

CONFERENCE ABSTRACT

## A multisite evaluation of pediatric asthma-related treatment in accordance to the 2007 National Heart, Lung, and Blood Institute Expert Panel Report – 3 guidelines

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**Background:** To determine if Georgia-based healthcare providers who received continuing education on pediatric asthma as described by 2007 National Heart, Lung, and Blood Institute Expert Panel Report – 3 guidelines demonstrated improvements in asthma-related treatment.

**Methods:** We used a multi-site, cross-sectional design. Data were collected via surveys administered to healthcare providers and via randomized medical chart abstractions. Chart abstraction occurred at 12 months prior to intervention (n = 149); one-month post-intervention (n = 208); and three months post-intervention (n = 123).

**Results:** Substantial improvements were observed among the providers who used pre/post bronchodilator spirometry (5% at baseline, 12% at one month, and 19% at three months), and there was a significant increase in the number of patients being advised to improve conditions at home or school to avoid asthma triggers (9% at baseline, 43% at one month, and 37% at three months). However, prescription of preventive medications and patients being taught proper medication/spacer technique by providers decreased from baseline to three-months (69% vs 55% and 41% vs 27%, respectively). Providers' self-reported barriers and patient load were consistently associated with poorer treatment outcomes. Healthcare providers who received continuing education on NHLBI - EPR 3 guidelines demonstrated an increase in spirometry use and in advising patients on improving home and school conditions. While these findings are useful, provider-reported barriers such as time, organizational, and insurance barriers prevent providers from effectively systematically incorporating all of the EPR 3 guidelines.

**Conclusions:** Internal efforts to address clinical barriers combined with continued education may result in improvements in pediatric asthma-related treatment outcomes.