Chronic Condition Toolbook: Diabetes

Focusing on Diabetes and Its Complications
Focusing on Diabetes ................................................................. 1
Diabetic Peripheral Neuropathy ............................................... 2
Peripheral Neuropathy Screening Tool ........................................ 3
Peripheral Arterial Disease (PAD) .............................................. 4
Peripheral Arterial Disease (PAD) Documentation & Coding ................... 5

Managing Chronic Kidney Disease:  
Early Detection, Accurate Staging and Correct Reporting ................................. 6

Screening and Documentation Tool:  
Diabetes, Chronic Kidney Disease and Peripheral Arterial Disease ...................... 8

Diabetes Mellitus and Associated Manifestations ........................................... 9

Due to the updated, clinically revised CMS-HCC Medicare risk adjustment model for Payment Year 2015, the bolding of ICD-9-CM codes has been revised to reflect:

- **Red** = Risk adjusts *in only* the 2013 CMS-HCC model
- **Black** = Risk adjusts *in both* the 2013 CMS-HCC model and the 2014 CMS-HCC model
- **Orange** = Risk adjusts *in only* the 2014 CMS-HCC model

*Note: The 2015 Payment Year model is a blend of the 2013 CMS-HCC model (67%) and the 2014 CMS-HCC model (33%).*
Focusing on Diabetes

Facts about Diabetes
Sixty percent of all diabetics have some complication of this devastating disease.

Diabetes with renal manifestations
Since diabetic nephropathy occurs in up to 40% of individuals with diabetes, annual screening for proteinuria in all diabetics and calculation of the Glomerular Filtration Rate (GFR) should be performed.

ICD-9-CM
• 250.4x Diabetes w/ Renal Manifestations
If Chronic Kidney Disease (CKD), use additional codes: 585.1-585.9

There is no presumed linkage between diabetes and CKD. The linkage must be stated specifically (i.e., diabetic nephropathy) or addressed as a causal relationship (i.e., chronic kidney disease due to diabetes).

Diabetes with opthalmologic manifestations
Screening: a dilated and comprehensive eye examination by an ophthalmologist or optometrist shortly after the diagnosis of diabetes. Subsequent eye exams should be repeated annually.

ICD-9-CM
• 250.5x Diabetes w/ Ophthalmic Manifestations
Use additional code to identify the manifestation

Diabetes with peripheral circulatory manifestations
Screening for peripheral arterial disease (PAD) is best achieved by both obtaining a history for claudication and performing an ankle-index (ABI) on all diabetic patients. Patients with ABI between 0.9 and 0.8 can be managed by the primary care physician with improved glucose control, supervised exercise regimens, and reduction of other risk factor (i.e., tobacco cessation). Specialized referrals are required for patients with ABIs > 1.2 or < 0.8.

ICD-9-CM
• 250.7x Diabetes w/ Peripheral Circulatory Disorders
Use additional code to identify the manifestation

Diabetes with neurological manifestations
Screening for peripheral neuropathy: A foot examination should include inspection, assessment of foot pulses, and testing for loss of protective sensation, assessing for changes in vibratory sensation and deep tendon reflexes (ankle), and identifying foot ulcers and amputations.

ICD-10-CM Coding Categories for Diabetic manifestations
• E08 Diabetes mellitus due to underlying cause*
• E09 Drug or chemical induced diabetes mellitus*
• E10 Type 1 diabetes mellitus
• E11 Type 2 diabetes mellitus
• E13 Other specified diabetes mellitus*
*Types of secondary diabetes mellitus

These are categories only. Please consult the code set for further information.

If type of Diabetes not documented – assign Type 2
• Long-term use of insulin
  • ICD-9-CM V58.67
  • ICD-10-CM Z79.4

Combination codes include:
• Type of diabetes
• Body system affected
• Complications affecting that body system
  • NO 5th digits as in ICD-9-CM
  • Note in the index for inadequately controlled, out of control, poorly controlled, coded by type with hyperglycemia

Example of combination code:
• E10.331 Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema

Code includes:
• Type of diabetes
• Body system involved
• Complications of the body system

Diabetes with peripheral neuropathy or peripheral arterial disease are three times more likely to have an amputation compared with diabetic people without these conditions.¹

Why is it important to diagnose Diabetic Peripheral Neuropathy?

Peripheral neuropathy may cause:²

- Foot deformities, such as hammertoes and the collapse of the midfoot
- Muscle weakness and loss of reflexes
- Injury and ulcers as numbness decreases awareness of pressure or injury
- Infection and tissue necrosis, resulting in limb loss (i.e., amputation)

If an infection occurs and is not treated promptly, the infection may spread to the bone and the foot may have to be amputated.

Many amputations are preventable if minor problems are caught and treated in time. Diagnose and treat a neuropathy before a complication occurs!

Why does it matter?

Providers can improve patients’ quality of life and outcomes with earlier screening and detection of Diabetic Peripheral Neuropathy.

- Diabetic patients account for 60% of all lower extremity amputations; 85% of these lower extremity amputations are preceded by a foot ulcer³⁴
- Five-year survival rate following diabetes-related amputation is less than 30%⁵
- Among persons with diabetes, foot ulcers and amputations can be reduced by up to 85%⁶

How are you currently screening for Diabetic Peripheral Neuropathy?

The American Diabetes Association recommends an annual comprehensive foot examination on patients with diabetes and a visual inspection of the feet at each routine visit.

Guidelines for Comprehensive Foot Care: Key Components⁴

<table>
<thead>
<tr>
<th>History</th>
<th>Assess for prior ulcers, amputation, symptoms related to neuropathy or peripheral vascular impairment, diabetic nephropathy and use of tobacco.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspection</td>
<td>Inspect feet for abnormalities, such as ulcers, erythema, skin temperature differences, as well as callus presence, nail changes and paronychia. Check shoes and socks for evidence of proper fit and bloody discharge.</td>
</tr>
<tr>
<td>Musculoskeletal</td>
<td>Check for deformities such as bunions, prominent metatarsal heads, toe deformities and Charcot foot.</td>
</tr>
<tr>
<td>Neurological</td>
<td>Perform tests to look for loss of protective sensation (LOPS), which should generally include testing with a 10 gm monofilament and one other test (e.g., tuning fork, ankle reflexes, pinprick sensation).</td>
</tr>
<tr>
<td>Vascular</td>
<td>Assess patients &lt; 50 years old with diabetes and one other atherosclerotic risk factor (e.g., smoking, dyslipidemia, hypertension, or hyperhomocysteinemia), patients 50-64 years old with history of diabetes or smoking, and all patients 65 or older.</td>
</tr>
</tbody>
</table>

This test may be performed in your practice

Monofilament Testing

The sites of Semmes-Weinstein monofilament test.
Source: Korean Med Sci 2003; 18:10 3-7

---

Peripheral Neuropathy Screening Tool

Brief Peripheral Neuropathy Screening Tool

1. **Elicit Subjective Symptoms**
   
   Ask the subject to rate the severity of each symptom listed in question 1 on a scale of 01 (mild) to 10 (most severe) for right and left feet and legs. Enter the score for each symptom in the columns marked R (right lower limb) and L (left lower limb). If a symptom has been present in the past, but not since the last visit, enter “00 - Currently Absent.” If the symptom has never been present, enter “11 - Always Been Normal.”

<table>
<thead>
<tr>
<th>ALWAYS BEEN NORMAL</th>
<th>CURRENTLY ABSENT</th>
<th>MILD</th>
<th>SEVERE</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>00</td>
<td>01</td>
<td>02</td>
</tr>
<tr>
<td></td>
<td></td>
<td>03</td>
<td>04</td>
</tr>
<tr>
<td></td>
<td></td>
<td>05</td>
<td>06</td>
</tr>
<tr>
<td></td>
<td></td>
<td>07</td>
<td>08</td>
</tr>
<tr>
<td></td>
<td></td>
<td>09</td>
<td>10</td>
</tr>
</tbody>
</table>

**SYMPTOMS**

- a. Pain, aching, or burning in feet, legs
- b. “Pins and needles” in feet, legs
- c. Numbness (lack of feeling) in feet, legs

2. **Grade Subjective Symptoms**
   
   Use the single highest severity score from question 1 above to obtain a subjective sensory neuropathy score. If all severity scores are “00” or “11,” the subjective sensory neuropathy score will equal “0.”

   **Subjective Sensory Neuropathy Score** (based on highest severity rating):

<table>
<thead>
<tr>
<th>Score</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 - 03</td>
<td>grade of 1</td>
</tr>
<tr>
<td>04 - 06</td>
<td>grade of 2</td>
</tr>
<tr>
<td>07 - 10</td>
<td>grade of 3</td>
</tr>
<tr>
<td>11 or 00</td>
<td>grade of 0</td>
</tr>
</tbody>
</table>

3. **Evaluate Perception of Vibration**
   
   Compress the ends of a 128-Hz tuning fork just hard enough that the sides touch. Place the vibrating tuning fork on a bony prominence on the subject’s wrist or hand to be sure that he/she can recognize the vibration or “buzzing” quality of the tuning fork. Again, compress the ends of the tuning fork just hard enough that the sides touch. Immediately place the vibrating tuning fork gently but firmly on the top of the distal interphalangeal (DIP) joint of one great toe and begin counting the seconds. Instruct the subject to tell you when the “buzzing” stops. Repeat for the other great toe.

   **Vibration perception**

   - a. Great toe DIP joint perception of vibration in seconds
   - b. Vibration perception score

<table>
<thead>
<tr>
<th>Score</th>
<th>Perception</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 = felt &gt;10 seconds (normal)</td>
<td></td>
</tr>
<tr>
<td>1 = felt 6-10 seconds (mild loss)</td>
<td></td>
</tr>
<tr>
<td>2 = felt &lt;5 seconds (moderate loss)</td>
<td></td>
</tr>
<tr>
<td>3 = not felt (severe loss)</td>
<td></td>
</tr>
<tr>
<td>8 = unable to or did not assess</td>
<td></td>
</tr>
</tbody>
</table>

4. **Evaluate Deep Tendon Reflexes**
   
   With the subject seated, the examiner uses one hand to press upward on the ball of the foot, dorsiflexing the subject’s ankle to 90 degrees. Using a reflex hammer, the examiner then strikes the Achilles tendon. The tendon reflex is felt by the examiner’s hand as a plantar flexion of the foot, appearing after a slight delay from the time the Achilles tendon is struck. Use reinforcement by having the subject clench his/her fist before classifying the reflex as absent.

   **Ankle Reflexes Score**

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 = absent</td>
<td></td>
</tr>
<tr>
<td>1 = hypoactive</td>
<td></td>
</tr>
<tr>
<td>2 = normal deep tendon reflexes</td>
<td></td>
</tr>
<tr>
<td>3 = hyperactive</td>
<td></td>
</tr>
<tr>
<td>4 = clonus</td>
<td></td>
</tr>
<tr>
<td>8 = unable to or did not assess</td>
<td></td>
</tr>
</tbody>
</table>

Sources:
Peripheral Arterial Disease (PAD)

In the next five years, one in four of your patients with Peripheral Arterial Disease will suffer a heart attack, stroke, amputation, or death.¹

Did you know that...

- PAD affects approximately 8 to 12 million individuals in the United States²
- PAD afflicts 29% of patients who are:
  - ≥70 years
  - 50 years and older with at least a 10-pack per year history of smoking³ or
  - 50 years and older with a history of diabetes⁴
- Up to 89% of people with PAD do not present with symptoms of classic claudication¹
- Despite the strikingly high prevalence of PAD, this disease is underdiagnosed because it often presents with atypical symptoms or no ischemic symptoms related to the legs at all³

Why is it important to diagnose asymptomatic at-risk individuals with lower extremity PAD?

PAD is a prevalent atherosclerotic syndrome and is associated with a very high risk of MI, stroke and death. In the absence of a national program of PAD education and detection, many patients will not receive a diagnosis of PAD prior to the occurrence of a morbid or mortal ischemic event.

**Groups at risk for PAD includes individuals...**

- < 50 years old with diabetes and one other atherosclerotic risk factor (smoking, dyslipidemia, hypertension, or hyperhomocysteinemia)
- 50 years and older and history of smoking or diabetes
- ≥ 65 years
- with leg symptoms with exertion (suggestive of claudication) or ischemic rest pain
- abnormal lower extremity pulse examination
- with known atherosclerotic coronary, carotid or renal arterial disease

Recognizing the importance of early diagnosis of PAD is the first step in improving patient outcomes resulting in...

1. Increased provider and member awareness of PAD
2. Earlier detection, including individuals at risk for PAD without classic symptoms
3. Lifestyle modification and pharmacological interventions
4. Reduced progression of PAD, symptomatic improvement and cardiovascular risk reduction

---

4 Mohler, ER. “Patient Information: Claudication (peripheral arterial disease).” In: UpToDate, Basow, DS (Ed), UpToDate, Waltham, MA, 2010.
“Peripheral arterial disease,” “peripheral vascular disease” and “intermittent claudication” are coded as 443.9. It is important to note that this code excludes atherosclerosis of the arteries of the extremities. When atherosclerosis (arteriosclerosis) is diagnosed by the clinician, the progress note should state “arteriosclerosis of” and the site, “arteriosclerotic” or “arteriosclerosis with” followed by the symptom or complication (e.g., arteriosclerosis with ulceration). Arteriosclerosis and atherosclerosis may be used interchangeably for documentation and coding purposes. Documentation of arteriosclerosis that lacks specificity is coded as 440.9 and includes the following:

- Arteriosclerotic vascular disease NOS
- Generalized arteriosclerosis
- Endarteritis deformans
- Arteriosclerosis (obliterans) (senile)
- Arteriosclerosis with calcification
- Occlusive arteriosclerosis

### ICD-9-CM Codes

Atherosclerosis of the native arteries of the extremities (Category 440) is further classified as:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>440.20</td>
<td>Atherosclerosis of native arteries of the extremities, unspecified</td>
</tr>
<tr>
<td>440.21</td>
<td>Atherosclerosis of native arteries of the extremities, with intermittent claudication</td>
</tr>
<tr>
<td>440.22</td>
<td>Atherosclerosis of native arteries of the extremities, with rest pain</td>
</tr>
<tr>
<td>440.23*</td>
<td>Atherosclerosis of native arteries of the extremities, with ulceration</td>
</tr>
<tr>
<td>440.24*</td>
<td>Atherosclerosis of native arteries of the extremities, with gangrene</td>
</tr>
<tr>
<td>440.29</td>
<td>Atherosclerosis of native arteries of the extremities, other</td>
</tr>
</tbody>
</table>

When PAD or atherosclerosis is documented as a manifestation of diabetes or secondary diabetes, report one of the following diabetes codes with the associated manifestation code:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>250.70-250.73</td>
<td>Diabetes with peripheral circulatory disorders</td>
</tr>
<tr>
<td>249.70-249.71</td>
<td>Secondary diabetes with peripheral circulatory disorders</td>
</tr>
</tbody>
</table>

The progress note must provide the appropriate linkage between the diabetes and the manifestation. For example, if the documentation states “PAD due to diabetes,” the most appropriate code to describe the PAD is 443.81. This becomes a two-code scenario:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>250.70</td>
<td>Diabetes with peripheral circulatory disorders, Type II or unspecified type, not stated as uncontrolled</td>
</tr>
<tr>
<td>443.81</td>
<td>Peripheral angiopathy in diseases classified elsewhere</td>
</tr>
</tbody>
</table>

Atherosclerotic disease is a progressive disease. Therefore, avoid documenting “history of peripheral vascular disease” and instead consider “known peripheral arterial disease.” In support of such documentation, providers can use a V code for patients who have had peripheral arterial bypass (V43.4) in addition to the ICD-9-CM code for PAD.

*Use additional code to identify any associated ulceration:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>707.1X</td>
<td>Ulcer of lower limbs, except pressure ulcer</td>
</tr>
<tr>
<td>X = 0</td>
<td>unspecified</td>
</tr>
<tr>
<td>X = 1</td>
<td>thigh</td>
</tr>
<tr>
<td>X = 2</td>
<td>calf</td>
</tr>
<tr>
<td>X = 3</td>
<td>ankle</td>
</tr>
<tr>
<td>X = 4</td>
<td>heel and midfoot</td>
</tr>
<tr>
<td>X = 5</td>
<td>other part of foot</td>
</tr>
<tr>
<td>X = 9</td>
<td>other part of lower limb</td>
</tr>
<tr>
<td>707.8</td>
<td>Chronic ulcer of other specified site</td>
</tr>
<tr>
<td>707.9</td>
<td>Chronic ulcer of unsp. site</td>
</tr>
</tbody>
</table>

When documenting ulcers, it is important **not to** document them as “wounds,” “open wounds” or “lesions.”
Currently, there are 26 million Americans with Chronic Kidney Disease (CKD). CKD can cause damage to the cardiovascular system and may result in dialysis. Undiagnosed CKD can be debilitating — and can lead to more serious complications up to and including death. Since each stage of CKD requires different interventions, it is important to be able to specify which stage of CKD a patient may have. Knowing how to appropriately detect, stage and treat for CKD can potentially improve health outcomes for this serious condition.

Did you know2 . . .

• By using the more accurate test of eGFR, CKD can be diagnosed well before abnormal creatinine levels appear
• Persistent protein in the urine indicates CKD
• Symptoms for CKD do not appear until the disease is advanced

Always remember to . . .

Screen at-risk individuals for CKD, such as:
• Individuals with hypertension or diabetes
• Those who have a family history of hypertension or diabetes or any renal disease
• Those considered as U.S. ethnic minority status

Test your high-risk patients annually with the following tests:
• Blood pressure measurement
• Urine test to detect protein (microalbuminuria)
• Chemistry (creatinine) to calculate GFR

Approximately 39.4% of adults 60 years or older in the United States have CKD according to the Centers for Disease Control and Prevention.3 On average, providers are reporting CKD at a much lower rate. The charts on page 9 represent coding of CKD and its other associated conditions.

Sources:
### Staging Chronic Kidney Disease

Note: All stages need to be chronic, not a one-time event.

<table>
<thead>
<tr>
<th>Stage</th>
<th>Severity</th>
<th>GFR Value (ml/min/1.73 m²)</th>
<th>ICD-9 Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage I</td>
<td>Normal or slightly ↑ GFR</td>
<td>GFR ≥ 90 with kidney damage*</td>
<td>585.1</td>
</tr>
<tr>
<td>Stage II</td>
<td>Mild</td>
<td>GFR 60-89 with kidney damage*</td>
<td>585.2</td>
</tr>
<tr>
<td>Stage III</td>
<td>Moderate</td>
<td>GFR 30-59</td>
<td>585.3</td>
</tr>
<tr>
<td>Stage IV</td>
<td>Severe</td>
<td>GFR 15-29</td>
<td>585.4</td>
</tr>
<tr>
<td>Stage V</td>
<td>Kidney Failure</td>
<td>GFR &lt; 15</td>
<td>585.5</td>
</tr>
<tr>
<td>CKD Unsp.</td>
<td>CKD, CRF NOS or CRI</td>
<td>Chronic Kidney Disease, unsp.</td>
<td>585.9</td>
</tr>
</tbody>
</table>

*Assign V45.11 for “dialysis status” or V45.12 for “noncompliance with renal dialysis” with regard to all 585.6 and some 585.5; assign V42.0 for “kidney transplant status.”

*CKD is defined as either kidney damage or GFR < 60 ml/min/1.73 m² for ≥ 3 months.

*Kidney damage is defined as pathologic abnormalities or markers of damage, including abnormalities in blood or urine tests (e.g., untimed spot urine albumin/creatinine ratio or microalbumin-sensitive dipstick) or imaging studies. Thus, patients can have chronic kidney disease with a normal estimated GFR.

### CKD, Hypertension & Heart Failure

Note: With chronic kidney disease, identify the stage of the disease; with heart failure, identify the type of failure.

<table>
<thead>
<tr>
<th>ICD-9 Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>403.90</td>
<td>Hypertensive CKD w/ CKD Stage I–IV or Unsp.</td>
</tr>
<tr>
<td>403.91</td>
<td>Hypertensive CKD w/ CKD Stage V or ESRD</td>
</tr>
<tr>
<td>404.90</td>
<td>Hypertensive Heart &amp; CKD w/o Heart Failure &amp; w/ CKD Stage I–IV or Unsp.</td>
</tr>
<tr>
<td>404.91</td>
<td>Hypertensive Heart &amp; CKD w/ Heart Failure &amp; w/ CKD Stage I–IV or Unsp.</td>
</tr>
<tr>
<td>404.92</td>
<td>Hypertensive Heart &amp; CKD w/o Heart Failure &amp; w/ CKD Stage V or ESRD</td>
</tr>
<tr>
<td>404.93</td>
<td>Hypertensive Heart &amp; CKD w/ Heart Failure &amp; CKD Stage V or ESRD</td>
</tr>
</tbody>
</table>

### Transplant & Dialysis

<table>
<thead>
<tr>
<th>ICD-9 Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>V42.0</td>
<td>Kidney Transplant Status</td>
</tr>
<tr>
<td>V45.11</td>
<td>Renal Dialysis Status</td>
</tr>
<tr>
<td>V45.12</td>
<td>Renal Dialysis, Noncompliance</td>
</tr>
</tbody>
</table>

### CKD and Diabetes

The following 5th digits are required for all DM codes:

**Primary DM** (250 category only)

- **0** = Type II or unspecified type, not stated as uncontrolled
- **1** = Type I (juvenile type), not stated as uncontrolled
- **2** = Type II or unspecified type, uncontrolled
- **3** = Type I (juvenile type), uncontrolled

**Secondary DM** (249 category only)

- **0** = Not stated as uncontrolled, or unspecified
- **1** = Uncontrolled

<table>
<thead>
<tr>
<th>ICD-9 Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>250.4x</td>
<td>DM (prim) w/ Renal Manifestations (add 5th digit 0–3 above)*</td>
</tr>
<tr>
<td>249.4x</td>
<td>DM (sec) w/ Renal Manifestations (add 5th digit 0–1 above)*</td>
</tr>
</tbody>
</table>

*Use additional code(s), if applicable, to identify diabetic manifestation(s) such as:

<table>
<thead>
<tr>
<th>ICD-9 Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>585.x</td>
<td>Chronic Kidney Disease or Chronic Renal Failure (For “x”, see “Staging Chronic Kidney Disease” table.)</td>
</tr>
<tr>
<td>403.9x</td>
<td>Hypertensive CKD (For “x”, see “CKD, Hypertension &amp; Heart Failure” table.)</td>
</tr>
<tr>
<td>583.81</td>
<td>Nephritis and Nephropathy, NOS</td>
</tr>
<tr>
<td>581.81</td>
<td>Nephrosis / Nephrotic Syndrome</td>
</tr>
<tr>
<td>791.0</td>
<td>Proteinuria, Albuminuria, Microalbuminuria</td>
</tr>
</tbody>
</table>

Note: Use additional code(s) for associated long-term (current) insulin use (V58.67) (except Type I), if applicable.

### Renal Failure

<table>
<thead>
<tr>
<th>ICD-9 Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>584.9</td>
<td>Acute Kidney Failure, Unspecified. Acute Kidney Injury (nontraumatic)</td>
</tr>
<tr>
<td>586</td>
<td>Renal Failure, Unspecified. Uremia NOS</td>
</tr>
</tbody>
</table>

### Additional Information

Screening and Documentation Tool:  Diabetes, Chronic Kidney Disease and Peripheral Arterial Disease

THE CHALLENGE: CONDITION RECOGNITION “GAP”

**Diabetes Mellitus (DM):**
The prevalence of DM is 26.6%. Among adults ≥ 20 years of age, as many as 30% of individuals with diabetes were undiagnosed.

**Chronic Kidney Disease (CKD):**
39.4% of people age 60 and older have CKD.

**Peripheral Arterial Disease (PAD):**
Although more than half of patients with PAD in one study had leg symptoms, relatively few had classic claudication. It is estimated that only 25% of afflicted individuals receive care.

Documentation Tips and Tools:
For patients age 65 and older, use of a Clinical Testing Flow Sheet (see back of this sheet) will facilitate capture of dates and results of the following:

- **Blood pressure, weight and BMI (every visit):** “Adults with treated or untreated BP > 135/80 mm Hg should be screened for diabetes.” (USPSTF Recommendation)
- **Ankle-brachial index (ABI):** ABI is used to screen at-risk individuals for asymptomatic lower extremity PAD.
- **Comprehensive dilated eye exam:** Recommended annually for patients with diabetes; Type 1 begin within 5 years of initial diagnosis, Type 2 begin soon after the diagnosis.
- **Comprehensive foot exam:** Foot exam includes inspection, palpation of pedal pulses, testing to detect loss of protective sensation (LOPS), which includes standard monofilament testing combined with an additional test, such as vibration, pinprick sensation or ankle reflexes. Recommended at least annually.
- **Testing for diabetes:**
  1. People with one or more high-risk foot conditions should have a visual inspection of their feet at every clinic visit.
  2. A1C > 6.5%. “The test should be performed in a laboratory using a method that is NGSP-certified and standardized to the DCCT assay.” Use of the A1C to diagnose diabetes may not be valid with certain clinical conditions.
  3. Fasting (8 hours): FPG ≥ 126 mg/dl.
  4. Oral glucose tolerance test (OGTT): Plasma glucose > 200 mg/dl 2 hrs. after 75 gm glucose load.
  5. Random plasma glucose ≥ 200 mg/dl in patients with classic hyperglycemic symptoms.
- **Monitoring glucose control with Hemoglobin A1C:**
  1. Every 3 months: if modifying therapy or if not meeting glycemic goals
  2. Twice a year: if meeting treatment goals and stable glycemic control
- **Diabetic Nephropathy Screening:** Screen for diabetic nephropathy by testing annually for urine albumin excretion and by determining, at least annually, serum creatinine and estimated GFR.
- **Fasting lipid profile (at least annually):**
  1. Without overt CVD, LDL-C goal <100 mg/dl
  2. With overt CVD, LDL-C goal of <70 mg/dl (using high dose of a statin) is an option

  "For patients who have been recently diagnosed with diabetes, were determined to be at risk for complications from diabetes, or were previously diagnosed with diabetes before meeting Medicare eligibility requirements, effective January 1, 2011, individual and group diabetes self-management training (DSMT) services are reportable (HCPCS codes G0108 & G0109). For more information, see: http://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/DiabetesSvc.pdf.

*In the absence of unequivocal hyperglycemia, “Testing for Diabetes” criteria 1 – 3 should be confirmed by repeat testing.
*Statin contraindicated in pregnancy.

**ICD-9-CM CODING GUIDE**

### Diabetes

**Diabetes without mention of complications:**
250.00

**Diabetes with mention of complications:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renal manifestations</td>
<td>250.4x</td>
</tr>
<tr>
<td>Ophthalmic manifestations</td>
<td>250.5x</td>
</tr>
<tr>
<td>Neurological manifestations</td>
<td>250.6x</td>
</tr>
<tr>
<td>Peripheral circulatory disorders</td>
<td>250.7x</td>
</tr>
<tr>
<td>Other specified manifestations, such as:</td>
<td>250.8x</td>
</tr>
<tr>
<td>Diabetic hypoglycemia NOS, hypoglycemic shock NOS</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>x = 0 Type 2 or unspecified type, not stated as uncontrolled</td>
</tr>
<tr>
<td>x = 1 Type 1, not stated as uncontrolled</td>
</tr>
<tr>
<td>x = 2 Type 2 or unspecified type, uncontrolled</td>
</tr>
<tr>
<td>x = 3 Type 1, uncontrolled</td>
</tr>
</tbody>
</table>

### Chronic Kidney Disease*

<table>
<thead>
<tr>
<th>Stage</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>I: GFR ≥ 90 with kidney damage</td>
<td>585.1</td>
</tr>
<tr>
<td>Kidney damage is defined as pathologic abnormalities or markers of damage, including abnormalities in blood or urine tests (e.g., un timed spot urine albumin/creatinine ratio or microalbumin-sensitive dipstick) or imaging studies.</td>
<td></td>
</tr>
<tr>
<td>Stage II: GFR 60–89 with kidney damage</td>
<td>585.2</td>
</tr>
<tr>
<td>Stage III: GFR 30–59</td>
<td>585.3</td>
</tr>
<tr>
<td>Stage IV: GFR 15–29</td>
<td>585.4</td>
</tr>
<tr>
<td>Stage V: GFR less than 15</td>
<td>585.5</td>
</tr>
<tr>
<td>ESRD: requiring chronic dialysis or transplantation</td>
<td>585.6</td>
</tr>
<tr>
<td>Chronic Kidney Disease, unspecified</td>
<td>585.9</td>
</tr>
<tr>
<td>Nephritis and nephropathy, not specified as acute or chronic, in diseases classified elsewhere</td>
<td>583.81</td>
</tr>
</tbody>
</table>

*Use additional code to identify kidney transplant status (V42.0), renal dialysis status (V45.11) or noncompliance with renal dialysis (V45.12), if applicable.

### Periperal Arterial Disease

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peripheral Arterial Disease NOS</td>
<td>443.9</td>
</tr>
<tr>
<td>Peripheral Vascular Disease NOS</td>
<td></td>
</tr>
<tr>
<td>Intermittent Claudication NOS</td>
<td></td>
</tr>
</tbody>
</table>

### Atherosclerosis / Arteriosclerosis of native arteries of the extremities:

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>With intermittent claudication</td>
<td>440.21</td>
</tr>
<tr>
<td>With rest pain</td>
<td>440.22</td>
</tr>
<tr>
<td>With ulceration</td>
<td>440.23**</td>
</tr>
<tr>
<td>With gangrene</td>
<td>440.24**</td>
</tr>
<tr>
<td>Unspecified</td>
<td>440.20</td>
</tr>
</tbody>
</table>

Atherosclerosis of bypass graft of the extremities, unspecified graft | 440.30 |

Periperal angipathy in diseases classified elsewhere | 443.81 |

### THE FOLLOWING FIFTH-DIGIT SUBCLASSIFICATIONS ARE FOR USE WITH ALL SUBCATEGORY 250.X DM CODES:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Type II or Unspecified Type, Not Stated as Uncontrolled*</td>
</tr>
<tr>
<td>1</td>
<td>Type I [Juvenile Type], Not Stated as Uncontrolled*</td>
</tr>
<tr>
<td>2</td>
<td>Type II or Unspecified Type, Uncontrolled</td>
</tr>
</tbody>
</table>

*When a provider documents “poorly controlled,” the Index instructs “code to Diabetes, by type, with 5th digit for stated as not controlled.”

---

**Notation (A):** All diabetic manifestations are dependent on chart documentation. Assign as many codes from category 250 as necessary to identify all the associated diabetic conditions. Multiple coding is required for this type of complication, with multiple codes for “Diabetes with Complications” as necessary, followed by a code(s) for the associated manifestation(s) indicating the complication(s).

**Notation (B):** Although arteriosclerosis occurs earlier and more extensively in diabetic patients, coronary artery disease, cardiomyopathy and cerebrovascular disease are not complications of diabetes and are not included in code 249.7x or 250.7x. These conditions are coded separately unless the physician documents a causal relationship. Brown, F. (2011). ICD-9-CM Coding Handbook 2012 with Answers, Chicago, IL/AHA Press.

---

### 250.0 Diabetes Mellitus w/o Mention of Complication

Refer to the gray section above for the fifth-digit subclassifications. Diabetes (mellitus), NOS

Diabetes mellitus without mention of complication or manifestation classifiable to 250.1–250.9

### 250.1–250.3 “Acute Diabetes Codes” (250.4–250.8) For Diabetes with Manifestations:

Refer to the gray section above for the fifth-digit subclassifications for the following 250.X DM codes. Also document causal relationship (i.e., “due to,” or “Diabetic”).

### 250.4 Diabetes w/ Renal Manifestations

“Diabetic:”

- **581.81** Glomerulosclerosis, Intercapillary
- **593.81** Nephritis and Nephropathy, not specified acute/chronic
- **581.81** Nephrosis / Nephrotic Syndrome

If Chronic Kidney Disease (CKD), use additional codes:

- **585.1** CKD (Stage I) GFR ≥ 90 ml/min Filtration
- **585.2** CKD (Stage II) GFR 60–89 ml/min Filtration
- **585.3** CKD (Stage III) GFR 30–59 ml/min Filtration
- **585.4** CKD (Stage IV) GFR 15–29 ml/min Filtration
- **585.5** CKD (Stage V) GFR < 15 ml/min Filtration
- **585.6** CKD (ESRD) requiring chronic dialysis / transplantation
- **585.9** CKD, Unspecified
- **V45.11 Dialysis Status**
- **V45.12 Noncompliance with Renal Dialysis**

If hypertension is documented with diabetic CKD, use additional codes:

- **403.90** Nephropathy w/ HTN and CKD, Stage I – IV, or Unspecified (code also, if applicable)
- **585.1–585.4, 585.9** Chronic Kidney Disease (see above)
- **V45.11 Dialysis Status**

### 250.5 Diabetes w/ Ophthalmic Manifestations

“Diabetic:”

- **366.41** Cataract
- **365.44** Glaucoma
- **378.86** Internuclear Ophthalmoplegia
- **364.42** Iritis
- **362.07** Macular / Retinal Edema

Note: This code must be used with a code for diabetic retinopathy (362.01-362.06)

- **362.01** Retinopathy
- **362.02 Retinopathy, Proliferative**
- **362.01 Retinopathy, Background / NOS**
- **362.04 Retinopathy, Nonproliferative, Mild**
- **362.05 Retinopathy, Nonproliferative, Moderate**
- **362.03 Retinopathy, Nonproliferative, NOS**
- **362.06 Retinopathy, Nonproliferative, Severe**

### 250.6 Diabetes w/ Neurological Manifestations

“Diabetic:”

- **353.5** Amyotrophy
- **355.71** Causalgia of Lower Limb (burning pain)
- **340** Dorsal Sclerosis
- **355.9** Mononeuropathy, NEC
- **355.8** Mononeuropathy, Unspecified, Lower Limb
- **354.9** Mononeuropathy, Unspecified, Upper Limb
- **358.1** Myasthenic Syndromes in Diseases Classified Elsewhere
- **336.3** Myelopathy in Diseases Classified Elsewhere
- **713.5** Neurogenic / Neuropathic Arthritis / Arthropathy (Charcot’s)
- **337.1** Peripheral Autonomic Neuropathy

Note: Includes any condition classifiable to 440.21 and 440.22

### 250.7 Diabetes w/ Peripheral Circulatory Disorders

“Diabetic:”

- **758.4** Gangrene
- **443.81** Peripheral Angiopathy / Microangiopathy (PVD)

*If diabetic atherosclerosis is documented, code also:

- **440.20** Atherosclerosis, Extremities, NOS
- **440.21** Atherosclerosis, Extremities, with Intermittent Claudication
- **440.22** Atherosclerosis, Extremities, with Rest Pain

Note: Includes any condition classifiable to 440.21

**440.23** Atherosclerosis, Extremities, with Ulceration

Note: Includes any condition classifiable to 440.21 and 440.22

**440.24** Atherosclerosis, Extremities, with Gangrene

Note: Includes any condition classifiable to 440.21, 440.22 and 440.23 with the following:

- **785.4** Gangrene
- **707.1X** Any Associated Ulcer of Lower Limbs, Except Pressure

### 250.8 Diabetes w/ Other Specified Manifestations

(i.e., Dermatitis, Complication NEC, Hypoglycemia, Hypoglycemic Shock)

“Diabetic:”

- **731.8** Bone Changes

Note: Use additional code to specify bone condition such as:

- **Osteomyelitis, Periostitis and Other Infections Involving Bone (730.00-730.09)**
- **259.8** Glycogenosis, Secondary
- **261** Lactase Deficiency
- **272.7** Lipoidosis
- **709.3** Oppenheim-Urbach Disease/Syndrome

**707.1X** Ulcer of Lower Limbs, Except Pressure

* * K = 0 = unspecified 1 = thigh 2 = calf 3 = ankle 4 = heel and midfoot 5 = other part of foot

9 = other part of lower limb
**Assign 250.8X when Ulcers are not due to Atherosclerosis**

**707.8 Ulcer of Skin, Chronic, Other Specified Sites**

**707.9 Ulcer of Skin, Chronic, Unspecified Site**

**272.2** Xanthoma

### 250.9 Diabetes w/ Unspecified Complication

Note: Known diabetic manifestations should be coded to the highest specificity using subcategories 250.4-250.8. See gray section above for fifth digits.

---

How can we help you?

Our goal is to help health care professionals facilitate and support accurate, complete and specific documentation and coding with an emphasis on early detection and ongoing assessment of chronic conditions. Through targeted outreach and education we help our clients and their providers:

- Deliver a more comprehensive evaluation for their patients
- Identify patients who may be at risk for chronic conditions
- Improve patient care to enhance longevity and quality of life
- Comply with Centers for Medicare & Medicaid Services (CMS) risk adjustment requirements

Call your Optum Healthcare Advocate to find out how we can help you improve outcomes for your patients.