent). By the end of the project period, the percentage of moderate-severe asthma in the intervention group was 26 percent versus 37 percent in the comparison delivery network, and 27 percent in the unaffiliated group. Measurement was crucial in determining whether Monroe Plan efforts were successful.

Affinity Health Plan: Outreach Early to Avoid Costly Utilization

When Affinity Health Plan identifies new members with asthma, outreach and case management workers in the plan’s AIR program are automatically contacted. Clinical outreach staff educate enrollees with asthma and help set up initial appointments for members who have not yet seen their PCP. They also conduct initial risk stratification, so that members identified with moderate or severe, persistent asthma, as well as those who were admitted to the ED or hospital due to asthma, are offered a respiratory therapy home visit. Affinity identifies more than half of its new members with asthma each quarter as a result of its outreach effort.

Member Intervention



Effective asthma interventions should improve the delivery of health care, while preventing acute asthma episodes and promoting improved member outcomes. Members can benefit greatly from programs designed to improve member self-management, improve health status, and reduce unnecessary utilization.

What works to improve outcomes of members with asthma?

This chapter highlights efforts by health plans to develop and implement programs in three key areas: asthma case management, asthma self-management education, and home environmental assessments. Examples include:

- Making reminder calls for scheduled primary care appointments following asthma-related hospitalizations or ED visits.
- Designing interventions that help members with transportation, child care, or other social service needs.
- Offering incentives that tap the interests of families — camps for kids, recreational events, tickets to ball games, phone cards, food coupons, cards for free video rentals, etc. — to draw members into care or educational efforts.
- Having a social worker conduct home visits to not only identify possible triggers of asthma, but also to help remove social and psychological barriers to effective asthma management.

Asthma Case Management

The goal of asthma case management is to assist families in the day-to-day management of asthma symptoms through the development of a personalized care plan. Services may include nurse home visits; physical and environmental assessments; patient education that addresses cultural and language needs; follow-up after inpatient stays or ED visits; and referrals to specialty services. Patients and families engaged in case management usually receive one-on-one contacts through regular phone calls or home visits to support self-management skills. Coordination with the patient's primary care physician is a key component of effective case management.

Family Health Partners: Successful Management of High Utilizers

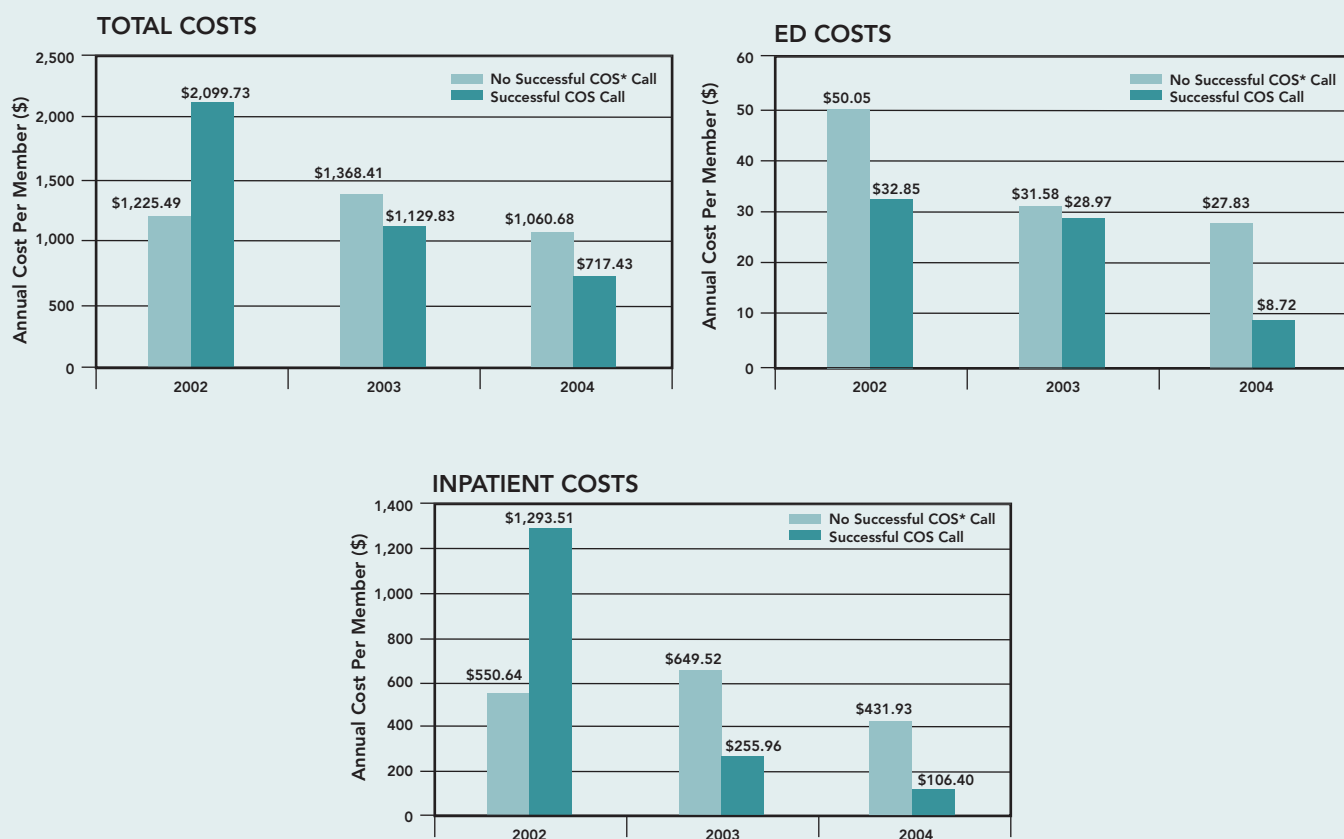
Family Health Partners stratified members with asthma into five groups, with the highest utilizers of care linked to an asthma case manager and/or environmental counseling and a home inspection by an environmental health specialist. Once the program began, the percentage of the health plan's asthma members deemed to be its highest utilizers of care experienced a 60 percent relative reduction, illustrating the success of the case management approach.

Affinity Health Plan: Case Management for High Utilizers

Affinity Health Plan sought to identify members with asthma who were potential high users of care to reduce costly hospitalizations and ED visits. The key link between identification efforts and keeping unnecessary utilization patterns in check is Affinity's AIR program. This case management program is targeted to members with moderate or severe persistent asthma. Clinical outreach specialists contact members identified for the AIR program, helping members visit their PCP if necessary and arranging for a respiratory therapist home visit. In 2003 and 2004, more than 300 pediatric asthma members (about 30 percent) with moderate or severe persistent asthma were offered a respiratory therapy home visit. In 2003, 43 percent of patients referred for respiratory therapy kept their appointment. In 2004, the number of patients referred who kept appointments fell to 32 percent, highlighting the challenges associated with this dimension of the program.

Affinity found that members who participated in the AIR program between 2002 to 2004, had lower utilization and costs than those who did not receive case management. For every dollar Affinity invested in improving asthma care for children, the plan estimates saving three dollars in overall costs.

Figure 6. Affinity Health Plan: Costs for Members Receiving/Not Receiving Asthma Case Management



* COS (Clinical Outreach Specialist)

Asthma Self-Management Education

National asthma treatment guidelines recommend that patients be educated about their condition, obtain regular medical review, monitor their condition at home with either peak flow meters or symptom observation, and use a written action plan. Many people with asthma and the people that care for them do not have access to materials that provide the knowledge and skills necessary to manage the disease. Managed care health plans can help provide this education directly to members and can also facilitate member education at provider practices.

Monroe Plan: Home Visits by Certified Asthma Educators and Outreach Workers

Families participating in Monroe Plan for Medical Care's asthma education and clinical management program receive initial home visits from one of the plan's outreach workers and/or certified asthma educators. Members are helped to set up quick-turnaround appointments with the specialty asthma center (which otherwise could take several weeks) and to resolve transportation problems they may confront in getting to the appointment. In addition to providing self-management education, the asthma educator or outreach worker conducts an in-home environmental assessment and follows up on asthma-related appointments and missed appointments. The educator or outreach worker follows up with patients after asthma-prompted ED visits to prevent further visits or hospitalizations, reviewing what might have precipitated the visit, and ensuring that patients schedule follow-up physician appointments and fill prescriptions for appropriate asthma medications.

During a two-and-a-half-year period, 202 initial home visits were made by the Monroe Plan's certified asthma educators or outreach workers. Of those, 128 children (63 percent) were seen for specialty evaluation and follow-up, with skin testing and allergy injections as needed, while 41 (20 percent) had a home environment assessment visit, as recommended by the asthma specialists after skin testing. The project also issued parking passes for 117 families (58 percent) and arranged taxicab transportation for 83 families (41 percent) as needed for visits to the asthma specialists for allergy skin testing and for weekly injection appointments.

Family Health Partners: Recruiting Providers to Teach Member Asthma Self-Management

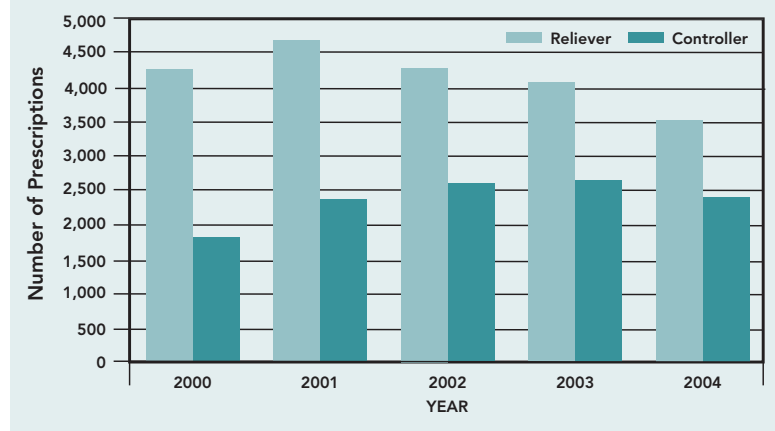
Family Health Partners formed partnerships with provider practices that manage the bulk of the plan's members to provide education to help members manage asthma more effectively.

FHP initially identified 18 provider practices caring for approximately 60 percent (21,153) of the plan's enrollees with asthma. The plan sent certified asthma educators to teach a comprehensive program to those physicians and office staff on educating members on how to manage their own asthma. FHP introduced the practices to the consistent use of asthma action plans. These plans provide patients with self-management tools. The asthma action plan, which is developed jointly by the patient and physician, offers detailed information on when asthma medications should be taken by dose and type, as well as how to handle acute asthma flare-ups.



The percent of FHP's members with asthma with an asthma action plan has increased to more than 30 percent since FHP started its provider education program. FHP's practice-based member education program also resulted in improved prescribing patterns for controller and reliever medication for members with asthma (Figure 7).¹² Between 2000 and 2004, the number of controller prescriptions increased while the number of short-acting reliever medication prescriptions decreased.

Figure 7. Family Health Partners: Asthma Prescription Fills



Home Environmental Assessments

Americans typically spend up to 90 percent of their time indoors according to the American Lung Association. Therefore, indoor allergens and irritants can play a significant role in triggering asthma flare-ups. It is important to recognize potential asthma triggers in the indoor environment and reduce exposure to those triggers. Managed care health plans can target high-risk members with asthma for in-home environmental assessment and trigger abatement services to promote reduced utilization and increased quality of life.

Contra Costa Health Plan: Asthma Community Advocates

Contra Costa Health Plan's Childhood Asthma Management Program trained neighborhood residents in the western part of Contra Costa County to educate families on asthma and its environmental triggers. Community advocates were trained to conduct In-Home Asthma Trigger Check-Up visits to assist families in identifying and eliminating indoor environmental asthma triggers using low-cost techniques. On their first visit to a family's home, the advocates provide a healthy homes kit — a bucket filled with low-cost trigger reduction items (non-toxic cleaners, brushes, a pillowcase cover, and food storage bags). At the end of this first visit, parents or guardians select two or three changes they are willing to make by the next visit, which takes place a few weeks later. To date, advocates were able to visit only a few homes, but have returned to 40 percent of the homes first visited and reported that, in all cases, anywhere from one to three home trigger reduction techniques had been adopted by families. Also, nearly all the families who completed home check-up visits report that their child's asthma symptoms improved. Plan officials suggest that others considering a similar intervention make sure follow-up visits occur. Additional funding sources have been secured to conduct home visits for an additional two and one-half years in Contra Costa County.

¹² Jones EM, Portnoy JM. Modification of Provider Behavior to Achieve Improved Asthma Outcomes, *Curr Allergy Asthma Rep* 2003;3(6):484-90.

Provider Outreach and Intervention



Working with health care providers often is the most direct route to improve the health status of individuals with asthma. Yet, physicians and other health care personnel — particularly those who serve the Medicaid population — are busy, and often are short on resources.

How can health plans work with providers to improve care for members with asthma?

Health plans can work with providers to improve prescribing patterns, teach the use of peak flow meters and other durable medical equipment, and provide culturally and linguistically appropriate asthma education to patients. Common health plan provider interventions include developing provider capacity to make every visit an “asthma education visit.”

These provider interventions can be linked with pay-for-performance approaches to encourage providers to maximize the quality of care for patients with asthma. Health plans can use financial incentives to recognize providers who deliver high quality asthma care, thus aligning provider reimbursement directly with improvements in patient health status.

This chapter introduces a variety of approaches, both high-touch and low-touch, to improve provider management of members with asthma. Plan strategies include:

- Innovative reimbursement models;
- Asthma education;
- Provider profiling;
- Academic detailing; and
- Promoting the use of asthma action plans.

Additionally, the *Plan/Practice Improvement Project*, which is joining health plans and provider practices in California to cut asthma-related admissions by 50 percent, is summarized.

Provider Education and Innovative Reimbursement Models

Today’s health care environment presents many opportunities for continued growth and professional development. The primary care practice setting is often challenged by time limitations and patient volume, making lengthy or off-site learning experiences impractical. However, creative educational approaches in the primary care setting can be successfully implemented, particularly when linked with quality-based incentives.

Affinity Health Plan: Distance Learning Linked with Provider Incentives

Affinity Health Plan developed *The Asthma Dialogues*, a continuing education curriculum for health care providers.¹³ It uses a case-based learning model to improve skills in managing people with asthma; clarify the diagnosis of asthma and the classification of asthma severity; improve access to primary care asthma services;

¹³ For further information on *The Asthma Dialogues*, contact Robert Morrow, MD, Clinical Associate Professor, Albert Einstein College of Medicine, at rmorrow@montefiore.org.

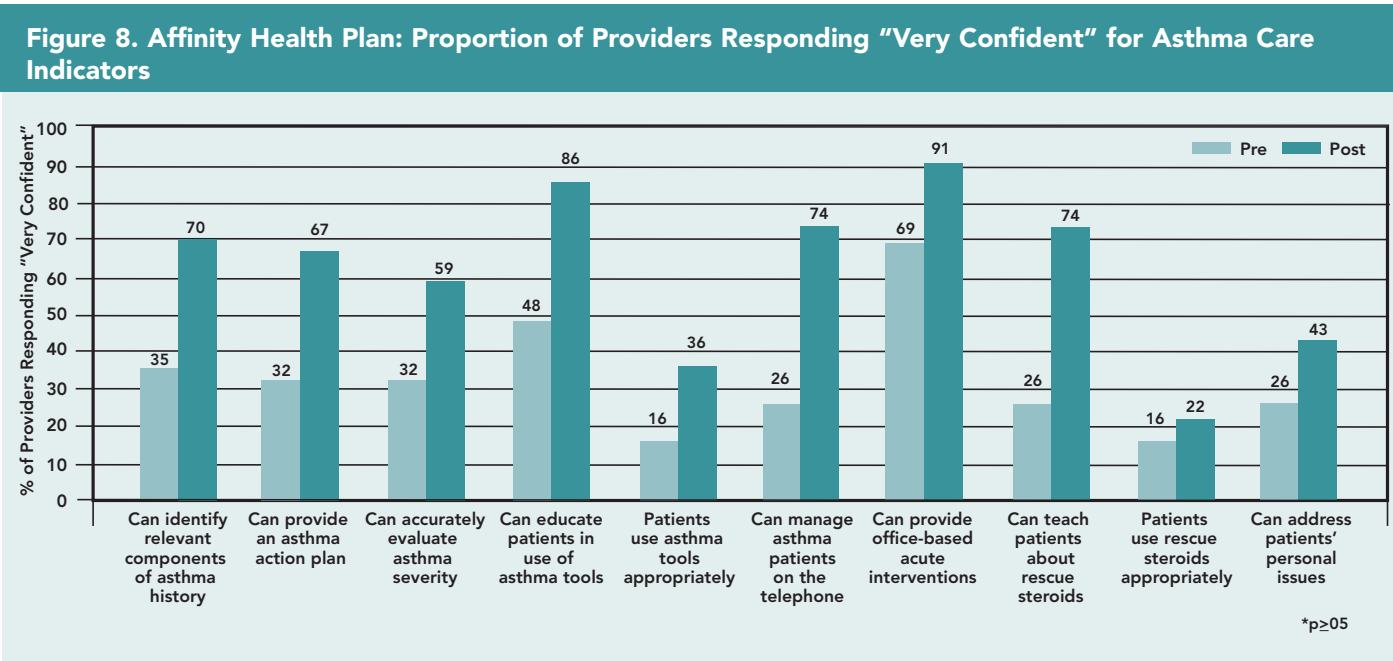
increase the use of asthma action plans and environmental assessments; and uncover and solve obstacles to good asthma care.

Affinity conducts the training through four integrated modules:

1. Diagnosis, level of severity, and treatment;
2. Access to care;
3. Asthma action plans; and
4. Tools of care and the environmental assessment.

Providers go online, complete the four modules, and submit an application for continuing medical education. In addition to the CME credit, physicians who complete the training receive financial reimbursement for in-office spirometry and nebulizer treatments, which previously were not reimbursed. The modules also are made available to practices via CD-ROM. Through Affinity's initial pilot program, 50 out of 327 providers completed all four modules and are receiving reimbursement for in-office spirometry and nebulizer treatments for Affinity members. Forty-three of the 50 providers also have received their CME certification.

Affinity found that physicians experienced substantial education gains from case-based asthma training provided on the CD-ROMs. Analysis of pre-post responses revealed a significant increase in the proportion of physicians who were confident about their ability and their patients' ability to treat asthma (Figure 8).





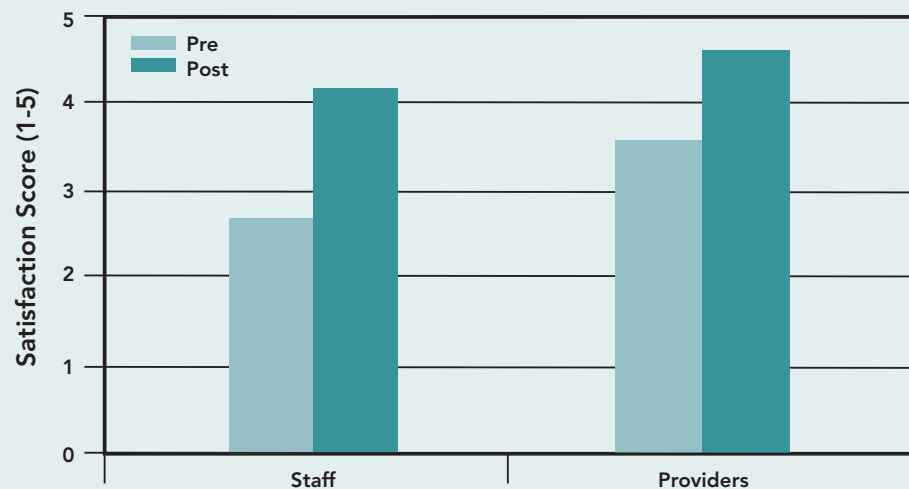
Family Health Partners: Office-Based Provider Education

Family Health Partners developed an incentive-based provider education approach to improve asthma patient outcomes. FHP offers financial incentives for primary care providers and staff who participate in office-based education on asthma management and patient self-management teaching techniques. Providers who complete the asthma management training series can bill FHP for the patient education they conduct, using specific billing codes.

In the intervention, a team of two asthma educators visit high-volume provider offices, a subset of providers who care for the bulk of the plan's members in the Kansas City area with asthma. The educational sessions run for one hour per week for eight weeks. At the end of the training, the asthma educators oversee and critique a patient training session. When training is completed, the providers can begin billing the health plan for providing patient education services using codes that are approved for chronic disease counseling. The first time a patient receives asthma education, a claim is filed using the CPT code 99402 for an initial 30-minute session. Subsequent 15-minute follow-up education sessions are billed using code 99401. FHP sets no limit on the number of follow-up sessions that can be billed and has not detected any misuse of billing codes.

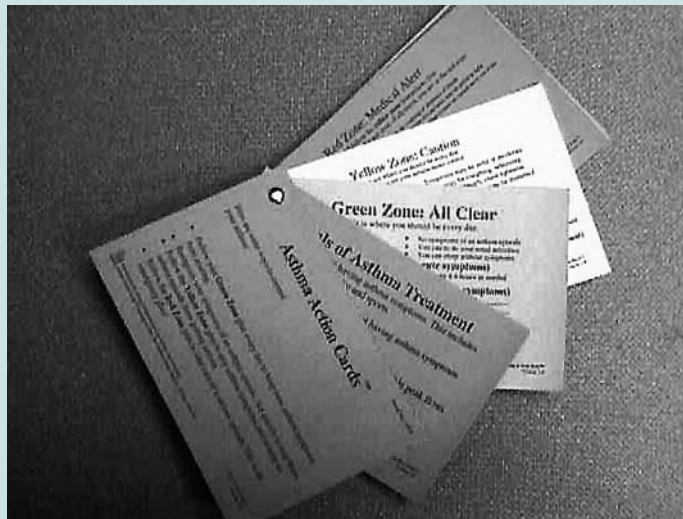
FHP is tracking its billing to document whether physician offices that finished the training are providing the service. It also is comparing outcomes among patients seen by providers who completed the training and those who did not. Among the providers who completed the training, there is increased use of anti-inflammatory drugs, improved documentation of patient assessments, and increased engagement of patients who are efficiently self-managing their asthma.

Figure 9. Family Health Partners: Satisfaction with Asthma Care by Providers and Office Staff



Family Health Partners Asthma Action Cards

Family Health Partners developed and implemented Asthma Action Cards. These patented cards are one of the plan's most important tools for teaching providers to foster self-management skills in their patients. The advantage of the cards lies in ease of use, even by providers and staff who are not completely familiar with the process of writing asthma action plans. The cards assist providers in writing action plans and teaching their patients how to follow them. Since they are colorful and user friendly, patients find them easy to use for reference during asthma flare-ups.



Provider Profiling

Provider profiling is the process of comparing the costs, quality of care, and service utilization of different health care professionals with community standards. It is often used in quality improvement to identify problem areas in the utilization of management approaches when large differences in patient outcomes arise.

San Francisco Health Plan: Using Data to Promote Improved Asthma Management

San Francisco Health Plan (SFHP) is working to connect providers with useful information about their patients with asthma, recognizing that there is an art to approaching busy physicians and convincing them that they could improve their management of patients with asthma. The plan developed and piloted its provider profiling initiative in phases and paid close attention to provider feedback to enhance the effectiveness of the process. Based on provider input, the information in the provider letter and profiling reports was reworked to highlight the care that individual patients with asthma receive. Few better incentives exist for physicians to change how they treat patients than data that alerts them that certain patients have visited the emergency department three times or that a patient with persistent asthma is not on controller medication.

SFHP provider profiles now enlist physician action as well as provide them with pharmacy claims and hospital utilization data on each of their SFHP patients. The strength of the revised letter is that it suggests the recommended treatment regimen

for the patient based on asthma guidelines. Not only were SFHP's provider profiles well received, but the plan's asthma HEDIS rates improved between 2002 and 2004.

Joint Provider Profiling Efforts in the New York State Asthma Collaborative

In CHCS' *Improving Asthma Care in New York State* initiative, health plans, some of which are direct competitors and have common provider networks, collaborated on the creation of a standardized profiling template.

Many plans use physician profiling reports containing information at the member level, as well as aggregate panel statistics, to supply physicians with actionable information about the health status of their patients and the care that has been received. However, since providers in New York can contract with multiple health plans, those providers may receive reports from a number of plans — and each report may highlight different measures with different definitions. The goal of the New York State's Provider Profiling workgroup was to create a template for a standardized provider profiling report.

The individual patient profile template that the plans developed contains four asthma alerts:

- *Drug Alert*: Activated if the patient has not filled any controller medications or has been flagged for short-acting beta agonist overuse (use of short-acting beta agonists more than two times a week (or filling more than two canisters in 12 months) may indicate the need to initiate (or increase) long-term control therapy).
- *Care Alert*: Activated if the patient has had fewer than two PCP visits in one year. The guideline recommends that all people with asthma have a scheduled asthma visit at least every six months.
- *Critical Care Alert*: Activated if the patient has been seen in the ED or hospital for asthma without a subsequent office visit.
- *Environmental Alert*: Activated if the patient smokes or is exposed to second hand smoke.

While not all of the plans implemented the template immediately, all agreed that the process and design were beneficial. As a result of this effort, several plans in the New York collaborative are adopting or adapting the profile to use with their contracted physicians.

Academic Detailing

Academic detailing can offer a successful “high-touch” mechanism to influence the practice patterns of health care professionals. In this model, a plan representative visits physicians in their offices to review recommended evidence-based practices. The sessions are conducted at the convenience of the physician, as close as possible to regular office hours.

Medi-Cal Competitors Collaborate to Leverage Academic Detailing

Inland Empire Health Plan (IEHP) and Molina Healthcare of California serve Medi-Cal recipients in California's Riverside and San Bernardino counties.

Although they cover the same market, both plans saw potential benefits in collaborating to more effectively reach their provider networks, which overlap by 75 percent. The plans felt that providers should receive a consistent message to improve asthma treatment.

IEHP and Molina agreed to combine resources to develop a joint standardized audit tool and an asthma kit for providers. Provider stratification parameters were developed based on poor medication prescribing practices, and the top 15 providers received a joint medical chart audit from both of the plans. In addition, the health plans developed two joint letters: one contained asthma resource information for all primary care physicians and the other was used to notify the targeted providers of the audit. Lastly, the plans summarized treatment guidelines for these providers.

Clinical audits were performed by a team of physicians, a clinical pharmacologist, and a registered nurse from each plan. The plans developed toolkits comprised of educational information and materials on asthma, for physicians who performed poorly. The toolkits included:

- An easy-to-use summary of the clinical practice guidelines for asthma;
- A standardized asthma medical record progress note and asthma chart identification stickers;
- A standardized asthma action plan agreed upon by both plans;
- Peak flow meters with a bag of mouthpieces for measuring peak flow readings; and
- Information about Molina and IEHP asthma programs, and their key contact numbers.

Building on their joint asthma effort, Molina and IEHP have decided to collaborate on an academic detailing initiative to improve primary care management of diabetes.

Partnership HealthPlan: Working with Physician Practices to Improve Asthma Care

Partnership HealthPlan of California has identified high-volume physician practices that have inconsistent prescribing patterns for patients with asthma. The plan sends a team consisting of a physician, pharmacy director, and case management nurse to meet with the targeted physician at the practice site. Over lunch provided by the plan, the team gives a presentation on quality improvement that highlights best practices in asthma treatment and prescribing protocols. The importance of using generic medications is carefully explained, as is the difference between "non-formulary" and "not covered" drugs. While highlighting best practices, the team reviews the beta-agonist overuse reports that are sent to providers every six months. The nurse case manager follows up the team visit to deliver subsequent reports and works with the practice to track progress. The plan found that providing the practice sites with decision support tools, such as paper or electronic profiling reports, is a strong motivator for improvement.

Additional Provider Strategies

Family Health Partners: Helping Members Develop an Asthma Action Plan

Primary care physicians that contract with Family Health Partners are encouraged to complete asthma action plans for all members with asthma. The asthma action plan is a three-copy NCR form that guides patients and their caregivers in responding appropriately to asthma-related symptoms to prevent an acute flare-up. One copy of the form is given to the patient, another is kept by the provider, and the third is sent to the health plan.

Through its office-based provider education project, FHP worked with practitioners to provide all asthma patients with an action plan. Plan staff also had an unstated goal of encouraging culture change in the practices by encouraging allied health workers and providers to work together as a team, placing the patients as the source of control. This is most clearly demonstrated by the way action plans are used. These plans provide patients with self-management tools; however, they must also develop skills to use them. It is the fostering and support of self-management skills by providers and office staff that lead to patients being the source of control.

From 2001 to 2004, Family Health Partners increased the use of asthma action plans from zero to approximately 33 percent of members with asthma. The plan is continuing efforts to increase the number of members with asthma with these self-management plans.

Monroe Health Plan: Connecting with School-Based Health Centers

Instead of waiting for kids to show up at the doctor's office (or emergency department), health plans can work with health care providers at school-based health centers (SBHCs) to identify students with asthma and help them manage their symptoms more effectively.

Monroe Plan for Medical Care teamed up with three Rochester, NY, school-based health centers to develop a consistent approach to identify students with asthma in their schools and ensure that the at-risk students were enrolled in the SBHC. The SBHCs not only proved helpful in identifying kids with asthma, but also helped to ensure that more kids received patient education and asthma action plans. The three SBHCs identified 286 kids with asthma in 2003 and identified nearly 400 in the next school year.

SBHCs also were invaluable in working with Monroe Plan to reach members under age 19 with asthma to encourage them to get flu shots during the influenza vaccine shortage in 2003-2004. The SBHCs sent flu vaccine informational packets to families of students with asthma, tracked vaccinations given to students with

asthma and those who were vaccinated at their doctor's office, and coordinated flu vaccine clinics for school faculty and staff. A Monroe Plan outreach worker attempted to reach the parents of students who had not responded to check if the students had received a flu shot. At the pilot SBHCs, 58 percent of 119 enrollees with asthma received flu shots. The flu vaccine collaborative project between Monroe Plan and the three local school health centers received first prize at the National Assembly of School-Based Health Care annual convention in June 2004 for demonstrating how "SBHCs can be instrumental in the promotion, education, and administration of the influenza vaccine."

Innovative Plan/Practice Collaboration to Improve Asthma Care

Significant strides have been made to improve chronic care delivery for people with asthma. Many health plans working with CHCS have found, not surprisingly, that the most effective strategies to improve the care of asthma supported changes at the point of care, i.e., within the physician office. *The Plan/Practice Improvement Project (PPIP)*, a collaborative funded by the California HealthCare Foundation, was designed to synchronize quality improvement and chronic care management approaches at the health plan and provider levels.

This ambitious 18-month collaborative has an overarching goal of reducing emergency department use and hospital admissions by 50 percent for members with asthma in the practice intervention sites. CHCS is partnering with the Medi-Cal Managed Care Division, the National Institute for Children's Healthcare Quality (NICHQ) and the Improving Chronic Illness Care Program (ICIC) to lead this collaborative of eight Medi-Cal health plans and their network providers.

The collaborative has two simultaneous, closely coordinated components:

- **An asthma improvement collaborative for providers** conducted exclusively using web-based technology. Each participating managed care plan recruited up to three practice teams, including at least one solo or small practice site, to participate in this virtual learning collaborative focused on practice site improvement using elements from the Chronic Care Model,¹⁴ asthma care guidelines, and best practices. Health plans are serving as coordinators of and participants in the virtual learning sessions, enabling the health plans to learn about the key elements of practice site improvement.
- **A health plan “spread” collaborative**, in which the plans will develop a systematic program to plan and implement the spread of better asthma care processes to a majority of their primary care practices. Health plans will leverage learning from the virtual practice site collaborative (lessons in how to improve chronic care outcomes and how to work effectively with physician offices and patients with asthma) to develop strategies to meet the needs of the diverse range of Medi-Cal provider sites.

As part of PPIP, NICHQ shared an *Asthma Change Package* with the participating practice sites.¹⁵ To facilitate plan engagement in practice site change, CHCS created a *Health Plan Activities to Support Practice Site Changes* tool that outlines best practices that plans can undertake to improve care at the provider level (see page 43). Plans can choose from this list to determine how to best work with provider practices on their panel.

The collaborative will continue through January 2007. Lessons will be shared nationally with health plans, providers, and state Medicaid agencies.

¹⁴ Wagner, EH. “Chronic Disease Management: What Will it Take to Improve Care for Chronic Illness?” *Effective Clinical Practice*. 1998;1:2-4.

¹⁵ NICHQ *Asthma Change Package*. Viewed at: <http://www.nichq.org/NICHQ/Topics/ChronicConditions/Asthma/Changes/> (June 22, 2006).

PPIP Case Study: Partnership HealthPlan and La Clinica Vallejo

Partnership HealthPlan, a participant in the PPIP project, is helping three of its practice sites implement aspects of the Chronic Care Model, and is teaching practitioners and office staff about basic quality improvement tenets, such as testing small changes to monitor the effects of a new intervention.

La Clinica Vallejo, one of Partnership's sites, began to use rapid cycle improvement (PDSA cycles) to determine if small changes could affect provider behavior and ultimately, the quality of care delivered to the clinic's patients with asthma. One simple but very effective change was to have the health educator highlight the severity grid on the progress note prior to a patient's visit. Because capturing the severity of a patient's asthma is considered an important piece of clinical information, La Clinica Vallejo wanted to increase the rate of providers who consistently made the evaluation. After stressing the importance of severity classification and highlighting the section to be filled in, the clinic had 100 percent of providers successfully documenting this information. The clinic next plans to test how it can increase the rate of flu vaccinations for its members with asthma.

Health Plan Activities to Support Practice Site Changes

Family and Self-Management Support	Decision Support	Clinical Information System	Delivery System Design	Health Care Organization	Community Resources
<ol style="list-style-type: none"> 1. Provide self-management training courses for practice site teams. 2. Provide self-management education directly to members with asthma. 3. Provide health education classes to teach members with asthma how to figure out their own severity classification. Educate on the importance of knowing that information. 4. Provide resources and incentives for patients, parents, household members of patients who smoke to help them quit. 5. Work with practice sites to incent members with asthma that participate in health promotion/ physical activity programs. 6. Identify age/cultural/literacy gaps in patient education tools and develop/purchase and disseminate through network physicians. 7. Work with other plans in a region to standardize provider and member educational documents. 	<ol style="list-style-type: none"> 1. Distribute asthma guidelines to your provider network and educate providers about standards of care. 2. Create/purchase an asthma flow chart that corresponds with the asthma guidelines that have been distributed and provide free to practice sites. 3. Incent providers to perform self assessment of their care using standardized tool (like American Academy of Pediatrics). 4. Provide pharmacy-profiling information to network physicians (filled prescriptions – rescue to controller data etc.). 5. Establish a relationship in which specific asthma specialist is ‘assigned’ to a set of providers (or patients) for consultation, review of medication use, utilization of acute care, random chart review, academic detailing. 	<ol style="list-style-type: none"> 1. Provide software or build registry functionality into existing software at practice sites. 2. Provide practice sites with training to integrate clinical information systems into everyday practice. 3. Provide IT support to build measures and reporting capability into software. 4. Assist practice sites in identifying their patients with asthma. 5. Facilitate downloading of any automated clinical data to the software. 6. Provide chart audit assistance for non-automated data needed in software. 7. Work with practices to send reminders to enrollees for asthma preventive, well visits. 8. Monitor group practice specific indicators for quality chronic illness care (moving beyond administrative data): <ul style="list-style-type: none"> • Severity assessment. • Treatment with anti-inflammatory meds • Patients exposed to ETS or other triggers. 9. Establish policies and programs to provide information system infrastructure among providers especially in smaller ambulatory community and rural settings. 	<ol style="list-style-type: none"> 1. Provide patient scheduling for planned visits and follow-up calling assistance to practice site. 2. Design and reimburse for group education visits by doctor, nurse or asthma educator. 3. Reimburse practice sites for peak flow meters, spacers, nebulizers kits, compressors, etc. 4. Provide clinicians with a list of vendors they can work with to obtain an inventory of asthma equipment for their practice site. 5. Send Technical Assistance team from health plan that specializes in information management, clinical management and patient education, to individual practice sites to assist in development of assessment, quality improvement and monitoring documentation tools, patient registry, reminder primary care/specialist clinicians that provide extended hours, evening and weekend appointments for urgent visits process/organization/redesign. 7. Provide an “asthma coordinator” to a struggling practice site. 	<ol style="list-style-type: none"> 1. Create performance incentives for providers who provide outstanding asthma care as defined by HEDIS, chart review, office redesign for chronic care and patient satisfaction. 2. Adopt the Chronic Care model as a framework for improving chronic illness care among members, as evidenced by mission statement and QI Policies & Procedures. 3. Be proactive in providing case mgmt/disease mgmt to high risk patients with asthma to facilitate better self management and access to care. 4. Build internal competency at the health plan around improving chronic illness care and quality improvement via staff development. 5. Become a clearinghouse for decision support tools, e.g. asthma flowcharts, asthma guidelines, asthma specialist referral form, etc. Provide consultant support on how to integrate into practice. 	<ol style="list-style-type: none"> 1. Provide equipment for school asthma management program implementation, e.g. peak flow meters, spacers, disposable nebulizer kits, compressors. 2. Review with hospitals what training/education/information members with asthma receive when they receive services in the hospital. 3. Work with local emergency departments to develop a means by which the health plan/provider is notified when a patient is seen in the ED. 4. Pilot a program which partners with pharmacists to provide education, assesses patient technique, evaluates for spacer use, etc. 5. Support/promote and participate in local and regional clinical and community collaboratives. 6. Employ/incent training of Certified Asthma Educators to provide group asthma education classes at the primary care site/schools/daycare centers.

Conclusion

Medicaid managed care plans, particularly those serving significant numbers of at-risk members with asthma, are in a position to improve asthma management and promote better member outcomes and quality of life. This toolkit, outlining successful strategies implemented, tested, and documented by several health plans across the country, is meant to serve as a bridge to help other health plans embarking on this path.

Health plans featured in this toolkit were successful in achieving their asthma quality improvement aims because they carefully documented new strategies; consistently measured their results; demonstrated a return on investment to build a business case for sustaining program successes; and diffused what they learned to other internal quality improvement efforts. Each plan was willing to leave its own silo and collaborate effectively with other health plans, with state Medicaid officials, and with its contracted health professionals to remove barriers, to solve problems, and to augment their administrative and clinical skills. Several of the managed care plans, including Monroe Plan for Medical Care, Family Health Partners, and Affinity Health Plan, have spread their projects beyond the pilot stage and are now implementing them for a wider population of their members.

Sustaining Positive Change

Effective measurement strategies provide key evidence that improvement has occurred. Yet, changes that the quality improvement team has tested, measured, and deemed successful are at risk of being lost or forgotten without a structured plan to sustain positive change. Methods to promote the institutionalization of a new process or program include:

- **Aligning quality improvement goals with organizational goals.** The more organizational goals the quality improvement project advances, the higher the probability that the program will be continued. These goals can include solidifying provider networks, increasing market share, meeting regulatory requirements, or simply scratching an organizational or executive “itch.”
- **Securing funding.** It may be possible to internally reallocate funds or to capitalize on funds gained from return on investment from the project. Less obvious sources that can be tapped include government agencies, consumer organizations, demonstration grants, or local community foundations.
- **Demonstrating the value of changes.** Methods to consider include documenting savings or improvements; reducing or realigning staffing; or proving that the best practice satisfies a regulatory requirement.

CHCS has devised the following scale to help plans track their progress toward achieving sustainability:

Score	Scale	Characteristics
1	No Effort	No movement toward long-term sustainability
2	Minimal Efforts	Efforts made to research funding or changes
3	Active Efforts	Attempts to find funding or implement changes
4	Limited Sustainability	Duration or comprehensiveness unclear
5	Successfully Sustained	Long-term funding or changes secured

Directory of Online Resources

The following tools and resources are available under *BCAP Quality Improvement* at www.chcs.org. We thank the health plans, states, and other stakeholders willing to share innovations to benefit Medicaid consumers with asthma across the country.

Tools

Identification and Measurement

BCAP Common Measures for Asthma: CHCS worked with health plans to develop a common set of standardized asthma measures that can provide essential comparative data to evaluate the success of Medicaid asthma quality initiatives.

Contra Costa Health Services – Asthma Registry Features Guide: This tool outlines the technical specifications and functionality of the web-based asthma registry developed by Contra Costa County Health Services.

Member Intervention

Alameda Alliance "Living Healthy with Asthma" Member Education

Tool: This brochure has proven to be an effective tool for educating members about environmental factors causing asthma and recommending action steps to reduce asthma triggers.

Contra Costa In-Home Asthma Trigger Check-up: This checklist was developed by the Contra Costa Health Services Asthma Program for trained community outreach workers to use during in-home environmental assessments.

Kansas City Children's Asthma Management Program – Asthma Action

Plan/Cards: This presentation details Family Health Partners' KC CAMP Asthma Action Plans and Cards.

Provider Intervention

Asthma Plan/Practice Change Package: This two-part grid uses the Chronic Care Model to outline best practices for provider site improvements for asthma care and for health plans to support best asthma practices at provider sites.

Inland Empire Health Plan/Molina Joint Asthma Progress Note: Two competing California health plans collaborated to develop this asthma progress note for provider offices to standardize asthma reporting.

Kansas City Children's Asthma Management Program – Office-Based

Provider Asthma Education Protocol: This resource outlines the protocol and curriculum for KC Camp's provider office-based asthma education.

San Francisco Health Plan Provider Profiling Letter: This letter was sent to physicians to alert them regarding members with asthma who were not receiving appropriate controller medication.

Resource Papers/Toolkits

Achieving Better Care for Asthma BCAP Toolkit: This CHCS BCAP toolkit, published in 2002, offers a structured approach for addressing quality improvement and a collection of best practices tested by health plans that participated in the *Achieving Better Care for Asthma* BCAP Workgroup.

The Bronx Improving Asthma Care for Children Project: This final report outlines Affinity Health Plan's efforts to address the widespread problem of childhood asthma in New York City.

Kansas City Children's Asthma Management Program: This final report summarizes the experiences of Family Health Partners in developing and piloting KC CAMP, a pilot project to improve care for health plan members with asthma.

Monroe Plan and ViaHealth Partnership, 2001-2004: Improving Asthma Care for Children: This final report outlines the efforts of the Monroe Plan in Rochester, New York, to improve identification and diagnosis of children with asthma, help patients and their families better manage their disease, and more effectively coordinate asthma care in primary care, specialty, and school settings.

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