

POSTER ABSTRACTS

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Chronic Disease 31

Preventing Asthma Hospitalizations: De-identifying and Re-identifying the Patient

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Background: In response to an increase in diagnosis, morbidity and mortality from asthma the World Health Organization, and the National Institutes of Health have both published recommendations on the diagnosis and management of asthma across the lifespan. Given the complexity of the disease, and the diversity among management practices and methods of diagnosis preventing the sentinel hospitalization of these patients presents an obstacle. In order to develop a program based on clinical evidence among Kaiser's population with asthma, the Asthma Implementation Resource Group (AIR) developed a team to investigate and evaluate asthma hospitalizations in the region.

Methods: Allergy Department nurses in cooperation with an analytical team evaluated patients hospitalized with a discharge diagnosis of asthma in the previous year. This evaluation included an analysis of patient demographics, clinical characteristics, prescription utilization, patterns of clinical care, and documentation of the diagnosis of asthma. The Allergy Department in cooperation with the AIR Group conducted an evaluation of the recommendations for preventing either initial or repeat hospitalization for asthma. First, a method for identifying patients with asthma was developed; second a protocol for post hospitalization and emergency department visits was developed and implemented in the region.

Results: Baseline evaluation of patients with a claims and referrals discharge diagnosis of asthma demonstrated an accuracy rate of less than 60%. Intervention methodology led to an increase in the accuracy of patients identified with an asthma hospitalization and the post-hospitalization program has demonstrated increased medication adherence, changes in asthma severity diagnoses, and significant cost savings analyses.

Conclusions: Hospitalization for asthma is becoming an increasingly sentinel event compared to the number of patients with a diagnosis of asthma. Among patients hospitalized for asthma there is a wide spectrum of disease longevity and disease severity. On one end of the spectrum is the patient never previously diagnosed with asthma and on the other end is the patient with severe asthma that requires periodic hospitalization despite optimal care. In order to prevent hospitalizations an appropriate program must be developed and targeted to the patient's location on this spectrum. Program development for asthma management needs to include interventions appropriate for the provider, the patient, and the site of care delivery.