

THE FUTURE OF ASTHMA CARE: TACKLING CHRONIC ILLNESS

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There was some disappointing news about asthma published recently. Despite substantial advances and new discoveries in controlling asthma, costs associated with asthma increased over the last decade while patients continued to suffer and have worse outcomes, according to an article in the *Annals of Allergy, Asthma and Immunology*.

You can measure the cost of asthma in terms of dollars: \$62.8 billion in 2009. Or you can measure it in more personal terms: thousands of children and adults waking up every night, in a panic, gasping for air and groping for a rescue inhaler; hundreds of thousands forgoing physical exercise and activities because they feel like they are breathing through a straw; millions stalked by fear of frantic rushes to the emergency room when the disease flares; and death for about 3,500 American asthma patients every year. Clearly, we need to do more for patients with chronic asthma.

With one in 12 Americans—25 million people—coping with this illness, it is clear that asthma is a public health/population issue, not simply a disease that strikes individuals. Our first line of defense is primary care and community outreach (pre-primary care). At National Jewish Health in Denver, we have found that educating community physicians and supplying them with better diagnostic tools can improve asthma diagnosis and management. Our outreach in Denver schools has also identified more students with asthma and helps them better manage their disease so they spend more time in school and on the playgrounds and less time in the hospital. Other partnerships, such as the recently

announced Respiratory Institute in New York, which teams National Jewish Health with the Icahn School of Medicine at Mount Sinai, are aimed at leading the charge against asthma and other respiratory diseases.

Patients need to learn how to monitor their disease and what to do when their symptoms worsen. In today's health care, there is little time or money for effective education. Yet investment and reimbursement for time spent teaching patients how to care for themselves would be well worth the cost in reduced urgent care.

We need to take advantage of the burgeoning biological

knowledge about patient-to-patient variation in asthma to make specific, personalized diagnoses and treatment plans from the start. Recent trials employing biologics—targeted monoclonal antibodies—have demonstrated efficacy in difficult-to-treat severe asthma patients. By replacing trial-and-error treatment with evidence-based, personalized medicine, we can get more effective treatments to more patients sooner.

As new clinical trials offer tantalizing glimpses into how we might prevent the disease, we continue our progress in modifying environmental and allergic factors that contribute to asthma in children and adults. We need to redouble these efforts at stopping asthma before it starts by investing more in education and research and translating that knowledge to care. With such efforts, I am confident that over the next decade, we can both raise care quality and reduce costs for the millions suffering from asthma.

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