

## NAPCRG 52nd Annual Meeting — Abstracts of Completed Research 2024.

**Submission Id:** 5921

### **Title**

*Evaluation of Primary Care Provider Utilization by Asthma Patients after the Implementation of Coach McLungsSM*

### **Priority 1 (Research Category)**

Child and adolescent health

### **Presenters**

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### **Abstract**

Context: Significant disparities in asthma outcomes occur by gender, race, ethnicity, and socioeconomic status. Patients with the worst outcomes often lack continuity of primary care and receive care at emergency departments during exacerbations. Improved asthma outcomes are associated with effective communication between patients and providers, such as using shared decision-making. Objective: This Patient-Centered Outcomes Research Institute (PCORI) funded study evaluated the implementation of Coach McLungsSM. Setting: Primary care provider utilization was assessed among several patient center health outcomes. Design and Analysis: Patients were evaluated for 6-month pre/post. Setting: An urban pediatric emergency department in Charlotte, North Carolina, USA, that serves a low-income, high-minority community. Population Studied: Patients with an asthma diagnosis aged 7-17. Intervention: Coach McLungsSM, a health information technology solution designed for primary care, engages patients, caregivers, and providers in shared decision-making about asthma. Outcome Measures: Emergency department utilization, hospitalization, steroid prescriptions, and primary care provider (PCP) utilization. Patients were evaluated for shared decision-making, self-efficacy, satisfaction, and knowledge. Results: 60 patients with Asthma utilized Coach McLungsSM (83% African-American, 15% Caucasian, 57% male, with an average age of 10.4 +/- 2.6). 6-month pre/post evaluation, although not statistically significant, showed ED utilization, hospitalization, and steroid prescriptions decreased 30% to 25% ([95%]CI -0.18 to 0.08, p=0.44), 5% to 2% ([95%]CI -0.03 to 0.10, p=0.32), and 35% to 28% ([95%]CI -0.08 to 0.22, p=0.37), respectively, and PCP utilization increased from 25% to 33% ([95%]CI -0.07 to 0.24, p=0.28). Results showed a high level of shared decision-making (CollaboRATE average score 8.57 +/- 1.3). Self-efficacy and satisfaction were high, ("knowing what to discuss with the doctor" 84%, "feeling that Coach McLungsSM was helpful" 89%). In terms of knowledge, 92% reported understanding asthma. Conclusions: A shared decision-making intervention, originally designed for primary care, was

feasible and effective in the emergency department. Additionally, increased utilization of Coach McLungsSM trended towards improved asthma outcomes for populations with known disparities, including increased utilization of primary care providers.

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