

## Phase 2 Measures of Asthma Population

Each Phase 2 asthma team is required to track and report the core national measures (measures 1 through 4) along with the count of patients with Asthma tracked by the clinical information system. "Patients with Asthma" is defined as patients with the diagnosis of asthma, ICD9 diagnoses codes 493.xx. ICD-9 codes are not always accurate, however; and organizations are reminded that clinical judgment should subsequently take precedence when selecting patients to include in a specific diagnostic category. Teams are welcome to track and report any of the additional measures (5-11) as useful to their work. The red text in the first measure shows the change made December 2003 to clarify the definition. PECS versions after 1.2.5 compute the measure according to the definition as below.

REQUIRED MEASURES				
Measure	Definition	Data Gathering Plan	Goal	Notes/Comments
1. Current severity assessment	The # of patients with a severity assessment at last contact (visit or phone) within <b>the past 12 months</b> divided by the # of patients in the registry. Multiply by 100 to get percent.	On the last workday of each month from the registry: count the # of patients with severity assessment at last contact <b>within the past 12 months</b> ; count the total # of patients in the registry.	>90%	Ref #1, #2 <b>The meaning of current has two components: the severity assessment was done at the last contact (and so is the most current information we have on the patient) AND the assessment is recent, within the last 12 months.</b>
2. Appropriate treatment with anti-inflammatory medication.	The # of patients with an underlying NHLBI classification of persistent asthma at last contact who are on anti-inflammatory medication <i>divided by</i> the # of patients with a NHLBI classification of persistent asthma. Multiply by 100 to get percent.	On the last day workday of each month from the registry: count the # of patients with an underlying severity classification of persistent asthma at last contact on anti-inflammatory meds; count the total # of patients with an underlying classification of persistent asthma at last contact in the registry.	>95%	We need to distinguish <i>underlying severity</i> from <i>current control severity</i> . There are two different fields in PECS that track these two different attributes. The persistent severity in this measure refers to the underlying severity. In early versions of PECS, underlying severity was referred to as baseline.  Meds include chronically administered inhaled corticosteroids, mast cell stabilizers and leukotriene inhibitors. Ref # 1
3. Current self-management goal.	The number of asthma patients in the registry with documented self-management goals in the last 12 months divided by the total number of asthma patients in the registry. Multiply by 100 to get percentage.	On the last workday of each month from the registry: count the # of patients with documented self-management goal in the last 12 months; count the total # of patients in the registry.	>70%	References 12, 13

4. # of symptom-free days in previous two weeks.	At each patient contact, ask the number of days with symptoms in the previous two weeks. Subtract that number from 14 to get the number of symptom-free days for the patient in the previous two weeks. ( <b>Sum</b> the symptom-free days over all patients. <b>Divide</b> the sum by the number of patients in the registry who report symptom free days.)	On the last workday of each month, search the registry to find the patients who had a severity assessment at last contact. Use the estimate of symptom-free days provided at this contact.	>10 days	<ul style="list-style-type: none"> <li>• Symptoms are: daytime coughing, wheezing, shortness of breath, chest tightness, night-time coughing and wheezing.</li> <li>• We define “days” as 24 hour periods—a “day” covers daytime and nighttime.</li> <li>• The standard care guideline asks about day-time symptoms in past week and night-time symptoms in the past month.</li> <li>• The flow sheet should contain a specific item that allows a record of symptoms in previous two weeks.</li> </ul>
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**ADDITIONAL RECOMMENDED MEASURES:** *These measures are not required; however, you will find that they can be used to enhance care and increase the ability to achieve the required measures above*

Measure	Definition	Data Gathering Plan	Goal	Notes/Comments
5. Exposure to environmental tobacco smoke	The # of patients with a reported exposure to environmental tobacco smoke at last visit divided by the # of patients with documented exposure status in the registry. Multiply by 100 to get percent.	On the last workday of each month, from the registry: count the # of patients with reported exposure to ETS at last visit; count the total # of patients in the registry with documented exposure status.	<20%	References 1,4, 14
6. Evaluation of environmental triggers	The # of patients evaluated for environmental triggers other than ETS (dust mites, cats, dogs, molds/fungi, cockroaches) either by history of exposure and/or by allergy testing divided by the # of patients in the registry. Multiply by 100 to get percent.	On the last workday of each month from the registry: count the # of patients who have been evaluated for the specific environmental triggers other than ETS; count the total # of patients in the registry.	>90%	<p>This measure (and the ETS measure) can overlap with the self-management measure in that a patient and provider can agree to work to reduce exposure to a trigger as a self-management goal.</p> <p>Evaluation may need to be repeated based on changes in clinical history and control state.</p> <p>The “indoor” environmental triggers here are those listed in Reference 4 as having the strongest evidence of causal relationship to asthma. See also References 2, 3, 14</p>

7. ED/Urgent Care visits for asthma	The # of patients who have had a visit to an ED/Urgent Care office for asthma in the past six months reported at last contact <i>divided by</i> the # of patients in the registry with documented query about ED/Urgent Care visits. Multiply by 100 to get percent.	On the last workday of each month from the registry: count the # of patients at last contact who have had a visit to ED/Urgent Care for asthma in the previous six months; count the total # of patients in the registry with documented query about ED/Urgent Care visits.	<5%	ED/Urgent Care visits can be counted from patient self-reports and from reports sent to the clinic by ED or Urgent Care offices.  Nationally, ED/Urgent Care visit Rate for children 0 to 5 is twice the rate of patients 6 to 64. Health centers may want to look at ED/Urgent care visits for these young children separately to understand issues and opportunities (.Ref 8).
8. Average Lost Workdays/school days	At each patient contact, ask the number of days in the past 30 lost at work or school because of asthma. ( <b>Sum</b> the lost days over all patients who report lost work or school days. <b>Divide</b> the sum by the number of patients in the registry who have been queried about lost work or school days at last contact.)	On the last workday of each month from the registry: get the number of lost days reported at last contact for each patient. Count the number of patients with documented lost work or school days at last visit.	<1 day	The documented number of days should include ZERO lost days as a possibility. We want to know across the population the average number of lost days, we should not restrict attention only to the patients who actually lost time. For pre-school pediatric patients or retired adults, we allow teams to ask about incapacity to carry out ordinary activities. Ref. 8
9. Establishment of Personal Best Peak Flow	The # of patients older than 5 years with an NHLBI classification of moderate or severe persistent asthma who have established a "Personal Best" peak flow through multiple measurements during a period of relative disease stability <i>divided by</i> the # of patients with a NHLBI classification of moderate or severe persistent asthma older than five years. Multiply by 100 to get percent.	On the last day workday of each month from the registry: count the # of patients older than five years (with a NHLBI classification of moderate or severe persistent asthma) who have established a "Personal Best" peak flow through multiple measurements during a period of relative disease stability; count the total # of patients older than five years with a NHLBI classification of moderate or severe persistent asthma.	>80%	Multiple measurements should be taken in the home, school or in well- clinic visits over two or more weeks. (Guidelines recommend a daily morning measurement and then an afternoon measurement after dose of bronchodilator for two weeks.)  Personal best will need to be re-established annually for children as they grow.  Reference 6 divides patients into two classes: a) those five years and younger b) those older than five years. We clarify that "older than five years" in calculation will mean those patients at least six years old. (Earlier versions of this measure stated the definition to include those patients at least five years old.)

10. Influenza immunization annually	The # of patients with a record of flu immunization in the past 12 months <i>divided by</i> the # of patients in the registry. Multiply by 100 to get percent.	On the last day workday of each month from the registry: count the # of patients who have a record of flu immunization in the previous 12 months; count the total # of patients in the registry.	>90%	For those centers using PECS, we also plan to add information about patients who have gotten a flu vaccination in the flu season (1 September to 31 March.) Reference 5.
11. Depression Screening (12 months)	The # of patients with a documented screening for depression in the past 12 months <i>divided by</i> the # of patients in the registry. Multiply by 100 to get percent.	On the last day workday of each month from the registry: count the # of patients with a documented screening for depression in the past 12 months; count the total # of patients in the registry.	>50%	You will need to specify the instrument(s) or method(s) to be used for screening. We recognize that depression screening for children differs from depression screening for adults. References 9-11.

- 1) FIGURE 1 - 3. CLASSIFICATION OF ASTHMA SEVERITY Guideline or the Diagnosis and Management of Asthma NIH PUBLICATION NO. 97-4051 JULY 1997 NATIONAL INSTITUTES OF HEALTH National Heart, Lung, and Blood Institute
- 2) JCAHO Performance Measurement for Disease-Specific Care Certification <http://www.jcaho.org/dscc/performance+measures/asthma+measure+set.htm>
- 3) COMPONENT 2 :CONTROL OF FACTORS CONTRIBUTING TO ASTHMA SEVERITY Guideline or the Diagnosis and Management of Asthma NIH PUBLICATION NO. 97-4051 JULY 1997 NATIONAL INSTITUTES OF HEALTH National Heart, Lung, and Blood Institute Page 41-55
- 4) Clearing the Air Committee on the Assessment of Asthma and Indoor Air for the Institute of Medicine. 438 pp. Washington, D.C., National Academy Press, 2000. \$57.95. ISBN 0-309-06496-1.<http://www.nap.edu/books/0309064961/html/>
- 5) MMWR Recommendations and Reports April 25, 2003 / 52(RR08);1-36 Prevention and Control of Influenza Recommendations of the Advisory Committee on Immunization Practices (ACIP) <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5208a1.htm>
- 6) National Asthma Education and Prevention Program Expert Panel Report: Guidelines for the Diagnosis and Management of Asthma Update on Selected Topics—2002 Guidelines for the Diagnosis and Management of Asthma The Journal of Allergy and Immunology November 2002, part 2 Volume 110 • Number 5 <http://www2.us.elsevierhealth.com/scripts/om.dll/serve?action=searchDB&searchDBfor=iss&id=jai021105b> summary <http://www.nhlbi.nih.gov/guidelines/asthma/execsumm.pdf>
- 7) Evidence Report/Technology Assessment Number 44: Management of Chronic Asthma Blue Cross and Blue Shield Association Technology Evaluation Center. Management of Chronic Asthma: Evidence Report/Technology Assessment Number 44. AHRQ Publication No. 01–EO44. Rockville, MD: Agency for Healthcare Research and Quality. September 2001. <http://www.ahrq.gov/downloads/pub/evidence/asthma.zip>
- 8) Healthy People 2010 National Goals for Asthma <http://www.healthypeople.gov/Document/html/tracking/od24.htm#asthma>
- 9) Rush AJ, Golden WE, Hall GW et al. *Depression in Primary Care: Clinical Practice Guideline*. Agency for Health Care Policy and Research. AHCPR Publication No. 93-0550. US Department of Health and Human Services, Rockville, MD. 1993
- 10) Cohen-Cole SA, Kaufman KG: Major depression in physical illness: Diagnosis, prevalence, and antidepressant treatment (A ten-year review: 1982-1992). *Depression* 1993; 1:181-204
- 11) Coyne J, Schwenk TL, Fechner-Bates S: Non-detection of depression by primary care physicians reconsidered. *Gen Hosp Psychiatry* 1995; 17:3-12.
- 12) Maly RM, Leake B, Frank JC, DiMatteo MR, Reuben DB. Implementation of consultative geriatric recommendations: the role of patient-primary care concordance. *Jrnl Amer Ger Soc* 2002; 50:1372-1380.
- 13) Lorig KR, Sobel DS, Stewart AL, Brown Jr BW, Ritter PL, González VM, Laurent DD, Holman HR. Evidence suggesting that a chronic disease self-management program can improve health status while reducing utilization and costs: A randomized trial. *Medical Care*. 37(1):5-14, 1999
- 14) R. A. Etzel, "How Environmental Exposures Influence the Development and Exacerbation of Asthma" *Pediatrics* 2003;112:233–239

