

## NQF-ENDORSED VOLUNTARY CONSENSUS STANDARDS FOR HOSPITAL CARE

### Measure Information Form Collected For: The Joint Commission Only

**Measure Set:** Children's Asthma Care (CAC)

**Set Measure ID#:** CAC-3

**Performance Measure Name:** Home Management Plan of Care (HMPC) Document Given to Patient/Caregiver

**Description:** An assessment that there is documentation in the medical record that a Home Management Plan of Care (HMPC) document was given to the pediatric asthma patient/caregiver.

**Rationale:** Asthma is the most common chronic disease in children and a major cause of morbidity and health care costs nationally (Adams, et al., 2001). For children, asthma is one of the most frequent reasons for admission to hospitals (McCormick, et al., 1999). Silber, et al., (2003) noted that there are approximately 200,000 admissions for childhood asthma in the United States annually, representing more than \$3 billion dollars in expenditures. Under-treatment and/or inappropriate treatment of asthma are recognized as major contributors to asthma morbidity and mortality. Guidelines developed by the National Asthma Education and Prevention Program (NAEPP) of the National Heart, Lung and Blood Institute (NHLBI), as well as by the American Academy of Pediatrics (AAP) for the diagnosis and management of asthma in children, recommend establishing a plan for maintaining control of asthma and for establishing plans for managing exacerbations. Both aspects of care would include instructions related to pharmacotherapy and assessment of lung function.

According to the Agency for Healthcare Research and Quality (AHRQ), an Evidence-based Practice Center (EPC) and Aronson, Lefevre, Piper, et al. (2001) reported that increasing use of controller medications improves outcomes. Children with asthma who are seen by specialists or receive follow-up appointments are more likely to use appropriate long-term control medications (ACQA, 2004; Finklestein, Lozano, Farber, et al., 2002).

Organization of care towards patient self-management and patient/caregiver routine education on appropriate use of asthma medications, identification of symptoms of exacerbation, avoidance of environmental triggers cannot be overemphasized (AHRQ, 2005). For children, it is particularly important to involve both the patient and the caregiver in this educational component of asthma care as participation in the plan of care by both will provide the greatest opportunity to promote compliance with the

treatment plan, control of asthma, and treatment of exacerbations in a safe and timely manner.

**Type of Measure:** Process

**Improvement Noted As:** An increase in the rate.

**Numerator Statement:** Pediatric asthma inpatients with documentation that they or their caregivers were given a written Home Management Plan of Care (HMPC) document that addresses **all** of the following:

1. Arrangements for follow-up care
2. Environmental control and control of other triggers
3. Method and timing of rescue actions
4. Use of controllers
5. Use of relievers

**Included Populations:** Pediatric asthma inpatients discharged with a distinct or stand alone HMPC document that addresses the five specific topic areas above.

**Excluded Populations:** None

**Data Elements:**

- *Home Management Plan of Care Document Addresses Arrangements for Follow-up Care*
- *Home Management Plan of Care Document Addresses Environmental Control and Control of Other Triggers*
- *Home Management Plan of Care Document Addresses Methods and Timing of Rescue Actions*
- *Home Management Plan of Care Document Addresses Use of Controllers*
- *Home Management Plan of Care Document Addresses Use of Relievers*
- *Home Management Plan of Care Document Given to Patient/Caregiver*
- *Home Management Plan of Care Document Present*

**Denominator Statement:** Pediatric asthma inpatients discharged home

**Included Populations:** Discharges with:

- An *ICD-9-CM Principal Diagnosis Code* of asthma (as defined in Appendix A, Table 6.1)
- An age of 2 through 17 years
- Discharge to home

**Excluded Populations:**

- Patients with an age less than 2 years or 18 years or greater
- Patients who have a Length of Stay greater than 120 days
- Patients enrolled in clinical trials

**Data Elements:**

- *Admission Date*
- *Birthdate*
- *Clinical Trial*
- *Discharge Date*
- *Discharge Status*
- *ICD-9-CM Principal Diagnosis Code*

**Risk Adjustment:** None

**Data Collection Approach:** Retrospective data sources for required data elements include administrative data and medical records.

**Data Accuracy:** Variation may exist in the assignment of ICD-9-CM codes; therefore, coding practices may require evaluation to ensure consistency.

**Measure Analysis Suggestions:** This measure provides opportunity to assess components of the HMPC individually. Healthcare organizations may obtain percentage reports of each individual HMPC component and focus their quality improvement initiatives in relation to components not adequately addressed.

**Sampling:** A randomly selected sample of pediatric inpatient discharges.

**Age Groups:** 2 years to 17 years

**Data Reported as:** Aggregate rate generated from count data reported as a proportion

**Selected References:**

- Adams RJ, Fuhlbrigge A, Finkelstein JA, Lozano P, Livingston JM, Weiss KB, and Weiss ST (2001). Use of Inhaled Anti-inflammatory Medication in Children with Asthma in Managed Care Settings. *Archives of Pediatrics and Adolescent Medicine*, 155, 501-507.
- Aronson N, Lefevre F, Piper M, et al. (September 2001). Management of chronic asthma. Evidence Report/Technology Assessment Number 44. (Prepared by Blue Cross and Blue Shield Association Technology Evaluation Center under Contract No. 290-97-0015.) AHRQ Pub. No. 01-E044. Rockville (MD): Agency for Healthcare Research and Quality.
- Asthma Care Quality Assessment Study (ACQA) (1998-2003). Asthma care quality in varying managed care Medicaid plans. Harvard Medical School. Grant No. U01-HS09935.
- Asthma Management Model System, <http://www.nhlbi.nih.gov>
- Clinical Practice Guidelines of the American Academy of Pediatrics: A Compendium of Evidence-Based Research for Pediatric Practice. *American Academy of Pediatrics* (1999).
- Crain EF, Weiss KB and Fagan MJ (1995). Pediatric Asthma Care in U.S. Emergency Departments. *Archives of Pediatric and Adolescent Medicine*. 149,

- 893-901.
- Finkelstein JA, Lozano P, Farber HJ, et al. (2002). Underuse of controller medications among Medicaid-insured children with asthma. *Arch Pediatr Adolesc Med* 156(6):562-7.
  - Guidelines for the Diagnosis and Management of Asthma (2002). <http://www.nhlbi.nih.gov>
  - McCormick MC, Kass B, Elixhauser A, Thompson J and Simpson L (2000). Annual Report on Access to and Utilization of Health Care for Children and Youth in the United States – 1999. *Pediatrics*, 105:1, 219-230.
  - National Asthma Education and Prevention Program, <http://www.nhlbi.nih.gov>
  - Silber JH, Rosenbaum PR, Even-Shoshan O, Shabbout M, Zhang X, Bradlow ET, and Marsh RR (2003). Length of Stay, Conditional Length of Stay, and Prolonged Stay in Pediatric Asthma. *Health Services Research*, 38: 3, 867-886.
  - Stanton MW, Dougherty D, Rutherford MK. (2005). Chronic care for low-income children with asthma: strategies for improvement. Rockville (MD): Agency for Healthcare Research and Quality. *Research in Action* Issue 18. AHRQ Pub. No. 05-0073.

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Arrangements for follow-up care, Environmental control and control of other triggers,  
Method and timing of rescue actions, Use of controllers, Use of relievers.

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**Variable Key:**  
MissingCounter  
CompletePlanCounter

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