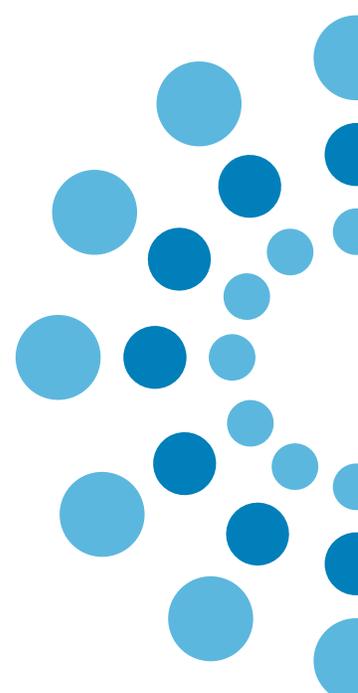


Asthma Management and the Allergist

Better Outcomes
at Lower Cost

Executive Summary



American
College
of Allergy, Asthma
& Immunology



AllergyandAsthmaRelief.org
college.acaai.org/betteroutcomes



Asthma is a chronic disease for which there is no cure. When properly controlled, asthma has a minimal impact on the lives of patients.

When the disease is uncontrolled, however, acute asthma exacerbations can have a significant cost to families and society.

Curbing the asthma epidemic, preventing needless suffering and premature deaths and controlling the runaway costs of treating the disease continue to be priorities for the nation's allergists and health care policymakers.

Controlled Asthma Means:

No or few asthma symptoms, even at night or after exercise.

Prevention of all or most asthma attacks.

Participation in all activities, including exercise.

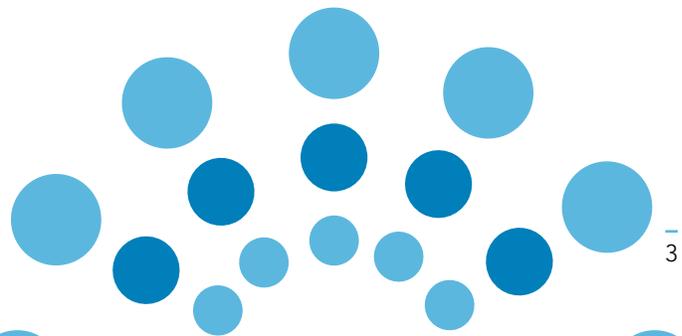
No emergency room visits or hospital stays.

Less need for quick-relief medicines.

No or few side effects from asthma medicines.

A substantial and growing body of published clinical data and economic research shows that aggressive management of asthma by allergists improves patient outcomes, lowers overall treatment costs for payers and reduces the indirect costs to society. **Asthma care by allergists results in fewer hospitalizations and other emergency interventions, fewer missed days from work or school and significantly enhanced health and quality of life [QoL]** for those who suffer from the disease. This evidence is reflected in national guidelines, including those issued in 2019 by the Global Initiative on Asthma (GINA), a partnership between the World Health Organization and the National Heart, Lung and Blood Institute (NHLBI). Guidelines recommend specialty referral for many patients with moderate-to-severe asthma.

Yet despite these efforts and significant scientific advances in the diagnosis, treatment and overall management of asthma, prevalence of the disease has increased over the years and asthma control remains a problem. One study found that 50% of adults and nearly 38.4% of children had uncontrolled asthma.



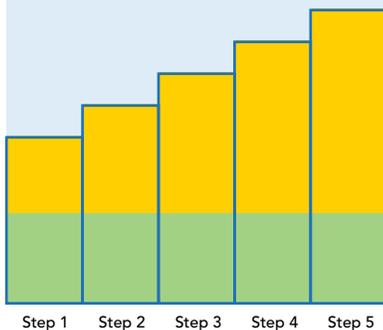
Scope and Impact of the Asthma Epidemic

- More than 25 million people, or 7.9% of the United States population have asthma, of which 6.1 million are under the age of 18. The disease accounts for:
 - An average of 3,168 deaths per year.
 - \$3,266 in direct costs (2013 dollars) per person.
 - \$82 billion in total costs to society.
 - 9.8 million physician office and hospital outpatient department visits.
 - 1.8 million emergency department (ED) visits.
 - 189,000 hospitalizations, including 80,000 for children 17 and under.
 - 14.2 million lost workdays.
 - 10.5 million lost school days.

Aggressive Asthma Management: The Standard of Care

Allergists develop tools for guideline implementation

The Asthma Yardstick serves as an "operation manual" to help health care professionals understand how to identify when adults and children need to step up or step down their treatment and what the process might involve.



- GINA, NHLBI and other guidelines for the care of asthma place special emphasis on the importance of asthma control, a stepwise approach to asthma management and early diagnosis and intervention. **Guidelines stipulate that asthma should be diagnosed as early as possible and treated aggressively while it is still mild. Otherwise it may worsen, requiring even more expensive medical interventions and, in some cases, cause permanent scarring and irreversible remodeling of the lungs' airways.** To supplement these guidelines, in 2017, allergists and other specialists developed the [Asthma Yardstick](#), a practical tool that helps health care professionals understand how to identify when adults and children with asthma need to step-up their treatments and what the process might involve. In 2018, they issued the [Pediatric Asthma Yardstick](#) to address differences in step-up therapy for children in different age groups. In 2019, [The Asthma Controller Step-down Yardstick](#) was published to provide clinicians with a practical and clinically relevant framework to determine when and how to implement a step-down in therapy.

Asthma cannot be cured, but it can be controlled. When guidelines are followed, people with asthma should expect:

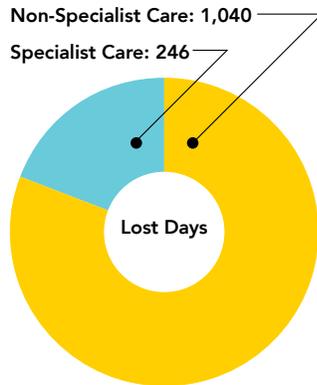
- No or few asthma symptoms, even at night or after exercise.
- Prevention of all or most asthma attacks.
- Participation in all activities, including exercise.
- No emergency room visits or hospital stays.
- Less need for quick-relief medicines.
- No or few side effects from asthma medicines.

There is ample evidence, however, that many patients are not meeting these goals of asthma control. **Much of the expense of asthma is attributed to costs that can be avoided or reduced when the disease is controlled. An estimated 80% of costs are the result of asthma that is poorly controlled.**



Asthma Treatment Outcomes with Specialist Care

Lost Work/School Days Due to Asthma



77% reduction in time lost from work or school with asthma specialty care

Source: Castro, et al. *Am J Resp Critical Care Med.* 2003

How Allergists Achieve High-Quality, Cost-Effective Outcomes

Every dollar spent on asthma control programs can save \$71 in health care expenses by shifting care from costly hospital/emergency department settings to doctor offices and outpatient clinics.

Source: National Asthma Control Program: *An Investment in America's Health.* Centers for Disease Control and Prevention. 2013.

- With their years of specialty training and clinical experience in asthma management, allergists are more likely to:
 - Have access to the diagnostic tools that are often essential to assess the unique characteristics that may play a role in confirming the diagnosis, type and severity of asthma in individual patients.
 - Manage asthma based on the latest clinical study findings.
 - Identify and implement procedures to reduce allergy triggers for the disease.
 - Follow consensus guidelines and state-of-the-art treatment plans that improve outcomes.

They also are more likely than non-specialists to manage asthma based on the latest clinical study findings, to identify and implement procedures to reduce allergy triggers for the disease and to follow consensus guidelines. Asthma patients under the care of an allergist consistently experience better outcomes at lower cost because of:

- Fewer emergency care visits.
- Fewer hospitalizations.
- Reduced lengths of hospital stays.
- Fewer sick care office visits.
- Fewer days missed from work or school.
- Increased productivity in their work and personal lives.
- Greater satisfaction with their care.

- Society in general, health plan administrators, group plan purchasers and – most importantly – patients benefit when asthma care is managed by an allergist. With their specialty training, knowledge and experience, allergists can:
 - Accurately diagnose the disease, its types, subtypes and severity.
 - Identify the role of external factors, including allergens that can trigger an asthma attack, and advise patients on how to avoid their asthma triggers.
 - Administer immunotherapy to reduce sensitivity to allergy triggers.
 - Prescribe biologic drugs – genetically engineered proteins that control asthma symptoms by targeting the underlying cellular and mediator changes that cause asthma.
 - Use current best practice standards to develop and implement appropriate treatment plans that focus on asthma control.
 - Maintain disease control through a multi-faceted approach that includes prevention, appropriate use of medications and other interventions to prevent symptoms and promote ongoing patient education and self-care strategies.
 - Prevent serious consequences of asthma.



Asthma Specialty Care in Health Plans



● Because of the consistent findings of the benefits of specialty care, **administrators of many health care plans and managed care organizations strive to involve allergists in asthma care.** For example:

- A survey of adult asthma patients enrolled in 12 managed care plans, found that care provided by specialists was consistently associated with better patient outcomes compared to care provided by generalists, including fewer hospitalizations and emergency room visits, higher ratings for the quality of care, fewer restrictions in activities and improved physical function.
- In a random sample of 3,568 patients with persistent asthma enrolled in a managed care plan, patients treated by allergists were less likely to be hospitalized, have unscheduled visits for asthma care or to overuse beta-agonist medications compared with patients followed by primary care physicians. Patients managed by specialists also reported significantly higher general physical and asthma specific QoL, less asthma control problems, less severe symptoms, higher satisfaction with care and greater self-management knowledge.
- A large matched cohort study of Medicaid-insured children with asthma enrolled in a state managed care plan compared health care costs for children treated with allergen immunotherapy (AIT) for allergic rhinitis (AR), with those who did not receive AIT. Patients in the AIT group had 192 hospitalizations compared to 286 in the control group. AIT patients incurred an average of 33% (\$1,625) lower 18-month median per patient overall health care costs compared to controls; 29% (\$765) to 58% (\$1,519) lower outpatient costs; and 16% (\$208) lower pharmacy costs after initiation of AIT.

Conclusion

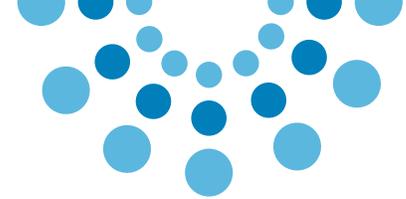


● Despite the evidence that allergists deliver better asthma outcomes at lower costs, some health care plans still place obstacles in front of patients seeking referral to an allergist, even when referral to a specialist is recommended in the NHLBI and GINA guidelines and other national consensus recommendations. **Suboptimal management of asthma leads to increased direct costs associated with increased hospitalizations, emergency care and other high-priced interventions. It also adds to indirect costs due to the number of days missed from work or school and adversely affects patients' QoL.**

As more is learned about the mechanisms of asthma and its risk factors and as new therapies are developed, allergists can and should be part of the process of transformation in our health care system. They can be integral to ensuring value-based care models save money by reducing emergency interventions and improving the quality of allergy and asthma care.

Excerpted from *Asthma Management and the Allergist: Better Outcomes at Lower Cost*. © 2020 The American College of Allergy, Asthma and Immunology. The complete report with supporting documentation is available at college.acaai.org/betteroutcomes





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