Reducing Disparities in Pediatric Asthma: Health Plan Augmentation of Federal Efforts

Millions of American children are familiar with the wheezing, tightness of chest and difficulty breathing that signal an asthma attack. In fact, asthma is the most common chronic condition in children, affecting approximately 7.1 million kids nationwide.\textsuperscript{1} Although the disease troubles children in every demographic, some communities experience greater incidences of asthma than others. Of the total population of 0 to 17 year olds, 9.4 percent suffer from asthma, while the percentage jumps to 12.2 among kids living below the federal poverty line.\textsuperscript{2} Even more dramatically, 16 percent of non-Hispanic black children and 16.5 percent of Puerto Rican children have been diagnosed with asthma.\textsuperscript{3} These disparities are thought to result from a combination of factors, including genetics, environmental triggers and lack of quality health care.\textsuperscript{4}

Populations that are disproportionately afflicted with asthma can pay a high price, particularly when lacking the resources for effective management. Uncontrolled pediatric asthma frequently results in emergency care, accounting for 679,000 visits to the emergency room in 2005,\textsuperscript{5} and it is responsible for the highest costs of all preventable pediatric hospitalizations.\textsuperscript{6} These adverse outcomes also reflect racial disparities: black children are twice as likely as white children to be hospitalized for asthma-related emergencies, more than two times as likely to visit an emergency department and four times as likely to die due to asthma.\textsuperscript{7}

Targeting these inequities, a federal interagency task force recently released the \textit{Coordinated Federal Action Plan to Reduce Racial and Ethnic Asthma Disparities}. The plan includes strategies to improve use of guidelines-based care, to improve health care delivery in communities with disparities, to better identify children impacted by disparities and to test interventions that may prevent the onset of asthma. The plan also involves engaging non-federal partners in implementing these strategies, and it emphasizes the importance of community collaboration around the overall mission.

Health plans have a clear business interest in augmenting the government’s push to reduce asthma disparities in children. A report from the Asthma Regional Council of New England estimates that enabling asthmatics to better control their symptoms could eliminate 25 percent of total asthma costs.\textsuperscript{8} The same report cites education and environmental trigger reduction as “highly promising yet often neglected” parts of asthma management. These are two areas where health plans and their foundations are well positioned to make successful investments in children’s asthma reduction. In many cases these interventions can be targeted to populations with high rates of asthma and emergency care use for even greater return.

\textbf{Educational Interventions}

Asthma treatment can be intricate, often requiring multiple prescriptions, medical equipment, decisions about when to use a controller or rescue medications, and strategies
to limit environmental exposure. Confusion over treatment plans and equipment are common among those with poorly managed asthma, as are low expectations about how well the disease can be controlled. It is critical for children to learn to recognize asthma symptoms, take steps to prevent an attack and properly use their inhalers or nebulizers. Parental education is also important to ensure adherence to treatment plans and attentiveness to environmental triggers. Health plans have demonstrated a range of strategies to make sure that children and their parents have access to straightforward, patient-friendly resources on asthma:

- **Providing Age-Appropriate Information** – The Arkansas Blue Cross and Blue Shield’s Catch Air Youth Asthma Program mails out monthly, age-specific resources to young members with asthma, along with materials for their caregivers. Topics include how to track symptoms and medications, emergency planning, asthma school care and exercising with asthma. The program also includes follow up with registered nurses for those members who need case management.

- **Addressing Barriers in Access to Resources** – In 2011 Blue Cross and Blue Shield of New Mexico (BCBSNM) granted funds to Asthma Allies to provide screenings and education to kids who might not have access to asthma resources. Certified Asthma Counselors and Respiratory Therapists traveled to four New Mexico communities in the BCBSNM Care Van mobile clinic, offering lung function tests as well as education and resources on managing asthma.

- **Offering Positive Role Models** - Health Care Service Corporation’s health and wellness website, [Be Smart. Be Well.](#), has an engaging section on children’s asthma. In addition to simple tips and resources, the site includes video interviews with experts and personal stories about active young people who are in control of their asthma. In one film, a mother talks about her struggle to keep her daughter out of the emergency room and how she came to understand the importance of following a medication regimen and avoiding triggers like scented candles.

- **Getting Kids Involved** – The Blue Cross and Blue Shield of Minnesota Foundation’s funding for the Children’s Environmental Initiative, a project of the Family Housing Fund and the Supportive Housing Provider Group, supported the production of an educational film on asthma care. Children living in transitional housing worked together with a local theater to develop and perform [Asthma Busters](#), a fun, kid-friendly resource complete with “Evil Dust Bunny Villains.”

- **Empowering Providers to Educate Patients** – Health Care Service Corporation will partner with the American Lung Association of the Upper Midwest in support of the Enhancing Care for Children with Asthma Project. This project will target clinics in areas with high levels of asthma-related claims and recruit these clinics to participate in a year-long training program on guidelines-based asthma care, improving the capacity of key providers to deliver important asthma information and resources to their patients.
Environmental Interventions

Disparities in asthma are due, in part, to the strong influence of environmental conditions on both the development of the disease and on the symptoms. Environmental asthma triggers like dust mites and mold can be particularly problematic in substandard housing situations where residents often do not have the authority of property owners or the financial capacity to make changes to ameliorate triggers. Even mild to moderate interventions, such as providing mattress and pillow covers or cleaning kits to members with asthma, are shown to offer positive returns on investment when combined with education. Health plans and their foundations are using a range of environmental asthma interventions in response to the needs of their communities:

- **Supporting Bilingual Community and Home-Based Services** – The Horizon Foundation for New Jersey granted funding to Save Latin America to support their Asthma Health Outreach and Education Initiative. This program identifies, educates and treats asthma through twice-monthly workshops and asthma screenings in Hispanic communities and through home visits by a bilingual health educator.

- **Advocating Improvements in Housing Conditions** – The Blue Cross Blue Shield of Minnesota Foundation is working on behalf of Native American children in the Phillips neighborhood of Minneapolis to alleviate asthma symptoms by improving rental-housing conditions. This program has helped to change public policy so that landlords are required to complete a visual inspection checklist and, if not in compliance with standards, to attend a healthy housing workshop and make changes or face fines.

- **Sponsoring Home Assessments** - The Blue Cross and Blue Shield of Minnesota Foundation also enabled environmental inspections of supportive housing sites through funding for the Children’s Environmental Initiative. The project involves interviewing staff and residents and evaluating housing units and grounds to try to reduce exposure to pesticides, household chemicals and maintenance problems that can exacerbate children’s asthma.

Additional Resources on Asthma Interventions


- **Asthma Return on Investment Calculator** (2007) – This tool from the Agency for Healthcare Research and Quality (AHRQ) allows users to input program-specific data and estimates the cost benefits based on a synthesis of 52 studies of the effects of asthma management on health care and productivity.
• **Implementing an Asthma Home Visit Program** (2005) – This guide from the Environmental Protection Agency offers guidance to health plans on developing home visiting programs with an emphasis on reducing environmental triggers.

• **Pediatric Asthma Care in the AHRQ Innovations Exchange** (2012) – This page features innovative programs in children’s asthma care and outcomes data. It also links to quality tools that could be distributed to parents and health care providers.

• **Asthma and Air Pollution Toolkit** (2012) – This tool from the Centers for Disease Control and Prevention includes tips on communicating with providers, the media and the public about the effects of air quality on asthma.

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3 Ibid.
4 Ibid.
5 American Lung Association.
7 President’s Task Force.
8 Asthma Regional Council.
9 Ibid.
10 Ibid.
11 Ibid.
12 Ibid.