

## Association of Asthma Educators 2019 Poster Abstract Submission Page (DATA)

**Title:** IS THE “LET’S TAKE CONTROL OF ASTHMA” FLIPCHART AN EFFECTIVE ASTHMA SELF-MANAGEMENT EDUCATION TOOL?

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**Background:** Incorporating evidence-based clinical guidelines in the delivery of asthma care requires developing standards that include the education of patients and caregivers. There is a lack of standardized, low literacy, culturally-sensitive, brief and effective teaching tools which can be utilized to educate the patient or caregiver for asthma self-management which is aligned with the National Asthma Education and Prevention Program Guidelines EPR-3.

**Methods:** Randomly selected caregivers of children (ages 4-11) with asthma were asked to participate in a session of asthma education using the “Let’s Take Control of Asthma” flipchart. A concise tool modeled after the American Lung Association’s Understanding Asthma Assessment (UAA) was used to assess improvement in asthma knowledge before the learning session. To ascertain if caregiver understanding lasted beyond the immediate post-education intervention, patients and their caregivers were scheduled to return in 4 weeks for a post-intervention assessment.

**Results:** A Paired T-test was performed to determine the difference between pre and post scores, before and after the flipchart-based asthma self-management education. A Wilcoxon signed rank test was also performed to see if the results varied. Results remained similar to the T-test, indicating significant difference between pre and post score. UAA scores increased significantly from pre-test to post-test with mean difference of 42.16, 95% confidence interval and  $p < 0.01$ . ACT scores increased significantly,  $p < 0.01$  and FeNO scores were reduced significantly,  $p < 0.01$ . Results showed no significant effect of age and sex on the magnitude of the difference between tests.

**Conclusion:** The “Let’s Take Control of Asthma” flipchart health education tool is an effective tool to improve caregiver knowledge about asthma,  $p < 0.01$ . Changes in ACT and FeNO measures are significant suggesting a positive impact of the educational tool on asthma control and inflammation. There were no confounding effects of age and sex of the patient or follow-up visit interval.