

**ICICE
ASTHMA GUIDELINES
March 2002**

HEADER

Questions #1 through #5 must be completed before continuing.

- 1. RAND Research ID** - Enter the RAND ID assigned to the patient.
 - * **2. Patient's date of birth** - Enter the date of birth as noted in the record.
 - 3. Site ID** - Enter the ID assigned to the site.
 - 4. Abstractor Code** - Enter your first initial and last name.
 - 5. Abstraction Date** - Automatically filled by the abstraction tool.
- * The abstraction tool will calculate the patient's age. If the patient is less than 2 years old, the tool will instruct you to STOP ABSTRACTING. Complete the remainder of the Header information and select "Other Reason" for Q8 - "Reason not abstracted"

Questions #6, #7, and #8 are to be answered when abstraction has been completed.

6. Confidence Rating of Abstractability

Enter a number from 0 to 10 that indicates the medical records "abstractability:"

- Completeness (i.e., presence/absence of major sections of the record)
- Legibility of the documentation
- Ability to read necessary FAXed or copied information

A score of 0 (zero) indicates that the record was missing **almost all** major components and/or was **completely** illegible.

A score of 10 indicates that all major components of the record were present and the **entire** record was legible.

7. Abstraction Completed:

This checkbox must be checked on all records entered into the tool when you have either completed the abstraction (all sections of the tool) or determined the record cannot be abstracted (Q8).

8. Reason not abstracted:

If the record cannot be abstracted beyond the header, select the reason.

NOTE: This does not refer to eligibility. Answer this question only if you cannot enter any information other than the Header information (Questions 1-8).

Record Unavailable: The record cannot be made available by the study facility for abstraction (e.g., cannot be located).

No such patient: The patient identifiers are listed on the Patient List provided by RAND, but the facility has no record of that patient.

Identifying information does not match: The name, date of birth, gender and/or other information does not match the consent or the Patient List. Attempt to reconcile the information with the site before selecting this option for the record.

No Consent: The consent is not available or has not been signed.

No relevant data: There is documentation indicating the person is a patient at the study facility (e.g., a face sheet only), but there is no accompanying medical record for that patient.

Other reason: None of the above reasons apply. Includes patient is less than 2 years old on 3/1/1999 (tool will stop abstraction on entry of DOB).

ELIGIBILITY

To be eligible for the study, there must be documentation by the **study facility** of a diagnosis or a history of asthma at some time during or prior to the study period. If NA (no data) is entered for the following question, the tool will instruct you to STOP ABSTRACTING.

9. Enter the *earliest* date on which there was any evidence of a diagnosis or history of asthma for this patient. (May be an imbedded date that is prior to the study period, but notation must be during the study period).

This question is looking for the **earliest** date on which there is any type of notation by the study facility that the patient had a new or continuing diagnosis or a history of asthma of any type or severity.

- The date must be the **earliest** date on which there was a known asthma diagnosis/history.
- The notation of this date must be during the study period.
- The date entered may be prior to the beginning of the study period.
- The date may be imbedded in a provider notation (e.g., Notation on 5/1/1999 states "last asthma exacerbation in April, 1998." If there is no other notation during the study period regarding a diagnosis/history of asthma prior to April 1998, you would enter 4/15/1998.
- **Rule-out diagnosis:** If the asthma is first entered as a probable, possible, or R/O diagnosis of asthma, and asthma was subsequently ruled in:
 - Enter the rule-out date if:
 - Therapy was prescribed for asthma on the rule-out date, or
 - The follow-up visit was indicated to be an asthma follow-up visit (i.e., asthma not identified as a new diagnosis on the next visit after the rule-out visit).
 - Enter the date the asthma was ruled in if asthma is noted to be a new diagnosis on that date.

Accept:

- Notation by a provider at the study facility of a history or diagnosis of asthma
- Patient's report of history of **of asthma** when not contradicted by the provider

Do **not** accept:

- ◆ Documentation by any facility other than the study facility
- ◆ R/O (rule-out) asthma if the asthma was not ruled in (see above for asthma that was rule-in)
- ◆ Bronchiolitis
- ◆ Bronchitis

Asthma

- Asthma of any severity
- Chronic obstructive asthma
- Extrinsic/intrinsic asthma
- Exercise induced asthma
- **Asthmatic bronchitis**
- Allergic/bronchial/bronchial induced/idiiosyncratic/occupational asthma
- Reactive airway disease (RAD)
- Reversible hyper-reactive lung disease
- Reversible airway disease
- Reversible obstructive airway disease
- Hyperresponsiveness of the airways
- Wheezy bronchitis

Location:

- ⊗ Progress notes
- ⊗ Initial History and Physical

10. When was there evidence that the patient discontinued care at the study clinic (e.g., transferred to another care facility, moved out of town, etc.)?

Enter the date when there was an indication that the patient would no longer be receiving care of any kind at the study clinic. The notation may be by a healthcare provider or office staff.

The reason may or may not be indicated, but might include:

- Patient was changing to a different healthcare plan
- Patient was moving out of the geographical area
- Patient was switching care to another clinic/office/provider group
- Death of the patient

Do **not** accept:

- ◆ A request for healthcare records to be sent to another provider without evidence that the patient would no longer be returning to the clinic for care.
- ◆ Patient temporarily being seen by another provider/clinic for reasons such as an extended travel period.

Location:

- ⊗ Progress notes
- ⊗ Facesheet
- ⊗ Study facility Discharge Summary
- ⊗ Transfer form

11. Was the patient pregnant at any time between 3/1/1999 and 6/30/2001?

Accept (if pregnancy was **not** terminated by abortion or miscarriage):

- Documentation that the patient is pregnant by either patient or provider report
- Documentation of a prenatal visit
- **Positive pregnancy test**
- Documentation of labor, delivery, stillborn birth
- Intrauterine Fetal Demise (IUFD), UFD, fetal demise

Do **not** accept pregnancies that were terminated by:

- ◆ Abortion – spontaneous (SAb)/incomplete/missed/unspecified
- ◆ Miscarriage

Location:

- ⊗ Progress notes
- ⊗ Initial History and Physical
- ⊗ Emergency Room record
- ⊗ Inpatient admission H&P/Discharge Summary
- ⊗ Labor and delivery summary/record
- ⊗ Surgical report

12. Enter the date on which the pregnancy ended (delivery, birth) or, if the date the pregnancy ended is not available, enter the estimated date of confinement (EDC) or expected delivery date (EDD).

Enter the date on which the pregnancy was ended. If the exact date is unknown, calculate the date using the instructions in the General Guidelines.

If the date on which the pregnancy ended is not available, enter the estimated date of confinement (EDC) or expected delivery date (EDD) as noted by the provider. The EDC and EDD are calculated by the provider using the date of the patient's last menstrual period (LMP). If there are multiple EDC dates, enter the first date you encounter (i.e., it is not necessary to find the earliest or most recent).

Accept for termination:

- Delivery, live birth, stillborn birth
- Intrauterine Fetal Demise (IUFD), UFD, fetal demise

Do **not** accept

- ◆ Abortion – spontaneous (SAb)/incomplete/missed/unspecified
- ◆ Miscarriage

Location:

- ⊗ Progress notes
- ⊗ Prenatal care flow sheet(s)
- ⊗ Ultrasound reports
- ⊗ Amniocentesis reports
- ⊗ Inpatient admission H&P/Discharge Summary

NEW PATIENT/NEW ASTHMA DIAGNOSIS SECTION

13. Was the patient given a new diagnosis of asthma on the date entered in Q9 (i.e., no pre-existing diagnosis of asthma prior to that date)?

Indicate whether the asthma was initially diagnosed on the date specified (i.e., no prior diagnosis or history of asthma either prior to or during the study period). The question is looking for the first time asthma was ever diagnosed, **NOT** just the first notation of a history or a diagnosis of asthma during the study period.

An exacerbation of asthma is a worsening of symptoms in a patient previously diagnosed with asthma. It is **not** equivalent to a new diagnosis unless the patient had no history of asthma prior to the episode.

If the date specified is the date of a rule-out diagnosis that was subsequently ruled-in, enter "Yes."

If it is unclear whether asthma was initially diagnosed on the specified date, select "No/No data."

14. Enter the date the patient *first* began receiving healthcare at the study facility (i.e., was a new patient at the facility) if it occurred between 3/1/1999 and 6/30/2001.

Enter the date on which the patient was new to the study **facility** (i.e., was not receiving care at the facility for any reason prior to that date) on or after the study start date (3/1/1999). The patient is considered to be a new patient if the patient had not been seen by any provider at the study facility for any reason prior to that date.

If the patient was a current patient on 3/1/1999 or there is evidence that the patient had been seen at the study clinic prior to 3/1/1999, enter "NA." If you are unable to determine whether the patient was new to the clinic during the study period, enter "NA."

Accept:

- Initial history & physical
- New patient record/data form
- Reference to first contact date at that facility(i.e., phone, letter, visit, procedure)
- Reference to transfer to the facility on that date

Do not accept:

- ◆ Patient is new to a different area of the study facility (e.g., new to adult medicine after being followed in the pediatric clinic of same facility).

Location:

- ⊗ Initial History & Physical at study facility
- ⊗ Current History & Physical
- ⊗ Progress Notes

BEGIN DATE: This date is calculated by the tool and will be one of 2 dates that will be used to determine the beginning of the data collection period for **MOST** of the remaining questions:

- The date entered for in Q14 (i.e., date patient was new to the study facility during the study period),

Or

- The beginning of the study period (3/1/1999).

15. Enter the earliest date prior to 6/30/2001 on which the patient had any type of contact (e.g., lab, visit, phone) at the study facility.

A date prior to the study period may be entered.

Look for the **earliest** date in the entire study facility record on which there is any indication that the patient was receiving healthcare at the study facility or was a patient at the study facility.

Accept:

- A contact of any type (office/clinic visit, phone or email contact)
- Laboratory/test/exam report on which it is clear that the specimen/test/exam was sent from/obtained by/performed at the study facility
- Medication prescription/refill by a provider at the study facility
- A visit to the office in which a healthcare provider is not seen (e.g., purpose is only to fill out forms or drop off medical record, etc.).
- A note to the chart indicating that the patient was a current patient at the study facility.

Location:

- ⊗ Initial History & Physical at study facility
- ⊗ Current History & Physical
- ⊗ Progress Notes
- ⊗ Laboratory reports (from study facility)
- ⊗ Test or exam reports (from study facility)

16. Question 16 has been deleted.

Indicate whether the patient's medical records are available for abstraction during the following time periods.

17. At least one month prior to the initial diagnosis of asthma.

Determine whether the medical record available to you extends **at least** one month prior to the initial diagnosis of asthma. This question is referring to the totality (progress notes, lab reports, etc.) of the medical record, not just isolated reports or references to events during the time period indicated. If the record extends to one month or more prior to the initial diagnosis of asthma, enter, "Yes."

18. At least six months prior to the initial diagnosis of asthma.

Determine whether the medical record available to you extends **at least** six months prior to the initial diagnosis of asthma. This question is referring to the totality (progress notes, lab reports, etc.) of the medical record, not just isolated reports or references to events during the time period indicated. If the record extends to six months or more prior to the initial diagnosis of asthma, enter, "Yes."

Enter the closest date within 1 month of (prior to or after) the initial diagnosis of asthma on which the following physical exam items were performed.

Location:

- ⊗ Current History & Physical
- ⊗ Progress Notes
- ⊗ Flow Sheet
- ⊗ Asthma specialist/clinic documentation

19. Upper respiratory tract exam

Accept:

- HEENT exam – wnl, nl, any findings
- Exam of the ears, nose and/or throat (ENT)
- Exam that includes pharynx, tonsils, and/or sinuses

20. Chest exam

Accept:

- Lungs/chest clear, neg, wnl
- Lungs/chest “clear to auscultation” (CTA)
- Lungs/chest “clear to auscultation and percussion” (CTAP)
- Breath sounds (sds) (BS) normal (nl) or decreased/no adventitious sounds
- Bronchial/vesicular breath sounds
- Dullness/resonance on percussion
- Presence or absence of rales, wheezes, rhonchi, crackles
- Inspiratory/expiratory ratio (I/E)
- Presence or absence of consolidation
- Tactile/vocal fremitus
- Contour, symmetry, expansion of chest
- Presence/absence tactile fremitus
- Percussion for diaphragmatic excursion, dullness

Do NOT accept:

- ◆ Chest MRI or CT/CAT scan
- ◆ Chest x-ray
- ◆ Chest radiography

21. Presence/absence of allergic dermatitis, atopic dermatitis, or eczema

Accept:

- Skin w/o lesions or inflammation
- No evidence or presence of allergic dermatitis, atopic dermatitis
- Eczema, childhood eczema
- Nummular/asteatotic/papular rash or lesions

Do **not** include

- ◆ Contact dermatitis,
- ◆ Xerosis
- ◆ Seborrheic dermatitis
- ◆ Drug rash, drug dermatitis
- ◆ Psoriasis.

Enter the closest date within 6 months of (prior to or after) the initial diagnosis of asthma on which the following history items were noted.

Find the closest date within 6 months prior to or 6 months after the new diagnosis on which the following items were noted or performed.

Location:

- ⊗ Current History & Physical
- ⊗ Progress Notes
- ⊗ Flow Sheet
- ⊗ Asthma specialist/clinic documentation
- ⊗ Allergy consult

22. Asthma allergen history (e.g., triggers, exposures, sensitivity to indoor allergens)

Accept:

- Any documentation that the patient was **questioned** about (i.e., presence/absence) what might trigger or bring on asthma symptoms

Triggers may include but are not limited to:

- Exercise
- Allergens (mold, dander, dust, pollen, detergents, pets, dust mites, etc.), food
- Environmental exposure such as cold temperatures, occupational substances, tobacco smoke
- Infections such as URI, colds
- Medications such as ASA, beta-blockers
- Conditions such as gastroesophageal reflux disease (GERD)

23. Allergy testing

Accept:

- Skin testing for allergy
- Patch testing for allergy
- In vitro testing for allergy
- RAST testing (radioallergosorbent test)

CONTACT SECTION

24. Did the patient have any healthcare contacts between BEGIN DATE and 6/30/2001?

Select "Yes" if the patient had any of the following types of contact with the study facility during the dates indicated. See guidelines below for more detailed information regarding the types of contacts.

- Well child
- Outpatient
- Urgent care
- Hospital Discharge Summary or Emergency Room Visit
- Medication prescription only (pertains only to those medications on the medication list)
- Telephone/letter/email

Do **not** enter any of the following as a separate contact date:

- ◆ **Imbedded contacts.** These are contacts with a provider/ER/Radiology/etc. that are mentioned within one of the contacts listed above (e.g., notation of the outpatient provider of a recent inpatient stay).
- ◆ Outpatient procedures (e.g., stress test, ultrasound, pulmonary function lab tests that are not part of a visit to the provider, etc.)
- ◆ Notes to the chart (i.e., notation regarding care, a recent ER visit or hospitalization, test results, etc., but the patient was not actually seen by a provider).
- ◆ Treatment plans, transfer forms that are a summary of care, and on which there is no indication that the patient was seen on that date.
- ◆ A notation of a referral to a provider (e.g., "Pt scheduled to see asthma educator").
- ◆ Visits to a non-study facility provider or clinic **other than** an asthma MD specialist/clinic.
- ◆ Visits to the school nurse or clinic
- ◆ Visits to another facility for the purpose of asthma education
- ◆ Visits that are strictly dietary (e.g., diet clinic) or for psychotherapy if asthma is **NOT** addressed (see below). If you find other types of contacts such as these that you think should not be entered as contacts, contact the RAND research team.
- ◆ Reading of a PPD (TB/Mantoux test) **only**
- ◆ Weight check **only**
- ◆ A visit to the office in which a healthcare provider is not seen (e.g., purpose is only to fill out forms or drop off medical record, etc.).

Location:

- ⊗ Progress notes
- ⊗ Flow sheets
- ⊗ Initial History and Physical
- ⊗ Asthma MD specialist consult report
- ⊗ Asthma clinic visit report

In this section you will enter information about each healthcare contact between the BEGIN DATE and 6/30/01. You will answer a series of questions for each contact date that you enter.

Contact date

- Enter each date on which there was a qualifying contact. (See Type of Contact, below.)
- If there are **multiple** contacts on the same day (e.g., a telephone and an outpatient contact), enter the date once for each contact and enter the required information.
- If the patient sees more than one provider at the **same** contact (e.g., RN and MD), enter as a single contact.

GENERAL INFORMATION

25. Type of Contact

Well Child

- A routine physical exam usually performed at 2, 4, 6, 9, 12, 15 & 18 months and yearly or every two years through adolescence; usually immunizations are administered, a developmental assessment is done & anticipatory guidance is given
 - Developmental assessment evaluates developmental milestones in growth, fine motor/gross motor/visuomotor abilities and language. The documentation may be a general comment on development (e.g., Development normal for age, Developmentally appropriate for age, "WNL" or "NI" written next to "Development") or more specific:
 - Growth: height/weight measurement
 - Fine motor development refers to use of small muscle groups, particularly the arms and hands in activities such as reaching, grasping, writing, throwing and using tools.
 - Gross motor development refers to the use of large muscle groups involved in lifting the head, crawling, standing, walking, running, stair climbing, jumping, throwing/kicking an object, pedaling a tricycle, gait
 - Visuomotor development refers to the ability to coordinate visual stimuli with fine motor activity. (e.g., Holds bottle; throws objects, Turns pages one at a time, Undresses completely; dresses partially, Copies a square, Draws a person with 6 or more body parts, Ties shoes
 - Language development in early childhood refers to understanding spoken words (receptive skills) and to communicating through speech (expressive skills). (e.g., Alerts to sound, Imitates speech sounds, Combines syllables (bababa, dadada), Says one or more words, Understands "No", Names/points to pictures, Uses pronouns (I, you, me) inappropriately, Says song or poem from memory/asks questions
 - Anticipatory guidance is age-appropriate counseling (e.g., safety/risk assessment, removal of toxic agents such as poisons and guns from the home, managing behavior problems such as temper tantrums, etc.)

Outpatient Medical other than Well Child

- Visit to a provider's office during which the patient was assessed and/or treated. This includes visits at which the patient was seen by an MD, nurse practitioner (NP), physician's assistant (PA), RN, LPN, medical technician, etc.)
- **Asthma specialty provider/clinic consults:** enter as a contact date when the consulting provider provides a report of a visit with the patient.
 - Enter the date of the consult. If the report is in the form of a letter that does not indicate the actual date of the visit or allow you to estimate the date (e.g., saw the patient last week), and it is a recent or current consult, then use the date of the letter.
- Visit for administration of influenza vaccine only.

Do **not** accept:

- ◆ Specialty consults outside of the study facility **other than** an asthma specialist or asthma clinic
- ◆ Visits to school nurse or school clinic.
- ◆ Outpatient visits to a non-study facility except visits to an asthma specialty provider or clinic.

Urgent care at study facility

- Visits to the study facility specified in the note to be "urgent," "urgent care," "walk-in," "drop-in" visits.

Do **not** accept:

- ◆ Urgent/walk-in/drop-in visits to a facility **other than** the study facility

Hospital Dischg Summary or ER Visit

- Hospitalization only when a copy of the Discharge Summary is in the study facility record (i.e., do not enter imbedded contacts or hospitalizations without a copy of the Discharge Summary).
- Visits to an Emergency Department (ED, ER) only when a copy of the ER record is in the study facility record (i.e., do not enter imbedded contacts).

Med list prescription only

- The only notation in the Progress Note notations is a prescription (original or refill) for one of the medications on the medication table list. Refer to "Asthma Tool Master Medication List" list for eligible medications. Do not enter a contact date if the medication is not on this list.
- Use this selection when the medication prescription indicates that the medication is to be started on a date other than the contact date. Create a separate "Asthma prescription only" contact and enter the medication on the Med Table tab.

Do **not** include for med list prescription:

- ◆ Prescription only contacts that do not include any of the medications on the drop-down list in the medication table.
- ◆ Medications requested by the parent/patient (e.g., in a phone message to the provider) in the absence of an indication that the provider prescribed the medication (e.g., notation on message of "OK" or "called in" to pharmacy).

Telephone

- Enter the date on which the provider and the patient had phone contact.
- Include calls initiated by the patient or the provider. Include only those calls on which the office or provider actually spoke with the patient.
- Summarization: Multiple phone calls may be summarized into one entry per week. Include all data from all telephone contacts on the date of the first telephone contact of that week.

Do **not** include for telephone:

- ◆ A note of a phone conversation that is physician-to-physician or office-to-office contact (i.e., not a contact with the patient).
- ◆ A call that is **ONLY** for any (or any combination) of the reasons listed below.
 - Calls to the patient re "no show"
 - Calls to schedule lab work or appointment
 - Calls to get or to give lab/test results
 - Calls that document only a BP taken by the patient
 - Cancellation of appointment
 - Change of phone, address, pharmacy phone
 - Request for copy of medical record
 - Provider office or patient "left message"
 - Telemonitoring calls
 - Pacemaker checks
 - Request for a prescription/refill only
 - Call to the pharmacy for a prescription/refill

Letter/email

- Enter the date on which the provider wrote a letter/note/email to the patient.
- **Letter sent to the patient regarding referral to asthma provider/clinic**
- Multiple letters/emails may be summarized into one entry per week. Include all data from all letters/emails using the date of the earliest letter/email of that week.

Do **not** include for letter/email:

A letter that is **ONLY** for any (or any combination) of the reasons listed below.

- ◆ Letter/email to the patient re "no show"
- ◆ Letter/email to schedule lab work or appointment
- ◆ Letter/email to get or to give lab/test results
- ◆ Cancellation of appointment
- ◆ Change of phone, address, pharmacy phone
- ◆ Request for copy of medical record

Other/No data

- A survey or questionnaire completed by the patient and there is no other indication of whether it was completed at a visit or by phone.
- If there is no way to determine the type of contact, use this selection.

26. Was asthma addressed at this visit?

Asthma was addressed if any of the following were noted:

- The reason for the visit is asthma
- Diagnosis of asthma is noted in assessment/plan
- Asthma exacerbation/flare-up/episode, etc.
- Follow-up or maintenance visit for asthma
- Follow-up on prior exacerbation, symptoms resolving
- Patient self-assessment or questionnaire is completed
- Pulmonary tests are ordered, discussed, performed, or results are noted
- Asthma education or referrals provided
- Review of asthma symptoms, action plan
- Review of, changes in asthma medication prescription
- Asthma medications are included in the list of the patient's current medications (inhalers, theophylline, systemic or inhaled corticosteroids)

Do **not** accept:

- ◆ Asthma is mentioned only in the patient's past medical history (PMH) and not addressed elsewhere in the visit.

27. Was the patient seen by an asthma specialist (MD) or by an MD at an asthma specialty clinic during this contact?

This question is looking to determine whether the patient was seen by an MD with a specialty that includes an expertise in asthma management. The specialty of the MD may be specifically noted in the progress or letterhead. If the specialty is not noted, you may assume the MD is a specialist if the patient is being seen in a specialty clinic, center or office for the purpose of asthma management.

Asthma specialist:

- Allergist
- Pulmonologist
- Immunologist
- MD noted to have expertise in asthma management

Asthma specialty clinic/center/group/office:

- Asthma clinic/pediatric asthma clinic
- Respiratory/pulmonary clinic
- Allergy clinic

28. Select the frequency of daytime asthma symptoms noted on the current contact.

Indicate the frequency with which the patient has recently (i.e., since the previous visit) been experiencing symptoms during the daytime (waking hours). Symptoms may be the usual symptoms or symptoms due an exacerbation. Include asthma symptoms that occur as a result of or other respiratory conditions (e.g., URI, bronchitis).

If the frequency of symptoms is **not** noted, enter the frequency with which the patient was using rescue medications (short-acting inhalers).

If symptoms are not described as being specifically daytime or nighttime/nocturnal, assume that the symptoms are daytime symptoms.

Ranges: Enter the least frequent frequency.

- For number of times per day or month enter the **lower** end of the range (e.g., for 3-4 times/week, enter "3").
- To calculate frequency based on hourly occurrence/day, use the higher end of the range (e.g., for 3-4 hours/day, divide 24hr by 4 hours to obtain frequency of 6 times/day),

If the range of symptoms spans more than one selection (e.g., 2-3 times/week) select the lower **end of the** range (in this example, "2 or fewer times per week").

If more than one frequency of symptoms is reported (e.g., "was having SOB once a month but lately has been having SOB a couple times a week"), enter the most recent (a couple times a week – "2 or fewer times per week" in this example).

The frequency must be noted as a number or as one of the notations listed below.

Symptoms include:

- Cough
- Wheezing
- Difficulty breathing/tightness in chest/shortness of breath (SOB)
- Tachypnea/rapid respirations
- Retraction of chest wall (children)
- Nasal flaring
- Tracheal tugging
- Difficulty completing a sentence

2 or fewer times per week

- 0-2 times per week
- 0-10 times per month
- None, rarely, occasionally, **never**

3-6 times per week

- 3-6 times per week
- 11-25 times per month
- Almost every day
- Often, several times/week

Daily

- Every day
- 7 days/week

Continual (all day)

- More than once/day on MOST days
- All or most of the day on MOST days
- Continuously
- Constantly
- Always experiencing symptoms

29. Select the frequency of nighttime asthma symptoms noted on the current contact.

Indicate the frequency with which the patient has recently (i.e., since the previous visit) been experiencing symptoms during the night. Symptoms may be the usual symptoms or symptoms due an exacerbation. Include asthma symptoms that occur as a result of or other respiratory conditions (e.g., URI, bronchitis).

If the frequency of symptoms is not noted, enter the frequency with which the patient has to use their rescue medications (short-acting inhalers) during the night.

Ranges: Enter the least frequent frequency.

- For number of times per day or month enter the **lower** end of the range (e.g., for 3-4 times/week, enter "3").
- To calculate frequency based on hourly occurrence/night, use the higher end of the range (e.g., for 3-4 hours/day, divide 24hr by 4 hours to obtain frequency of 6 times/day),

If the range of symptoms spans more than one selection (e.g., 2-3 times/month) select the lower range (in this example, "2 or fewer times per month").

If more than one frequency of symptoms is reported (e.g., "was rarely coughing at night but lately has been coughing at least once a week"), enter the most recent (once a week, or "3-4 times per month" in this example).

Symptoms include:

- Cough
- Wheezing
- Difficulty breathing/tightness in chest/shortness of breath (SOB)
- Tachypnea/rapid respirations
- Retraction of chest wall (children)
- Nasal flaring
- Tracheal tugging

2 or fewer times per month

- 0-2 times per month
- Less than once per week
- None, rarely, infrequently

3-4 times per month

- 3-4 times per month
- Once per week
- Almost every week
- Occasionally

5 – 10 times per month

- 5 – 10 times per month
- More than once per week
- Once or twice per week
- Frequently

11 or more times per month

- 11 or more times per month
- More than twice per week
- Every night or almost every night
- Frequently

30. Select the category or level of asthma severity noted at the current contact.

Select the level of severity noted at the contact. If a range is noted (e.g., mild-moderate asthma), or there is a conflict in severity notations (e.g., noted to be mild in the progress note and moderate in the flow sheet for the same contact), select the lesser option (mild in this example).

Step 0 (Mild unspecified).

- Mild severity without an indication of intermittent or persistent.

Step 1 (Mild intermittent, exercise-induced).

- "Step 1," "mild intermittent"
- Exercise-induced
- Severity code "1"

Step 2 (Mild persistent)

- "Step 1," "mild persistent"
- Severity code "2"

Step 3 (Moderate persistent)

- "Step 1," "moderate persistent"
- Moderate
- Severity code "3"

Step 4 (Severe persistent)

- "Step 1," "severe persistent"
- Severe
- Severity code "4"

MEDICATIONS

31. Did the PATIENT/PARENT REPORT the frequency with which an inhaled (inhaler or nebulizer) short-acting beta-2 agonist or ipratropium was being USED? (Look for actual USE, not frequency on a prescription.)

Indicate whether the provider noted at this contact how often (e.g., 2 times/week; once a day, never) the patient was **currently using** a short-acting inhaled beta-2 agonist or ipratropium on a regular basis either to treat or to prevent asthma symptoms. Refer to the Short-acting Beta-2 Agonist and the Ipratropium medication lists for eligible medications.

The short-acting beta-2 agonist or ipratropium inhaler may be referred to as:

- Rescue medicine
- Quick-acting medication
- "Breathing treatment"

Do **not** accept:

- ♦ Preventative or controller medication use
- ♦ The frequency of a prescription written or noted by the physician (e.g., "albuterol 2-4 times per day PRN").
- ♦ The number of uses (e.g., used the nebulizer 4 times) if the frequency or time period (e.g., 4x/day or 4 times in 2 days) is not indicated.

The frequency must be written numerically (e.g., 1x/once per day, 2x/twice a week, 3 times/month, etc.) or in one of the following ways that can be translated into a number:

- Daily, "almost daily," continuously would be entered as 1 time/day
- Weekly or "almost weekly" would be entered as 1 time/week
- Monthly or "almost monthly" would be entered as 1 time/month
- Zero times would be entered as NA

If there is a discrepancy between the parent's report and the patient's report (i.e., one reports using and the other reports not using) assume that the patient is using the medication (e.g., mother reports no use, patient reports use 2x/week, assume that the patient is using medication 2x/week).

Enter the following information as reported at this contact by the patient/parent regarding the use of inhaled and/or nebulized use of a short-acting beta2-agonist or ipratropium inhaler.

Accept notation by the provider or responses on a patient self-assessment form or questionnaire.

32. Was the patient using a short-acting beta-2 agonist or ipratropium administered by inhaler or by nebulizer?

Indicate whether the short-acting beta-2 agonist or ipratropium was being administered by an inhaler or by a nebulizer. If the patient was actually using both an inhaler AND a nebulizer, select, "Both inhaler and nebulizer."

33. Frequency of Use: Number

Enter the number of times in this answer field. For example, if the inhaler is used twice a week, enter "2" here. **If there is a notation that the patient is not using the short-acting inhalers at all, enter "0."**

Ranges: Enter the least frequent frequency.

- For number of times per day or month enter the **lower** end of the range (e.g., for 3-4 times/week, enter "3").
- **To calculate frequency based on hourly use/day, use the higher end of the range (e.g., for 3-4 hours/day, divide 24hr by 4 hours to obtain frequency of 6 times/day),**

If more than one frequency for a single medication is reported and one is the usual frequency for the patient and another is a recent frequency during a current exacerbation or historical worsening (e.g., "usually uses the inhaler once or twice a month, but in the past couple of days has been using it

almost daily”) enter the **usual** (e.g., not during an exacerbation or respiratory infection) frequency for this patient.

If the only frequency reported was during a **current** exacerbation/episode, enter the information as noted for Number and Unit and select “Less than 2 weeks” for the Duration of Current Frequency (Q)

If the patient uses 2 different inhaled or nebulized rescue medications and is using them with different frequency (e.g., uses albuterol 3 times a week and uses Combivent twice a week), enter the **higher** number.

If there is a discrepancy between the parent’s report of frequency and the patient’s report of frequency, assume enter the **lower** reported frequency, regardless of whether it is the parent or patient (e.g., mother reports 3x/week, patient reports use 1x/week, enter once/week).

34. Frequency of Use: Unit

Enter the “unit” for the number of time the medication is used. For example, if the inhaler is used twice a week, select “Week.”

35. Number of puffs per use (inhaler)

Enter the number of inhaler puffs the patient was administering with each dose (e.g., if using “3 puffs, twice a day,” you would enter “3.” If there is a range, enter the lower end of the range. (e.g., for 2-3 puffs, enter “2”).

36. Duration of current frequency

Select the duration of time the patient had been using the medication at the frequency entered above.

Select “Less than 2 weeks” if the frequency was noted to be during a recent/current exacerbation. If the duration is not noted, enter “Other/No data.”

37. Was an influenza vaccine ordered or administered at this contact, or noted to have been administered at *another* facility during the CURRENT flu season?

Accept:

- The provider ordered an influenza vaccine to be administered during the current contact.
- The patient received an influenza vaccine during the current contact.
- The provider noted that the patient received an influenza vaccine during the **current flu season** (October through January) at another facility.

Do **not** accept:

- ◆ Discussion about an influenza vaccine (without evidence of it being administered).
- ◆ Influenza vaccine recommended (without evidence of it being administered).

Accept:

- Influenza/flu virus vaccine
- Flu vaccine/shot
- Flu Shield
- Fluogen
- Flushield
- Fluvirin
- Fluzone
- Fluzone PFS
- Fluzone SV
- Fluzone WV

38. Enter the indicated data for each medication noted at this contact.

Medication

Enter each medication on the drop-down medication list that was noted in the progress notes to have been started, stopped (discontinued), continued, or refused on the current contact date.

- Enter the medication as noted in the record (i.e., generic or brand). Enter all medications that are started, continued, stopped or refused.
- If the date on which a medication is to be initiated is different from the date of the contact on which it was prescribed, create a separate "Med list prescription only" contact using the date the medication is to be initiated and enter the medication on that new contact. This does NOT include PRN medications (to be taken if needed). PRN medications are entered on the contact medication table with a code of "Yes" for the "Ordered as PRN?" column.
- If a classification (e.g., beta-2 agonist) is noted rather than the specific drug, select the classification from the medication list.
- "Continue current meds:" If "continue current meds" (or similar statement) was noted at the contact, enter whatever medications were noted to be "current medications" at the **same** contact. Do not refer to previous contacts to determine what the current medications were. If no medications were noted as current medications at the same contact as the "continue current meds" notation, disregard the statement (i.e., do not enter the medications referred to). You may refer to a medication log, if available, and enter the medication(s) listed there.
- Corticosteroids (steroids) may be prescribed as continuous therapy or for short-term periods. The "short-term" prescriptions are called "taper" or "burst" and are typically prescribed to treat an exacerbation/flare.
 - Continuous steroid use: May also be referred to as chronic steroid use. The steroid is taken continuously every day or every other day (i.e., not intermittently) at a consistent dose and frequency for a period of greater than 30 days.
 - If the steroid is prescribed continuously (i.e., not short-term), select the prescribed steroid specified on the list as "not short-term."
 - If you cannot determine whether the prescription was short-term or continuous, contact the RAND research team.
 - Short term steroids:
 - o Steroid burst: The burst is a short-term (usually 1-2 weeks) prescription for a steroid with a consistent daily dose and frequency (e.g., prednisone 20 mg tid x 7 days).
 - o Steroid taper: A taper is a short-term prescription with a dose and/or frequency that tapers off over 1-2 weeks. The taper may be prescribed as a "package" such as "Methylprednisolone Dose Pack" or as "methylprednisolone" with the tapering dosage written out (e.g., "methylprednisolone 4 mg tid x 4 days, 3 mg tid x 4 days, 2 mg tid for 4 days").
 - If a steroid dose pack is prescribed, select that specific dose pack from the medication list. If a dose pack is prescribed that is not listed on the medication drop down list, contact the RAND research team.
 - If a steroid taper is written out, select the prescribed steroid that is designated as "(short-term)" on the medication list (e.g., "Methylprednisolone (short-term)").
 - See "Dose" and "Frequency" guidelines below for instructions on entering that data for tapers.
 - o If a short-term steroid was prescribed on a prior contact and then continued at the current contact (but continued as a short-term prescription), select the appropriate medication and enter the "Continued" status that applies (i.e., "Continued, decreased dose" for a taper and "Continued, same dose" for the burst).
 - o Imbedded steroid taper or burst: If an imbedded note in an outpatient, telephone or email contact indicates a recent prescription for a short-term steroid, enter it on the current contact, select the appropriate steroid (i.e., designated as short-term) and select "Other/No data" for the Status. **No other imbedded medications are to be entered.**
- HOSPITAL DISCHARGE AND EMERGENCY ROOM DISCHARGE MEDICATIONS:
 - Enter **only** the discharge medication prescriptions for all hospital discharge summary and emergency room contacts. (For imbedded notations, see "Well-child, outpatient, telephone and letter medications.")

- Generic combination medications are listed with all components (e.g., aspirin/salicylimide/caffeine).
 - The order of the medications in a combination medication as listed in the drop-down medication list may differ from the order listed in the record. Follow the following steps when entered a combination medication.
 - Type in the first 3 letters of the first medication of the combination medication as listed in the record and look for the same combination medication on the drop-down list.
 - If you find the same combination, but in a different order, select it. For example, you may find "aspirin/caffeine/salicylimide" separated by a slash (/).
 - If you don't find the same combination, type in the second medication of the combination medication as listed in the record.
 - If you find the same combination, but in a different order, select it.
 - Continue to do this for all medications listed in the combination medication until you have either found the combination medication on the drop-down list or searched for each component medication unsuccessfully.

Do **not** enter (on medication table):

- ◆ Medications listed as current medications (being taken at the time of admission) noted on Emergency Room or inpatient documentation.
- ◆ The same rescue (short-acting inhaler) medication twice on the same contact if both medications are ordered as PRN
- ◆ Medications that are listed **only** on a medication log (i.e., are not listed within the contact documentation on the progress notes). See "Non-contact Medications" below.
- ◆ Medications **administered** during an outpatient, Emergency Room visit or inpatient stay.
- ◆ Topical medications (ointment, salve, eye or ear drops, etc.)
- ◆ Medications that the patient has tried in the past (e.g., previous trial of cromolyn)
- ◆ Medications listed on an ECG report/request.
- ◆ Medications that are part of a study in which the patient is participating and the drug given to the patient is unknown (e.g., Altolomet vs. placebo).

Ordered as PRN?

- Indicate whether the frequency was PRN. If frequency was not indicated, enter "No data."
- PRN includes medications that are to be taken in an emergency only (e.g., for the next asthma flare, for red zone symptoms).

Medication Dose

- Enter the numerical dose as indicated in the note. If a dose is written by weight (e.g., "prednisone 1 mg/kg" enter the dose as written ('1', in this example).
- For inhalers the dose is usually noted in "puffs" (e.g., Atrovent 2 puffs qid a day)
- If the dose is written as a range (1-4 mg) and it is NOT a PRN order, enter the lowest number.
- Steroid taper: enter the total dose for the first day of the taper and enter "qd" for the frequency. For example for the order, "prednisone taper 20mg tid x 5 days, 20 mg bid x 5 days, 20 mg qd x 5 days," you would enter, "prednisone 60mg qd." Use the same rule to enter an order to continue a taper that was started on a prior date. For example, "continue taper at 20 mg bid x 5 and 20 mg qd x 5" would be entered "40 mg qd").
- Steroid burst: enter the dose and frequency as written
- If the dose varies during the day (e.g., 3 puffs in the morning and 2 puffs in the evening), enter the total dose for one day (in this example, 5 puffs) and enter 'qd').
- If the dose is not noted, enter "NA."

Medication Unit

- Select the appropriate unit, or "Other/No data" if the unit is not listed or noted.
- If a dose is written by weight (e.g., "prednisone 1 mg/kg" enter the unit as written ('milligram/kg', in this example).
- If the unit noted in the record does not appear on the list or is not indicated, check "Other/No data."

Medication Frequency

- Select the frequency indicated in the note.
- Steroid tapers: enter the total dose for the first day of the taper and enter "qd" for the frequency. For example for the order, "prednisone taper 20mg tid x 5 days, 20 mg bid x 5 days, 20 mg qd x 5 days," you would enter, "prednisone 60mg qd."
- If the dose varies during the day (e.g., 3 puffs in the morning and 2 puffs in the evening), enter the total dose for one day (in this example, 5 puffs) and enter 'qd'.
- If the frequency noted in the record does not appear on the list, select "Other/No data."

Medication Route

- Select the route indicated in the note if it is either Inhaler/nebulizer or Oral.
- If the route noted in the record is other than inhaled or oral, select "Other/No data."

Medication Status

Start

The provider's note must specifically state that the prescription was the initial prescription for this medication. An initial prescription means that the patient did not have a prescription for the medication prior to that date.

- Notation may be that the medication was being started, the medication was being added to current medication regime, the patient was to begin the prescription, etc.
- The initial order for a steroid burst or taper
- The medication had been discontinued previously and is now being resumed (e.g., prednisone was discontinued on 4/4/99 and was started again on 6/6/00).

Do **not** assume that the medication is being started based on prior documentation (or lack of documentation) in the chart. With the exception of the initial prescription for a steroid burst or taper (implies a "start" status"), the notation must specifically indicate that this is a new medication prescription for the patient.

Stopped

- A medication is discontinued by the provider
- A medication that the patient had been taking was discontinued by the provider and was not prescribed again by the provider on that date.

Do **not** accept for "stopped":

- ◆ Medication temporarily stopped when patient has surgery (i.e., the drug is to be stopped for a few days and then resumed after surgery).
- ◆ Patient refusal to begin taking medication when it was initially prescribed.
- ◆ Patient noncompliance (i.e., not taking medication as prescribed or has stopped taking the medication).

Continued, same/change unspecified/unknown dose

- A medication that the patient had been taking prior to that date is continued on that date (1) at the same dose, (2) change in dose is not specifically indicated, or (3) the dose is not noted.
- A medication is listed as a current medication on that date and is not discontinued on that date and (1) the dose is not changed or (2) the dose is not noted.
- A steroid burst was prescribed on a prior contact and then continued at the current contact (but continued as a short-term burst), select the appropriate medication (i.e., designated as "short-term") and select this Status option.

Continued, increased dose

- There is a **notation** that a medication the patient had been taking prior to that date is continued on that date with an increased dose. This may be an increase in either the amount (e.g., from 250 mg to 300 mg) or the frequency (e.g., from bid to tid).
- The note must specifically indicate the increase:
 - A specific notation is made by the provider (e.g., "will increase/raise dose")
 - The medication and dose is listed in current medications and is listed again in the plan at the end of the contact at a higher dose.

Do **not** determine an increase in dose based on documentation prior to the contact. If the notation does not indicate an increase by either type of notation listed above, select "Continued, same/change unspecified/unknown dose."

Continued, decreased dose

- There is a **notation** that a medication the patient had been taking prior to that date is continued on that date with a decreased dose. This may be a decrease in either the amount (e.g., from 500 mg to 300 mg) or the frequency (e.g., from tid to bid).
- The note must specifically indicate the decrease:
 - A specific notation is made by the provider (e.g., "will decrease/lower dose")
 - The medication and dose is listed in current medications and is listed again in the plan at the end of the contact at a lower dose.
- A steroid taper was prescribed on a prior contact and then continued at the current contact (but continued as a taper), select the appropriate medication (i.e., designated as "short-term") and select this Status option.

Do **not** determine a decrease in dose based on documentation prior to the contact. If the notation does not indicate a decrease by either type of notation listed above, select "Continued, same/change unspecified/unknown dose."

Refused

- The patient refuses to start taking a medication when it is first prescribed.

Do **not** accept:

- ◆ Discontinuation by the patient for any reason after he/she started the prescription (e.g., ran out of drug, noncompliance, forgot to take it).

Other/No data

- The patient was noted to be on the medication, but it was not re-prescribed/refilled or stopped on that date
- A PRN prescription for a steroid is given to be used for the next exacerbation/flare
- Some other status was indicated
- The status is unclear

PULMONARY TESTS

39. Enter the indicated data regarding all of the following FEV1 or PEFr/Peak flow tests noted on the current contact:

- (1) Test(s) performed at the contact (the office or pulmonary lab);**
- (2) Predicted values/office or lab test(s) done on previous date;**
- (3) Home monitoring values reported by the patient/parent; or**
- (4) Test(s) ordered and results are NOT available anywhere in record.**

Location:

- Progress Notes
- Laboratory Results: Spirometry, Spirogram, Pulmonary function tests (PFT)
- Flow Sheet

Type of Recording

Enter **each** Type of Recording as listed below that was noted at the contact.

Test performed at the contact (the office or pulmonary lab)

Select this response if the test was performed during the current contact and was administered either by the provider or in a pulmonary lab. If it is unclear whether it was performed at home or by the provider and the value is reported as part of the physical exam or "O" (objective), select this response. **A notation that spirometry was done indicates that both an FEV1 and a PEFr/PEF were performed. In which case you can enter both values (or "NA") on the same row.**

Predicted values/results of office or lab test(s) done on previous date

Select this response when there is a notation of:

- (a) Predicted values, values described as "goals."
- (b) Test result noted to be the patient's "normal" or baseline obtained on a previous date
- (c) Results of tests done in the office or a pulmonary lab that were performed prior to the current contact.

Do **not** choose this selection if the provider is noting peak flow home monitoring results.

Home monitoring values reported by the patient/parent

Select this response if the test was a peak flow performed by the patient and reported at the current contact. If it is unclear whether it was performed at home or by the provider and the value is reported as part of the chief complaint, history or "S" (subjective), select this response.

Test ordered and results are NOT available anywhere in record

Select this response only if the test is ordered at this contact and the test results are not found elsewhere in the record.

Other, No data

Select this response if a test value is noted that cannot be classified as any of the above choices.

Test Sequencing

If the note lists several test results without indicating the sequence in which the tests were performed (e.g., 250, 350, 300), assume that they are listed in the order they were obtained (i.e., 250 would be the "first test" and "300" would be the last test in that series).

First test of the contact

Select this response option when you are entering the results of

- The first FEV1 or PEFr/PEF at this contact
- The only FEV1 or PEFr/PEF at this contact

Neither first nor last test

Select this response option only when you are entering the results of the FEV1 or PEFr/PEF at this contact AND the test was not the first test of the contact or the last test of the contact.

Last test of the contact

Select this response option only when you are entering the results of the last FEV1 or PEFr/PEF performed at the contact.

No data

Select this response if you are unable to determine the timing of the test.

Treatment during contact

Treatment here refers to:

- Short-acting beta-2 agonist
- Breathing treatment
- Respiratory treatment
- Asthma treatment
- Rescue medication

Prior to beta-2 treatment

Select this response option if the test that you are entering was performed prior to the administration of any beta-2 agonist treatment at this contact.

After beta-2 treatment

Select this response option only if the test you are entering was performed after the **initial** administration of any beta-2 agonist treatment at this contact.

Beta-2 treatment not administered at contact

Select this response option only if there was no beta-2 agonist treatment administered during the entire contact.

Where performed

If you selected "Test(s) performed at the contact (the office or pulmonary lab)" you will be asked to indicate the specific location here.

Type of test

Assessment

- The provider was obtaining the pulmonary tests to evaluate the patient's current status (i.e., the patient presented with asthma symptoms or c/o increasing symptoms).
- The home monitoring values were **other than** the patient's personal best.

Baseline

- The value **must be indicated to be** a baseline value, "normal" or a personal best ("best"). If a range is given, enter the **higher** number of the range.
- If several baseline FEV1 or PEF/PEFR attempts are documented on a Pulmonary Function report, enter as follows:
 - Enter the pre-treatment (PRE-Rx) value (i.e., prior to treatment with a beta-2 agonist).
 - If more than one pre-treatment value is reported, enter the value that is the patient's "best" or "personal best" attempt **prior** to treatment.

If you cannot determine whether the patient was having symptoms at the time of pulmonary lab tests, code the Test Type as "No data."

NOTE: Pre-treatment (PRE-Rx) and post-treatment values do **NOT** indicate that the patient was having symptoms.

Do **not** accept for baseline:

- ◆ Predicted values noted on a pulmonary lab report (enter separately and select "Predicted" for type of test).

Predicted

The predicted values for an FEV1 and PEFr/PEF are calculated values based on patient characteristics such as gender, age and weight. They usually appear on a pulmonary function test ("Predicted," "Pred") but may be noted by the provider in a progress note.

May be described as a "goal."

If noted as a range, enter the **higher** end of the range (e.g., for "goal is 200-250", enter 250).

Do **not** accept for predicted:

- ◆ Percent (%) of predicted
- ◆ Baseline test results
- ◆ Personal best results
- ◆ Pre or post treatment results
- ◆ Values that are not specifically noted to be "predicted" values

FEV1 Value

Forced Expiratory Volume in One Second (FEV1) is the amount of air that is forcefully exhaled in the first second of the Forced Vital Capacity (FVC) test.

Enter the numerical value of the test result, rounding to one decimal place.

If a range is given (e.g., 1.6 – 2.3) use the **higher** number (2.3 in this example).

If there is no FEV1 value noted, enter "NA."

Do NOT Accept:

- ◆ Results that are not numerical (e.g., "normal," "increased")
- ◆ Forced Expiratory Time (FET)
- ◆ Forced Vital Capacity (FVC)

PEFR/Peak Flow value

Pulmonary expiratory flow rate (PEFR/PEF) is the peak flow rate during expiration.

Enter the numerical value of the test result, rounding to one decimal place.

If a range is given (e.g., 250-300) use the **higher** number (300 in this example).

For **home monitoring** peak flows:

If the patient reports both a personal best (normal, usual) and a recent assessment peak flow, enter both tests. The "Type of Recording" would be "Home monitoring..." for both. The Type of Test would be "Baseline" for the former and "Assessment" for the later.

If there is no PEFR/PEF value noted, enter "NA."

Do **not** Accept:

- ◆ Values that are not numerical (e.g., "normal," "increased")
- ◆ Forced expiratory volume
- ◆ FEV1

PEFR/Peak Flow Units

Select the correct units, if known, of the PEFR/PEF value.

If the units are not noted, select "No data."

EXACERBATION and HISTORICAL WORSENING

40. Was this an asthma follow-up contact?

A follow-up contact is any visit during which the patient's asthma is addressed other than the visit during which the initial diagnosis of asthma was made. If it is not the date of the initial asthma diagnosis, enter "Yes" for this question.

Indicate whether the following were noted on the current contact.

41. Select "No/No data" for Question 41

This question should always be answered "NA."

42. List of medications

Indicate whether the provider reviewed the patient's current medications on presentation of the exacerbation.

Accept:

- List of current medications on the progress note or on the same date in a medication log
- Discussion of asthma medications that lists the medications
- "Patient is currently taking....."
- List of medications in the Plan (order section)
- "No medications"

Do **not** accept:

- ♦ A notation that medications were reviewed or refilled without a list of the specific medications.

43. Presence/absence of recent oral corticosteroid use **prior to the visit** (current Rx, recent taper, no use, etc.)

Indicate whether there is a notation on the date of the current exacerbation regarding the patient's recent use/nonuse of oral corticosteroid(s)/steroid(s) **prior to** that contact. Refer to the Oral Steroid medication list for eligible medications.

Accept:

- Oral corticosteroid(s) listed or noted as a current medication
- Mention of past use of corticosteroid(s)
- Notation that patient had recently (past month) had a steroid taper
- Notation of the most recent dose/burst of any oral corticosteroid
- Recent withdrawal of oral corticosteroids/steroids
- Has not been taking oral corticosteroids/steroids recently

Do not accept:

- ♦ An order for a steroid. The question is looking for a notation in the assessment

44. Presence/absence of prior ER or hospital visits for asthma

- Any notation that the patient **has** or **has not** recently had an Emergency Department visit or was hospitalized to treat the asthma.
- A listing of all prior ER visits, **urgent care visits** and/or hospitalizations **to treat the asthma**

NOTE: Also accept a notation regarding prior visits to an urgent care center for asthma treatment.

45. Was the patient treated with (i.e., received) inhaled or systemic corticosteroids at this contact?

Indicate whether an inhaled or nebulized corticosteroid/steroid or a systemic corticosteroid/steroid - oral (po), intramuscular (IM) or intravenous (IV) - was administered to the patient during the contact. Refer to the Inhaled Steroid, Oral Steroid and Parenteral Steroid medication lists for eligible medications.

Do **not** accept:

- ◆ A prescription given to the patient

46. Was the patient sent directly from the physician's office to the ED or the hospital for admission following this contact?

Accept:

- Any documentation that the patient was admitted **directly** to the hospital or the ER **as a result of** the asthma contact.

Do **not** accept:

- ◆ The patient was sent home and then presented subsequently to the ER or the hospital for admission.
- ◆ Any hospital admission **not related** to the asthma contact or an asthma exacerbation.

Location:

- ⊗ Current History & Physical
- ⊗ Progress Notes
- ⊗ Admission Note
- ⊗ Discharge Note
- ⊗ Physicians Orders

REFERRALS, EDUCATION & FOLLOW-UP

47. Is there documentation at this contact that the patient was referred to an asthma MD specialist/clinic, had seen by an asthma MD specialist/clinic, or was going to visit an asthma MD specialist/clinic?

This question is looking for any indication that the patient will be or has been seen by an asthma specialist or at a clinic specializing in asthma management, or that the provider has referred the patient to an asthma specialist or clinic.

Asthma specialist

The specialist must be an MD.

Asthma specialist:

- Allergist
- Pulmonologist
- Immunologist
- MD noted to have expertise in asthma management

Asthma specialty clinic/center/group/office:

- Asthma clinic/pediatric asthma clinic
- Respiratory/pulmonary clinic
- Allergy clinic

Accept:

- Visit to an asthma MD specialist/clinic
- Notation in a progress note, home health visit note, etc., that the patient had been seen by an asthma MD specialist/clinic
- A referral to an asthma MD specialist/clinic
- A notation that the patient will be seeing, is scheduled for, reminded of a visit to an asthma MD specialist/clinic
- Refusal (patient or parent) of a referral to an asthma MD specialist/clinic

Do **not** accept:

- ◆ Notation by an asthma specialist/clinic regarding the next visit or time interval for the next visit (e.g., asthma clinic indicates the patient is to return in a month).

Location:

- ⊗ Current History & Physical
- ⊗ Progress Notes
- ⊗ Consult reports

48. Is there documentation at this contact that the patient was referred to, had seen, or was going to see a provider for the purpose of asthma education?

This question is looking for any indication that the patient will be seen by, has been seen by or was referred to a provider for the purpose of receiving asthma education. The provider may or may not be referred to as an asthma educator. Education includes both individual and group sessions and may be part of an asthma visit for purposes other than asthma education.

Asthma education may include:

- Counseling, discussion or review regarding asthma diary
- Recognizing, handling asthma symptoms/warning signs of impending episode
- Notation of "asthma education/counseling/teaching, etc."
- Discussion/education/review of allergen/trigger control
- Discussion/education/review of exercising safely
- General discussion/review of risk factors/asthma self-management
- Dietary issues for asthmatics (e.g., avoid sulfite-containing food)

Accept:

- The patient will be attending, has attended, is scheduled for or reminded to attend a group educational session/program for asthma education
- Notation in a progress note, home health visit note, etc., that the patient had been seen by a provider or patient educator for asthma education
- A referral to a patient educator for asthma management
- The patient will be seeing, has seen, is scheduled for/reminded of a visit to a patient educator for asthma management

49. Indicate the type of asthma education provided at this contact. Select ALL that apply.

GENERAL GUIDELINES:

Education consists of an encounter in which counseling, education, advice, teaching or instruction is received by the patient/parent from the provider in the form of a discussion and/or written material. The notation often refers to a discussion, review of information, or encouragement with regard to the patient's management of the condition.

Do **not** accept for education at the visit:

- ◆ Notations regarding return appointments, RTC, etc.
- ◆ Descriptions of activities that have occurred entirely in the past. (e.g., "seen by NP for asthma management last month.")
- ◆ The provider's plan (i.e., what the provider will do) such as; "will double her dose in 2 weeks if she doesn't respond" or "start peak flow monitoring at home."

- ◆ Notation or checklist completed by provider or patient that indicates what the patient had been doing prior to that contact (e.g., "adhering to medication regime").

In order to qualify as education, the notation must include **at least one** of the following 4 characteristics:

1. Involvement of the patient/parent in the management of the disease (i.e., something that the patient will do, was advised to do or was given instruction on, not something the provider will do).

Accept:

- Discussed/demonstrated home peak flow monitoring.
- Reviewed methods to reduce exposure to allergens/triggers

2. A statement by the provider about what the patient will or should do in the future in the management of the disease. This does **not** include what the patient/parent has been doing up until the time of the notation.

Accept:

- Advised to check peak flow daily and after exercise
- Encouraged to reduce exposure to allergens/triggers
- Patient is reluctant to or is resistant to doing recommended risk management (e.g., resistant to maintaining symptoms diary).

Do **not** accept:

- ◆ She monitors peak flows regularly
- ◆ Has been maintaining a symptom diary

3. Written material about the disease, medication, risk factors, complications, etc. is given to or discussed with the patient.

4. A checklist completed by provider or patient that indicates what type of education or advice was given to the patient or addressed at the contact (i.e., implies a discussion took place).

How to Use an MDI

- Instructions/demonstration on how to use MDI (e.g., "MDI instruction given")
- An order by the provider for instruction to be given

Role of medication

- The note must imply or state that a medication that appears in the "Asthma Medications" list was discussed or reviewed. (NOTE: beta blockers are not included.)
- Education may be regarding side effects, compliance, when and how to take/administer the medication, how medication affects symptoms
- Review of the role of short-acting vs long-term controller medications

Do **not** accept for medication education:

- ◆ A medication order or plan.
- ◆ List of current medication.
- ◆ Statements that the patient was told simply what drug to take; or to continue taking the same drugs - what dose; what frequency (e.g., "advised to increase atrovent to 2 puffs bid"). There must be information other than or in addition to what the prescription is (such as a side effects, importance of taking regularly, etc.).
- ◆ Statements that the provider is simply making adjustments in the prescribed dose (may or may not be communicating this to patient).
- ◆ Counseling regarding medication that is not on the "Asthma Medications" list.

Peak flow monitoring

- How and/or when to monitor home peak flows
- Technique to administer (inhaled) medications
- Examples: "Reviewed importance of monitoring peak flows," " Demonstrated peak flow meter."

Other asthma education

- Counseling, education, discussion or review regarding
 - Asthma
 - Asthma diary
 - Asthma management plan, zones
 - Asthma self-management
 - Allergen/trigger control; risk factors
 - Exercising safety
 - Advice to stop smoking; avoidance of second-hand smoke; prescription for a smoking deterrent (e.g., nicotine patch).
- Recognizing, handling asthma symptoms/warning signs of impending episode
- Dietary issues for asthmatics (e.g., avoid sulfite-containing food)

50. Enter the time interval in which the patient was instructed to return for a follow-up visit following the current contact.

(If none enter "NA" for Number and "No data" for Unit.)

This question is looking for the specific time interval (number of days, week, months, years) in which the patient was instructed to return to the office/clinic for the next follow-up visit. If neither a time interval nor a return date is noted, enter "NA" in the Number field and "No data" in the Unit field.

If the time interval is written as a range, (e.g. 3-4 weeks), enter the lower end of the range (3 in this case).

Enter "1 week" for a notation that states:

- The day of the week for the next visit, (e.g., "patient to RTC next Monday")
- "Follow-up visit next week"

Accept:

- RTC (return to clinic) or RTO (return to office) within a specified time period
- Notation of the date or time interval for the next visit (either scheduled or to be scheduled)
- Notation of "Follow-up" to be within certain time period (e.g., "follow-up in 7-8 days") without specifying visit or phone (i.e., assume that a visit is intended).

Do **not** accept:

- ♦ A notation for a PRN return visit (e.g., if necessary, if symptoms persists, etc.).
- ♦ Instructions for a follow-up phone call (i.e., follow-up must be a visit),

Number: Enter the number of the time interval. For example, for a notation of "RTC in 2 weeks," you would enter "2." If a date is specified rather than a time interval, calculate the time interval. Enter NA if neither a time interval nor a return date is noted.

Unit: Select the unit of the time interval. For example, for a notation of "RTC in 2 weeks," you would select "Weeks." If a date is specified rather than a time interval, calculate the time interval. Select "No data" if neither a time interval nor a return date is noted.

End of Contact Section

Enter the next contact by clicking on the "Add Contact Date" button.

When you have entered all contacts in the record, continue on to remaining sections of the tool.

ALLERGIES & NON-VISIT MEDICATIONS/FLU VACS SECTION

NOTE: This section should be completed only after all contacts have been entered in the Contact Section.

51. Select each medication or medication category that is either a medication allergy or noted to be a medication that is contraindicated for this patient. Enter all allergies/contraindicated medications ONCE or select either "None noted/No data." (OK to look prior to the study period.)

Select each medication from the list that is noted in the record to be either an allergy or to be contraindicated for the patient. The entry may be a specific medication or a category of medications. The note does not have to be dated and may be entered prior to the study period.

Do **not** enter:

- ◆ Allergies/contraindicated medications that were **first** discovered **after** the study period.

Location:

- ⊗ Problem list
- ⊗ Allergy alert flag
- ⊗ History Questionnaire
- ⊗ Progress note
- ⊗ Initial History and Physical
- ⊗ Inpatient admission H&P/Discharge Summary

52. Enter all dates not entered in the Contact Section on which the patient received an influenza vaccine (e.g., noted on vaccination record or log).

Accept:

- Entry on an immunizations/vaccine administration log
- Notation that influenza vaccine was ordered or administered at a visit that is not eligible for the contact section (e.g., record from another clinic).

Do **not** accept:

- ◆ Discussion about an influenza vaccine (without evidence of it being administered)
- ◆ Influenza vaccine recommended (without evidence of it being administered)

Accept:

- Influenza/flu virus vaccine/flu vaccine/flu shot
- Flu Shield
- Fluogen
- Flushield
- Fluvirin
- Fluzone
- Fluzone PFS
- Fluzone SV
- Fluzone WV

NON-CONTACT MEDICATIONS:

53. Enter all medications listed that were not noted during a contact (of any type) that were started, stopped (discontinued), continued (including dose increases and decreases) and refused between BEGIN DATE and 6/30/01.

Medication

Enter the indicated data for each medication that was noted by the study facility, an asthma specialist or asthma clinic and was not documented within a contact note.

Location:

- ⊗ A "care note" in a location such as progress notes, transfer form, etc. that is not a patient contact
- ⊗ Pharmacy summary (from study facility)
- ⊗ Medication log (from study facility)

Do **not** accept:

- ◆ A notation of a medication (regardless of status) by a facility other than the study facility
- ◆ Notations such as "same as above," "continue same meds," etc.

GENERAL INFORMATION

- Enter the medication as noted in the record (i.e., generic or brand)
- If a classification (e.g., ACE Inhibitor) is noted rather than the specific drug, select the classification from the medication list.
- Corticosteroids (steroids) may be prescribed as continuous therapy or for short-term periods. The "short-term" prescriptions are called "taper" or "burst" and are typically prescribed to treat an exacerbation/flare.
 - Continuous steroid use: May also be referred to as chronic steroid use. The steroid is taken continuously every day or every other day (i.e., not intermittently) at a consistent dose and frequency for a period of greater than 30 days.
 - If the steroid is prescribed continuously (i.e., not short-term), or if it cannot be determined whether the prescription is short-term, select the prescribed steroid specified on the list as "not short-term").
 - Short term steroids:
 - Steroid burst: The burst is a short-term (usually 1-2 weeks) prescription for a steroid with a consistent daily dose and frequency (e.g., prednisone 20 mg tid x 7 days).
 - Steroid taper: A taper is a short-term prescription with a dose and/or frequency that tapers off over 1-2 weeks. The taper may be prescribed as a "package" such as "Methylprednisolone Dose Pack" or as "methylprednisolone" with the tapering dosage written out (e.g., "methylprednisolone 4 mg tid x 4 days, 3 mg tid x 4 days, 2 mg tid for 4 days").
 - If a steroid dose pack is prescribed, select that specific dose pack from the medication list. If a dose pack is prescribed that is not listed on the medication drop down list, contact the RAND research team.
 - If a steroid taper is written out, select the prescribed steroid that is designated as "(short-term)" on the medication list (e.g., "Methylprednisolone (short-term)").
 - If a short-term steroid was prescribed on a prior contact and then continued at the current contact (but continued as a short-term prescription), select the appropriate medication and enter the "Continued" status that applies (i.e., "Continued, decreased dose" for a taper and "Continued, same dose" for the burst).
 - See "Dose" and "Frequency" guidelines below for instructions on entering that data for tapers.
- Generic combination medications are listed with all components (e.g., aspirin/salicylimide/caffeine).
 - The order of the medications in a combination medication as listed in the drop-down medication list may differ from the order listed in the record. Follow the following steps when entered a combination medication.
 - Type in the first 3 letters of the first medication of the combination medication as listed in the record and look for the same combination medication on the drop-down list.
 - If you find the same combination, but in a different order, select it. For example, you may find "aspirin/Caffeine/salicylimide."
 - If you don't find the same combination, type in the second medication of the combination medication as listed in the record.
 - If you find the same combination, but in a different order, select it.

- o Continue to do this for all medications listed in the combination medication until you have either found the combination medication on the drop-down list or searched for each component medication unsuccessfully.
- Medication lists such as from pharmacy data or medication summaries: Include medications that are not found in the progress notes (i.e., do not duplicate entries). Include both the initial prescription and the "last filled" date.
- Do **not** code the initial prescription as "Start" unless you are certain that it is the very first time the drug is being prescribed for the patient (i.e., "Initial prescription" on a summary may be the first prescription ever or may just be a new prescription for a drug the patient has been on.)
- Include orders or prescriptions written on lab reports. Use the date of the note if available. Otherwise use the date of the lab report.

Do **not** enter:

- ◆ Medications noted/administered during a visit/contact.
- ◆ Medications that the patient has tried in the past (e.g., previous trial of cromolyn) unless the date is specified.
- ◆ Medications listed on an ECG report/request.
- ◆ Medications that are part of a study in which the patient is participating and the drug given to the patient is unknown (e.g., Altolomet vs. placebo).

Ordered as PRN?

- Indicate whether the frequency was PRN. If frequency was not indicated, enter "No data."
- PRN includes medications that are to be taken in an emergency only (e.g., for the next asthma flare).

Medication Dose

- Enter the numerical dose as indicated in the note. If a dose is written by weight (e.g., "prednisone 1 mg/kg" enter the dose as written ('1', in this example).
- For inhalers the dose is usually noted in "puffs" (e.g., Atrovent 2 puffs qid a day)
- If the dose is written as a range (1-4 mg) and it is NOT a PRN order, enter the lowest number.
- Steroid taper: enter the total dose for the first day of the taper and enter "qd" for the frequency. For example for the order, "prednisone taper 20mg tid x 5 days, 20 mg bid x 5 days, 20 mg qd x 5 days," you would enter, "prednisone 60mg qd." Use the same rule to enter an order to continue a taper that was started on a prior date. For example, "continue taper at 20 mg bid x 5 and 20 mg qd x 5" would be entered "40 mg qd").
- Steroid burst: enter the dose as you would any other medication (e.g., the dose and If the dose varies during the day (e.g., 3 puffs in the morning and 2 puffs in the evening), enter the total dose for one day (in this example, 5 puffs) and enter 'qd').
- If the dose is not noted, enter "NA."

Medication Unit

- Select the appropriate unit, or "Other" if the unit is not listed.
- If a dose is written by weight (e.g., "prednisone 1 mg/kg" enter the unit as written ('milligram/kg', in this example).
- If the unit is not indicated, check "Other/No data."

Medication Frequency

- Select the frequency indicated in the note
- Steroid tapers: enter the total dose for the first day of the taper and enter "qd" for the frequency. For example for the order, "prednisone taper 20mg tid x 5 days, 20 mg bid x 5 days, 20 mg qd x 5 days," you would enter, "prednisone 60mg qd."
- If the dose varies during the day (e.g., 3 puffs in the morning and 2 puffs in the evening), enter the total dose for one day (in this example, 5 puffs) and enter 'qd').
- If the frequency noted in the record does not appear on the list, select "Other/No data."

Medication Route

- Select the route indicated in the note if it is either Inhaler/nebulizer or Oral.
- If the route noted in the record is other than inhaled or oral, select "Other/No data."

Medication Status

Start

The provider's note must specifically state that the prescription was the initial prescription for this medication. An initial prescription means that the patient did not have a prescription for the medication prior to that date.

- Notation may be that the medication was being started, the medication was being added to current medication regime, the patient was to begin the prescription, etc.
- The medication had been discontinued previously and is now being resumed (e.g., Prednisone was discontinued on 4/4/99 and was started again on 6/6/00).

Do **not** assume that the medication is being started based on prior documentation (or lack of documentation) in the chart. The notation must specifically indicate that this is a new medication prescription for the patient.

Continued, same/change unspecified/unknown dose

- A medication that the patient had been taking prior to that date is continued on that date (1) at the same dose, (2) a change in dose is not specifically indicated, or (3) the dose is not noted.
- A medication is listed as a current medication on that date and is not discontinued on that date and (1) the dose is not changed or (2) the dose is not noted.
- A steroid burst was prescribed on a prior contact and then continued at the current contact (but continued as a short-term burst at the same dose), select the appropriate medication (i.e., designated as "short-term") and select this Status option.

Continued, increased dose

- There is a **notation** that a medication the patient had been taking prior to that date is continued on that date with an increased dose. This may be an increase in either the amount (e.g., from 250 mg to 300 mg) or the frequency (e.g., from bid to tid).
- The note must specifically indicate the increase:
 - A specific notation is made by the provider (e.g., "will increase/raise dose")
 - The medication and dose is listed in current medications and is listed again in the plan at the end of the visit at a higher dose.

Do **not** determine an increase in dose based on prior documentation. If the notation does not indicate an increase by either type of notation listed above, select "Continued, same/change unspecified/unknown dose."

Continued, decreased dose

- There is a **notation** that a medication the patient had been taking prior to that date is continued on that date with a decreased dose. This may be a decrease in either the amount (e.g., from 500 mg to 300 mg) or the frequency (e.g., from tid to bid).
- The note must specifically indicate the decrease:
 - A specific notation is made by the provider (e.g., "will decrease/lower dose")
 - The medication and dose is listed in current medications and is listed again in the plan at the end of the visit at a lower dose.
- A steroid taper was prescribed on a prior contact and then continued at the current contact (but continued as a taper), select the appropriate medication (i.e., designated as "short-term") and select this Status option.

Do **not** determine a decrease in dose based on prior documentation. If the notation does not indicate a decrease by either type of notation listed above, select "Continued, same/change unspecified/unknown dose."

Stopped

- A medication is discontinued by the provider
- A medication that the patient had been taking was discontinued by the provider and was not prescribed again by the provider on that date.

Do **not** accept for "stopped":

- ◆ Medication temporarily stopped when patient has surgery (i.e., the drug is to be stopped for a few days and then resumed after surgery).
- ◆ Patient refusal to begin taking medication when it is initially prescribed.
- ◆ Patient noncompliance (i.e., not taking medication as prescribed or has stopped taking the medication).

Refused

- The patient refuses to start taking a medication when it is first prescribed.

Do **not** accept:

- ◆ Discontinuation by the patient for any reason after he/she started the prescription (e.g., ran out of drug, noncompliance, forgot to take it).

Other/No data

- Some other status was indicated
- The status is unclear

54. Did the patient have a prescription for an inhaled or nebulized asthma medication prior to BEGIN DATE? (OK to look prior to the study period.)

Look for any indication that the patient had been taking any inhaled or nebulized asthma medication prior to the date indicated. If you are unable to determine whether the first prescription for any of these drugs was prior to the study period, you may look prior to the study period for evidence of a prescription. You need only find one prescription for any inhaled or nebulized asthma drug to answer, "Yes" to this question.

Refer to the medication lists for:

- Inhaled steroids
- Ipratropium
- Beta-2 agonists, short-acting and long-acting

Location:

- ⊗ Problem list
- ⊗ Medication/pharmacy log
- ⊗ History Questionnaire
- ⊗ Progress notes
- ⊗ Initial History and Physical
- ⊗ Inpatient admission H&P/Discharge Summary

Enter the earliest date on which the patient was prescribed any of the following during the study period for administration of asthma medications:

A spacer device can be a simple extension tube or a proprietary device. It is a holding chamber with a port at one end to which a metered-dose inhaler (MDI) is attached and a mouthpiece or a mask at the other end. It improves the delivery of the inhaled medication by optimizing inhaled particle size, allowing large particles to settle out. This prevents the need for coordination of breathing and inhaler use.

A spacer may be used with any inhaled asthma medication such as cromolyn, beta2-agonists or corticosteroids.

Location:

- ⊗ Problem list
- ⊗ Progress notes

- ⊗ Initial History and Physical

55. A spacer or holding chamber WITHOUT a mask

Accept any of the following prescribed **WITHOUT** a mask or prescribed without mentioning a mask:

- Spacer or holding chamber
- Inhal-Aid
- Aerochamber
- Plastic or paper tube

56. A spacer or holding chamber WITH a mask

Accept any of the following prescribed **WITH** a mask ("mask" must be specifically indicated):

- Spacer or holding chamber with mask
- Inhal-Aid with mask
- Aerochamber with mask

57. A nebulizer or air compressor

Nebulizers use compressed air to turn a solution of liquid medication into a fine mist that can be easily breathed in through a mask of mouthpiece. A nebulizer is prescribed for children who are too young or unable to use a spacer.

Accept:

- Rx for nebulizer or aire compressor
- An Rx for a nebulizer solution (e.g., "nebs," "sol")

ASSESSMENT SECTION

NOTE: This section should be completed only after all contacts have been entered in the Contact Section.

58. When was the patient first admitted to an intensive care unit (ICU) to treat the asthma between BEGIN DATE and 6/31/01?

Enter the first date during the study period on which the patient was admitted to a hospital intensive care unit (ICU) to treat the asthma. If the actual date is not noted, use the guidelines for calculating or estimating a date in "General Guidelines." If you cannot calculate or estimate the date and you are certain that the ICU admission was within the time period specified, enter the date of the note.

Include ICU admission for a COPD exacerbation, pneumonia, acute bronchitis or other respiratory problem that has exacerbated the asthma condition.

Location:

- ⊗ History Questionnaire
- ⊗ Progress notes
- ⊗ Initial History and Physical
- ⊗ Emergency room/department documentation
- ⊗ Inpatient admission H&P/Discharge Summary
- ⊗ Consult notes

59. Enter the age (in years and months) of all height measurements plotted on the growth chart between 2 years, 0 months and 16 years, 11 months.

Refer to the patient's growth chart. For each plotting on the chart/graph, the age of the patient is noted rather than the date of the plotting. Find the age of the patient in years and months (e.g., 7 years, 3 months) and enter those numbers as indicated for each plotting on the chart.

60. Enter all dates on or after BEGIN DATE when a theophylline level was ordered or obtained.

If both the order and the results are noted in the chart, enter the date of the results.

Do **not** accept:

- ◆ Theophylline levels performed in the ER, hospital or ordered by a facility other than the study facility.

Accept an order or results for:

- Serum theophylline
- Serum aminophylline
- Therapeutic drug level of theophylline

Location:

- ⊗ Current History & Physical
- ⊗ Progress Notes
- ⊗ Flow sheet
- ⊗ Physicians Orders
- ⊗ Laboratory Results

61. Enter all FEV1 and PEF/PEFR/Peak Flow test results that are NOT associated with a contact and that were performed or reported between BEGIN DATE and 6/30/01.

Date of test

Enter the date of each FEV1 or PEF/PEFR/peak flow test not entered in the Contact section (e.g., pulmonary lab).

- If a baseline FEV1 or PEF/PEFR was performed outside the study period but was noted during the study period, enter the date of the note within the study period.
- **Patient Daily Logs (home monitoring logs): summarize the values on each log monthly by entering the highest value for each calendar month.**

Test Location

Provider's office

An FEV1, PEF/PEFR or peak flow was performed in a **study facility** provider's office but was not documented during a visit to the study facility

Home monitoring

The patient or parent reported peak flow value(s) obtained during home monitoring. Include the 100% peak flow noted in the Green Zone of the Asthma Action Plan.

Pulmonary lab

The test was reported on a lab report or was noted to have been performed in a lab.

Other/No data

The test was performed in a non-study facility or by a non-study provider (e.g., school nurse).

Test Type

Baseline

- The value **must be indicated** to be a baseline value, "normal" or a personal best ("best").
- If a range is given, enter the **higher** number of the range. 4
- The higher value in the 80-100% of "personal best" indicated in the Green Zone of the Asthma Action Plan (Enter the value only if the action plan is dated.)

If the test was performed in a pulmonary lab, the report must indicate that the test was a routine or baseline test (i.e., not done while the patient was symptomatic). If you cannot determine whether the patient was having symptoms at the time of pulmonary lab tests, code the Test Type "No data."

NOTE: pre-treatment (PRE-Rx) and post-treatment values do **NOT** indicate that the patient was having symptoms.

If several baseline FEV1 or PEFr/PEF attempts are documented on a Pulmonary Function report, enter as follows:

- Enter the pre-treatment (PRE-Rx) value (i.e., prior to treatment with a beta-2 agonist).
- If more than one pre-treatment value is reported, enter the value that is the patient's "best" or "personal best" attempt **prior** to treatment.

Predicted

The predicted values for an FEV1 and PEFr/PEF are calculated values based on patient characteristics such as gender, age and weight. They usually appear on a pulmonary function test ("Predicted," "Pred") but may be noted by the provider in a progress note.

- Select "Predicted" for values noted to be the patient's goal for peak flows.
- If a range is given, enter the **higher** number of the range.

Do **not** Accept:

- ◆ Percent (%) of predicted
- ◆ Baseline test results
- ◆ Personal best results
- ◆ Pre or post treatment results
- ◆ Values that are not specifically noted to be "predicted" values.

FEV1 Value

Forced Expiratory Volume in One Second (FEV1) is the amount of air that is forcefully exhaled in the first second of the Forced Vital Capacity (FVC) test.

Enter the numerical value of the test result, rounding to one decimal place.

If a range is given (e.g., 1.6 – 2.3) use the **higher number (2.3 in this example)**.

If there is no FEV1 value noted, enter "NA."

Do **not** accept:

- ◆ Results that are not numerical (e.g., "normal," "increased")
- ◆ Forced Expiratory Time (FET)
- ◆ Forced Vital Capacity (FVC)

PEFR/Peak Flow value

Pulmonary expiratory flow rate (PEFR/PEF) is the peak flow rate during expiration.

Enter the numerical value of the test result, rounding to one decimal place.

If a range is given (e.g., 250-300) use the **higher number (300 in this example)**.

For **home monitoring** peak flows:

If the patient reports both a personal best (normal, usual) and a recent assessment peak flow, enter both tests. The "Type of Recording" would be "Home monitoring..." for both. The Type of Test would be "Baseline" for the former and "Assessment" for the later.

If there is no PEFr/PEF value noted, enter "NA."

Do **not** accept:

- ◆ Results that are not numerical (e.g., "normal," "increased")
- ◆ Forced expiratory volume
- ◆ FEV1

PEFR/Peak Flow Units

Select the correct units, if known, of the PEFr/PEF value.

If the unit is not noted, enter "No data."

Location:

- ⊗ Current History & Physical
- ⊗ Progress Notes/Flow sheet
- ⊗ Laboratory Results: Spirometry, Spirogram, Pulmonary function tests (PFT)

COMORBIDITIES

62. Indicate whether the patient had a history or diagnosis of any of the following conditions.

For each of the conditions listed below, indicate whether the patient had a history or diagnosis of that condition (e.g., noted in the past or current history, noted as the reason for a visit or an admission, noted as an impression or a diagnosis of that condition). The date of initial diagnosis does not have to be during the study period.

Inpatient documentation: refer to the Admission History and Physical and Discharge Summary only.

Accept:

- Provider's notation of history or diagnosis
- Patient's report of history
- Notation on a Problem List or intake form

Do **not** accept:

- ◆ A rule-out (RO), possible, probable or "suggestive of" diagnosis except where noted (i.e., AIDs). If there is a conflict in the chart (R/O versus history of/diagnosis of) assume the patient has the history/diagnosis on the date indicated.
- ◆ A diagnosis that is preceded by "...symptoms consistent with" (e.g. patient has symptoms consistent with peripheral neuropathy).
- ◆ A medication as evidence of a diagnosis
- ◆ A diagnosis written as a result of a test or exam except where indicated

Location:

- ⊗ Problem List
- ⊗ History Questionnaire
- ⊗ Progress notes
- ⊗ Initial History and Physical
- ⊗ Emergency room/department documentation
- ⊗ Inpatient admission H&P/Discharge Summary
- ⊗ Consult notes

Cerebrovascular Disease (CVD)

- Cerebrovascular Disease
- Cerebral insufficiency
- Arteriovenous malformation (AVM)
- Transient ischemic attack (TIA)
- Cerebrovascular accident (CVA)
- Stroke/Stroke in evolution
- Cerebral or brainstem infarction/hemorrhage
- Focal hemorrhage in brain
- Hemorrhagic stroke
- Thromboembolic stroke
- Atherothrombotic ischemic stroke
- Embolic or ischemic stroke
- Hemispheric infarct
- Intracerebral hemorrhage (ICH)
- Lacunar infarction
- Ruptured cerebral aneurysm
- Intracerebral/subarachnoid hemorrhage
- Hypertensive encephalopathy

Chronic lung disease (other than asthma)

- Chronic bronchitis
- Simple obstructive lung disease
- COLD - chronic obstructive lung disease
- COPD
- Obstructive airways disease

- Emphysema
- Asthmatic bronchitis [chronic]
- Chronic bronchitis
- Bronchiectasis
- Bronchopulmonary dysplasia (BPD)
- Chronic pulmonary fibrosis
- Cystic fibrosis
- Tuberculosis (TB)

Congenital heart disease

- Anomalous Pulmonary Venous Connections
- Atrial Septal Defect (ASD)
- Atrioventricular Canal (AV-Canal)
- Coarctation of the Aorta
- Double Outlet Right Ventricle (DORV)
- Eisenmenger's Syndrome
- Hypoplastic Left Heart
- Patent Ductus Arteriosus (PDA)
- Pulmonary Stenosis
- Pulmonary Valve Atresia
- Single Ventricle
- Tetralogy of Fallot (TOF)
- Total Anomalous Pulmonary Venous Return (TAPVR)
- Transposition of the Great Arteries
- Tricuspid Atresia
- Truncus Arteriosus
- Ventricular Septal Defect (VSD)

Congestive Heart Failure (CHF)

Accept:

- Heart failure
- Congestive heart failure (CHF)
- Left-sided with right-sided heart failure
- Forward with backward failure
- Left with right ventricular heart failure
- Low output heart failure
- Left-sided heart failure
- Left ventricular heart failure
- Forward failure
- Cardiomyopathy (i.e. ischemic cardiomyopathy, dilated cardiomyopathy, alcoholic cardiomyopathy)

Do not accept:

- ◆ Isolated right heart failure (Right-sided heart failure without left-sided heart failure also mentioned)
- ◆ Failure from diastolic dysfunction
- ◆ Notation of left ventricular dysfunction on an echo, radiologic, or other cardiac procedure.
- ◆ Borderline left ventricular hypertrophy
- ◆ S/P heart transplant

Connective tissue disease

- Rheumatoid arthritis (RA)
- Juvenile rheumatoid arthritis (JRA)
- Infectious arthritis
- Mixed connective tissue disease
- Osteomyelitis
- Lyme disease
- Reiter's syndrome
- Psoriatic arthritis
- Ankylosing spondylitis
- Gout
- Gouty arthritis

- Pseudogout
- Calcium pyrophosphate dihydrate (CPPD)
- Crystal deposition disease
- Relapsing polychondritis (RP)
- Vasculitis
- Lupus Erythematosus – Discoid (DLE) or Systemic (SLE)
- Progressive systemic sclerosis (PSS)
- Scleroderma
- Polymyositis
- Dermatomyositis
- Sclerodermatomyositis
- Inclusion body myositis (IBM)
- Polymyalgia rheumatica
- Temporal/Giant cell/Cranial arteritis
- Polyarteritis nodosa
- Polyarteritis
- Wegener’s granulomatosis
- Mixed connective tissue disease (MCTD)
- Ankylosing Spondylitis (AS)
- Marie-Strumpell disease
- Reiter’s syndrome (RS)

Do **not** accept:

- Osteoarthritis (OA, DJD)
- Arthritis

Dementia

- Dementia
- Static dementia
- Progressive dementia
- Alzheimer’s disease
- Multi-infarct dementia
- AIDS dementia
- Chronic cognitive deficit

Diabetes (mild to moderate)

- AODM - Adult onset DM
- IDDM - Insulin-dependent DM
- Juvenile diabetes
- Juvenile onset type diabetes
- Ketosis-prone diabetes
- MOD - Maturity onset diabetes
- MODM - Maturity onset diabetes mellitus
- MODY - Maturity onset diabetes of youth
- NIDDM - Non-insulin dependent diabetes mellitus
- Nonketosis-prone diabetes
- Type I DM, type 1 diabetes
- Type II DM, type 2 diabetes
- Diabetes – diet controlled, or controlled by oral hypoglycemics
- History of ketoacidosis, hyperosmolar coma

Do **NOT** accept:

- ◆ Secondary diabetes mellitus
- ◆ Borderline diabetes
- ◆ Impaired fasting glucose (IFG)
- ◆ Impaired glucose tolerance (IGT)
- ◆ Gestational diabetes mellitus (GDM)
- ◆ Diabetes with end-organ disease, such as:
 - Diabetic retinopathy
 - Diabetic neuropathy
 - Diabetic nephropathy

- o Arterionephrosclerosis
- o Azotemia
- o Chronic renal disorder
- o Chronic renal insufficiency
- o Renal insufficiency
- o Acute renal failure
- o Diabetic kidney disease
- o Diffuse diabetic or nodular glomerulosclerosis
- o End stage renal disease (ESRD)
- o Kimmelstiel-Wilson lesion
- o Microalbuminuria (as a diagnosis)
- o Proteinuria (as a diagnosis)
- o Papillary necrosis
- o Renal dialysis

Diabetes; End-organ Disease

- Diabetic retinopathy
- Diabetic neuropathy
 - Neuropathic pain/symptoms
- Diabetic nephropathy
 - Arterionephrosclerosis
 - Azotemia
 - Chronic renal disorder
 - Chronic renal insufficiency
 - Renal insufficiency
 - Acute renal failure
 - Diabetic kidney disease
 - Diffuse diabetic or nodular glomerulosclerosis
 - End stage renal disease (ESRD)
 - Kimmelstiel-Wilson lesion
 - Microalbuminuria (as a diagnosis)
 - Proteinuria, albuminuria (as a diagnosis)
 - Notation by provider that the patient has a positive urine test for proteinuria or microproteinuria, or albuminuria
 - Papillary necrosis
 - Renal dialysis

Hemiplegia

- Permanent paralysis of one side (right or left) of the body

Do **not** accept:

- ◆ Temporary hemiplegia (e.g., occurs during a stroke or TIA but resolves or leaves residual weakness.
- ◆ Paraplegia

Liver disease

- Jaundice
- Hepatitis; chronic hepatitis
- Cholestasis
- Hepatomegaly
- Portal hypertension
- History of variceal bleeding
- Ascites
- Portal-systemic encephalopathy
- Hepatic encephalopathy
- Hepatic fibrosis
- Cirrhosis
- Primary biliary cirrhosis (PBC)

Malignant tumor, lymphoma, leukemia

- Any primary malignant solid tumor, such as:

- Hepatocellular carcinoma
 - Hepatoma
 - Adenocarcinoma of the prostate
 - Malignant tumors of the lung, breast, colon
- Lymphoma disease, such as:
 - Lymphosarcoma
 - Hodgkin's disease
 - Non-Hodgkin's lymphoma (NHL)
 - Myeloma
 - Burkitt's Lymphoma
 - Waldenstrom's macroglobulinemia
 - Mycosis Fungoides
 - Any leukemia, such as
 - Acute/chronic myelogenous leukemia
 - Acute/chronic lymphoblastic leukemia (ALL)
 - Acute/chronic myeloid leukemia (AML)
 - Acute/chronic myelocytic leukemia
 - Acute/chronic lymphocytic leukemia
 - Polycythemia vera

Do **not** enter:

- ◆ Basal cell skin cancer
- ◆ Squamous cell skin cancer
- ◆ Metastatic tumor

Metastatic tumor or probable/definite AIDS

- Secondary malignancy that appeared in parts of the body remote from the primary site
- Metastatic carcinoma of unknown primary origin (UPO)
- Metastatic solid tumors (e.g., breast, lung, colon)
- Acquired Immune Deficiency Syndrome (AIDS) – definite or probable
- AIDS related complex

Do **not** accept:

- ◆ HIV positive without a probable or definite definition of AIDS

Myocardial Infarction (MI)

Accept:

- Acute MI (AMI)
- Myocardial infarction (MI)

Do **not** accept:

- ◆ R/O MI

Peripheral Vascular Disease (PVD)

- Peripheral vascular disease (PVD)
- Peripheral atherosclerotic disease
- Intermittent claudication
- Arterial insufficiency
- Untreated thoracic or abdominal aneurysm
- Gangrene

Do not accept:

- ◆ Deep Vein Thrombosis (DVT)

Renal disease, moderate/severe

- End-stage renal disease (ESRD)
- Patient is on dialysis
- Chronic renal failure (CRF)
- Renal insufficiency

- Uremia
- Kidney transplant recipient
- Glomerulonephritis - acute (AGN)/chronic/membranous (MGN)/membranoproliferative (MPGN)
- Postinfectious glomerulonephritis (PIGN)
- Acute nephritic syndrome
- Rapidly progressive nephritic syndrome
- Rapidly progressive glomerulonephritis (RPGN)
- Crescentic glomerulonephritis
- Nephrotic syndrome (NS)
- Chronic nephritic/proteinuric syndrome
- Slowly progressive glomerular disease
- Nephritis – Acute/Chronic/tubulointerstitial
- Toxic nephropathy
- Pyelonephritis – acute/chronic

Do **not** accept:

- ◆ Nephrectomy

Ulcer disease

- Peptic ulcer (PUD)
- Duodenal ulcer
- Gastric ulcer
- Channel ulcer
- Postbulbar ulcer
- Marginal ulcer
- Stomal ulcer

Do **not** accept:

- ◆ Esophageal ulcer

SELF MANAGEMENT SECTION

63. Enter all dates between BEGINDT and 6/30/01 on which there is a separate completed Asthma Action Plan (form) in the record that indicates what action to be taken based on signs and symptoms and/or peak flow measurements.

If there is no Action Plan during the study period, enter the date of the most recent Action Plan prior to the study period.

An asthma action plan outlines the specific steps to be taken when asthma signs and symptoms appear or when there is a drop in peak flow. The action plan is unique to each patient and is developed together by the patient and the provider.

This question is looking for printed Asthma Action Plan forms in the chart that indicate the medication regime to be followed and steps to be taken when peak flows are within a specified range and/or a certain set of asthma signs/symptoms occurs. Action plans usually indicate "zones" that describe the severity or status of the asthma signs and symptoms (e.g., Green Zone, Yellow Zone, Red Zone).

Enter the date of each action plan during the study period. If you do not find at least one action plan during the study period, enter the date of the most recent action plan prior to the study period. If there are no dated action plans in the record, enter "NA."

Do **not** accept:

- ◆ An Action Plan with fewer than 2 zones filled out.
- ◆ An Asthma Action Plan in which the actions to be taken are not specified.
- ◆ A peak flow and/or asthma symptom diary.
- ◆ A blank Asthma Action Plan form (i.e., the peak flow range and action to be taken are not filled in).
- ◆ An Asthma Action Plan that is noted to be written by a facility/provider other than the study clinic.

- ◆ A hand-written action plan by the provider (enter in Q66 below).

64. Is there an undated Asthma Action Plan in the medical record?

Indicate whether there is an undated completed Asthma Action Plan in the medical record.

65. Indicate which types of Action Plan(s) are in the record. Check all that apply.

Home Management Plan

The Action Plan is specifically noted to be an action plan for use at home.

School Management Plan

The Action Plan is specifically noted to be an action plan for use at school.

Asthma Action or Management Plan (type not specified)

The Action Plan does not specify home management or school management.

66. Enter each date on or after BEGIN DATE on which there is a hand written asthma action or management plan noted by the provider that indicates what action should be taken based on signs and symptoms and/or peak flow measurements. Then select all of the components that were present in the plan.

COMPONENTS:

- **Peak flow ranges for the action**
- **Signs and symptoms for the action**
- **Medication regime to follow**
- **When the patient should seek care**
- **Other, unspecified components**

An asthma action plan outlines the specific steps to be taken when asthma signs and symptoms appear or when there is a drop in peak flow. The action plan is unique to each patient and is developed together by the patient and the provider.

This question is looking for a hand-written asthma action plan in the chart that indicates the medication regime and steps to be taken when peak flows are within a specified range and/or a certain set of asthma signs/symptoms occurs. Use the minimum qualifications below to determine if the entry is an action plan.

At a minimum to qualify as an asthma action plan:

1. The plan should describe **at least** 2 zones or levels of severity as well as the actions that should be taken for that level (see examples below).
2. The actions in the plan (e.g., which medication to take, call the provider) must be based either on peak flow rates or on symptoms.
3. In general, the symptoms should be specified (e.g., wheezing, cough) in at least one zone. The Red or Danger zone may state, "if the symptoms worsen" as long as the symptoms were listed in the previous level.

Examples of levels or zones:

- Green zone (baseline level, asymptomatic level), Yellow zone (activities interrupted, symptomatic level) and Red Zone (Danger zone, severe symptoms)
- Description of situation (e.g., "If your peak flow is____, take the following medications....., contact your doctor if..., Go the the ER if your symptoms are.....)

Do **not** accept:

- ◆ An Asthma Action Plan printed form (see previous question).
- ◆ A notation stating only that the patient should contact the provider when asthma symptoms worsen.
- ◆ Vague statements such as what to do "if you have asthma symptoms."
- ◆ A single notation such as take "Albuterol 3 puffs tid for wheezing."

- ◆ Notations such as “reviewed action plan, “changed action plan,” “see asthma plan” when the specifics (peak flow, sign/symptoms, actions) are not noted.

The peak flow range for the action

The plan states that for a specific a range of values for peak flows (e.g., 200-300), specific action(s) should be taken (e.g., medication to be taken, call the doctor, go to the Emergency Room). There may be one or more ranges with actions for each range.

The signs and symptoms for the action

The plan states that for specific signs or symptoms (e.g., presence of absence of coughing, wheezing, difficulty breathing), specific action(s) should be taken (e.g., medication to be taken, call the doctor, go to the Emergency Room).

The medication regime to follow and under what circumstances

The regime may include daily or PRN medication, what to add if the peak flow falls to a specified range or if certain symptoms are present or do not respond to routine medication.

The circumstances under which the patient should seek care

The plan indicates when the patient should call the doctor/clinic or when to go to the Emergency Room (e.g., the peak flow falls to a specific range, specific symptoms are present or do not respond to a specified medication regime).

67. Enter all dates on which the patient was seen by an asthma educator or at an asthma education facility outside of the study clinic.

Enter all dates on which there is documentation from a separate visit to a asthma educator or to an asthma education facility that is not part of the study clinic. Include education given by a school nurse or at a school clinic.

68. Enter all dates on or after BEGIN DATE on which there was evidence of goal setting with the patient.

Look for evidence that the provider discussed the goals of the asthma therapy with respect to what the patient would like to do that they were not currently able to do because of the asthma symptoms.

A goal may be expressed as a statement (“to be able to play soccer”) or as a question (“will I be able to play baseball next summer?”).

Other examples of goals include:

- To be able to sleep better
- To be able to exercise regularly
- To increase my attendance at school/work
- Will I ever be able to stop taking medication?

Location:

- ⊗ Current History & Physical
- ⊗ Progress Notes
- ⊗ Flow sheets