Medications: The following medications may be recommended for patients with asthma, depending on individual circumstances:

- **Short-acting (rescue) medications:** As needed to promptly relieve acute symptoms.
- **Long-acting (controller) medications:** To maintain long-term asthma control in patients who will benefit, including patients with persistent asthma and children and infants who require symptomatic treatment two or more times per week.
  - Inhaled corticosteroids are the most potent and consistently effective long-term controller medications for asthma. In general, inhaled corticosteroids are the treatment of choice.
  - For patients treated with inhaled corticosteroids who need additional control, long-acting inhaled beta₂-agonists are more effective than leukotriene antagonists
  - Abruptly stopping long-acting controller medications, particularly inhaled beta₂-agonists, may result in acute worsening of symptoms (withdrawal)

Demonstrate that patients are using inhalers and/or nebulizers correctly. Use spacers for children and spacer/masks for young children. Consider spacers for adolescents and adults especially when not doing well.

Written action plan that includes:
- Explicit, patient-specific recommendations for minimizing environmental triggers.
- How to assess changes in airflow obstruction (see Respiratory monitoring below), and adjust medication, as appropriate.
- Actions to take when medications are ineffective or if an emergency situation arises.
- Contacts for securing urgent care, if needed.

Respiratory monitoring: The nature and intensity of self-monitoring should be individualized, based on such factors as asthma severity, patient’s ability to perceive or report airflow obstruction, availability of peak flow meters, and patient preferences. Components of respiratory monitoring may include the following, depending on individual needs:

- **Symptom monitoring:** For the most common forms of asthma (seasonal/allergic, mild intermittent, and mild persistent); early recognition of symptoms (cold, cough, chest tightness) and step-up in medications.
- **Peak flow measurement:** In moderate-to-severe persistent asthma, peak flow measurement may be done daily, or for two-to three-week intervals when symptoms change, as part of a symptom-based action plan.
- **Spirometry:** At diagnosis, on stabilization of peak flow, and every one to two years in patients with moderate-to-severe persistent asthma. (Regular spirometry may not be needed in mild-to-moderate asthma.)
Trigger identification and avoidance. Including environmental smoke, occupational dusts/chemicals, indoor/outdoor pollution, dust, dander, perfumes, etc.

Smoking cessation: All patients, plus avoidance of secondary smoke.

Depression: The association between asthma and depression is less strong than for other chronic conditions such as cardiovascular disease or diabetes. However, screening is always appropriate for patients with any chronic condition. Screening improves the accurate identification of depression in primary care settings, and treatment of depressed adults identified in primary care settings decreases clinical morbidity. Two simple questions (“Over the past 2 weeks, have you felt down, depressed, or hopeless?” and “Over the past 2 weeks, have you felt little interest or pleasure in doing things?”) may be used as a screening tool.

Influenza vaccine: Annually for all patients, age 6 months and older, with chronic lung conditions (including asthma), and for household contacts and caregivers of adults or children with medical indications.

Pneumococcal vaccine: All adults age 65 years and older. A second dose is recommended five years after the first for patients with chronic kidney disease and those vaccinated before age 65. Asthma alone is not an indication for pneumococcal vaccine.

Monitoring: Regular, frequent monitoring of patients based on individual assessment to include review of action plan, medication(s), MDI use technique, and assessment of control (see attachment).
ASTHMA CONTROL TEST™

Know your score

The Asthma Control Test™ provides a numerical score to help you and your healthcare provider determine if your asthma symptoms are well controlled.

Take this test if you are 12 years or older. Share the score with your healthcare provider.

Step 1: Write the number of each answer in the score box provided.

Step 2: Add up each score box for the total.

Step 3: Take the completed test to your healthcare provider to talk about your score.

If your score is 19 or less, your asthma symptoms may not be as well controlled as they could be. No matter what the score, bring this test to your healthcare provider to talk about the results.

1. In the past 4 weeks, how much of the time did your asthma keep you from getting as much done at work, school or at home?
   - All of the time [1]
   - Most of the time [2]
   - Some of the time [3]
   - A little of the time [4]
   - None of the time [5]

   SCORE:  

2. During the past 4 weeks, how often have you had shortness of breath?
   - More than once a day [1]
   - Once a day [2]
   - A week [3]
   - Twice a week [4]
   - Not at all [5]

   SCORE:  

3. During the past 4 weeks, how often did your asthma symptoms (wheezing, coughing, shortness of breath, chest tightness or pain) wake you up at night or earlier than usual in the morning?
   - 4 or more nights a week [1]
   - 2 to 3 nights a week [2]
   - 1 night a week [3]
   - Once a night [4]
   - Not at all [5]

   SCORE:  

4. During the past 4 weeks, how often have you used your rescue inhaler or nebulizer medication (such as albuterol)?
   - 3 or more times per day [1]
   - 1 or 2 times per day [2]
   - 2 or 3 times per week [3]
   - Once a week [4]
   - Not at all [5]

   SCORE:  

5. How would you rate your asthma control during the past 4 weeks?
   - Not controlled at all [1]
   - Poorly controlled [2]
   - Somewhat controlled [3]
   - Well controlled [4]
   - Completely controlled [5]

   TOTAL:  

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Asthma Control Test is a trademark of QualityMetric Incorporated.

This material was developed by GSK.

Adapted from Health Net Guidelines by the Riverside Physician Network
Medical Practice Committee

Effective date: January, 2005
Short Clinical Guidelines: Asthma, Effective Care for Patients

Childhood Asthma Control Test for children 4 to 11 years

Know your score.

Parent or Guardian: The Childhood Asthma Control Test* is a way to help your child's healthcare provider determine if your child's asthma symptoms are well controlled.

Take this tool with your child (ages 4 to 11). Share the results with your child's healthcare provider.

Step 1: Have your child answer the first four questions (1 to 4). If your child needs help, you may help, but let your child choose the answer.

Step 2: Answer the last three questions (5 to 7) on your own. Don't let your child's answers influence yours. There are no right or wrong answers.

Step 3: Write the number of each answer in the score box to the right.

Step 4: Add up each score box for the total.

Step 5: Take the COMPLETED test to your child's healthcare provider to talk about your child's total score.

Have your child complete these questions.

1. How is your asthma today?

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very bad</td>
<td>Bad</td>
<td>Good</td>
<td>Very good</td>
</tr>
</tbody>
</table>

2. How much of a problem is your asthma when you run, exercise or play sports?

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>It's a big problem, I can't do what I want to do.</td>
<td>It's a problem and I don't like it.</td>
<td>It's a little problem but it's okay.</td>
<td>It's not a problem.</td>
</tr>
</tbody>
</table>

3. Do you cough because of your asthma?

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes, all of the time.</td>
<td>Yes, most of the time.</td>
<td>Yes, some of the time.</td>
<td>No, none of the time.</td>
</tr>
</tbody>
</table>

4. Do you wake up during the night because of your asthma?

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes, all of the time.</td>
<td>Yes, most of the time.</td>
<td>Yes, some of the time.</td>
<td>No, none of the time.</td>
</tr>
</tbody>
</table>

Please complete the following questions on your own.

5. During the last 4 weeks, how many days did your child have any daytime asthma symptoms?

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not at all</td>
<td>1-3 days</td>
<td>4-10 days</td>
<td>11-18 days</td>
<td>19-24 days</td>
</tr>
</tbody>
</table>

6. During the last 4 weeks, how many days did your child wheeze during the day because of asthma?

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not at all</td>
<td>1-3 days</td>
<td>4-10 days</td>
<td>11-18 days</td>
<td>19-24 days</td>
</tr>
</tbody>
</table>

7. During the last 4 weeks, how many days did your child wake up during the night because of asthma?

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not at all</td>
<td>1-3 days</td>
<td>4-10 days</td>
<td>11-18 days</td>
<td>19-24 days</td>
</tr>
</tbody>
</table>

*The Childhood Asthma Control Test was developed by GSK.

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Adapted from Health Net Guidelines by the Riverside Physician Network Medical Practice Committee

Effective date: January, 2005