

# ICD-10

# Clinical Concepts for Pediatrics

## ICD-10 Clinical Concepts Series



Common Codes



Clinical Documentation Tips



Clinical Scenarios

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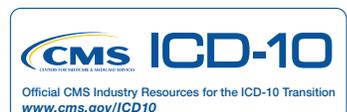
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ICD-10 Compliance Date: **October 1, 2015**



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# Common Codes

ICD-10 Compliance Date: **October 1, 2015**

## Abdominal Pain (ICD-9-CM 789.00 to 789.09 range)

R10.0	Acute abdomen
R10.10	Upper abdominal pain, unspecified
R10.11	Right upper quadrant pain
R10.12	Left upper quadrant pain
R10.13	Epigastric pain
R10.2	Pelvic and perineal pain
R10.30	Lower abdominal pain
R10.31	Right lower quadrant pain
R10.32	Left lower quadrant pain
R10.33	Periumbilical pain
R10.84	Generalized abdominal pain
R10.9*	Unspecified abdominal pain

\*Codes with a greater degree of specificity should be considered first.

## Acute Bronchitis (ICD-9-CM 466.0, 466.11, 466.19)

[Note: Organisms should be specified where possible]

J20.0	Acute bronchitis due to <i>Mycoplasma pneumoniae</i>
J20.1	Acute bronchitis due to <i>Hemophilus influenzae</i>
J20.2	Acute bronchitis due to streptococcus
J20.3	Acute bronchitis due to coxsackievirus
J20.4	Acute bronchitis due to parainfluenza virus
J20.5	Acute bronchitis due to respiratory syncytial virus
J20.6	Acute bronchitis due to rhinovirus
J20.7	Acute bronchitis due to echovirus
J20.8	Acute bronchitis due to other specified organisms
J20.9*	Acute bronchitis, unspecified

\*Codes with a greater degree of specificity should be considered first.

## Acute Pharyngitis (ICD-9-CM 034.0, 462)

J02.0	Streptococcal pharyngitis
J02.8	Acute pharyngitis due to other specified organisms
J02.9*	Acute pharyngitis, unspecified

\*Codes with a greater degree of specificity should be considered first.

## Allergic Inflammation of the Nasal Airways (ICD-9-CM 477.0 TO 477.9 range)

J30.0	Vasomotor rhinitis
J30.1	Allergic rhinitis due to pollen
J30.2	Other seasonal allergic rhinitis
J30.5	Allergic rhinitis due to food
J30.81	Allergic rhinitis due to animal (cat) (dog) hair and dander
J30.89	Other allergic rhinitis
J30.9*	Allergic rhinitis, unspecified

\*Codes with a greater degree of specificity should be considered first.

## Asthma (ICD-9-CM 493.00, 493.01, 493.02, 493.10, 493.11, 493.12, 493.20, 493.21, 493.22, 493.81, 493.82 , 493.90, 493.91, 493.92)

J45.20	Mild intermittent asthma, uncomplicated
J45.21	Mild intermittent asthma with (acute) exacerbation
J45.22	Mild intermittent asthma with status asthmaticus
J45.30	Mild persistent asthma, uncomplicated
J45.31	Mild persistent asthma with (acute) exacerbation
J45.32	Mild persistent asthma with status asthmaticus
J45.40	Moderate persistent asthma, uncomplicated
J45.41	Moderate persistent asthma with (acute) exacerbation
J45.42	Moderate persistent asthma with status asthmaticus
J45.50	Severe persistent asthma, uncomplicated
J45.51	Severe persistent asthma with (acute) exacerbation
J45.52	Severe persistent asthma with status asthmaticus
J45.901*	Unspecified asthma with (acute) exacerbation
J45.902*	Unspecified asthma with status asthmaticus
J45.909*	Unspecified asthma, uncomplicated
J45.990	Exercise induced bronchospasm
J45.991	Cough variant asthma
J45.998	Other asthma

\*Codes with a greater degree of specificity should be considered first.

## Chest Pain (ICD-9-CM 786.50 TO 786.59 range)

R07.1	Chest pain on breathing
R07.2	Precordial pain
R07.81	Pleurodynia
R07.82	Intercostal pain
R07.89	Other chest pain
R07.9*	Chest pain, unspecified

\*Codes with a greater degree of specificity should be considered first.

## Diabetes Mellitus (Select) (ICD-9-CM 250.00 to 250.03 range)

E10.65	Type 1 diabetes mellitus with hyperglycemia
E10.9	Type 1 diabetes mellitus without complications
E11.65	Type 2 diabetes mellitus with hyperglycemia
E11.9	Type 2 diabetes mellitus without complications

\*Codes with a greater degree of specificity should be considered first.

## Headache (ICD-9-CM 784.0)

R51	Headache
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\*Codes with a greater degree of specificity should be considered first.

## Acute Serous Otitis Media (ICD-9-CM 381.01)

H65.00*	Acute serous otitis media, unspecified ear
H65.01	Acute serous otitis media, right ear
H65.02	Acute serous otitis media, left ear
H65.03	Acute serous otitis media, bilateral
H65.04	Acute serous otitis media, recurrent, right ear
H65.05	Acute serous otitis media, recurrent, left ear
H65.06	Acute serous otitis media, recurrent, bilateral
H65.07*	Acute serous otitis media, recurrent, unspecified ear

\*Codes with a greater degree of specificity should be considered first.

## Other Acute Nonsuppurative Otitis Media (ICD-9-CM 381.00, 381.02 to 381.06 range)

H65.111	Acute and subacute allergic otitis media (mucoid) (sanguinous) (serous), right ear
H65.112	Acute and subacute allergic otitis media (mucoid) (sanguinous) (serous), left ear
H65.113	Acute and subacute allergic otitis media (mucoid) (sanguinous) (serous), bilateral
H65.114	Acute and subacute allergic otitis media (mucoid) (sanguinous) (serous), recurrent, right ear
H65.115	Acute and subacute allergic otitis media (mucoid) (sanguinous) (serous), recurrent, left ear
H65.116	Acute and subacute allergic otitis media (mucoid) (sanguinous) (serous), recurrent, bilateral
H65.117*	Acute and subacute allergic otitis media (mucoid) (sanguinous) (serous), recurrent, unspecified ear
H65.119*	Acute and subacute allergic otitis media (mucoid) (sanguinous) (serous), unspecified ear
H65.191	Other acute nonsuppurative otitis media, right ear
H65.192	Other acute nonsuppurative otitis media, left ear
H65.193	Other acute nonsuppurative otitis media, bilateral
H65.194	Other acute nonsuppurative otitis media, recurrent, right ear
H65.195	Other acute nonsuppurative otitis media, recurrent, left ear
H65.196	Other acute nonsuppurative otitis media, recurrent, bilateral
H65.197*	Other acute nonsuppurative otitis media recurrent, unspecified ear
H65.199*	Other acute nonsuppurative otitis media, unspecified ear

\*Codes with a greater degree of specificity should be considered first.

## Chronic Serous Otitis Media (ICD-9-CM 381.10, 381.19)

H65.20*	Chronic serous otitis media, unspecified ear
H65.21	Chronic serous otitis media, right ear
H65.22	Chronic serous otitis media, left ear
H65.23	Chronic serous otitis media, bilateral

\*Codes with a greater degree of specificity should be considered first.

## Chronic Mucoid Otitis Media (ICD-9-CM 381.20, 381.29)

H65.30*	Chronic mucoid otitis media, unspecified ear
H65.31	Chronic mucoid otitis media, right ear
H65.32	Chronic mucoid otitis media, left ear
H65.33	Chronic mucoid otitis media, bilateral

\*Codes with a greater degree of specificity should be considered first.

## Other Chronic Nonsuppurative Otitis Media (ICD-9-CM 381.3)

H65.411	Chronic allergic otitis media, right ear
H65.412	Chronic allergic otitis media, left ear
H65.413	Chronic allergic otitis media, bilateral
H65.419*	Chronic allergic otitis media, unspecified ear
H65.491	Other chronic nonsuppurative otitis media, right ear
H65.492	Other chronic nonsuppurative otitis media, left ear
H65.493	Other chronic nonsuppurative otitis media, bilateral
H65.499*	Other chronic nonsuppurative otitis media, unspecified ear

\*Codes with a greater degree of specificity should be considered first.

## Unspecified Nonsuppurative Otitis Media (ICD-9-CM 381.4)

H65.90*	Unspecified nonsuppurative otitis media, unspecified ear
H65.91*	Unspecified nonsuppurative otitis media, right ear
H65.92*	Unspecified nonsuppurative otitis media, left ear
H65.93*	Unspecified nonsuppurative otitis media, bilateral

\*Codes with a greater degree of specificity should be considered first.

## Acute Suppurative Otitis Media (ICD-9-CM 382.00, 382.01)

H66.001	Acute suppurative otitis media without spontaneous rupture of ear drum, right ear
H66.002	Acute suppurative otitis media without spontaneous rupture of ear drum, left ear
H66.003	Acute suppurative otitis media without spontaneous rupture of ear drum, bilateral
H66.004	Acute suppurative otitis media without spontaneous rupture of ear drum, recurrent, right ear
H66.005	Acute suppurative otitis media without spontaneous rupture of ear drum, recurrent, left ear
H66.006	Acute suppurative otitis media without spontaneous rupture of ear drum, recurrent, bilateral
H66.007*	Acute suppurative otitis media without spontaneous rupture of ear drum, recurrent, unspecified ear
H66.009*	Acute suppurative otitis media without spontaneous rupture of ear drum, unspecified ear
H66.011	Acute suppurative otitis media with spontaneous rupture of ear drum, right ear
H66.012	Acute suppurative otitis media with spontaneous rupture of ear drum, left ear
H66.013	Acute suppurative otitis media with spontaneous rupture of ear drum, bilateral
H66.014	Acute suppurative otitis media with spontaneous rupture of ear drum, recurrent, right ear
H66.015	Acute suppurative otitis media with spontaneous rupture of ear drum, recurrent, left ear
H66.016	Acute suppurative otitis media with spontaneous rupture of ear drum, recurrent, bilateral
H66.017*	Acute suppurative otitis media with spontaneous rupture of ear drum, recurrent, unspecified ear
H66.019*	Acute suppurative otitis media with spontaneous rupture of ear drum, unspecified ear

\*Codes with a greater degree of specificity should be considered first.

## Chronic Tubotympanic Suppurative Otitis Media (ICD-9-CM 382.1)

H66.10*	Chronic tubotympanic suppurative otitis media, unspecified
H66.11	Chronic tubotympanic suppurative otitis media, right ear
H66.12	Chronic tubotympanic suppurative otitis media, left ear
H66.13	Chronic tubotympanic suppurative otitis media, bilateral

\*Codes with a greater degree of specificity should be considered first.

## Chronic Atticoantral Suppurative Otitis Media (ICD-9-CM 382.2)

H66.20*	Chronic atticoantral suppurative otitis media, unspecified ear
H66.21	Chronic atticoantral suppurative otitis media, right ear
H66.22	Chronic atticoantral suppurative otitis media, left ear
H66.23	Chronic atticoantral suppurative otitis media, bilateral

\*Codes with a greater degree of specificity should be considered first.

## Other Chronic Suppurative Otitis Media (ICD-9-CM 382.3)

H66.3X1	Other chronic suppurative otitis media, right ear
H66.3X2	Other chronic suppurative otitis media, left ear
H66.3X3	Other chronic suppurative otitis media, bilateral
H66.3X9*	Other chronic suppurative otitis media, unspecified ear

\*Codes with a greater degree of specificity should be considered first.

## Suppurative Otitis Media, Unspecified (ICD-9-CM 382.4)

H66.40*	Suppurative otitis media, unspecified, unspecified ear
H66.41*	Suppurative otitis media, unspecified, right ear
H66.42*	Suppurative otitis media, unspecified, left ear
H66.43*	Suppurative otitis media, unspecified, bilateral

\*Codes with a greater degree of specificity should be considered first.

## Otitis media, Unspecified (ICD-9-CM 382.9)

H66.90*	Otitis media, unspecified, unspecified ear
H66.91*	Otitis media, unspecified, right ear
H66.92*	Otitis media, unspecified, left ear
H66.93*	Otitis media, unspecified, bilateral

\*Codes with a greater degree of specificity should be considered first.

## Otitis Media in Diseases Classified Elsewhere (ICD-9-CM 382.02)

H67.1	Otitis media in diseases classified elsewhere, right ear
H67.2	Otitis media in diseases classified elsewhere, left ear
H67.3	Otitis media in diseases classified elsewhere, bilateral
H67.9*	Otitis media in diseases classified elsewhere, unspecified ear

\*Codes with a greater degree of specificity should be considered first.

## Pain in Limb (ICD-9-CM 729.5)

M79.601	Pain in right arm
M79.602	Pain in left arm
M79.603*	Pain in arm, unspecified
M79.604	Pain in right leg
M79.605	Pain in left leg
M79.606*	Pain in leg, unspecified
M79.609	Pain in unspecified limb
M79.621	Pain in right upper arm
M79.622	Pain in left upper arm
M79.629*	Pain in unspecified upper arm
M79.631	Pain in right forearm
M79.632	Pain in left forearm
M79.639*	Pain in unspecified forearm
M79.641	Pain in right hand
M79.642	Pain in left hand
M79.643*	Pain in unspecified hand
M79.644	Pain in right finger(s)
M79.645	Pain in left finger(s)
M79.646*	Pain in unspecified finger(s)
M79.651	Pain in right thigh
M79.652	Pain in left thigh
M79.659*	Pain in unspecified thigh
M79.661	Pain in right lower leg
M79.662	Pain in left lower leg
M79.669*	Pain in unspecified lower leg
M79.671	Pain in right foot
M79.672	Pain in left foot
M79.673*	Pain in unspecified foot
M79.674	Pain in right toe(s)
M79.675	Pain in left toe(s)
M79.676*	Pain in unspecified toe(s)

\*Codes with a greater degree of specificity should be considered first.

## Routine Child Health Examination (ICD-9-CM V20.2)

Z00.121	Encounter for routine child health examination with abnormal findings
Z00.129	Encounter for routine child health examination without abnormal findings

\*Codes with a greater degree of specificity should be considered first.

## Urinary Tract Infection, Cystitis (ICD-9-CM 595.0 to 595.4 range, 595.81, 595.82, 595.89, 595.9, 599.0)

N30.00	Acute cystitis without hematuria
N30.01	Acute cystitis with hematuria
N30.10	Interstitial cystitis (chronic) without hematuria
N30.11	Interstitial cystitis (chronic) with hematuria
N30.20	Other chronic cystitis without hematuria
N30.21	Other chronic cystitis with hematuria
N30.30	Trigonitis without hematuria
N30.31	Trigonitis with hematuria
N30.40	Irradiation cystitis without hematuria
N30.41	Irradiation cystitis with hematuria
N30.80	Other cystitis without hematuria
N30.81	Other cystitis with hematuria
N30.90	Cystitis, unspecified without hematuria
N30.91	Cystitis, unspecified with hematuria
N39.0*	Urinary tract infection, site not specified

\*Codes with a greater degree of specificity should be considered first.

# Primer for Pediatrics Clinical Documentation Changes

ICD-10 Compliance Date: **October 1, 2015**

Specifying anatomical location and laterality required by ICD-10 is easier than you think. This detail reflects how physicians and clinicians communicate and to what they pay attention - it is a matter of ensuring the information is captured in your documentation.

In ICD-10-CM, there are three main categories of changes:

- Definition Changes**
- Terminology Differences**
- Increased Specificity**

Over 1/3 of the expansion of ICD-10 codes is due to the addition of laterality (left, right, bilateral). Physicians and other clinicians likely already note the side when evaluating the clinically pertinent anatomical site(s).

## ASTHMA

### Terminology Difference

ICD-10 terminology used to describe asthma has been updated to reflect the current clinical classification system.

When documenting asthma, include the following:

- |                            |  |
|----------------------------|--|
| <b>1. Cause</b>            | Exercise induced, cough variant, related to smoking, chemical or particulae cause, occupational  |
| <b>2. Severity</b>         | Choose one of the three options below for persistent asthma patients<br>1. Mild persistent<br>2. Moderate persistent<br>3. Severe persistent |
| <b>3. Temporal Factors</b> | Acute, chronic, intermittent, persistent, status asthmaticus, acute exacerbation   |

## ICD-10 Code Examples

J45.30	Mild persistent asthma, uncomplicated
J45.991	Cough variant asthma

## UNDERDOSING

### Terminology Difference

Underdosing is an important new concept and term in ICD-10. It allows you to identify when a patient is taking less of a medication than is prescribed.

When documenting underdosing, include the following:

- 1. Intentional, Unintentional, Non-compliance** Is the underdosing deliberate? (e.g., patient refusal)
- 2. Reason** Why is the patient not taking the medication? (e.g. financial hardship, age-related debility)

### ICD-10 Code Examples

Z91.120	Patient's intentional underdosing of medication regimen due to financial hardship
T36.4x6A	Underdosing of tetracyclines, initial encounter
T45.526D	Underdosing of antithrombotic drugs, subsequent encounter

## DIABETES MELLITUS, HYPOGLYCEMIA AND HYPERGLYCEMIA

### Increased Specificity

The diabetes mellitus codes are combination codes that include the type of diabetes mellitus, the body system affected, and the complications affecting that body system.

When documenting underdosing, include the following:

- 1.Type** e.g. Type 1 or Type 2 disease, drug or chemical induces, due to underlying condition, gestational
- 2. Complications** What (if any) other body systems are affected by the diabetes condition?  
e.g. Foot ulcer related to diabetes mellitus
- 3. Treatment** Is the patient on insulin?

A second important change is the concept of “hypoglycemia” and “hyperglycemia.” It is now possible to document and code for these conditions without using “diabetes mellitus.” You can also specify if the condition is due to a procedure or other cause.

The final important change is that the concept of “secondary diabetes mellitus” is no longer used; instead, there are specific secondary options.

## ICD-10 Code Examples

E08.65	Diabetes mellitus due to underlying condition with hyperglycemia
E09.01	Drug or chemical induced diabetes mellitus with hyperosmolarity with coma
R73.9	Transient post-procedural hyperglycemia
R79.9	Hyperglycemia, unspecified

## INJURIES

### Increased Specificity

ICD-9 used separate “E codes” to record external causes of injury. ICD-10 better incorporates these codes and expands sections on poisonings and toxins.

When documenting injuries, include the following:

- 1. Episode of Care** e.g. Initial, subsequent, sequelae
- 2. Injury site** Be as specific as possible
- 3. Etiology** How was the injury sustained (e.g. sports, motor vehicle crash, exposure?)
- 4. Place of Occurrence** e.g. School, work, etc.

Initial encounters may also require, where appropriate:

- 1. Intent** e.g. Unintentional or accidental, self-harm, etc.
- 2. Status** e.g. Civilian, military, etc.

## ICD-10 Code Examples

### Example 1:

A left knee strain injury that occurred on a private recreational playground when a child landed incorrectly from a trampoline:

- **Injury:** S86.812A, Strain of other muscle(s) and tendon(s) at lower leg level, left leg, initial encounter

- **External cause:** W09.8xxA, Fall on or from other playground equipment, initial encounter
- **Place of occurrence:** Y92.838, Other recreation area as the place of occurrence of the external cause
- **Activity:** Y93.44, Activities involving rhythmic movement, trampoline jumping

### Example 2:

On October 31st, Kelly was seen in the ER for shoulder pain and X-rays indicated there was a fracture of the right clavicle, shaft. She returned three months later with complaints of continuing pain. X-rays indicated a nonunion. The second encounter for the right clavicle fracture is coded as *S42.021K, Displaced fracture of the shaft of right clavicle, subsequent for fracture with nonunion.*

## WELL CHILD EXAMS AND SCREENING

### Increased Specificity

ICD-10 will improve the quality of data collection for well child exams, early screening, and the detection of childhood illnesses.

When documenting well child exams and screen, include the following:

1. **Child's age** In days, months or years as appropriate
2. **Exam type** e.g. Well child exam, hearing screen, sports physical, school physical, etc.
3. **Findings** Note normal vs. abnormal findings, as there codes vary depending on results

## ICD-10 Code Examples

Z00.129	Encounter for routine child health examination without abnormal findings
Z00.121	Encounter for routine child health examination with abnormal findings
Z00.110	Newborn check under 8 days old
Z00.111	Newborn check 8 to 28 days old

## OTITIS MEDIA

### Increased Specificity

When documenting otitis media, include the following:

- |                                     |  |
|-------------------------------------|--|
| 1. <b>Type</b>                      | e.g., Serous, sanguinous, suppurative, allergic, mucoid      |
| 2. <b>Infectious agent</b>          | e.g., Strep, Staph, Scarlet Fever, Influenza, Measles, Mumps |
| 3. <b>Temporal factors</b>          | Acute, subacute, chronic, recurrent                          |
| 4. <b>Side</b>                      | e.g. Left, right or both ears                                |
| 5. <b>Tympanic Membrane Rupture</b> | Note whether this is present                                 |
| 6. <b>Secondary causes</b>          | e.g. Tobacco smoke, etc.                                     |

### ICD-10 Code Examples

H66.001	Acute suppurative otitis media without spontaneous rupture of ear drum, right ear
H66.004	Acute suppurative otitis media without spontaneous rupture of ear drum, recurrent, right ear
H65.03	Acute serous otitis media, bilateral
H72.821	Total perforations of the tympanic membrane, right ear

## BRONCHITIS AND BRONCHIOLITIS

### Increased Specificity

When documenting bronchitis and bronchiolitis, include the following:

- |                           |   |
|---------------------------|---|
| 1. <b>Acuity</b>          | e.g., Acute, chronic, subacute. Delineate when both acute and chronic are present, e.g., acute and chronic bronchitis |
| 2. <b>Causal Organism</b> | e.g. Respiratory syncytial virus, metapneumovirus, unknown, etc.  |

### ICD-10 Code Examples

J20.2	Acute bronchitis due to streptococcus
J21.0	Acute bronchiolitis due to respiratory syncytial virus
J21.1	Acute bronchiolitis due to human metapneumovirus

## FEEDING PROBLEMS OF THE NEWBORN

### Increased Specificity

In ICD-10-CM, newborn remains defined as the first 28 days of life.

Document feeding problems of the newborn and subsequent treatment recommendations specifically in your note. Example issues with discrete ICD-10 coding options include:

1. Difficulty feeding at breast
2. Slow feeding
3. Underfeeding
4. Overfeeding
5. Regurgitation and rumination

### ICD-10 Code Examples

P92.1	Regurgitation and rumination of newborn
P92.2	Slow feeding of newborn
P92.5	Neonatal difficulty in feeding at breast

# Pediatrics Clinical Scenarios

ICD-10 Compliance Date: **October 1, 2015**

Quality clinical documentation is essential for communicating the intent of an encounter, confirming medical necessity, and providing detail to support ICD-10 code selection. In support of this objective, we have provided outpatient focused scenarios to illustrate specific ICD-10 documentation and coding nuances related to your specialty.

The following scenarios were natively coded in ICD-10-CM and ICD-9-CM. As patient history and circumstances will vary, these brief scenarios are illustrative in nature and should not be strictly interpreted or used as documentation and coding guidelines. Each scenario is selectively coded to highlight specific topics; therefore, only a subset of the relevant codes are presented.

## Scenario 1: Diarrhea, Fever, and Vomiting

### Scenario Details

#### Chief Complaint

- Watery diarrhea, fever, and vomiting<sup>1</sup> for 2 days.

#### History

- 33 month old female presents as new patient with severe dehydration after 2 days of watery diarrhea, fever and vomiting with no indication of nausea. Child holds onto stomach and is crying but makes no tears. Child unimmunized for all vaccines per mother<sup>2</sup>. Child noted to have reduced urine output per mother. Symptoms started after a visit to the pool with her cousins. Mother thinks daughter swallowed pool water multiple times.

#### Exam

- Apparent acute distress. Appears dehydrated. Child is holding her abdomen.
- Vitals: T 100.1, R 36, P 135 BP 90/55. BS hyperactive times four quadrants. The abdomen is distended and diffusely tender to palpation. No rebound tenderness, masses or organomegaly.
- Dry mouth and tongue, membranes pale. Skin dry with poor skin turgor.
- Capillary refill is >3 seconds.

## Scenario 1: Diarrhea, Fever, and Vomiting (continued)

### Assessment and Plan

- Unvaccinated status a concern. Will address with family after this acute episode is over.
- Rotavirus likely. Order rotavirus with EIA and RT-PCR, electrolyte panel.
- Patient requires IV hydration. Send to hospital for IV fluids and observation. Admission orders called in.

### Summary of ICD-10-CM Impacts

#### Clinical Documentation

1. Code the symptoms of diarrhea, fever, dehydration, dry mouth, and vomiting. Determine if the patient has nausea and document accordingly since there are codes to differentiate nausea and vomiting, and/or if there is the presence of vomiting without nausea.
2. Determine why the patient is not vaccinated and document accordingly. It is important to identify the reason(s) since there are multiple codes available to explain why immunizations haven't been administered. Because this is a significant public health issue, ICD-10-CM has addressed the collection of this information by providing multiple coding explanations as to why a child has not been immunized. In this scenario, Z28.3 Under-immunization status is the most appropriate code as it represents delinquent in immunizations.

#### Coding

ICD-9-CM Diagnosis Codes		ICD-10-CM Diagnosis Codes	
787.91	Diarrhea	R19.7	Diarrhea, unspecified,
780.60	Fever, unspecified 782.4	R50.9	Fever, unspecified
	Jaundice NOS		
787.03	Vomiting alone	R11.11	Vomiting without nausea
276.51	Dehydration	E86.0	Dehydration
789.67	Abdominal tenderness, generalized	R10.817	Generalized abdominal tenderness
V64.00	No vaccination, not other wise specified	Z28.3	Under-immunization status

#### Other Impacts

No specific impacts noted.

## Scenario 2: Physical for Preschool Entrance

### Scenario Details

#### Chief Complaint

- Preschool physical

#### History

- 4 year old male presenting for preschool physical exam. No acute concerns<sup>1</sup>.
- Asthma<sup>2</sup>, child has albuterol inhaler. Average one attack a week, somewhat limiting in terms of physical play.
- Immunizations are up to date; none are due at this time.

#### Exam

- Child development normal for age. Vitals, height, and weight are normal. Height and weight in 95th percentile.
- All other physical exam body sections and organ systems are within normal limits.
- Asthma is usually well controlled. Parents are able to verbalize common triggers and understand how to limit or avoid common triggers.

#### Assessment and Plan

- Age-appropriate injury prevention and health promotion issues discussed.
- Reviewed sports and asthma status. The patient demonstrated correct use of albuterol inhaler. No side effects noted per mother.
- No immunizations due at this time; will continue to follow immunization schedule.
- School assessment documentation completed and a copy retained in the medical record.

## Scenario 2: Physical for Preschool Entrance (continued)

### Summary of ICD-10-CM Impacts

#### Clinical Documentation

1. There is an administrative requirement for a physical exam pertaining to educational institution admission; there is no complaint, suspected, or reported diagnosis is indicated in this scenario. Also, hearing and vision exams haven't been performed. There are separate ICD-10-CM codes for vision screenings, hearing exams, and identified medical conditions; therefore, it is important to document this information in the patient's record where applicable.
2. ICD-10-CM terminology used to describe asthma has been updated to reflect the current clinical classification system. The terms intrinsic and extrinsic are no longer used. Persistent asthma is now classified as mild, moderate or severe. Specific asthma triggers should be noted (and are described adequately here). Other causes for acute exacerbation or lack of responsiveness to bronchodilators are not documented here, but should be included and would be relevant for coding and billing. Persistence (acute, persistent, exercise induced, etc.), severity, frequency, and functional attributes should be noted to best reflect patient complexity of care. Since the primary focus of this visit is not asthma the level of documentation provided is sufficient.

#### Coding

ICD-9-CM Diagnosis Codes		ICD-10-CM Diagnosis Codes	
V70.3	Medical exam not elsewhere classified, administrative purpose	Z02.0	Encounter for examination for admission to educational institution
493.00	Extrinsic asthma, unspecified	J45.20	Mild intermittent asthma uncomplicated

#### Other Impacts

Asthma is the most common chronic childhood illness and leading cause of pediatric hospitalization:

- Patient/parent adherence rates to medications and home-management recommendations may be low resulting in hospitalization and additional follow-up care which can be costly.
- There are HEDIS, Ambulatory Quality Alliance, and pay for performance measures (e.g., Leapfrog group) that may be applicable to this patient demographic group of your practice, depending on your payers.

## Scenario 3: Asthma and Atopic Dermatitis

### Scenario Details

#### Chief Complaint

- Asthma, atopic dermatitis.

#### History

- 6 year old male, established patient.
- Mother states son has had an exacerbation of asthma symptoms and observed a recent skin disruption during their family vacation to a dude ranch in Arizona last week. Mom stated that activities and issues associated with vacation may cause the asthma/skin disruption including potential allergens, change in sleep schedule, use of different laundry detergent, and exposure to new animals. She also mentioned there was significant second hand cigarette smoke exposure at the ranch with other guests and ranch employees.
- According to mother, child has asthma episodes about 2-3 times per month, effecting normal activities, but his condition is usually improved with short acting albuterol inhaler use. Child also has asthma episodes at nighttime occurring about once every three months.
- Several days prior to leaving the ranch, child began experiencing asthma episodes 2-3 times per day with difficulty in breathing, wheezing, and the feeling of heavy weight on his chest with progressive worsening. Mother states the albuterol inhaler was last used this morning, about 90 minutes prior to arrival, but seems less effective than usual.
- The skin disruption manifested three days after arrival to ranch; child's mother describes this as a red, itchy, scaly rash noted on face with patches around mouth, on both hands, and inside both elbows.
- Vaccination status: up to date.
- Family medical history: positive for asthma in mother and father, no eczema, no allergies.

#### Exam

- Vital Signs: BP 110/67, HR 100, T 98.9°F, R 28, Wt. 25kg, SpO2 95%
- General appearance: mild respiratory distress, alert.
- ENT: oropharynx clear, no plaques or exudates, minimal nasal flaring noted, no accessory muscle use.
- Respiratory: diminished breath sounds with mild expiratory wheezing heard throughout.
- Cardiovascular: no murmurs, no rubs, no gallops.
- Gastrointestinal: soft, NT, ND, no organomegaly, + BS
- Skin: color of lips and fingernails normal; scratching, redness and irritated skin evident on face and both elbows with crusted red nail marks.
- All other systems within normal limits.

## Scenario 3: Asthma and Atopic Dermatitis (continued)

### Assessment and Plan

- Intermittent asthma with acute exacerbation; atopic dermatitis. Asthma exacerbation caused by exposure to second-hand smoke.
- Administered one unit dose albuterol sulfate solution nebulizer treatment and first dose oral prednisolone in office with good response. Improvement noted.
- Prescribed 3-day course oral prednisolone; continue albuterol inhaler with spacer use as outpatient.
- Restart emollient cream applied after warm bath, and hydrocortisone cream applied to areas that itch.
- Discussed asthma action plan with mother, and when to call 911. Also discussed oral hygiene with use of inhaler.
- Mom instructed to return child in three days for recheck or sooner for worsening of symptoms.

### Summary of ICD-10-CM Impacts

#### Clinical Documentation

1. ICD-10-CM uses the National Heart, Lung, and Blood Institute (NHLBI)'s asthma severity classification in the terminology. This information in the context of the NHLBI guidelines can be accessed at [www.nhlbi.nih.gov/guidelines/asthma/asthma\\_qrg.pdf](http://www.nhlbi.nih.gov/guidelines/asthma/asthma_qrg.pdf).
2. Wheezing and acute bronchospasm, if relevant, are integral to the underlying medical condition of asthma, and are thus not coded separately as symptoms.
3. ICD-10-CM has another change in reporting respiratory diagnoses such as asthma and has desires an additional code, where applicable, to identify whether the patient had exposure to second-hand smoke, a history of tobacco use, or current use or dependence of tobacco.
4. The assignment of this code for exposure to second hand smoke is dependent upon the physician's documentation. The code should not be assigned as a first-listed diagnosis but may be assigned as an additional code when the physician has stated that second-hand smoke or environmental tobacco smoke is the cause of the patient's condition. The code may not assigned in the absence of a condition or symptom.

#### Coding

ICD-9-CM Diagnosis Codes		ICD-10-CM Diagnosis Codes
493.92 Asthma, unspecified type, with (acute) exacerbation	J45.21	Mild intermittent asthma, with (acute) exacerbation
691.8 Other atopic dermatitis and related conditions	L20.9	Atopic dermatitis, unspecified
V17.5 Family history of asthma	Z82.5	Family history of asthma and other chronic lower respiratory diseases
E869.4 Exposure to second hand smoke	Z77.22	Contact with and (suspected) exposure to environmental tobacco smoke (acute) (chronic)

#### Other Impacts

No specific impact noted.

## Scenario 4: Newborn Feeding

### Scenario Details

#### Chief Complaint

- Feeding problem, vomiting, rash.

#### History

- 7 day old female newborn, established patient, last seen in hospital five days ago.
- Uncomplicated full term pregnancy, vaginal/forceps assisted.
- Intact family – mother, father, three siblings, all present with patient.
- Per parents, patient is not feeding well by breast or bottle. Baby does swallow, but feeds slow and only briefly. Dad reports baby never seems to experience pain before or after feedings. No real fussiness at meals.
- Dad states baby has about 1 milky-colored tablespoon of non-projectile vomiting at end of the feedings and this is sometimes followed with coughing. No vomiting occurs from mouth or nose when burping.
- Mom has tried different angles/positions for breast and bottle feeding – “I am not new to breastfeeding”. She states no issues with latching-on to breast and has tried feeding more frequently and for a shorter time. Mom denies consuming chocolate, coffee, peppermint, fatty foods, citrus fruit; no alcohol, drugs, or OTC medication use.
- Parents have started holding baby about 30 minutes in sitting or upright position after being fed. Baby currently feeding every 2 hours for 10 – 15 minutes, alternating breast and bottle with some improvement.
- Per mom, baby has about 6 – 7 wet diapers a day and usually 2 BMs per day. Stool is yellow and/or green in color and loose but not watery.
- Parents also notice a rash eruption on face about 4 days ago. They described rash as blotchy and looked like flea bites; there are no animals in household. Per parents, the rash shape and size is not consistent and seems to change every few hours.

#### Exam

- Vital Signs: Weight 6 lbs. 10.5 oz., decrease of 5.5 oz. from birth weight (~5% wt. loss). Length 19.5 inches. HR 148 bpm, T 98.1°F, R 42.
- General appearance: patient awake and alert, does not appear to be in pain.
- Head: Normocephalic, fontanelles normal.
- EENT: PERRLA, Ears normal. Nose clear. Palate is complete. Oropharynx is clear with moist mucous membranes, tongue normal.
- Neurological: Normal suck, grasp, + Babinski, and +Moro.
- Skin: Noted normal turgor. No jaundice noted. Erythema toxicum neonatorum noted. Several 2 mm macules, papules, pustules. Blotchy areas of erythema. Lesions on the face, trunk; no lesions on palms and soles.
- Gastrointestinal: Umbilical stump intact/dried, abdomen soft, without guarding & rebound, otherwise normal.

## Scenario 4: Newborn Feeding (continued)

### Exam

- Genitalia: Normal.
- Respiratory: Normal.
- Cardiovascular: Normal
- Joints: Negative for Barlow and Ortolani.
- All other systems within normal limits.

### Assessment and Plan

- Difficulty feeding. Discussed additional feeding techniques, recommended adding nutritional supplements to breast milk to increase caloric intake. Supplements will include Vitamin D. Discussed introducing formula supplementation if symptoms continue.
- Instructed to watch for signs of dehydration.
- Will monitor for gastroesophageal reflux.
- Erythema toxicum neonatorum. Informed parents that rash should resolve on its own. Continue to watch.
- Next appointment in 2 days to recheck infant weight and feeding progress, sooner if symptoms worsen. Reminded parents of answering service/after hour's number.

## Scenario 4: Newborn Feeding (continued)

### Summary of ICD-10-CM Impacts

#### Clinical Documentation

1. ICD-10-CM provides additional code selections to describe newborn feeding conditions. The new alternatives include difficulty feeding at breast, overfeeding, regurgitation and rumination, slow feeding, underfeeding, other feeding problems of newborn, and feeding problem of newborn, unspecified.
2. Newborn is defined as the first 28 days of life. If the condition first presents after 28 days, it is not considered a newborn condition. The newborn codes may be used throughout the life of the patient, if the condition was noted as present during the first 28 days of life, and if the condition remains present after 28 days.

#### Coding

ICD-9-CM Diagnosis Codes		ICD-10-CM Diagnosis Codes	
779.31	Feeding problems in newborn	P92.2	Slow feeding newborn
779.33	Other vomiting in newborn	P92.8	Other feeding problems of newborn (brief feedings)
778.8	Other specified conditions involving the integument of fetus and newborn	P92.09	Other vomiting of newborn
		P83.1	Neonatal erythema toxicum

#### Other Impacts

No specific impact noted.