Clinical Practice Committee
Point-of-Care Spirometry in Managing Asthma

Source [Methodology for choosing sources]

Clinical Question
In the routine primary care management of asthma patients, does the addition of point-of-care spirometry in the primary care office, compared to referral spirometry, result in better patient-oriented outcomes?

Bottom line
Patient-oriented effectiveness studies comparing point-of-care spirometry in the primary care office to referral spirometry have not been performed.

Synopsis
EPR3 does not cite any randomized studies of the incremental value of periodic point-of-care versus referral spirometry to improve patient-oriented outcomes. The EBM Group was unable to identify any outcome studies that address this clinical question.

EPR3 recommends spirometry for two purposes:

(1) To establish a diagnosis of asthma, EPR3 recommends spirometry to document variable airway obstruction (VAO) which is a defining characteristic of asthma. EPR3 does not recommend using peak expiratory flow rates (PEFR) to aid in asthma diagnosis, stating that “Peak flow meters are designed as monitoring, not as diagnostic tools in the office” (page 43). EPR3 does not address patient PEFR self-monitoring outside the office in cases where asthma is suspected but for which spirometry does not demonstrate sufficient reversibility to make a diagnosis of asthma.

(2) For periodic office assessment of asthma, EPR3 recommends periodic spirometry as part of ongoing asthma management (SOR C) but does not make a recommendation for point-of-care spirometry over or in addition to referral spirometry.

Dean Allergy and Immunology Department Statement