The Problem

About one in every nine adults and one in every eleven children currently has asthma.\(^1\)

Approximately one in every two New Yorkers with asthma has asthma that is not well controlled or very poorly controlled.\(^2\)

Poor asthma control resulted in an average of 170,000 emergency department visits, almost 35,000 hospitalizations,\(^3\) and an average of 281 deaths\(^4\) annually during 2012-14.

A gap exists between care recommended by the National Asthma Education and Prevention Program (NAEPP) Guidelines\(^5\) and the actual care being provided. For instance, patients in NYS are not consistently meeting Healthy People 2020 (HP2020) goals for asthma self-management education given by a health care provider (Figures 1 and 2). Furthermore, there has been an annual decline in the percentage of patients in NYS whose provider has advised them to change their environment to improve their asthma (Figure 1).\(^6\)

NAEPP Guideline Recommendations

Asthma self-management education is essential to provide individuals with the skills necessary to control their asthma.

All individuals with asthma should receive tailored education on:
- how to handle signs and symptoms of worsening asthma
- medication use and compliance
- inhaler and spacer techniques
- use of a written Asthma Action Plan
- environmental triggers for asthma

Health care providers should counsel and refer individuals with asthma to services to reduce exposure to allergens and irritants in their environment.

An important component of asthma self-management education is an Asthma Action Plan, which is a written step-by-step plan that should be developed jointly by the health care provider and person with asthma and updated at least every six months. It is a useful tool that helps people to control and manage their asthma.

Progress to Date

HP2020 includes three objectives related to asthma self-management education provided by health care providers to patients: (1) ever been advised on how to respond to an asthma episode or attack, (2) ever been given an Asthma Action Plan, and (3) ever been advised to change one's home, school or work environment to improve their asthma.

Figure 1: Healthy People 2020 Objectives Related to Adult Asthma Self-Management Education Given by a Health Care Provider, New York State (2011-2013)

Data Source: BRFSS Asthma Call-Back Survey
Percentages are age adjusted to the 2000 United States population.
Data show that while NYS met the HP2020 objective regarding individuals with asthma who received education about the appropriate response to an asthma attack or episode each year from 2011 to 2013, the percentage is decreasing each year (Figure 1). Data for the other two HP2020 objectives (i.e., being given an asthma action plan and changing one’s environment) show that NYS has not met the national targets (Figure 1).

Per NAEPP guidance, all people with asthma should have an Asthma Action Plan and should be provided with education and self-management tools.

**Figure 2: Components of Asthma Self-Management Education Given by a Health Care Provider for Children and Adults, New York State, 3 Years Average Rates 2011-2013**

<table>
<thead>
<tr>
<th></th>
<th>Children</th>
<th>Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ever Taught to Recognize Early Symptoms of Asthma Episode</td>
<td>77.2%</td>
<td>60.7%</td>
</tr>
<tr>
<td>Ever Taught What to Do During an Asthma Episode or Attack</td>
<td>86.2%</td>
<td>72.4%</td>
</tr>
<tr>
<td>Ever Taught How to Use a Peak Flow Meter</td>
<td>48.0%</td>
<td>38.8%</td>
</tr>
<tr>
<td>Ever Given an Asthma Action Plan</td>
<td>42.3%</td>
<td>26.0%</td>
</tr>
<tr>
<td>Ever Advised to Change the Environment</td>
<td>41.5%</td>
<td>38.0%</td>
</tr>
</tbody>
</table>

Data demonstrate that individuals with asthma in NYS received asthma education and self-management tools at a much lower rate compared to the NAEPP recommendations (Figure 2). Overall, children with asthma in NYS were more likely to receive asthma self-management education from their health care provider than were adults with asthma (Figure 2).

Additionally, though it is recommended that every patient with asthma have a current Asthma Action Plan, only 26% of adults and 42% of children with asthma in NYS ever received one from their health care provider (Figure 2).

**What Can Be Done**

**State Leaders Can:**
Develop and implement policies to increase access to quality self-management support and education services.

**Health Care Providers Can:**
Integrate Certified Asthma Educators (AE-Cs) into their clinical practices to increase access to quality asthma self-management education.

Complete and update individualized Asthma Action Plans for all patients with asthma.

Assess patients’ specific asthma triggers and advise patients to make changes to the environment to reduce or eliminate asthma triggers.

**Health Insurers Can:**
Provide reimbursement for high quality, evidence-based asthma self-management support and education services provided in the clinic and home settings.

**People with Asthma Can:**
Develop an Asthma Action Plan with their health care provider.

Seek asthma self-management support and education services from health care providers, health insurers, and the community.

*Data Source: BRFSS Asthma Call-Back Survey*
Asthma education and self-management support are essential to achieve asthma control

Communities Can:
Raise awareness among primary and specialty care providers about the skills and abilities of AE-Cs, especially within those practices serving individuals with asthma who are enrolled in Medicaid.

Resources Available to Help Meet the NAEPP Guideline Recommendations

The NYS Department of Health’s (NYSDOH) Asthma Program is actively working with a broad range of public and private partners to increase access to quality asthma self-management education services.

NYSDOH funds Regional Asthma Contractors who are working with local partners to improve the delivery of asthma self-management education in healthcare and community settings.

The NYS Medicaid program provides coverage for asthma self-management education services provided by Certified Asthma Educators (AE-Cs).

There are more than 300 AE-Cs in NYS who are certified in asthma assessment and management, with skills to counsel individuals with asthma and their families. The NYSDOH Asthma Program is working to further integrate these AE-Cs into healthcare settings to provide asthma education services.

While progress has been made, there is still much to be done in NYS to both meet the Healthy People 2020 objectives and bring the provision of asthma care in line with the NAEPP recommendations. Work must be done to provide patients, especially adults, with asthma with the recommended self-management education and tools. As indicated, the different partners and stakeholders, including patients with asthma, all can contribute to these efforts, and resources are available to assist in achieving these goals.

Contact
For more information, please send an email to: asthma@health.ny.gov

References
8) National Asthma Educator Certification Board, 2016