

PEDIATRIC ASTHMA MANAGEMENT: OUTCOME MEASURES FOR AN EVIDENCE BASED PRACTICE

Linda Gibson, RN, CRNP, AE-C, UAB School of Nursing (Doctoral Student), The Children's Hospital of Alabama; Theresa Rodgers, RN, CRNP, AE-C, The Children's Hospital of Alabama; Anne Turner Henson, RN, DSN, UAB School of Nursing; Janet Johnston, RN, CRNP, AE-C, UAB Pediatric Pulmonary Center; Raymond Lyrene, MD, UAB School of Medicine

PURPOSE: Asthma prevalence and morbidity are increasing among inner city and impoverished children, and yet many children are undiagnosed and under-treated. A high prevalence of children with asthma with repeat emergency room visits for asthma exacerbations has been identified as a critical issue in a southeastern Children's Hospital. This poster presentation will describe interventions and outcomes from an asthma specialty practice that uses advanced practice nurses.

METHOD: The practice is designed specifically for high-risk inner city children with asthma. It includes an interdisciplinary focus of advanced practice nurses (pediatric nurse practitioners, asthma case managers), medical social workers, nutritionists, respiratory care practitioners, respiratory therapists and pediatric pulmonologists. This practice primarily focuses on four key aspects of asthma care: 1) appropriate medication & treatment based upon the NHLBI guidelines, 2) crisis management by providing a written crisis management plan), 3) environmental trigger control, and 4) preventive asthma care which includes establishing a primary source of preventive asthma care.

FINDINGS: While the interdisciplinary asthma specialty clinic only serves a small percentage of children with asthma in this area, significant changes in asthma management and morbidity are being seen at the institutional level. Comparing the years 2002 to 2003, changes in asthma morbidity and treatment at the institutional level were seen. There was a 31% decrease in emergency room visits, 12% increase in use preventive and primary care services for children with asthma, 22% decrease in inpatient length of stay days for asthma, and 11% decrease in inpatient admissions and a decrease in PICU admissions.

DISCUSSION: Reductions in asthma morbidity have been noted in children receiving health services through this interdisciplinary practice. The practice has been able to change nursing and medical clinical practice at the institutional level. This practice has developed the position of a asthma case manager, established an asthma education program, resource guides or critical pathways for inpatient asthma management, smoking status as a vital sign throughout the institution, smoking cessation for parents, instruction for staff nurses, medical students & physicians on how to counsel on smoking cessation, and other strategies to promote the respiratory health of children. The patients/parents are empowered to manage asthma symptoms at home before going to the ED.