



**New River Health Association – Breathing Center:
Building an Asthma System of Care**

Public Health Problem

The 2007 Burden of Asthma in West Virginia report highlights that while the burden of asthma in West Virginia is severe, with 8.5% (or 123,000 adults and 31,000 children) of the state's residents having a diagnosis of asthma, this is particularly true in specific areas of the state. The Raleigh/Fayette area of the state ranks higher on average in prevalence of asthma. New River Health Association (NRHA), a federally qualified health center organization comprised of 7 primary care sites, serves the patients of these and surrounding counties.

Program

The Asthma System of Care is designed to improve the quality of life among patients with asthma served by NRHA. New River receives support from the West Virginia University Office of Health Services Research in its application of clinical data to quality improvement. Specifically, NRHA aims to:

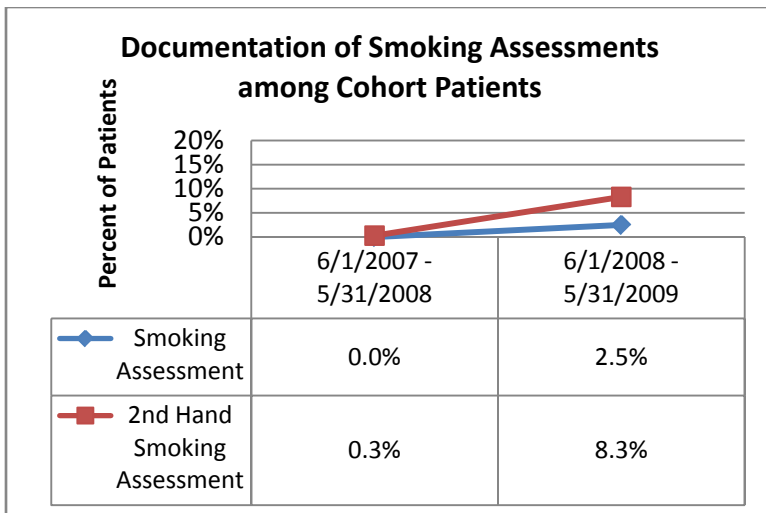
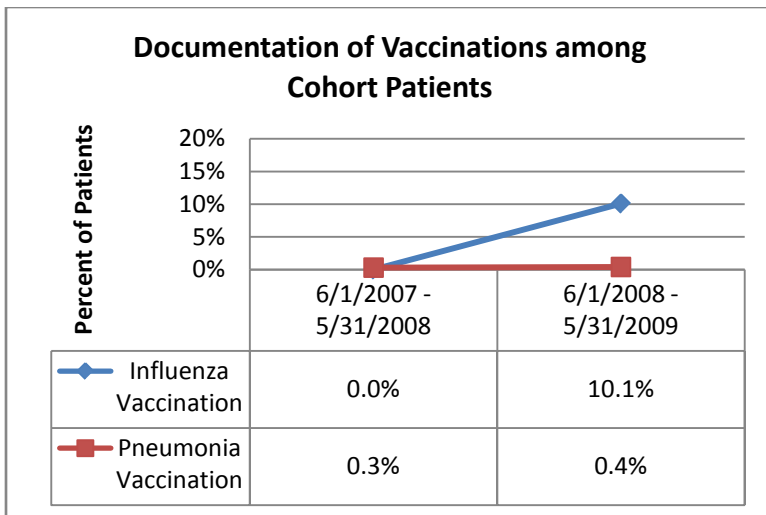
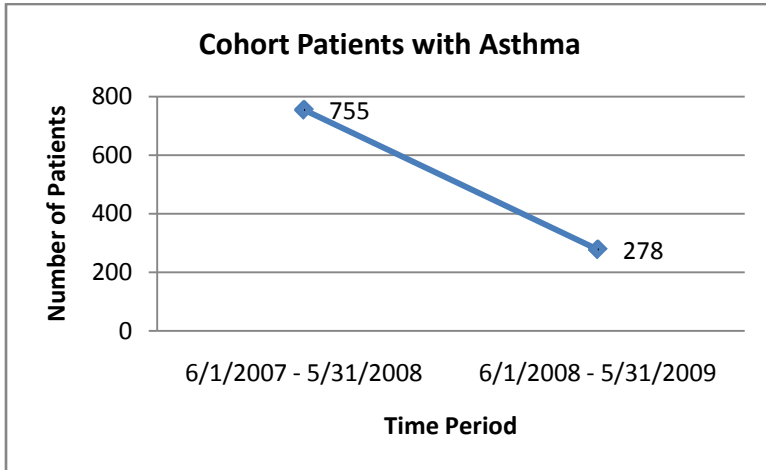
- Reduce the number of hospitalizations and missed school/work days
- Have a better organized asthma treatment plan

These goals will be accomplished via:

- Adherence to national asthma care guidelines
- Monitoring asthma control via clinical information systems
- Asthma patient self-management education
- Reducing environmental risk-factors for asthma onset and severity
- Adjusting patient medications for optimal asthma control

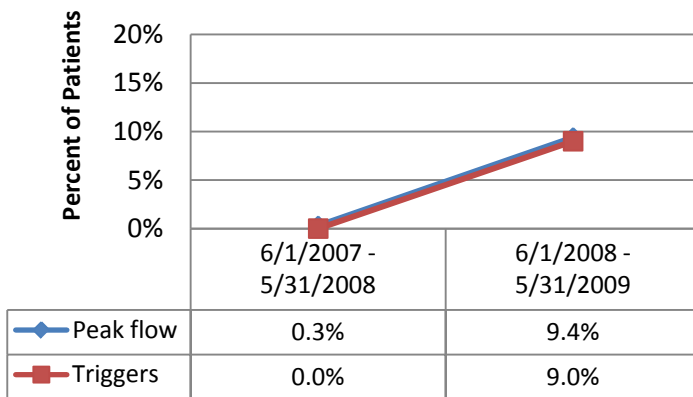
Impact

Originally, NRHA used electronic patient registries for tracking and targeting of asthma care. The first of these systems was the Patient Electronic Care System (PECS). The second of these was the Chronic Disease Electronic Management System, which was built by importing PECS data. Within the past 2 years, NRHA transitioned to an electronic health record. The electronic health record used by NRHA has been linked to the CDEMS registry. This advancement means that de-identified data sharing can continue in a comparable way. The charts below provide detail on improvements in some of the key asthma outcomes measures being tracked at NRHA, in relation to registry use plus policies and procedures development for patients with asthma. These charts display outcomes for a cohort of patients with asthma (n = 755) as originally tracked in CDEMS. Cohort patients are defined as those with documented office visits in CDEMS during the 6/1/2007 to 5/31/2008 time period. Please note that the decrease in cohort patients is due in large part to the data cleaning that took place during the transition from the PECS to CDEMS registry.

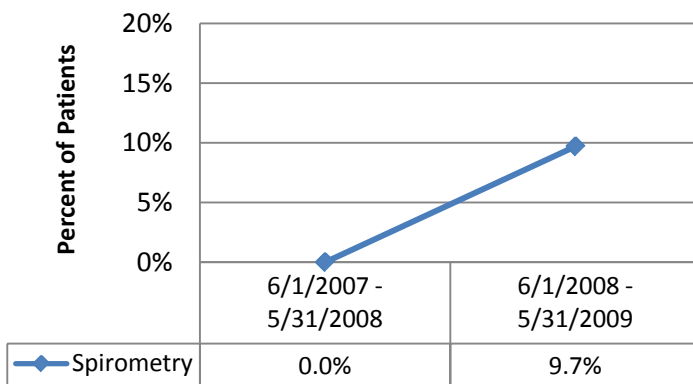




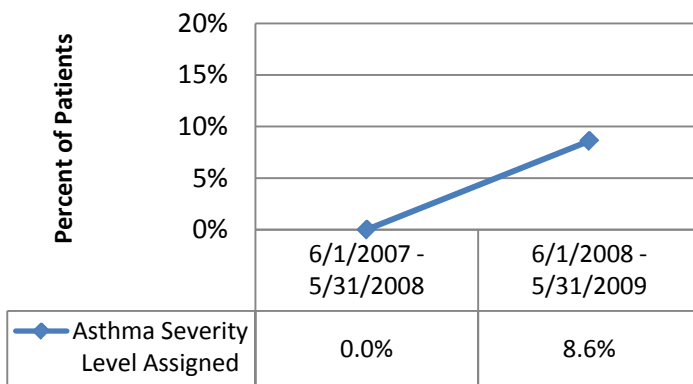
Documentation of Asthma Education among Cohort Patients



Documentation of Spirometry among Cohort Patients

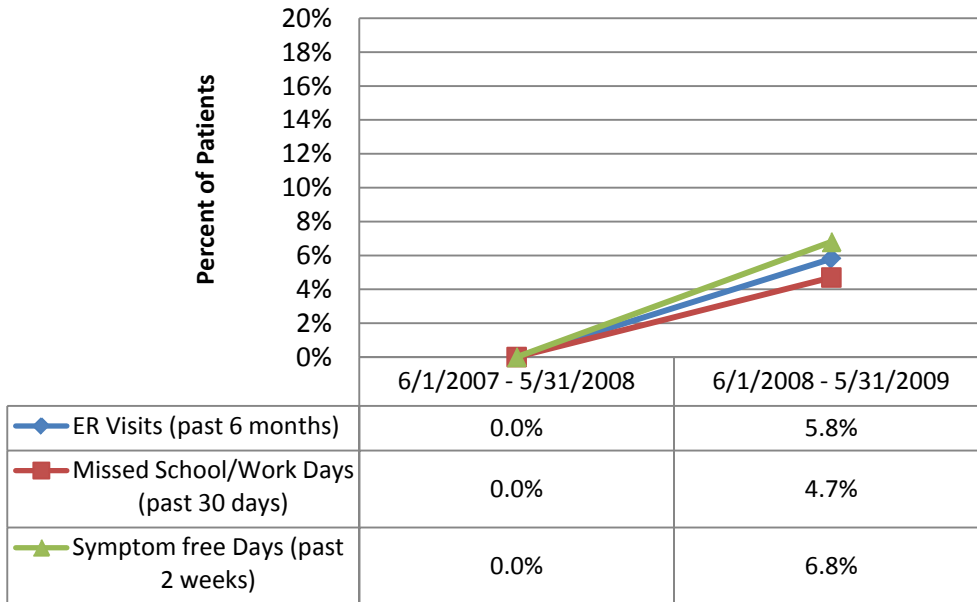


Documentation of Severity Level among Cohort Patients





Documentation of Asthma Measures among Cohort Patients



For questions and additional information on work, please contact:

Susie Criss, CMA
New River Health Association
(304) 469-2905; Susie.Criss@pihn.org

Cecil Pollard, MA, Director
West Virginia University Department of Community Medicine
Office of Health Services Research
(304) 293-1080; cpollard@hsc.wvu.edu

Office of Health Services Research