

**Practice Parameter: Assessing Patients in a Neurology Practice for Risk of Falls
(an evidence-based review)**

This evidence-based report provides clinicians with information that assists identifying patients at greatest risk of falls, documenting risk factors, and offering interventions that may prevent falls among patients with chronic neurologic disease.

Case Presentation

A 75-year-old female with Parkinson's disease presents to the neurology clinic for a follow-up visit. She reports that over the past 6 months she has been having more difficulties with her tremor, her gait and her balance. When asked about falls she reports that she is falling several times a week when walking. She reports short and shuffling gait with freezing episodes. Her Mini Mental Status testing is normal. On physical examination she is hypophonic and has a decreased blink rate. Cranial nerve 2-12 testing reveals some mild saccadic pursuits and mild decrease in her swallow. Her other cranial nerves were normal. Her motor examination reveals 5/5 strength throughout with normal bulk. She has cogwheeling on the left and a moderate left hand rest tremor. Her reflexes are symmetric at 2/4 throughout and her toes are downgoing. Sensory testing to light touch, pinprick, proprioception and vibration is intact. Her coordination testing is not dysmetric. She has decreased amplitude and bradykinesia with finger dexterity and rapid alternating movement testing on the left. Her heel to shin is intact. She stands slowly. While walking she has a shuffling gait. Her left hand tremor is noted during walking and she has decreased arm swing on that side. She is stooped and has small strides. She has slow turns and nearly loses her balance because of freezing. She must be caught on shoulder pull testing.

1. In this patient with Parkinson's disease. What is the highest predictor of future falls?

- A. A history of previous falls
- B. Lack of regular exercise
- C. Stairs in the home
- D. Lack of social support
- E. Nocturia

Correct answer: A. Given a history of falls, the pooled absolute risk of falling during follow-up based on an analysis of six studies was 55%.

2. An increased risk of falls is *established* in which of the following diagnoses?

- A. Migraine and Optic neuritis
- B. Back pain and complex regional pain syndrome
- C. Stroke and dementia
- D. Carpal Tunnel Syndrome
- E. Trigeminal Neuralgia

Correct answer: C. With a history of stroke, the absolute risk of falling during follow-up was 34%, using data pooled from 3 studies. In stroke patients receiving acute care or rehabilitation, cognitive impairment, confusion, and impairment in activities of daily living predict risk of falls. An analysis of pooled data indicates an absolute risk of falling of 47% among patients with dementia during study follow-up.

3. An increased risk of falls is *probable* among patients with:

- A. Leg weakness
- B. Parkinson's Disease
- C. Peripheral neuropathy

- D. Substantial visual loss
- E. All of the above

Correct answer: E. Several studies have noted a relative risk of falls ranging from 1.8-2.4 in individuals with leg weakness. In these studies leg weakness was often combined with sensory deficits. There is an increased risk of falls in patients with Parkinson's disease. One Class II study reported the absolute risk of falls among persons with Parkinson's disease as 68% during the study follow-up period. Patients with advanced Parkinson's disease, postural instability, and those with absent arm swinging during walking were at greater risk. In patients with peripheral neuropathy, one Class I study yielded an absolute risk of falling of 55% during an average follow-up time of nearly 6 months. Another Class I study reported an RR for falls of 1.7 among seniors with vision loss.

4. Further gait evaluation can be done with:
- A. Straight leg raise
 - B. Heel tapping testing
 - C. Evaluation of lower extremity tone
 - D. Get-Up-and-Go Test and the Timed Up-and-Go Test
 - E. Leg tremor evaluation

Correct answer: D. The Get-Up-and-Go Test and the Timed Up-and Go Test are closely related measures of ability to rise independently from a sitting position, walk a short distance, turn around, then walk back and sit down. Two Class II and three Class III studies suggested these measures were useful in assessing risk of falling

Evidence-based guidelines for interventions that can reduce the risk of falls in older persons have been published in the last several years. According to these guidelines, interventions with demonstrated efficacy in older, community-dwelling populations include gait training (including use of assistive devices), review and reduction of medications (especially psychotropics), and exercise programs with balance training.

5. Additional general risk factors for falls include:
- A. Depression
 - B. Arthritis
 - C. Impairments in Activities of Daily Living
 - D. Use of psychoactive medications including sedatives, antidepressants, and neuroleptics
 - E. All of the Above

Correct answer: E. Other systematic, evidence-based reviews of numerous studies have identified general risk factors for falls, including advanced age, age-associated frailty, arthritis, impairments in activities of daily living, depression, and the use of psychoactive medications including sedatives, antidepressants, and neuroleptics.

All of the patients with any of the fall risk factors described above should be asked about falls during the past year (Level A).

The PQRI measure for Screening for Future Fall Risk is as follows:

DESCRIPTION: Percentage of patients aged 65 years and older who were screened for future fall risk (patients are considered at risk for future falls if they have had 2 or more falls in the past year or any fall with injury in the past year) at least once within 12 months.

INSTRUCTIONS: This measure is to be reported a minimum of once per reporting period (calendar year) for patients seen during the reporting period. There is no ICD-9 diagnosis

associated with this measure. This measure is appropriate for use in all non-acute settings (excludes ER's and acute care hospitals).

NUMERATOR: Patients who were screened for future fall risk (patients are considered at risk for future falls if they have had 2 or more falls in the past year or any fall with injury in the past year) at least once within 12 months. A fall is defined as a sudden unintentional change in position causing an individual to land at a lower level, on an object, the floor, or the ground, other than as a consequence of sudden onset of paralysis, epileptic seizure, or overwhelming external force.

Numerator Coding

Screening for future fall risk performed

CPT II 1100F: Patient screened for future fall risk; documentation of two or more falls in the past year or any fall with injury in the past year.

OR

CPT II 1101F: Patient screened for future fall risk; documentation of no falls in the past year or only one fall without injury in the past year.

Screening for future fall risk NOT performed for Medical Reasons

Append a modifier (**1P**) to CPT II code **1100F** or **1101F** to report documented circumstances that appropriately exclude patients from the denominator (e.g. patient is not ambulatory)

OR

Screening for future fall risk is NOT performed, Reason not specified

Append a reporting modifier (**8P**) to CPT II code **1100F** to report circumstances when an action described in a measure's numerator is not performed and the reason is not otherwise specified.

Denominator Coding

ALL patients aged 65 years and older. An E&M code is required to identify patients for denominator inclusion (ICD-9 codes are NOT required for this measure).

ICD-9-CM Coding Discussion

In the above case, the diagnostic code for the visit is:

332.0 Paralysis agitans Parkinsonism or Parkinson's disease

For manifestations classically associated with a disease (here tremor, gait disturbance and imbalance) one does not add additional diagnosis codes for the manifestations. This isn't true for diagnoses where manifestations are quite variable such as stroke.

The PQRI measure for screening for falls does not require a specific ICD-9-CM code be used. On the other hand, for data-mining purposes and possible future audits, there is a code for falls which can be added as a secondary code:

V15.88 History of falls

V15.88 may be used as the first code in a situation where there is no primary diagnosis to explain the falls. As with other V-codes, some carriers incorrectly fail to recognize these as diagnostic codes and may require symptom codes be used instead.

E&M coding is predicated on the history, physical examination, and Medical Decision Making (MDM). In this case, the history has 3 points and there is one fact on the ROS. This would make the History "Expanded problem focused". There are 18 points on the examination. Medical Decision making is only Low as there are only 2 points in the Diagnosis and Management Options and the Risk of the Disease is High because of the falls. We have no information on the amount of data or the complexity of the data reviewed that could influence MDM. In this situation, the appropriate code used would be **99213** or a level 3 established visit. MDM is the major driver in coding and in this case MDM is low.

To increase the E&M coding to a level 5 you would need to document more information as in the following example:

A 75-year-old woman with Parkinson's disease presents to the neurology clinic for a follow-up visit. She reports that over the past 6 months she has been having more difficulties with her tremor, her gait is worse and her balance is much more unsteady. When asked about falls she reports that she is falling several times a week when walking. She reports short and shuffling gait with freezing episodes. She is afraid to go anywhere because of her propensity to fall.

She checks her blood sugars twice per day and the range of values is 105-150. She is worried about her blood pressure.

On ROS, she denies symptoms in 10 of the 14 categories asked.

She has stopped driving since her last appointment. Her hypertension is under poor control on the recently prescribed labetalol. She also takes metformin, atorvastatin, and hydrochlorothiazide.

She remembers a distant cousin having Parkinsonism.

She is a frail, elderly appearing woman in mild distress from imbalance. Pulse is 60, BP 150/105, and her RR is 14. No bruits are heard over her neck. There are no murmurs or abnormal heart sounds. She has good radial pulses. Fundoscopic examination is normal. Mini Mental Status testing is normal. On physical examination she is hypophonic and has a decreased blink rate. Cranial nerve 2-12 testing reveals mild saccadic pursuits and mild impairment in her swallowing. Her other cranial nerves are otherwise normal. Her motor examination reveals 5/5 strength throughout with normal bulk. She has cogwheeling on the left and a moderately severe left hand resting tremor. Her reflexes are symmetric at 2/4 throughout and her toes are downgoing. Sensory testing to light touch, pinprick, proprioception and vibration is intact. Her coordination testing is not dysmetric. She has decreased amplitude and bradykinesia with finger dexterity and rapid alternating movement testing on the left. Her heel to shin is intact. She stands slowly. While walking she has a short, shuffling gait. Her left hand tremor is noted during walking and she has decreased arm swing on that side. She is stooped and walks in small strides. She has slow turns and nearly loses her balance because of freezing. She must be caught on shoulder pull testing.

You feel that her Parkinson's disease has worsened. You start her on levodopa/carbidopa 25/100 bid to advance to tid in one week. You recommend physical therapy for gait and balance training, a home safety evaluation, and follow-up in clinic in three months.

Safety Tips

A home safety evaluation is useful to reduce hazards in the home. Arrange furniture simply and keep the environment uncluttered. Remove loose rugs and seal up carpet edges that may be safety hazards. Nightlights in the hallways and in the toilet are useful to assist a person to find their way

to the bathroom at night. Raised toilet seats, hospital beds, grab bars, and shower seats may help to prevent falls. Single level living will also reduce risk of falls.

Disclaimer

This statement is provided as an educational service of the American Academy of Neurology. It is based on an assessment of current scientific and clinical information. It is not intended to include all possible proper methods of care for a particular neurologic problem or all legitimate criteria for choosing to use a specific procedure. Neither is it intended to exclude any reasonable alternative methodologies. The AAN recognizes that specific patient care decisions are the prerogative of the patient and the physician caring for the patient, based on all of the circumstances involved.

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