Foreword

It has been 13 years since the last revision of the asthma recommendations, and substantial progress has been made since that time in understanding the origins of asthma as well as its pathophysiology and treatment. As members of the pulmonary and allergy provider community and the primary care community that provide more than half of all asthma care in the United States, we now recognize that asthma is not one disease, but it is a syndrome composed of multiple phenotypes. Asthma is much more complex than indicated in the *Expert Panel Report: Guidelines for the Diagnosis and Management of Asthma* (EPR-1),[1] released in 1991, which characterized asthma as an inflammatory disease that is responsive to corticosteroids.

This document updates selected topics that were identified as high priority by an NHLBI Advisory Council Asthma Expert Working Group based on input from previous guideline developers, National Asthma Education and Prevention Program (NAEPP) participant organizations, and the public. The list of these priority topics was published in 2015.[2]

Seventeen topics were suggested initially for updating, and six topics were found to have sufficient new information to warrant an update. Key questions were drafted by the Advisory Council and used by Agency for Healthcare Research and Quality (AHRQ) Evidence-Based Practice Centers to conduct systematic reviews that were published between October 2017 and March 2018.[3-7] The Expert Panel was then assembled in July 2018 and charged with using these systematic reviews to develop recommendations on these six previously chosen topics.

The Expert Panel updated the literature for the systematic reviews through October 2018 and then developed its recommendations. These recommendations differ from other guidelines in several important ways:

- The key questions were developed a priori and not after a review of the current literature.
- The Expert Panel was composed of diverse individuals not only from the asthma specialty community (adult and pediatric pulmonary and allergy specialists), but also from the general medical community (pediatric, internal medicine, family medicine, and emergency medicine providers). Expert Panel members also included health policy and dissemination and implementation experts, and the panel received input from patients and families.
- The Expert Panel members abided by strict standards for conflicts of interest developed by the Institute of Medicine (now the National Academy of Medicine)[8] and in the spirit of the more recently released recommendations from the American College of Physicians.[9] Individuals with any conflict of interest related to the updated topics recused themselves from discussions of those topics.
- This was the first time that the NAEPP used GRADE methodology (discussed below) to provide transparency in the decision-making process.
- Lastly, but not insignificantly, the Expert Panel sought comments from external groups and individuals, including from the NAEPP Coordinating Committee (whose members represent a diverse group of stakeholders), the public, and federal agencies. Although the panel that developed the *Expert Panel Report 3: Guidelines for the Diagnosis and Management of Asthma* (EPR-3) also sought external input, this approach has rarely been used by other asthma guideline committees. The Expert Panel considered this input when it developed the final recommendations and this document.