

# Improving Referral Rates to MDH Asthma Home Based Services

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**Background:** Asthma exacerbations are a common reason for pediatric patients to visit the emergency department (ED). Asthma home-based services (AHBS) is a free, county-run program that provides home visits to assess for potential asthma triggers, provide mitigation resources of identified triggers, and additional asthma education to patients with asthma. Referrals to the program can improve asthma management and reduce hospital admissions. This quality improvement (QI) project aimed to have 30% of the asthma ED visits at Masonic Children's Hospital receive a home-based asthma services referral by utilizing the orderset in EPIC by February 2025.

**Methods:** In March 2024 a decision support notification was integrated into the ED discharge workflow within the electronic medical record (Epic). In October 2024 an educational intervention was implemented targeting Masonic ED staff, which included emailing informational materials and posting posters with information about asthma home-based services and how to place a referral within the ED. Residents educated the ED staff in person about this referral process as well. The primary outcome was the percentage of monthly eligible patients who received referrals to AHBS, measured before and after the interventions.

**Results:** Following the intervention, there was an initial increase in the number of monthly referrals to AHBS from the previous month; however, this increase was not sustained over time. Only a very small fraction (6% or less) of eligible patients in the emergency department received referrals each month despite these interventions.

**Conclusion:** While there was an initial increase in AHBS referrals for asthma patients immediately after the intervention, the increase was not sustained, indicating that additional strategies, such as ongoing education, reminder systems, and process integration into daily practice, may be needed to achieve lasting improvements in referral rates. Further research is needed to identify the most effective strategies for long-term referral enhancement in pediatric asthma care.