ICD-10 IN PRIMARY CARE
An Approach to Clinical Documentation Improvement
LYNN M. MYERS MD, CPC, CHC

Agenda

• The Challenge of ICD-10
• The Assessment of our Providers
• Actions Taken
• The Result

The Challenge

Train providers on ICD-10
– Coding guidelines
– Documentation
– EMR upgrades
– Paper vs. electronic
– Hospital and ambulatory
Defining the Scope

- Identify the high impact codes
  - Unspecified code analysis
- Audit Charts for 5 specialties
  - Cardiology
  - Orthopedics
  - Obstetrics
  - Family Practice
  - Internal Medicine

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<td>OSTEARTHRITIS NOS-UNSPEC</td>
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<td>BONE &amp; CARTILAGE DIS NOS</td>
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<td>162.9</td>
<td>MAL NEO BRONCH/LUNG NOS</td>
<td>4438</td>
<td>2.82%</td>
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Audit Report

ICD-10-CM Assessment Summary

<table>
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<tr>
<th>Findings</th>
<th>Counts</th>
<th>Description</th>
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</thead>
<tbody>
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<td>Documentation supports</td>
<td>22</td>
<td>Complete documentation</td>
</tr>
<tr>
<td>Documentation does not support</td>
<td>27</td>
<td>Potential risk for compliance</td>
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</table>
ICD-9-10 Diagnosis Accuracy

ICD9 vs. ICD10 Cardiology
ICD9 vs. ICD10 Internal Medicine (not including hospitalists or LTAC)

Provider 1
Provider 2
Provider 3
Provider 4
Provider 5

Internal Medicine Summary

ICD9 vs. ICD10 Obstetrics/Gyn

Provider 1
Provider 2
Provider 3
Provider 4
Provider 5
Diabetes EØØ-E89

- In ICD-9
  - 4th digit (if other than 0 or 9, requires add’l code)
  - 5th digit (describes control and type)
- In ICD-10-Combination codes
  - Type of DM
  - Body system affected
  - Complications affecting that body system

Diabetes EØ8-E13

- 5 categories
  - EØ8-DM due to underlying condition (secondary)
    - Cushing’s, CF, pancreatitis, etc.
  - EØ9-DM induced by drug or chemical (secondary)
    - Steroids
  - E1Ø-Type 1 DM (insulin deficiency)
  - E11-Type 2 DM (insulin resistance)
  - E13-Other specified DM (secondary)
    - Genetic defects, post-surgical

Diabetes

- Codes expanded to reflect manifestations and complications by use of 4th or 5th characters instead of additional ‘companion codes’
- Inadequately controlled, out of control, poorly controlled are coded to diabetes, by type, with hyperglycemia
Diabetes-Key Terms

• Document insulin use! Z79.4
• Document the causal condition, drug or chemical
• Document the underlying associated condition
• Document insulin pump complications
  – Initial, subsequent or sequela
  – Overdose or under-dosing of insulin related to pump malfunction
• Document complications – Hyperglycemia, hypoglycemia, renal, ophthalmic, etc.

Diabetes in Pregnancy O24

• Document if
  – diabetes pre-dates pregnancy
  – gestational
• Document trimester
• Document treatment
  – Diet controlled
  – Insulin controlled
  – Unspecified control

Hyperlipidemia

• ICD-9 Ability to define hypercholesterolemia, hypertriglyceridermia, and mixed
• ICD-10 Similar format
Hyperlipidemia-Key Terms

Encourage specificity by documenting significant laboratory test data. Coders cannot code from lab report.

- Pure hypercholesterolemia
- Pure glyceridemia (hypertriglyceridemia)
- Mixed (elevated cholesterol and triglycerides)
- Lipoprotein deficiency

Definitions

<table>
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<th>ICD-9</th>
<th>ICD-10</th>
<th>Comments</th>
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<td>Pure Hypercholesterolemia</td>
<td>272.0</td>
<td>E78.0</td>
<td>Familial, inherited, elevated LDL</td>
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<td>Pure Glyceridemia</td>
<td>272.1</td>
<td>E78.1</td>
<td>Elevated Very Low Density Lipoproteins</td>
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<td>Mixed</td>
<td>272.2</td>
<td>E78.2</td>
<td>Elevated cholesterol and triglycerides</td>
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<td>272.4</td>
<td>E78.4 E78.5</td>
<td>&quot;Hyperlipidemia&quot;</td>
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<td>Lipoprotein Deficiencies</td>
<td>272.5</td>
<td>E78.6</td>
<td>Low HDL with normal cholesterol</td>
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</table>

Obesity-E66

- ICD-9 defined as
  - Overweight, morbid and unspecified

- ICD-10 Documented by type and severity and BMI

- Pediatrics should be documented in BMI percentile (0-20yrs)
  - Overweight (85th to less than 95th percentile)
  - Obese (equal to or greater than the 95th percentile)
Obesity-Key Terms

- Obesity due to excess calories E66.0
  - Morbid (severely) obese due to excess calories (Adult BMI 40+) E66.01
  - Other obesity due to excess calories (Adult BMI 30+) E66.02
- Drug-induced obesity E66.1 (use additional code for adverse effect of drug)
- Morbid severe obesity with alveolar hypoventilation syndrome E66.2 (Pickwickian syndrome)
- Overweight (Adult BMI 25-29.9) E66.3
- Adult BMI codes are assigned for patient age 21+

Chapter IX i00-i99
Diseases of the Circulatory System

- Heart disease
- Cerebrovascular diseases
- Vascular diseases

Hypertension i10-i15

- In ICD-9
  - Requires documentation of benign, etc.
  - Combination codes/dual code requirement
    - Hypertensive heart + disease code
    - Hypertensive renal + renal disease code
    - Hypertensive heart and renal + both and renal codes
- In ICD-10
  - Combination codes
  - Dual code requirement remains
  - Hypertension in pregnancy is not included in Chapter IX
Hypertensive Heart Disease i11
Documentation
• Causal relationship “due to”
  – Echocardiogram
  – ECG findings
  – Exam findings of JVD and edema
• Type of heart failure - i50.-

Hypertensive Kidney Disease i12
Documentation
• Causal relationship may be assumed
• Stage of CKD included with the code
• Still requires additional code for CKD (N18.-)

Hypertensive Heart and Kidney Disease i13
Documentation
• Causal relationship
• Additional codes for heart failure (i50.-) and CKD (N18.-)
• Stage of CKD included in the code
Heart Failure i50

• Be sure that associated hypertensive heart and/or hypertensive heart & renal disease are documented
• Documentation must identify the cause-and-effect relationship between HTN and CHF.

Heart Failure i50.

Key Terms

• Cardiac asthma
• Edema of lung with heart disease
• Edema of lung with heart failure
• Left heart failure
• Pulmonary edema with heart disease
• Pulmonary edema with heart failure
• Biventricular (heart) failure
• Cardiac or myocardial failure
• Congestive heart disease or failure
• Right ventricular failure (secondary to left heart failure)

Heart Failure-Definitions

• Systolic HF i50.2  *A dilated ventricle that does not empty properly. ‘Exacerbation’ indicates an acute flare. If the patient has chronic HF, use the ‘acute on chronic’ CHF codes
• Diastolic HF i50.3-  40-60% of CHF; *Impaired myocardial relaxation results in increased diastolic pressure
Cerebrovascular Disease i60-i67

Key Terms

- Type
  - Cerebral infarction
  - Occlusion
  - Hemorrhage
- Site
  - Cerebral
  - Subarachnoid
  - Carotid
- Cause
  - Embolism
  - Occlusion
  - Thrombosis

- Use Additional Code for
  - Alcohol abuse/dependence
  - Exposure to tobacco smoke
  - History of tobacco use
  - Tobacco dependence
  - Tobacco use

CVA or Stroke Documentation

- Acute diagnosis within the first 24 hours, so not usually an ambulatory diagnosis
- Need specific information
  - Acute process
    - Cause, site, type
  - Late residual deficits (Sequela) if not acute-(i69)

Sequela of Cerebrovascular Disease

Key Terms

- Type of sequela
  - Apraxia
  - Dysphagia
  - Ataxia
  - Paralysis
  - Hemiplegia
  - Monoplegia
- Dominant or non-dominant side of the brain
Peripheral Vascular Disease

• Diabetic PVD coded in combination codes indicating type and nature of DM and PVD
  – Type 1 or 2 DM
  – Gangrene, peripheral angiopathy without gangrene
• Raynaud’s syndrome - With or without gangrene i73.0
• Buerger’s disease

Peripheral Vascular Disease

Key Terms

• Type
  – Aneurysm
  – Atherosclerosis
• Site
• Laterality
• Complications
  – Ulceration
  – Gangrene
• Type of vessel
  – Native
  – Autologous vein bypass
  – Non-autologous biological

Ischemic Heart Disease i20-i25

Documentation

• Combination codes for atherosclerotic Coronary Artery Disease & Angina i20
  – Native coronaries
  – Bypass grafts
  – Transplant
• With AMI i21
Mental, Behavioral & Neurodevelopmental Disorders

- ICD-9 is grouped by psychotic, nonpsychotic or mental retardation
- ICD-10 is grouped in blocks
  
  F01-F09 Due to known physiologic issues  
  F10-F19 Due to psychoactive substance use  
  F20-F29 Schizophrenia, etc.  
  F30-F39 Mood [affective] disorders-depression  
  F40-F48 Anxiety, dissociative, etc.

Dementia FØ1-FØ3

- Progressive decline in mental ability
  - Usually >60 y/o
  - Due to trauma, disease, toxins
- Often diagnosed by symptoms and behavior
  - Confirmation of diagnosis sometimes at autopsy
- Document the type of dementia AND any behavioral component
  - None
  - Aggressive, combative, violent, wandering off

Dementia-Key Terms

- Vascoar with or without behavioral disturbance
- Other causes-with or without behavioral disturbance
- Identify underlying disease as causative
  - Alzheimer’s with dementia
  - Creutzfeldt-Jakob
  - Lewy body disease
  - Fronto-temporal
  - Due to hypercalcemia, MS, syphilis, etc.
Depression F30-39
Key Terms
• Very much like ICD-9!
• Single, recurrent, persistent
• Mild, moderate, severe
• Remission
  – Full
  – Partial
• Psychosis
  – With
  – Without

Alzheimer’s Disease G3Ø-.
• Currently coded to 331.0
• Key terms
  – Early onset- before age 65 - New!
  – Late onset-New!
  – Other type causing diffuse atrophy of cerebrum
  – Unspecified

Injury and Poisoning SØØ-T88
• Injuries
• Traumatic fractures
• Burns and corrosions
• Adverse effects
  – Poisoning, under-dosing and toxic effects
• Child and Adult abuse and neglect
• Complications of care
Injuries

- Specific types of injuries are arranged by body region beginning with the head and concluding with the ankle and foot
- External cause codes capture the cause of the injury or condition, the intent, the place where the event occurred and the activity of the patient at the time of the event and the person’s status (military, etc.)
- Most diagnoses will have 7th character
  - A-initial encounter
  - D-subsequent encounter
  - S-sequela

Injuries

- Documentation of most serious injury is critical
  - Primary injury with minor damage to peripheral nerves or vessel
  - Primary injury to nerves, spinal cord or vessels

Traumatic fractures

- A-patient receiving active treatment
  - Surgical
  - ED encounter
  - Evaluation by new physician
- D-routine care during recovery
  - Cast change or removal
  - Removal of external or internal fixation device
  - Medication adjustment
  - Other aftercare and follow up following treatment
- S-complications or conditions that arise as a direct result of a condition
  - scar
Traumatic Fractures Documentation

- Site
- Laterality (if bilateral, and no bilateral code is provided, both sides are coded)
- Open or closed
- Displaced
- Initial or Subsequent encounter
- Complications
  - Malunion or nonunion?
- Presence of Osteoporosis (M80)

Late Effects (Sequela)

- The residual effect after the acute phase of an illness or injury has terminated
- No time limit
- Document the nature of the sequela as well as the cause of the sequela

Burns and Corrosions

- Burn codes are for burns that come from a heat source such as fire, a hot appliance, electricity & radiations
  - Depth
    - 1st - erythema
    - 2nd - blistering
    - 3rd - full thickness
- Corrosions are burns due to chemicals
Burns-Documentation

• Site
• Source of burn and place of occurrence
• Degree
• Focus of treatment (most severe)
• Non-healing or necrosis
• Infection
• Late effect (scar or contracture)
• Rule of 9s

  9% - Head & neck
  9% - Each arm
  18% - Each leg
  18% - Anterior trunk
  18% - Posterior trunk
  1% - Genitalia

Adverse Effects T36-T6

Documentation

Combination codes that include the substance as well as the intent

  Adverse Effect: effect of a drug properly prescribed and administered

  Examples of Effect: tachycardia, delirium, gastro-intestinal hemorrhaging, vomiting, hepatitis, renal failure, respiratory failure

Poisoning-Documentation

• A reaction to the improper use of a medication
  – Overdose
  – Wrong substance given in error
  – Wrong substance taken in error
  – Wrong route of administration
• Intent
  – Accidental
  – Intentional self-harm
  – Assault
  – Undetermined
Poisoning-Examples

- Error in drug prescription or administration of the drug by the provider, nurse, patient or other person
- Overdose of a drug intentionally taken
- Non-prescribed drug taken with correctly prescribed and properly administered drug
- Interaction of drug and alcohol

Under Dosing Documentation

- New code available to describe taking less of a medication than is prescribed by a provider or a manufacturer’s instruction
  - Financial reasons
  - Side effects
- Relapse or exacerbation of the medical condition for which the drug is prescribed should be documented
- Noncompliance should be documented, if known

Toxic Effects-Documentation

- When a harmful substance is ingested or comes in contact with a person
- Document intent
  - Accidental
  - Intentional self-harm
  - Assault
  - Undetermined
GERD

- ICD-9 Gastroesophageal Reflux vs. Reflux Esophagitis
- ICD-10 Gastroesophageal Reflux Disease is now a combination code

GERD Key Terms

With esophagitis K20.9
Without esophagitis K21.9

Sinusitis

- ICD-9 Acute vs. chronic and location
- ICD-10 Similar structure
  - Document acute vs. acute recurrent by site (use additional code to identify infectious agent – e.g., Staphylococcus)
  - Chronic (include tobacco exposure)
Sinusitis

Documentation for acute sinusitis may support specific codes based upon which sinuses are involved, and the causative organism. In primary care, the causative organism is often unknown, as indicated by the word ‘unspecified’ in the codes below. If the organism is known, a code from the B95-B97 series is also coded.

- J01.00 Acute maxillary sinusitis, unspecified
- J01.10 Acute frontal sinusitis, unspecified
- J01.20 Acute ethmoidal sinusitis, unspecified
- J01.30 Acute sphenoidal sinusitis, unspecified
- J01.40 Acute pansinusitis, unspecified
- J01.80 Other acute sinusitis—use for more than one sinus, but not pansinusitis

Key Terms-Sinusitis

- Frontal
- Maxillary
- Ethmoidal
- Sphenoidal
- Pansinusitis (inflammation of all paranasal sinuses on one or both sides)
- Tobacco details

Arthritis

Chapter 13 M00-M99

- ICD-9 Type and site involved no designation for laterality
- ICD-10 Cause, Site & Laterality
  - For certain conditions the upper or lower end may be involved, the designation is still the bone and not the joint
  - Bone vs. joint
  - Document whether acute traumatic, chronic or recurrent
  - Some types include ability to code for multiple sites
Arthritis-Key Terms

• Pyogenic (infectious)(document organism)
• Primary
  – Rheumatoid, by site
  – Other symptoms
    • With/without RF
    • With/without rheumatoid nodule
    • Involvement of other organs or systems
  – Juvenile
  – Psoriatic
• Secondary arthritis
  – Post-traumatic
  – Osteoarthritis (polyosteoarthritis-multiple sites)

Tobacco Exposure

Many different categories suggest coding tobacco exposure
  – Neoplasms, Heart Disease, Pulmonary, Obstetrics

Document specific types of exposure:
• Exposure to environmental tobacco smoke
  – Second hand exposure (acute/chronic)
  – Passive smoking (acute/chronic)
• History of tobacco use (personal)
• Occupational exposure to environmental tobacco smoke (servers)
• Document type of Nicotine dependence
  – Cigarettes, chewing tobacco, other types
• Document uncomplicated, withdrawal, remission, other nicotine-induced disorders

Tobacco

• Environmental exposure to tobacco smoke
• History of tobacco use
• Tobacco dependence
• Tobacco use-use when criteria for dependence is not met.
Defining Tobacco Dependence

At least 3 of the following in 12 months:
• Tolerance
• Withdrawal
• Nicotine is used in larger amounts or over a longer period than intended.
• The user has a persistent desire or makes unsuccessful attempts to cut down on tobacco.
• A great deal of time is spent in obtaining or using the substance (e.g., chain smoking).
• Reduction in activities because of tobacco use
• Recurrent use of the substance continues despite recurrent physical or psychological problems

COPD J44.0-J44.9

• ICD-9 Chronic bronchitis, obstructive chronic bronchitis, emphysema
• ICD-10 Chronic obstructive pulmonary disease

COPD-Key Terms

• Chronic bronchitis
• Chronic obstructive asthma
• Emphysema
• Exacerbation
• Decompensation
• Chronic lung disease
• Tobacco details
Asthma

• ICD-9 defined as intrinsic, extrinsic, exercise induced, other specified types
• ICD10 Document type includes allergic and non-allergic asthma.

Asthma Key Terms

• Mild intermittent
• Mild persistent
• Moderate persistent
• Severe persistent
• Tobacco Exposure
### Asthma Documentation

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<th>Severe Persistent</th>
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<td><strong>Symptoms</strong></td>
<td>2 or less days per week</td>
<td>More than 2 days per week</td>
<td>Daily</td>
<td>Throughout the day</td>
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<tr>
<td><strong>Nighttime Awakenings</strong></td>
<td>2 X's per month or less</td>
<td>3-4 X's per month</td>
<td>More than once per week but not nightly</td>
<td>Nightly</td>
</tr>
<tr>
<td><strong>Rescue Inhaler</strong></td>
<td>2 or less days per week</td>
<td>More than 2 days per week but not daily</td>
<td>Daily</td>
<td>Several times per day</td>
</tr>
<tr>
<td><strong>Interference with Normal activity</strong></td>
<td>None</td>
<td>Minor limitations</td>
<td>Some limitations</td>
<td>Extremely limited</td>
</tr>
<tr>
<td><strong>Lung Function</strong></td>
<td>FEV1 &gt;80% predicted and normal between exacerbations</td>
<td>FEV1 &gt;80% predicted</td>
<td>FEV1 60-80% predicted</td>
<td>FEV1 less than 60% predicted</td>
</tr>
</tbody>
</table>

### Headache-Key terms

- **Type**
  - Migraine G43. -
  - Cluster G44.0-
  - Vascular G44.1-
  - Tension G44.2-
  - Post-traumatic G44.3-
  - Drug induced G44.4-
  - Menstrual G44.8-
- **Aura (with or without)**
- **Intractable (or not)**

### Rhinitis J30-31

**Key Terms**

**Vasomotor & Allergic J30.-**
- Allergic rhinitis
- Vasomotor rhinitis
- Allergic rhinitis due to pollen
- Other seasonal allergic rhinitis
- Allergic rhinitis, unspecified

**Chronic rhinitis J31.0**

**Acute nasopharyngitis (common cold) J00**
UTI

Key Terms

• Site
  – Cystitis N30.-
  – Urethritis N34.-
  – Not specified N39.0
• Infectious Agent B95-B97

Training

• Make the most of ‘Teachable Moments’
• Regular newsletter publications
  – “ICD-10 Coding Corner”
• Audit Recommendations

Formal Training

• Leverage system resources
• Capitalize on existing educational offerings
  – Medicare Advantage
  – ACO
  – Meaningful Use
Training Schedule

- Web-based training
  - Awareness
  - Non-coders that use ICD codes in daily work
    • Providers
    • Staff
- Instructor-led training
  - Coders
  - Providers
    • Ambulatory: Five 2-hour sessions in each of 3 zones
    • Hospital: Two 2-day one hour sessions in each of 14 hospitals, followed by on site coder access

The Result

- To Be Determined!
- Chart Audits for ICD-10 to begin in the 4th quarter
THANK YOU!

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