### Summary

#### Asthma Management - Summary

<table>
<thead>
<tr>
<th>Screening</th>
<th>Last Screening</th>
<th>Protocol</th>
<th>Recommendation</th>
<th>Today</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity</td>
<td>Class: Mid Persistent (05/07/2012) Risk: Low (05/07/2012) Impairment Mild (05/07/2012)</td>
<td>At First Diagnosis</td>
<td>Protocol Satisfied</td>
<td>Update</td>
<td>Update</td>
</tr>
<tr>
<td>Control</td>
<td>Class: Risk: Impairment:</td>
<td>Every 6 months</td>
<td>Due</td>
<td>Update</td>
<td>Update</td>
</tr>
<tr>
<td>Triggers</td>
<td>Triggers: Done (05/07/2012) Smoking: never smoker (05/07/2012) Passive Smoke: Yes (05/07/2012)</td>
<td>Every 6 months</td>
<td>Due</td>
<td>Update</td>
<td>Update</td>
</tr>
<tr>
<td>Spirometry</td>
<td>FVC: FEV1: FEV1/FVC: Spirometry:</td>
<td>Every 6 months</td>
<td>Due</td>
<td>Update</td>
<td>Update</td>
</tr>
<tr>
<td>ACT</td>
<td>ACT:</td>
<td>Every 6 months</td>
<td>Due</td>
<td>Update</td>
<td>Update</td>
</tr>
<tr>
<td>Asthma Action Plan</td>
<td>AAP: Asthma Action Plan Reviewed (05/07/2012)</td>
<td>Every 6 months</td>
<td>Due</td>
<td>Update</td>
<td>Update</td>
</tr>
<tr>
<td>Patient Education</td>
<td>Basic Asthma Facts: Done (05/07/2012) Trigger Reduction: Done (05/07/2012) Inhaler/Nebulizer Use: Done (05/07/2012) Adherence: Yearly Flu Vaccine: Peak Flow Use:</td>
<td>Every 6 months</td>
<td>Due</td>
<td>Update</td>
<td>Update</td>
</tr>
<tr>
<td>Influenza Vaccine</td>
<td>#1: Exclusion:</td>
<td>Yearly</td>
<td>Due</td>
<td></td>
<td>Add Influenza</td>
</tr>
<tr>
<td>Pneumococcal Vaccine</td>
<td>Pneumovax: Exclusion:</td>
<td>Every 5 years</td>
<td>Due</td>
<td></td>
<td>Add Pneumovax</td>
</tr>
</tbody>
</table>

References: NICE Guidelines Summary Report, Overview of Guideline Changes (AAP), Orders
**Asthma Control Test (12+)**

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In the past 4 weeks, how much of the time did the patient's asthma keep them from getting much done at work, school or at home?</td>
<td>All of the time  Most of the time  Some of the time  A little of the time  None of the time</td>
</tr>
<tr>
<td>2. During the past 4 weeks, how often has the patient had shortness of breath?</td>
<td>More than once a day  Once a day  3 to 6 times a week  Once or twice a week  Not at all</td>
</tr>
<tr>
<td>3. During the past 4 weeks, how often did the patient's asthma symptoms (wheezing, coughing, shortness of breath, chest tightness or pain) wake them up at night or earlier than usual in the morning?</td>
<td>4+ nights a week  2 or 3 nights a week  Once a week  Once or twice  Not at all</td>
</tr>
<tr>
<td>4. During the past 4 weeks, how often has the patient used their rescue inhaler or nebulizer medication (such as Albuterol)?</td>
<td>More than once a day  1 or 2 times per day  2 or 3 times per week  Once a week or less  Not at all</td>
</tr>
<tr>
<td>5. How would the patient rate their asthma control during the past 4 weeks?</td>
<td>Not controlled at all  Poorly controlled  Somewhat controlled  Well controlled  Completely controlled</td>
</tr>
</tbody>
</table>

For an ACT score of 19 or less, the patient’s asthma may not be controlled.

**References:** [Asthma Control Test (12+)]
# Asthma Control Test (under 12)

**Pediatric Asthma Control Test (ACT)**

- **Questions for Child**
  1. How is your asthma today?
     - Very Bad
     - Bad
     - Good
     - Very Good
  2. How much of a problem is your asthma when you run, exercise or play sports?
     - It's a big problem- I can't do
     - It's a problem and I don't like it
     - It's a little problem but it's okay
     - It's not a problem
  3. Do you cough because of your asthma?
     - Yes- all the time
     - Yes- most of the time
     - Yes- some of the time
     - No- none of the time
  4. Do you wake up during the night because of your asthma?
     - Yes- all the time
     - Yes- most of the time
     - Yes- some of the time
     - No- none of the time

- **Questions for Parent**
  5. During the last 4 weeks, how many days did your child have any daytime asthma symptoms?
     - Not at all
     - 1-3 days
     - 4-10 days
     - 11-15 days
     - 16-24 days
     - Everyday
  6. During the last 4 weeks, how many days did your child wheeze during the day because of asthma?
     - Not at all
     - 1-3 days
     - 4-10 days
     - 11-15 days
     - 16-24 days
     - Everyday
  7. During the last 4 weeks, how many days did your child wake up during the night because of asthma?
     - Not at all
     - 1-3 days
     - 4-10 days
     - 11-15 days
     - 16-24 days
     - Everyday

For an ACT score of 19 or less, the child’s asthma may not be controlled.

**References:**
- Asthma Control Test (4-11)
### Asthma Management - Control/Severity

- **DOB:** 03/27/2000
- **Patient Age:** 12 Years & 11 Months
- **Severity Options Displayed**

#### Severity Assessment
- **Currently on controller medication?** Yes/No
- **Previous Severity:** Mild Persistent (05/07/2012 7:26:51 AM)

#### Impairment
<table>
<thead>
<tr>
<th></th>
<th>Intermittent</th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cough due to asthma</td>
<td>None</td>
<td>&lt;=2 days/wk</td>
<td>Daily</td>
<td>All Day</td>
</tr>
<tr>
<td>Wheezing</td>
<td>None</td>
<td>&lt;=2 days/wk</td>
<td>Daily</td>
<td>All Day</td>
</tr>
<tr>
<td>Chest tightness</td>
<td>None</td>
<td>&lt;=2 days/wk</td>
<td>Daily</td>
<td>All Day</td>
</tr>
<tr>
<td>Shortness of breaths</td>
<td>None</td>
<td>&lt;=2 days/wk</td>
<td>Daily</td>
<td>All Day</td>
</tr>
<tr>
<td>Nighttime awakening</td>
<td>&lt;=2x/month</td>
<td>3x/month</td>
<td>1x/wk</td>
<td>Often 7x/wk</td>
</tr>
</tbody>
</table>

#### Interference with normal activities:
- None
- SABA use (not for BB):
  - None
  - <=2 days/wk
  - >2 days/wk

#### Lung Function
- FEV1 or peak flow:
  - FEV1>60% predict
  - FEV1/FVC normal

#### Risk Factors for asthma
- Acute/ER visit(s) due to asthma:
  - 0
  - 1 in last year
  - 2 in last year
  - 3 in last year
  - >=4 in last year
- Hospitalizations due to asthma:
  - 0
  - 1 in last year
  - 2 in last year
  - 3 in last year
  - >=4 in last year
- Exacerbations requiring oral systemic corticosteroids:
  - 0-1/year
  - >=2/year

#### Classification
- Impairment Classification: Mild
- Risk Classification: Moderate
- Severity Classification (Calc): Mild Persistent

#### Asthma Severity Comments
Control/Severity with Control Options Displayed

<table>
<thead>
<tr>
<th>Control Management</th>
<th>Control/Severity</th>
<th>DOB: 03/27/2000</th>
<th>Patient Age: 12 Years &amp; 11 Months Old</th>
<th>Return to Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currently on controller medication?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previous Severity</td>
<td>Mild Persistent</td>
<td>(05/07/2012 7:26:51 AM)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Impairment

<table>
<thead>
<tr>
<th>Impairment</th>
<th>Well Controlled</th>
<th>Not Well Controlled</th>
<th>Very Poorly Controlled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cough due to asthma</td>
<td>None</td>
<td>&lt;=2 days/wk</td>
<td>Daily</td>
</tr>
<tr>
<td>Wheezing</td>
<td>None</td>
<td>&lt;=2 days/wk</td>
<td>Daily</td>
</tr>
<tr>
<td>Chest tightness</td>
<td>None</td>
<td>&lt;=2 days/wk</td>
<td>Daily</td>
</tr>
<tr>
<td>Shortness of breath</td>
<td>None</td>
<td>&lt;=2 days/wk</td>
<td>Daily</td>
</tr>
<tr>
<td>Nighttime awakening</td>
<td>None</td>
<td>&lt;=2x/month</td>
<td>Daily</td>
</tr>
<tr>
<td>Interference with normal activity</td>
<td>None</td>
<td>&lt;=2 days/wk</td>
<td>Daily</td>
</tr>
<tr>
<td>SABA use (not for EIB)</td>
<td>None</td>
<td>&lt;=2 days/wk</td>
<td>Daily</td>
</tr>
<tr>
<td>FEV1 or peak flow</td>
<td>None</td>
<td>&gt;=80% predicted</td>
<td>Daily</td>
</tr>
<tr>
<td>ACT Score</td>
<td>None</td>
<td>&gt;=20</td>
<td>Daily</td>
</tr>
</tbody>
</table>

### Risk

<table>
<thead>
<tr>
<th>Risk</th>
<th>Well Controlled</th>
<th>Not Well Controlled</th>
<th>Very Poorly Controlled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute/ER visit(s) due to asthma</td>
<td>0</td>
<td>1 in last year</td>
<td>&gt;=3 in last year</td>
</tr>
<tr>
<td>Hospitalizations due to asthma</td>
<td>0</td>
<td>1 in last year</td>
<td>&gt;=3 in last year</td>
</tr>
<tr>
<td>Exacerbations requiring oral steroids</td>
<td>0-1/year</td>
<td>&gt;&gt;2/year</td>
<td>&gt;&gt;2/year</td>
</tr>
</tbody>
</table>

### Classification

- Impairment Classification: Moderate
- Risk Classification: Moderate
- Control Classification: Not Well Controlled

### Asthma Control Comments

- Comment: Not well controlled due to increased symptoms and exacerbations.
## Triggers

### Allergies:
- **Dust Mites:** □ Yes □ No □ Unknown + allergy test □ Comments:
- **Pollen/Cut Grass/Flowers:** □ Yes □ No □ Unknown + allergy test □ Comments:
- **Animals:** □ Yes □ No □ Unknown + allergy test □ Comments:
- **Mice/Rats/Cockroaches:** □ Yes □ No □ Unknown + allergy test □ Comments:
- **Mold:** □ Yes □ No □ Unknown + allergy test □ Comments:
- **Nest:** □ Yes □ No □ Unknown + allergy test □ Comments:
- **Other:** □ Yes □ No □ Unknown + allergy test □ Comments:

### Irritants:
- **Tobacco Smoke:** □ Yes □ No □ Unknown □ Comments:
- **Outdoor Pollutants:** □ Yes □ No □ Unknown □ Comments:
- **Chalk Dust:** □ Yes □ No □ Unknown □ Comments:
- **Strong Odors:** □ Yes □ No □ Unknown □ Comments:

### Other:
- **Viral Illness:** □ Yes □ No □ Unknown □ Comments:
- **Exercise:** □ Yes □ No □ Unknown □ Comments:

*Current Allergy List: No Known Allergies (updated 05/07/2012)*
### Asthma Management - Assessment

#### Provider Assessment - Today
- **Severity:** Mild Persistent (03/01/2013)
- **Control:** Not Well Controlled (03/01/2013)
- **Inhaler Technique:** Correct
- **Medication Adherence:** Good
- **Environmental Control:** Adequate

#### Decision Support - Today
- **Severity Class:** Mild Persistent
- **Impairment:** Mid
- **Risk:** Moderate
- **Previous Step:** Step 2
- **Recommended Step:** Step 2

#### Problems:
- **Step 1:** Preferred: Low-dose ICS
  - Alternative: Cromolyn, LTRA, Nedocromil
  - Consider consultation
- **Step 2:** Preferred: Medium-dose ICS + LABA, or COMBO
  - Alternative: Medium-dose ICS + either LTRA, or Zileuton
- **Step 3:** Preferred: Medium-dose ICS + LABA, or COMBO
  - Alternative: Medium-dose ICS + either LTRA, or Zileuton
  - Consult Asthma Specialist
- **Step 4:** Preferred: High-dose ICS + LABA, or COMBO
  - Consider Omalizumab for patients who have allergies
- **Step 5:** Preferred: High-dose ICS + LABA, or COMBO
  - Consider Omalizumab for patients who have allergies
  - Consult Asthma Specialist

*Based on 2007 NHLBI/NAEPP Guidelines*
## Medication (Options shows for Medication Step 2)

### Asthma Management - Medication

**Problems**
- HPV (ICD-079.4)
- HPV (ICD-079.4)
- Asthma - Mild Persistent (ICD-493.00)

**Medications**
- Pulmicort Flexhaler 25-50 Micrograms/Actuation (Budesonide)
- 50 micrograms, 1 puff twice a day. Please rinse your mouth after taking your puffs.
- Albuterol Sulfate (2.5 mg/ml) 0.083% Nebu
- Albuterol Sulfate 2.5 mg 5cc with 5cc NS nebulized

**Allergies**
- No known allergies (updated 05/07/2012)

### Selected Treatment Step: 2

#### Quick Relief
- Short acting B-2 agonist

#### Long Term Control

**Preferred**
- 1. Low-dose inhaled steroid

- Xopenex 0.02 mg Neb
- Xopenex 0.03 mg Neb

### Medication Adverse Effect

<table>
<thead>
<tr>
<th>Side Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Throat</td>
</tr>
<tr>
<td>Palpitations</td>
</tr>
<tr>
<td>Jitteriness</td>
</tr>
<tr>
<td>Sleep Disturbances</td>
</tr>
<tr>
<td>Decreased Growth</td>
</tr>
</tbody>
</table>

### References:

- NHLBI Guidelines Summary Report
- Overview of Guideline Changes (AAP)
### Green Zone

**Peak Flow Range**: More than

- No medications used in the green zone
- Take controller medication as prescribed
- Additional controller medication as prescribed
- 5-60 minutes before exercise, take

Avoid things that make your asthma worse - Avoid tobacco smoke and ask people to smoke outside.

**Other instructions**:

### Yellow Zone

**Peak Flow Range**: From...

- Continue taking controller medications as prescribed
- Add quick relief medication
- If you are taking your quick-relief medication more than 2 to 3 times/week, then call your provider.

If your symptoms and/or peak flows do not improve after 1 hour of treatment, then...

- Take quick relief medication
- Also take quick relief medication
- Call your primary care provider if no improvement in ___ days.

**Other instructions**:

### Red Zone

**Peak Flow Range**: Less than

- Call your provider NOW, if unable to reach provider go to Emergency Room.
- Call 911 if person doesn't respond to you, skin is sucked in around the neck and ribs, and/or if lips or fingernails are grey or blue
- Make an appointment with your primary care provider within two days of an emergency room visit or hospitalization.

**Other instructions**:

Additional instructions: