

# PREVENTION AGENDA BRIEF 2017: ASTHMA DATA TO ACTION

## Inhaled corticosteroids are the preferred first-line treatment to improve control of persistent asthma<sup>1</sup>

### The Problem

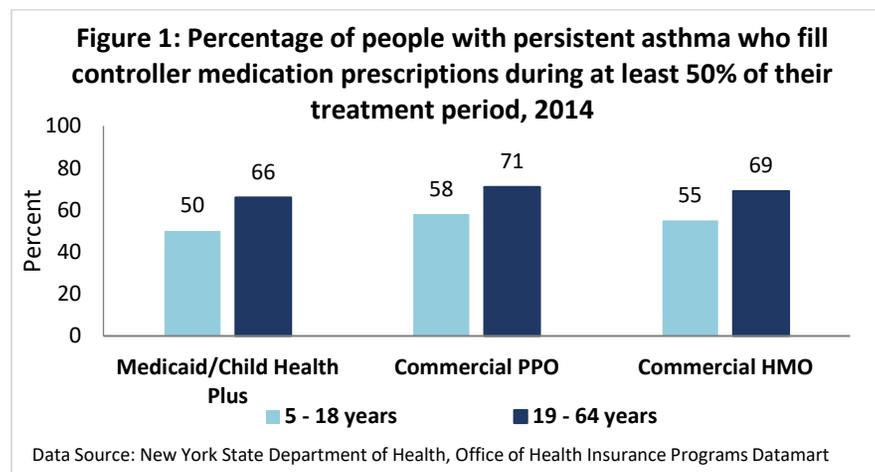
One in every two New Yorkers with asthma has asthma that is considered “not well controlled” or “very poorly controlled”.<sup>2</sup>

Per the national clinical guidelines, **inhaled asthma controller medications**, including inhaled corticosteroids (ICS), are recommended for daily use for all these individuals to prevent and control asthma symptoms and attacks.<sup>3</sup> Among New Yorkers whose asthma is not controlled, the **daily use of recommended inhaled asthma controller medications is low** (43%).<sup>2</sup>

Additionally, among people with asthma who use inhaled asthma controller medications, including ICS, **only half report using the medication as prescribed**.<sup>2</sup>

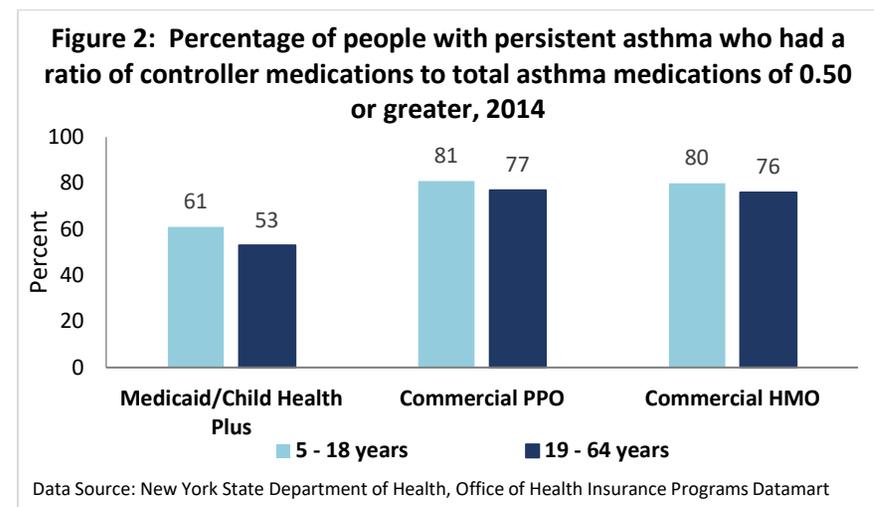
### Controller Medication During Treatment Period

Daily controller medication use is recommended among those with persistent asthma during their treatment period. However, data show a **low percentage** of these individuals who filled their prescriptions **during at least 50% of that period**, especially children aged 5-18 years (Figure 1). **Medicaid Managed Care/Child Health Plus (MMC/CHP) enrollees have lower percentages**, compared to Commercial Preferred Provider Organization (PPO) or Commercial Health Maintenance Organization (HMO) enrollees (Figure 1).



### Controller Medications Ratio

An asthma medication ratio is an evidence-based way to assess controller medication use. Ratios  $\geq 0.5$  indicate a patient may have filled their controller medication more than their rescue medication, hence is associated with lower risk of asthma symptoms and attacks.<sup>4</sup> The data show that **MMC/CHP plans have lower percentages of enrollees with a ratio  $\geq 0.5$** , compared to Commercial PPO or Commercial HMO enrollees (Figure 2).



The low percentages of both measures in MMC/CHP population may be due to the barriers in accessing controller medications and the insufficient education of controller medication usage.

## Resources for Improvement

### National Asthma Guidelines

The National Asthma Education and Prevention Program (NAEPP) *Expert Panel Report 3 (EPR-3), 2007: Guidelines for the Diagnosis and Management of Asthma*<sup>1</sup> provides guidance for treatment based on a patient's individual needs and level of asthma severity and control.

## New York State Resources for Healthcare Providers

**Clinical Guideline for the Diagnosis, Evaluation, and Management of Adults and Children with Asthma\*** is a [clinical decision support tool](#) to assist clinicians in applying concepts of the NAEPP EPR-3 into practice.<sup>5</sup>

**Asthma in the Primary Care Practice: Clinical Application of the NAEPP EPR-3\*** is a companion tutorial (eligible for 1.5 CME) to the above support tool and is available as an online course<sup>6</sup> or as a DVD.

The [Asthma Action Plan\\*](#) is a written step-by-step plan that assists the patient in controlling and managing asthma. It is developed jointly with the patient and updated at every visit (at least every six months).<sup>7</sup>

\*This resource is [available online](#), free-of-charge, at the *NYS Asthma Program webpage*.<sup>8</sup>

**The New York State Medicaid Managed Care Pharmacy Benefit Information Center** provides access to information on the medications and supplies covered by Medicaid and Family Health Plus health care plans. This includes a formulary drug search across health plans, information on medication quantity limits, step therapy, and prior authorization requirements.<sup>9</sup>

## What Can Be Done

### Health Care Providers Can:

**Prescribe ICS** as first-line treatment for persistent or not well controlled asthma. **Adhere to the NAEPP EPR-3** in assessing asthma severity and control, and prescribing asthma medications.

**Provide asthma self-management education**, including instruction on medications and administration, use of spacers and holding chambers, and when to seek emergency care, and **monitor patient's medication adherence**.

**Complete an individual Asthma Action Plan** with patients with asthma.

**Refer patients to an asthma specialist**, such as an allergist or pulmonologist, when patients are not meeting the goals of treatment, require additional self-management education for medication compliance, or when indicated.

**Refer patients to home-based services** to receive a home environmental assessment and asthma self-management education.

### Health Insurers Can:

**Monitor asthma medication fills** for members and prescribing practices among health care providers.

**Provide feedback and education to health care providers** regarding their asthma medication prescribing practices and patterns.

**Provide follow up services, education, resources and tools** to members with asthma about their prescribed medications.

### Pharmacists Can:

**Track asthma medication dispensing** and follow-up with customers when a refill is needed.

**Provide education to customers with asthma** on appropriate asthma medication dosage, frequency and administration technique.

### People with Asthma Can:

**Fill prescriptions** right away.

Take the **right amount** of asthma medication **at the right times**.

**Take asthma medication as prescribed by the doctor**, even when feeling and breathing well.

Follow their **Asthma Action Plan**.

### Schools and Childcare Settings Can:

**Keep updated, individual Asthma Action Plans and medication administration authorization forms on file** for students and children with asthma.

**Implement an asthma management program** for students with asthma to include: guidelines and procedures to provide improved support to students with asthma and their families; maintain an up-to-date individual Asthma Action Plan for every student with asthma; and, ensure access to and appropriate administration of asthma medications to students and children with asthma.

### Regional Asthma Contractors Can:

**Provide guidelines education and resources** for asthma self-management, including Asthma Action Plans.

**Assist in the continuity of asthma care by facilitating connections** between providers, insurers, families, and schools.

## References

- 1) National Asthma Education and Prevention Program. *Expert Panel Report 3: Guidelines for the Diagnosis and Management of Asthma*. NIH pub no 07-4051. Bethesda, MD: National Heart, Lung, and Blood Institutes of Health. 2007. Available from: <https://www.nhlbi.nih.gov/health-pro/guidelines/current/asthma-guidelines>.
- 2) New York State Behavioral Risk Factor Surveillance System, Asthma Call-Back Survey data, 2006-2010.
- 3) *Asthma Care Quick Reference, Diagnosing and Managing Asthma*. NIH pub no 12-5075, September 2012. Available from: [https://www.nhlbi.nih.gov/files/docs/guidelines/asthma\\_qrg.pdf](https://www.nhlbi.nih.gov/files/docs/guidelines/asthma_qrg.pdf)
- 4) Available from: [http://www.aimc.com/journals/issue/2010/2010-03-vol16-n03/ajmc\\_10mar\\_broder\\_170to178/](http://www.aimc.com/journals/issue/2010/2010-03-vol16-n03/ajmc_10mar_broder_170to178/)
- 5) Available from: <http://www.health.ny.gov/publications/4750.pdf>
- 6) Available from: <http://ipro.org/for-providers/asthma>
- 7) Available from: <http://www.health.ny.gov/publications/4850.pdf>
- 8) Available from: [http://www.health.ny.gov/forms/order\\_forms/asthma.pdf](http://www.health.ny.gov/forms/order_forms/asthma.pdf)
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