Primary Care and Asthma

- Most common chronic disease of childhood.
- Primary care providers are expected to manage most cases of asthma.
- There are disincentives to frequent referrals to specialists.
Modern Paradox

• Understanding of the pathogenesis and treatment of asthma has increased.
• Understanding the steps to control asthma has increased.
• However, morbidity and mortality from asthma around the world is at an alarmingly high level with only recent flattening in some areas around the globe.

Some Possible Explanations

• Patients and families are not recognizing the symptoms of asthma.
• Clinicians are not making the diagnosis.
• Clinicians are either not providing state of the art care, or, if they are, patients are not adhering to the recommended programs.

Barriers to Achieving Optimal Care

• Patients treat asthma as an acute episodic illness rather than as a chronic disease.
• Physicians assume that patients will put aside their own beliefs, concerns, and goals to follow the treatment plan.
Key Points

1. Assessment of severity and control forms the basis of the treatment plan.
2. Appropriate asthma management requires the proper use of long term control and quick-relief medications.
3. Because asthma symptoms are variable, families need to recognize symptoms and adjust medications at home according to the clinician’s written asthma action plan.

Key Points

4. Good communication between patient and clinician helps identify patient concerns, makes patient teaching more effective and promotes patient self-confidence to follow the treatment plan.
5. Initial patient education can be efficiently and effectively accomplished in several standard primary care visits.

Guidelines
Definition of Asthma

• Asthma is a common chronic disorder of the airways that is complex and characterized by variable and recurring symptoms, airflow obstruction, bronchial hyperresponsiveness and underlying inflammation.
• The interaction of these features of asthma determines the clinical manifestations and severity of asthma and the response to treatment.

A Lot Going On Beneath The Surface

Symptoms
Airflow obstruction
Bronchial hyperresponsiveness
Airway inflammation

Major Triggers

- Tobacco smoke
- Dust mites
- Animal dander
- Cockroach allergens
- Indoor mold
- Wood smoke
- Formaldehyde
- Volatile organic compounds
- Air pollution
- Cold, damp, windy, stormy weather
- Sudden temperature changes
- Weeds, trees, grass
- Strenuous exercise
- Respiratory infections
- Common food allergies
Allergen and Irritant Exposure Control

Clinicians should review each patient’s exposure to allergens and irritants and provide a multipronged strategy to reduce exposure to those allergens and irritants to which a patient is sensitive and exposed, i.e., that make the patient’s asthma worse.

Benchmarks of Good Asthma Control

- No coughing or wheezing
- No shortness of breath or rapid breathing
- No waking up at night
- Normal physical activities
- No school absences due to asthma
- No missed time from work for parent or caregiver

TREATMENT OF ASTHMA
### Key Point #1

- Assessment of severity and control forms the basis of the treatment plan.
  - Severity is assessed before the patient is provided treatment.
  - Control is determined once a regimen has been initiated.

### Current Impairment and Future Risk

- Asthma severity and asthma control include two domains.
  - **Current impairment**: frequency and intensity of the patient’s symptoms and functional limitations (current or recent)
  - **Risk**: likelihood of untoward events (exacerbations, progressive loss of lung function, or medication side effects)

### Asthma Severity

All patients should have an initial severity assessment based on measures of current impairment and future risk in order to determine type and level of initial therapy needed.
Physician Asthma Education (PACE)

**Asthma Severity Chart**

<table>
<thead>
<tr>
<th>Components of Severity</th>
<th>Classification of Asthma Severity (Children 5–11 years of age)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Impairment</strong></td>
<td><strong>Symptoms</strong></td>
</tr>
<tr>
<td></td>
<td>1 day (worse than usual)</td>
</tr>
<tr>
<td></td>
<td>2 days (worse than usual)</td>
</tr>
<tr>
<td></td>
<td>3 days (worse than usual)</td>
</tr>
<tr>
<td></td>
<td>4 days or more than usual</td>
</tr>
<tr>
<td>Nighttime awakening</td>
<td>No</td>
</tr>
<tr>
<td>Nighttime awakening</td>
<td>Rare</td>
</tr>
<tr>
<td>Nighttime awakening</td>
<td>Several times per night</td>
</tr>
<tr>
<td>Nighttime awakening</td>
<td>Frequently</td>
</tr>
<tr>
<td>Nighttime awakening</td>
<td>Always</td>
</tr>
<tr>
<td>Nighttime awakening</td>
<td>Intermittent action needed</td>
</tr>
<tr>
<td>Nighttime awakening</td>
<td>Continuous action needed</td>
</tr>
<tr>
<td>Nighttime awakening</td>
<td>ICU, hospitalization required</td>
</tr>
<tr>
<td>Nighttime awakening</td>
<td>ICU, hospitalization required</td>
</tr>
<tr>
<td><strong>Risk</strong></td>
<td>1 day (worse than usual)</td>
</tr>
<tr>
<td>Risk</td>
<td>2 days (worse than usual)</td>
</tr>
<tr>
<td>Risk</td>
<td>3 days (worse than usual)</td>
</tr>
<tr>
<td>Risk</td>
<td>4 days or more than usual</td>
</tr>
</tbody>
</table>

**Asthma Control**

- At planned follow-up visits, asthma patients should **review level of control** with their health care provider based on multiple measures of current impairment and future risk in order to guide clinician decisions to either maintain or adjust therapy.
- Patients should be scheduled for **planned follow-up visits** at periodic intervals in order to assess their asthma control and modify treatment if needed.

**Asthma Control Chart**

**Figure 3-1b: Assessing Asthma Control in Children 5–11 Years of Age**

<table>
<thead>
<tr>
<th>Components of Control</th>
<th>Classification of Asthma Control (Children 5–11 years of age)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Impairment</strong></td>
<td><strong>Symptoms</strong></td>
</tr>
<tr>
<td></td>
<td>1 day (worse than usual)</td>
</tr>
<tr>
<td></td>
<td>2 days (worse than usual)</td>
</tr>
<tr>
<td></td>
<td>3 days (worse than usual)</td>
</tr>
<tr>
<td></td>
<td>4 days or more than usual</td>
</tr>
<tr>
<td>Nighttime awakening</td>
<td>No</td>
</tr>
<tr>
<td>Nighttime awakening</td>
<td>Rare</td>
</tr>
<tr>
<td>Nighttime awakening</td>
<td>Several times per night</td>
</tr>
<tr>
<td>Nighttime awakening</td>
<td>Frequently</td>
</tr>
<tr>
<td>Nighttime awakening</td>
<td>Always</td>
</tr>
<tr>
<td>Nighttime awakening</td>
<td>Intermittent action needed</td>
</tr>
<tr>
<td>Nighttime awakening</td>
<td>Continuous action needed</td>
</tr>
<tr>
<td>Nighttime awakening</td>
<td>ICU, hospitalization required</td>
</tr>
<tr>
<td>Nighttime awakening</td>
<td>ICU, hospitalization required</td>
</tr>
<tr>
<td><strong>Risk</strong></td>
<td>1 day (worse than usual)</td>
</tr>
<tr>
<td>Risk</td>
<td>2 days (worse than usual)</td>
</tr>
<tr>
<td>Risk</td>
<td>3 days (worse than usual)</td>
</tr>
<tr>
<td>Risk</td>
<td>4 days or more than usual</td>
</tr>
</tbody>
</table>

www.nhlbi.nih.gov/health/prof/lung/asthma/pace
Case Study 1
You meet a 3-year-old boy with a long history of recurrent coughing who was recently seen in the urgent care due to a severe cough. He was given oral steroids for 3 days and is improving, according to his mother. The child is happy and playful in the room with you. His history is remarkable for several emergency room visits between 6 months and 18 months of age for “bronchitis” during the winter. After further questioning, the mother notes the child has a daily cough and she gives him albuterol often.

- What is your diagnosis?
- What level of severity does this patient have?
**Case Study 2**

Your 17 year old female patient has just returned home from her first year in college. She is compliant with her long term control medication and denies nighttime symptoms. She notes that she is doing well and only having asthma symptoms if she forgets her medication prior to workouts. She is using albuterol for exercise pre-treatment about 3-4 times a week, but not requiring rescue medication. She has not needed recent urgent care or prednisone therapy.

- What is her level of control?

---

**Asthma Control Chart**

**FIGURE 3.6: ASSESSING ASTHMA CONTROL IN YOUTH 12 YEARS OF AGE AND ADULTS**

<table>
<thead>
<tr>
<th>Components of Control</th>
<th>Classification of Asthma Control (Adults: 12 years of age and adults)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency of Symptoms</td>
<td>None, 1–2 days/week; 3–4 days/week; 5–7 days/week; 1 week or more</td>
</tr>
<tr>
<td>- Nighthtine awakening:</td>
<td>1–2 times/month; 1–2 times/week; 3–4 times/week; 1 week or more</td>
</tr>
<tr>
<td>- Work using breathing:</td>
<td>None; Some limitation; Extensive limitation</td>
</tr>
<tr>
<td>- Sport or leisure:</td>
<td>None; Some limitation; Extensive limitation</td>
</tr>
<tr>
<td>- Coughing at night:</td>
<td>1–2 times/month; 1–2 times/week; 3–4 times/week; 1 week or more</td>
</tr>
<tr>
<td>- Infants/Babies:</td>
<td>≥2 episodes/day; 2–4 episodes/day; &gt;4 episodes/day</td>
</tr>
<tr>
<td>- Feeding problems:</td>
<td>N/A; &lt;50% loss; 50–75% loss; &gt;75% loss</td>
</tr>
<tr>
<td>- Risk factors:</td>
<td>0–1; &gt;1</td>
</tr>
</tbody>
</table>

---

**Case Study 3**

An 8-year-old girl is being evaluated in the office for her asthma. She has very few symptoms during the winter, but in the spring when her allergies are severe, she has at least 3 visits to the doctor and 2 bursts of oral steroids due to nighttime cough and wheezing when she is playing outdoor soccer. She fails to complete half of her games in May.

It is now the beginning of the school year, and her parents bring her in for her forms for albuterol at school. She has no symptoms in the past month. She is able to run without difficulty, she has coughed only once a month at nighttime, and has not had albuterol since the spring. The school form asks you to classify her asthma.

- What treatment plan might you suggest and what is her current level of control?
**Components of Control**

Classification of Asthma Control

<table>
<thead>
<tr>
<th>Children 5–11 years of age</th>
<th>Well Controlled</th>
<th>Not Well Controlled</th>
<th>Very Poorly Controlled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nocturnal symptoms</td>
<td>None</td>
<td>Some or frequent</td>
<td>Constant or frequent</td>
</tr>
<tr>
<td>Symptoms</td>
<td>None</td>
<td>Some or frequent</td>
<td>Constant or frequent</td>
</tr>
<tr>
<td>Lung function</td>
<td>FEV1 or peak flow</td>
<td>FEV1/FVC</td>
<td></td>
</tr>
<tr>
<td>FEV1 or peak flow</td>
<td>≥80% predicted/personal best</td>
<td>≥80% predicted/personal best</td>
<td></td>
</tr>
<tr>
<td>FEV1/FVC</td>
<td>≥80% predicted/personal best</td>
<td>≥60% predicted/personal best</td>
<td></td>
</tr>
<tr>
<td>Risk</td>
<td>Reducing in lung growth</td>
<td>Inhaler use for prevention of EIB</td>
<td></td>
</tr>
<tr>
<td>Lung function</td>
<td>FEV1 or peak flow</td>
<td>FEV1/FVC</td>
<td></td>
</tr>
<tr>
<td>FEV1/FVC</td>
<td>≥80% predicted/personal best</td>
<td>≥60% predicted/personal best</td>
<td></td>
</tr>
<tr>
<td>FEV1/FVC</td>
<td>≥60% predicted/personal best</td>
<td>≤50% predicted/personal best</td>
<td></td>
</tr>
</tbody>
</table>

**Key Point #2**

- Appropriate asthma management requires the proper use of **long term control and quick-relief medications**.

**Selecting Appropriate Medications**

- Quick-relief medications
  - Short-acting β₂ agonists
  - Inhaled anticholinergics
  - Systemic corticosteroids
- Long-term control medications
  - Daily inhaled corticosteroids
  - Leukotriene modifiers
  - Long-acting inhaled β₂-agonists (should never be used alone)
  - Cromolyn and nedocromil
  - Methylxanthines
- Combination medicines
  - Inhaled corticosteroid and long-acting β₂-agonist combination
  - Other anti-asthmatic combination therapies
SAMPLE TREATMENT ADJUSTMENT CASE

Name: Alejandra García  
Age: 10 years old  
Weight: 80 lbs  
Moderate persistent asthma currently on long term control medication

Budesonide  
180mcg  
2 x/day  
→ Step 2  
Coughing, wheezing 2-3 times a week  
→ Albuterol use 3x/day  
→ Consider Step 3 or 4  
→ Peak flow 200

Stepwise Approach

FIGURE 4-10: STEPWISE APPROACH FOR MANAGING ASTHMA IN CHILDREN 5-11 YEARS OF AGE

Key:
- inhaled
- intravenous
- subcutaneous
- oral
- external
- topical
- systemic
- topical
- nonprescription
- prescription
- over the counter
- nonprescription
- prescription

Steps:
1. Step 1: Simple interventions—health education, environmental control
2. Step 2: Step 1 + inhaled short-acting beta2-agonist or cromolyn
3. Step 3: Step 2 + inhaled corticosteroid or nedocromil
4. Step 4: Step 3 + additional inhaled or systemic controller
5. Step 5: Step 4 + external controller
6. Step 6: Step 5 + increased external controller

Key:
- inhaled
- intravenous
- subcutaneous
- oral
- external
- topical
- systemic
- topical
- nonprescription
- prescription
- over the counter
- nonprescription
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Steps:
1. Step 1: Simple interventions—health education, environmental control
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5. Step 5: Step 4 + external controller
6. Step 6: Step 5 + increased external controller

Key:
- inhaled
- intravenous
- subcutaneous
- oral
- external
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Steps:
1. Step 1: Simple interventions—health education, environmental control
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3. Step 3: Step 2 + inhaled corticosteroid or nedocromil
4. Step 4: Step 3 + additional inhaled or systemic controller
5. Step 5: Step 4 + external controller
6. Step 6: Step 5 + increased external controller
Follow-up Visits
Patients should be scheduled for planned follow-up visits at periodic intervals in order to assess their asthma control and modify treatment if needed.

Inhaled Steroids In Children
- Most potent and effective long-term anti-inflammatory medications currently available.
- Reduce the need for quick-relief medications.
- Fewer side effects than steroid tablets or syrup.
- Long-term studies have failed to demonstrate long-term inhibition of growth.
- Rinsing the mouth after inhaling steroids and using spacer devices decrease local side effects and systemic absorption.

Key Point #3
- Because asthma symptoms are variable, families need to recognize symptoms and adjust medications at home according to the clinician’s written asthma action plan.
Key Features of an Asthma Action Plan

• All people who have asthma should receive a written asthma action plan to guide their self-management efforts.

• Written plans should be keyed to symptoms, severity and control and should include:
  – Daily management as well as early recognition and actions for exacerbations
  – Medication names (trade or generic)
  – How much to take and when to take it
  – How to adjust medicines at home as symptoms change

Priority Message from the EPR-3 Guidelines Implementation Panel

Asthma Action Plan Examples

Review of Key Points Covered

1. Assessment of severity and control forms the basis of the treatment plan.
2. Appropriate asthma management requires the proper use of long term control and quick-relief medications.
3. Because asthma symptoms are variable, families need to recognize symptoms and adjust medications at home according to the clinician’s written asthma action plan.
Segment 1: Wrap up

Segment 2
Communication Strategies

Key Point #4

- Good communication between patient and clinician helps identify patient concerns that may block adherence, makes patient teaching more effective and promotes patient self-confidence to follow the treatment plan.
Background

- Excellence in medical treatment is worthless if the patient doesn’t take the medicine.
- Compliance is closely linked to clinician communication and patient education.
- Most clinicians believe they are good communicators, but most patients feel clinician communication and education is inadequate.

Recent Medicine Adherence Studies

<table>
<thead>
<tr>
<th>Status</th>
<th>Controller Medication</th>
<th>Recent Adherence</th>
<th>Method of Measuring Medication Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bender et al., 2000</td>
<td>Metered dose inhaler (MDI)</td>
<td>80%</td>
<td>Mother report, child report</td>
</tr>
<tr>
<td></td>
<td></td>
<td>43%</td>
<td>Canister weight, raw doser, adjusted doser</td>
</tr>
<tr>
<td>Smith et al., 2008</td>
<td>Steroid inhaler</td>
<td>39%</td>
<td>Telephone interviews with parents of children 2-12 years. Long term control medication underuse was defined as suboptimal control and parent report of 6 days/week of inhaled steroid use</td>
</tr>
</tbody>
</table>

Implications

- Studies consistently show that less than 50% of patients adhere to daily medication regimens.
- Clinicians cannot predict better than chance which patients will be compliant.
- Therefore, all patients need to be educated to ensure adherence to the medical regimen.
- Communicating well and providing education are as important as prescribing the right medicine.
Aims of the Following Discussion

• To provide a theoretical framework—a way to think about clinician-patient communication.
• To demonstrate strategies that clinicians can use to improve communication and help patients be responsive to recommendations.

Health Belief Model

These beliefs influence willingness to follow preventive or therapeutic recommendations:
– I am susceptible to this health problem.
– The threat to my health is serious.
– The benefits of the recommended action outweigh the costs.
– I am confident that I can carry out the recommended actions successfully.

Beliefs About Susceptibility

Some families resist accepting the diagnosis because they believe that:
– Because an older relative was “crippled” by asthma, their child will also be “crippled.”
– Asthma is psychologically caused or feigned by the child.

Resisting the diagnosis reduces the likelihood that the family will follow the treatment plan.
Beliefs About Seriousness

- If the family thinks asthma is not serious, they are less likely to follow the treatment plan.
- If the family overestimates the seriousness of asthma, they may follow the plan, but prevent the child from taking part in normal physical activities.

Beliefs About Benefits and Costs

- The benefits of therapy, obvious to the clinician, are often unclear to patients or irrelevant to their personal goals.
- Perceived costs of therapy include:
  - Financial burden of care
  - Fear that medicines will harm the child
  - Regimen seen as time-consuming and hard to carry out

Fears About Asthma Medicines

39% believe medicines are addictive.
36% believe medicines are not safe to take over a long period.
58% believe regular use will reduce effectiveness.
Beliefs About Ability to Carry Out Recommendations

Research in psychology shows that when you are confident and you can do something successfully:

– You do it more often.
– You are more persistent in the face of difficulty.

Many families lack confidence that they can manage an asthma attack at home.

Implications

Therefore, the clinician must establish open communication that permits these health beliefs to be identified and discussed.

Barriers To Effective Communications

Studies show that patients often:

• Feel they are wasting the clinician’s valuable time
• Omit details they deem unimportant
• Are embarrassed to mention things they think will make them look bad
• Don’t understand medical terms
• May believe the clinician has not really listened and therefore doesn’t have the information needed to make a good treatment decision
Video Demonstration:
Communication Strategies

Strategies

- Non-verbal attentiveness
- Addressing immediate concerns
- Reassuring messages

Goal/Purpose
Relaxing and reassuring patients so they pay attention to what is being said.

Strategies

- Interactive conversation
- Eliciting underlying fears

Goal/Purpose
Improving the exchange of ideas and feelings and gathering information needed for diagnosis and treatment decisions.
Physician Asthma Education (PACE)

Strategies

- Tailoring messages
- Planning for decision making
- Goal setting

Goal/Purpose
Preparing patients to carry out treatment at home. Incorporate the most appropriate family members in decision making.

Strategies

- Non-verbal encouragement
- Verbal praise

Goal/Purpose
Building self-confidence needed to carry out the plan.

Key Point #5

Good communication and patient education can be efficiently and effectively accomplished in several standard primary care visits.
Evidence

Randomized controlled trials have shown that good communication and patient education can positively impact patient outcomes.

Results from Parents & Patient, and Pediatrician Outcomes

Both studies showed:
- Physicians were more confident in:
  - developing short term goals
  - reviewing long term plans
- Parents reported that the intervention pediatrician:
  - tried to find out about parents’ biggest concerns
  - was more likely to encourage child to be active
  - was more likely ask if child was meeting goals

Patients whose physicians participated in the PACE seminar had
- Reduced emergency room visits
- Reduced days of daytime symptoms in the Fall
- Reduced days with decreased activity due to asthma (Spring, Summer, Winter, & Fall)

Compared with controls, physicians who received the intervention showed:
- Increased use of written plans
- Increased use of inhaled anti-inflammatory therapy
- More attention to patient fears
- No additional time for patient visit

In Summary

- Good communication between patient and clinician helps identify patient concerns that may block adherence, makes patient teaching more effective and promotes patient self-confidence to follow the treatment plan. It is directly related to reductions in symptoms and health care use.
- Good communication and patient education can be efficiently and effectively accomplished in several standard primary care visits.
### Key Points

1. **Assessment of severity and control** forms the basis of the treatment plan.
2. Appropriate asthma management requires the proper use of *long term control and quick-relief medications*.
3. Because asthma symptoms are variable, families need to recognize symptoms and adjust medications at home according to the clinician’s written asthma action plan.

### Key Points

4. **Good communication** between patients and clinician helps identify patient concerns, makes patient teaching more effective and promotes patient self-confidence to follow the treatment plan.
5. Initial patient education can be efficiently and effectively accomplished in several standard primary care visits.
Segment 5
Case Studies and Discussion

Case 1
Severe but Infrequent Asthma

During an office visit with a new patient, Mrs. Wallace tells you that every time her two-year-old daughter Jennifer has a cold, she has severe coughing and wheezing that lasts for two or three weeks. She says her child always goes to the doctor because she has a lingering “chest cough” and “bronchitis” symptoms. The antibiotics don’t help; but albuterol does provide short-term relief. She has had approximately three or four such colds in the last year, and the most recent occurred a month ago. Jennifer does not have any symptoms now, but Mrs. Wallace is worried and asks you for help.

Case 2
Frequent, Mild Asthma

Tom Platt is six years old and coughs and wheezes several times a week. The symptoms occur when he runs or in rare instances when he is near a cat. The Platt family does not have any pets in their home. Mrs. Platt has never had to take Tom to the emergency room, but she tries to keep him from running too much to prevent these symptoms.
Segment 6
Coding and Reimbursement

Goals & Agenda

• To demonstrate how quality asthma education and counseling can be documented and coded.
  – Necessary chart documentation to support codes selected.

• To help physicians receive appropriate reimbursement for the quality asthma care they provide.
  – Correct coding of encounters for asthma care.

Education and counseling should be properly reimbursed

– Pediatricians generally undercharge.
– Physicians learn coding on-the-job and often overlook simple ways to achieve optimum reimbursement.
The Codes-Definitions

CPT Code: “what we did” for the patient
Current Procedural Terminology
Codes have relative value based on resources used

ICD-9-CM Code: “what was the problem”
International Classification of Diseases Ninth Version.
“Clinical” Modification (CM) for United States payment systems.
Codes for the problem or situation and defines the medical necessity of the services provided.

Linking CPT & ICD-9-CM

• ICD codes give the reason (diagnosis) for the visit (can be 3 to 5 digits).
• All CPT codes when billed are linked to one or more ICD codes to explain the medical necessity of the service provided.
• More than one diagnosis code can be entered for a service if it helps explain the reason or level.

Example- CPT (99214) linked to ICD- (493.12 asthma exacerbation)

Selecting the CPT Code

• CPT codes exist for:
  – Asthma care delivered in different settings- inpatient, outpatient
  – Different intensities of service based on complexity
• The code selected should be based on what was performed and documented.
  – “If it wasn’t documented, it didn’t happen,”
  – Poor documentation can lead to claim denials or recovery of payments by carriers.
Two Methods for Selecting CPT Codes

1. Complexity based on:
   - history (4 types)
   - exam (4 types)
   - medical decision making (4 types)

   OR

2. Time

Coding by Complexity Using History

Four levels of history

1. Problem Focused: chief complaint, brief HPI
2. Expanded Problem Focused: cc, brief HPI.
   Pertinent ROS
3. Detailed: cc, extended HPI, pertinent PFSH and ROS
4. Comprehensive: cc, extended HPI, complete PFSH and ROS (10 or more systems)

Coding by Complexity Using Physical Exam

Four levels of physical examination:

1. Problem Focused: limited to affected body area
2. Expanded Problem Focused: limited exam of affected area plus other symptomatic or related systems
3. Detailed: extended exam of affected body area(s) and other related systems
4. Comprehensive: general multisystem exam
Key Elements for Coding by Complexity Using Medical Decision Making

<table>
<thead>
<tr>
<th>Level of Decision</th>
<th>Number of Diagnoses</th>
<th>Amount of Data</th>
<th>Complication Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Straightforward</td>
<td>Minimal</td>
<td>Minimal or None</td>
<td>Minimal</td>
</tr>
<tr>
<td>Low complexity</td>
<td>Limited</td>
<td>Limited</td>
<td>Low</td>
</tr>
<tr>
<td>Moderate complexity</td>
<td>Multiple</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>High complexity</td>
<td>Extensive</td>
<td>Extensive</td>
<td>High</td>
</tr>
</tbody>
</table>

Coding Using Time

- Suppose the total time for an asthma education visit is 27 minutes, of which 15 minutes is spent counseling patient.
- Use time only when counseling or coordination of care accounts for greater than 50% of the total face-to-face time with a patient.
- Document:
  - total duration of counseling
  - total duration of visit
  - topics covered for counseling or coordination

Coding for Asthma Counseling Provided During a Well-Child Visit

- Scenario: During annual exam, asthma topics are reviewed requiring additional time beyond the well-child visit.
- Can bill both the well-child exam (code 99391) and an asthma visit (code 99213)
  - Attach the -25 modifier to the E/M service

CPT (99391) link to ICD (V20.2) plus
CPT (99212-25) link to ICD (493.12)
Take Home Messages

- In summary, counseling is important in promoting optimal asthma management with patients, shared decision making and patient satisfaction.
- When properly documented, coding based on time usually more accurately reflects this higher level of service.

Wrap-up

http://www.nhlbi.nih.gov/health/prof/lung/asthma/pace/