Managing Asthma Long Term

TARGET POPULATION
Eligibility
Inclusion Criterion
Exclusion Criterion

RECOMMENDATIONS

Recommendation

FIGURE 4 – 2 a. CLASSIFYING ASTHMA SEVERITY AND INITIATING TREATMENT IN CHILDREN 0–4 YEARS OF AGE (Assessing severity and initiating therapy in children who are not currently taking long-term control medication)

**Conditional:** Classification of Asthma Severity (0–4 years of age) {Rec_1: Cond_1 }

**IF**
Impairment: Symptoms

- **Value:** 2 days/week
- **Value:** >2 days/week but not daily
- **Value:** Daily
- **Value:** Throughout the day

Impairment: Nighttime awakenings

- **Value:** 0
- **Value:** 1–2x/month
- **Value:** 3–4x/month
- **Value:** >1x/week

Impairment: Short-acting beta2-agonist use for symptom control (not prevention of EIB)

- **Value:** 2 days/week
- **Value:** >2 days/week but not daily
- **Value:** Daily
- **Value:** Several times per day

Interference with normal activity

- **Value:** None
- **Value:** Minor limitation
- **Value:** Some limitation
- **Value:** Extremely limited

Risk: Exacerbations requiring oral systemic corticosteroids

- **Value:** 0–1/year
- **Value:** 2 exacerbations in 6 months requiring oral systemic corticosteroids, or 4 wheezing episodes/1 year lasting >1 day AND risk factors for persistent
asthma

THEN

Recommended Step for Initiating Therapy: Step 1
Recommended Step for Initiating Therapy: Step 2
Recommended Step for Initiating Therapy: Step 3
Conclude: Intermittent
Conclude: Mild persistent
Conclude: Moderate persistent
Conclude: Severe persistent

Evidence Quality:

Strength of Recommendation:

Reason:

Logic:

Recommendation

F I G U R E 4 – 3 a . ASSESSING ASTHMA CONTROL AND ADJUSTING THERAPY IN CHILDREN 0 – 4 YEARS OF AGE

Conditional: Classification of Asthma Control (0–4 years of age) [Rec_2:
Cond_2 ]

IF

Impairment: Symptoms

Value: 2 days/week
Value: >2 days/week
Value: Throughout the day

Impairment: Nighttime awakenings

Value: 1x/month
Value: >1x/month
Value: >1x/week

Impairment: Interference with normal activity

Value: None
Value: Some limitation
Value: Extremely limited

Impairment: Short-acting beta2-agonist use for symptom control (not prevention of EIB)

Value: 2 days/week
Value: >2 days/week
Value: Several times per day

Risk: Exacerbations requiring oral systemic corticosteroids

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Risk: Treatment-related adverse effects

Value: Medication side effects can vary in intensity from none to very troublesome and worrisome. The level of intensity does not correlate to specific levels of control but should be considered in the overall assessment of risk.

THEN

Conclude: Well Controlled

Maintain current treatment. • Regular followup every 1–6 months. • Consider step down if well controlled for at least 3 months.

Conclude: Not well-controlled

• Step up (1 step) and • Reevaluate in 2–6 weeks. • If no clear benefit in 4–6 weeks, consider alternative diagnoses or adjusting therapy. • For side effects, consider alternative treatment options.

Conclude: Very poorly controlled

• Consider short course of oral systemic corticosteroids. • Step up (1–2 steps), and • Reevaluate in 2 weeks. • If no clear benefit in 4–6 weeks, consider alternative diagnoses or adjusting therapy. • For side effects, consider alternative treatment

Evidence Quality:

Strength of Recommendation:

Reason:

Logic:

Recommendation

FIGURE 4-2b. CLASSIFYING ASTHMA SEVERITY AND INITIATING TREATMENT IN CHILDREN 5–11 YEARS OF AGE (Assessing severity and initiating therapy in children who are not currently taking long-term control medication)

Conditional: Classification of Asthma Severity (5–11 years of age)

{Rec_3: Cond_3 }

IF

Impairment: Symptoms

Value: 2 days/week

Value: >2 days/week but not daily
| Value: Daily                                                                 |
| Value: Throughout the day                                                    |
| Impairment: Nighttime awakenings                                              |
| Value: 2x/month                                                              |
| Value: 3–4x/month                                                            |
| Value: >1x/week but not nightly                                              |
| Value: Often 7x/week                                                         |
| Impairment: Short-acting beta2-agonist use for symptom control (not prevention of EIB) |
| Value: 2 days/week                                                           |
| Value: >2 days/week but not daily                                            |
| Value: Daily                                                                 |
| Value: Several times per day                                                  |
| Impairment: Interference with normal activity                                |
| Value: None                                                                  |
| Value: Minor limitation                                                      |
| Value: Some limitation                                                       |
| Value: Extremely limited                                                     |
| Impairment: Lung function                                                    |
| Value: • Normal FEV1 between exacerbations • FEV1 >80% predicted • FEV1/FVC >85% |
| Value: • FEV1 = >80% predicted • FEV1/FVC >80%                               |
| Value: • FEV1 = 60–80% predicted • FEV1/FVC = 75–80%                         |
| Value: • FEV1 <60% predicted • FEV1/FVC <75%                                 |
| Risk: Exacerbations requiring oral systemic corticosteroids                   |
| Value: 0–1/year (see note)                                                   |
| Value: 2/year (see note)                                                     |
| Intermittent                                                                 |
| Mild Persistent                                                              |
| Moderate Persistent                                                          |
| Severe Persistent                                                            |
| THEN                                                                          |
| Recommended Step for Initiating Therapy                                      |

Evidence Quality:

Strength of Recommendation:

Reason:

Logic:

Recommendation
Figure 4 – 3b. Assessing Asthma Control and Adjusting Therapy in Children 5–11 Years of Age

Conditional: Classification of Asthma Control (5–11 years of age)
{Rec_4: Cond_4 }

IF

Impairment: Symptoms

Value: 2 days/week but not more than once on each day

Value: >2 days/week or multiple times on 2 days/week

Value: Throughout the day

Impairment: Nighttime awakenings

Value: 1x/month

Value: 2x/month

Value: 2x/week

Impairment: Interference with normal activity

Value: None

Value: Some limitation

Value: Extremely limited

Impairment: Short-acting beta2-agonist use for symptom control (not prevention of EIB)

Value: 2 days/week

Value: >2 days/week

Value: Several times per day

Impairment: Lung function • FEV1 or peak flow • FEV1 /FVC

Value: >80% predicted/ personal best >80%

Value: 60–80% predicted/ personal best 75–80%

Value: <60% predicted/ personal best <75%

Risk: Exacerbations requiring oral systemic corticosteroids

Value: 0–1/year

Value: 2/year (see note)

Risk: Reduction in lung growth

Risk: Treatment-related adverse effects

 THEN

Recommended Action for Treatment

Conclude: Well controlled

Conclude: Not well controlled

Conclude: Very poorly controlled

Evidence Quality:

Strength of Recommendation:

Reason:
Logic:

**Recommendation**

FIGURE 4–6. CLASSIFYING ASTHMA SEVERITY AND INITIATING TREATMENT IN YOUTHS 12 YEARS OF AGE AND ADULTS — Assessing severity and initiating treatment for patients who are not currently taking long-term control medications

**Conditional:** Classification of Asthma Severity 12 years of age {Rec_5: Cond_5 }

**IF**

Impairment: Symptoms

- **Value:** 2 days/week
- **Value:** >2 days/week but not daily
- **Value:** Daily
- **Value:** Throughout the day

Impairment: Nighttime awakenings

- **Value:** 2x/month
- **Value:** 3–4x/month
- **Value:** >1x/week but not nightly
- **Value:** Often 7x/week

Impairment: Short-acting beta2-agonist use for symptom control (not prevention of EIB)

- **Value:** 2 days/week
- **Value:** >2 days/week but not daily, and not more than 1x on any day
- **Value:** Daily
- **Value:** Several times per day

Impairment: Interference with normal activity

- **Value:** None
- **Value:** Minor limitation
- **Value:** Some limitation
- **Value:** Extremely limited

Impairment: Lung function

- **Value:** Normal FEV1 between exacerbations • FEV1 >80% predicted • FEV1 /FVC normal
- **Value:** FEV1 >80% predicted • FEV1 /FVC normal
- **Value:** FEV1 >60% but <80% predicted • FEV1 /FVC reduced 5%
- **Value:** FEV1 <60% predicted • FEV1 /FVC reduced >5%

Risk: Exacerbations requiring oral systemic corticosteroids

- **Value:** 0–1/year (see note)
- **Value:** 2/year (see note)
THEN

Recommended Step for Initiating Treatment

Evidence Quality:

Strength of Recommendation:

Reason:

Logic:

Recommendation

FIGURE 4 – 6. CLASSIFYING ASTHMA SEVERITY AND INITIATING TREATMENT IN YOUTHS 12 YEARS OF AGE AND ADULTS — Assessing severity and initiating treatment for patients who are not currently taking long-term control medications

Conditional: Classification of Asthma Control (12 years of age) {Rec_6: Cond_6 }

IF

Impairment: Symptoms

Value: 2 days/week
Value: >2 days/week
Value: Throughout the day

Impairment: Nighttime awakenings

Value: 2x/month
Value: 1–3x/week
Value: 4x/week

Impairment: Interference with normal activity

Value: None
Value: Some limitation
Value: Extremely limited

Impairment: Short-acting beta2-agonist use for symptom control (not prevention of EIB)

Value: 2 days/week
Value: >2 days/week
Value: Several times per day

Impairment: FEV1 or peak flow

Value: >80% predicted/ personal best
Value: 60–80% predicted/ personal best
Value: <60% predicted/ personal best

Impairment: Validated questionnaires: ATAQ ACQ ACT

Value: 0 0.75* 20
Value: 1–2 1.5 16–19
Value: 3–4 N/A 15
Risk: Exacerbations requiring oral systemic corticosteroids
   Value: 0–1/year
   Value: 2/year (see note)
Risk: Progressive loss of lung function
   Value: Evaluation requires long-term followup care
Risk: Treatment-related adverse effects
   Value: Medication side effects can vary in intensity from none to very troublesome and worrisome. The level of intensity does not correlate to specific levels of control but should be considered in the overall assessment of risk.

THEN
Recommended Action for Treatment
Conclude: Well Controlled
Conclude: Not Well Controlled
Conclude: Very Poorly Controlled

Evidence Quality:
Strength of Recommendation:
Reason:
Logic: