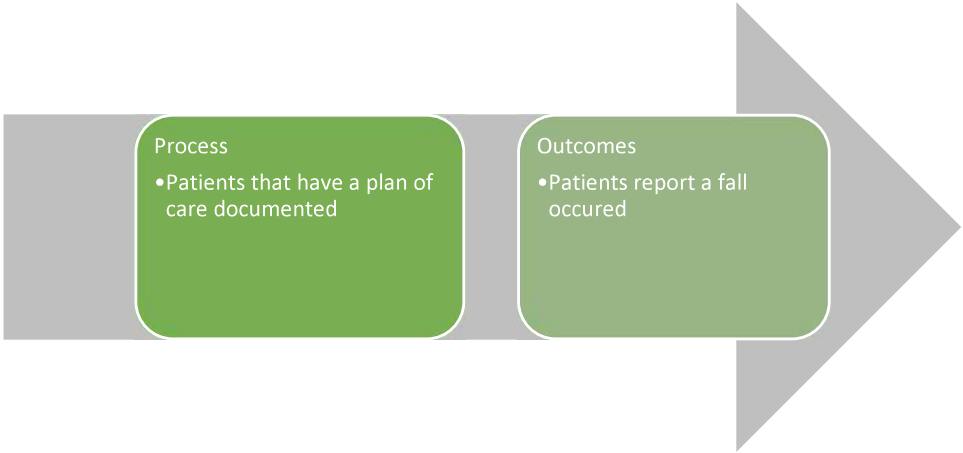


<b>Measure Title</b>	Patient reported falls and plan of care	
<b>Description</b>	Percentage of patients (or caregivers as appropriate) with an active diagnosis of a movement disorder, multiple sclerosis, a neuromuscular disorder, dementia, or stroke who reported a fall occurred and those that fell had a plan of care for falls documented at every visit	
<b>Measurement Period</b>	January 1, 20xx to December 31, 20xx	
<b>Eligible Population</b>	<b>Eligible Providers</b>	Medical Doctor (MD), Doctor of Osteopathy (DO), Physician Assistant (PA), Advanced Practice Registered Nurse (APRN)
	<b>Care Setting(s)</b>	Outpatient
	<b>Ages</b>	All ages
	<b>Event</b>	Office visit
	<b>Diagnosis</b>	Movement disorder, MS, neuromuscular disorder, dementia, hemiplegic migraine, stroke
<b>Denominator</b>	<p>Patients with an active^ diagnosis of a movement disorder, multiple sclerosis, a neuromuscular disorder, dementia, or stroke</p> <p>^Active means the diagnosis has to be coded or billed for on the date of service, not just a diagnosis on the historical problem list.</p> <p>NOTE: See coding table below for full list of conditions included</p>	
<b>Numerator</b>	<p>A. Patients (or caregivers as appropriate) that reported a fall* occurred since the last visit</p> <p>B. and those that fell had a plan of care^ for falls documented at every visit</p> <p>*Fall: 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, overwhelming external force, or overwhelming environmental hazards</p> <p>^Plan of care must include</p> <ul style="list-style-type: none"> <li>• Balance, strength, or gait training OR</li> <li>• Referral to physical or occupational therapy OR</li> <li>• Home safety evaluation</li> </ul>	
<b>Required Exclusions</b>	None	
<b>Allowable Exclusions</b>	<p>Patients diagnosed with any of the following disorders:</p> <ul style="list-style-type: none"> <li>• Syncope</li> <li>• Vertigo and related disorders</li> <li>• Restless leg syndrome</li> <li>• Tourette syndrome/tic disorder</li> <li>• Back pain</li> <li>• Concussion/mTBI</li> <li>• Cervical dystonia</li> <li>• Epilepsy</li> </ul>	
<b>Exclusion Rationale</b>	<p>Patients with syncope, concussion, or epilepsy may experience falls during the course of their disease. However, they have been excluded from this measure as patients with syncope or concussion may not experience falls. If they do, it is usually a limited time and the plan of care for would be different than balance, strength and gait training. The same is true for patients with epilepsy. A plan of care would include different components than what is recommended in this measure. RLS, Tourette syndrome/Tic disorder, primary headache, back pain, and cervical dystonia have been excluded as they are captured in the large buckets of disorders in the measure denominator but it may not always be appropriate to screen for falls and develop a plan of care for these specific patients.</p>	
<b>Measure Scoring</b>	Percentage	

<b>Interpretation of Score</b>	A. Lower score indicates better quality B. Higher score indicates better quality
<b>Measure Type</b>	Patient reported outcome
<b>Level of Measurement</b>	Provider
<b>Risk Adjustment</b>	TBD
<b>For Process Measures Relationship to Desired Outcome</b>	
<b>Opportunity to Improve Gap in Care</b>	<p>Many studies have been conducted on the rate of falls for common neurological conditions. All of them indicate that falls are an issue for neurology patients with symptomology that affects movement and balance<sup>1-21</sup>. Falls and the fear of falling can impact quality of life and should be addressed for populations most at risk for falling.</p> <p>In people age 65 years and older, falls are one of the leading causes of death<sup>22,23</sup>. However, patients with neurological conditions are often younger and are at an increased risk for falls due to disease symptomology. 127,456,106 non-fatal falls were recorded from 2001 to 2015<sup>24</sup>. For those that were hospitalized due to the fall, the cost is approximately \$39,000 per patient<sup>24</sup>.</p> <p>The U.S. Preventive Services Task Force updated their recommendations for fall prevention in community-dwelling older adults. There are many intervention recommendations for patients 65 years and older.<sup>23</sup></p>
<b>Harmonization with Existing Measures</b>	There are many measures available to assess risk and future risk and create plans of care. The AAN has created this measure to combine separate measures that were developed for individual disease states. This consolidated measure is meant to incorporate individuals that are younger and have rarer diseases that may never have a measure developed.
<b>References and Supporting Evidence</b>	<ol style="list-style-type: none"> <li>1. Hayes S, Galvin R, Kennedy C, et al. Interventions for preventing falls in people with multiple sclerosis. Cochrane Database of Systematic Reviews 2019; Issue 11.</li> <li>2. Mackintosh SF, Hill KD, Dodd KJ, Goldie PA, Culham EG. Balance score and a history of falls in hospital predict recurrent falls in the 6 months following stroke rehabilitation. Arch Phys Med Rehabil. 2006;87:1583–9.</li> <li>3. Kerse N, Parag V, Feigin VL, McNaughton H, Hackett ML, Bennett DA, Anderson CS. Falls after stroke: results from the Auckland regional community stroke (ARCOS) study, 2002 to 2003. Stroke. 2008;39:1890–3</li> <li>4. Forster A, Young J. Incidence and consequences of falls due to stroke: a systematic inquiry. BMJ. 1995;311:83</li> <li>5. Jørgensen L, Engstad T, Jacobsen BK. Higher incidence of falls in long-term stroke survivors than in population controls: depressive symptoms predict falls after stroke. Stroke. 2002;33:542–7.</li> <li>6. Mackintosh SFH, Goldie P, Hill K. Falls incidence and factors associated with falling in older, community-dwelling, chronic stroke survivors (&gt;1 year after stroke) and matched controls. Aging Clin Exp Res. 2005;17:74–81.</li> </ol>

	<ol style="list-style-type: none"> <li>7. Kristensen J, Birn I, Mechlenburg I. Fractures after stroke – A Danish register-based study of 106,001 patients. <i>Acta Neurol Scand</i> 2020; 141:47-55.</li> <li>8. Bloem, B.R.; Grimberge, Y.A.M.; Cramer, M.; Willemsen, M.; Zwinderman, A.H. Prospective assessment of falls in Parkinson's disease. <i>J. Neurol</i> 2001; 248: 950–958.</li> <li>9. Paul, S.S.; Sherrington, C.; Canning, C.G.; Fung, V.S.C.; Close, J.C.; Lord, S.R. The relative contribution of physical and cognitive fall risk factors in people with Parkinson's disease: A large prospective cohort study. <i>Neurorehabilit. Neural Repair</i> 2014; 28: 282–290.</li> <li>10. Allen, N.E.; Schwarzel, A.K.; Canning, C.G. Recurrent falls in Parkinson's disease: A systematic review. <i>Parkinsons Dis.</i> 2013; 2013: 906274.</li> <li>11. Grimbergen YAM, Knol MJ, Bloem BR, et al. Falls and gait disturbances in Huntington's disease. <i>Mov Disord</i> 2008; 23:970-976.</li> <li>12. Hanewinkel R, Drenthen J, Verlinden VJA, et al. Polyneuropathy relates to impairment in daily activities, worse gait, and fall-related injuries. <i>Neurology</i> 2017; 89:76-83.</li> <li>13. Schell WE, Mar VS, Da Silva CP. Correlation of falls in patients with Amyotrophic Lateral Sclerosis with objective measures of balance, strength, and spasticity. <i>NeuroRehabilitation</i> 2019; 44:85-93.</li> <li>14. Hammaren E, Kjellby-Wendt G, Lindberg C. Muscle force, balance and falls in muscular impaired individuals with myotonic dystrophy type 1: a five-year prospective cohort study. <i>Neuromuscul Disord</i> 2015; 25: 141-8.</li> <li>15. Matsuda PN, Verrall AM, Finlayson ML, Molton IR, Jensen MP. Falls among adults aging with disability. <i>Arch Phys Med Rehabil</i> 2015; 96:464-71.</li> <li>16. Hiscock A, Dewar L, Parton M, Machado P, Hanna M, Ramdharry G. Frequency and circumstances of falls in people with inclusion body myositis: a questionnaire survey to explore falls management and physiotherapy provision. <i>Physiotherapy</i> 2014; 100:61-5.</li> <li>17. Montes J, McIsaac TL, Dunaway S, et al. Falls and spinal muscular atrophy: exploring cause and prevention. <i>Muscle Nerve</i> 2013; 47:118-23.</li> <li>18. Pieterse AJ, Luttikhoud TB, de Laat K, Bloem BR, van Engelen BG, Munneke M. Falls in patients with neuromuscular disorders. <i>J Neurol Sci</i> 2006; 251:87-90.</li> <li>19. Borges Sde M, Radanovic M, Forlenza OV. Fear of falling and falls in older adults with mild cognitive impairment and Alzheimer's disease. <i>Neuropsychol Dev Cogn B Aging Neuropsychol Cogn</i> 2015; 22:312-21.</li> <li>20. Ansai JH, Andrade LP, Nakagawa TH, Rebelatto JR. Performances on the timed up and go test and subtasks between fallers and non-fallers in older adults with cognitive impairment. <i>Arq Neuropsiquiatr</i> 2018; 76:381-386.</li> <li>21. Carvalho GF, Almeida CS, Florencio LL, et al. Do patients with migraine experience an increased prevalence of falls and fear of falling? A cross-sectional study. <i>Physiotherapy</i> 2018; 104:424-429.</li> <li>22. National Committee for Quality Assurance (NCQA) <a href="http://www.ncqa.org/report-cards/health-plans/state-of-health-care-quality/2016-table-of-contents/fall-risk">http://www.ncqa.org/report-cards/health-plans/state-of-health-care-quality/2016-table-of-contents/fall-risk</a></li> <li>23. US Preventive Services Task Force. Interventions to Prevent Falls in Community-Dwelling Older Adults. <i>JAMA</i> 2018; 319:1696-1704.</li> <li>24. Centers for Disease Control and Prevention. Web-based Injury Statistics Query and Reporting System (WISQARS) [online]. Available at: <a href="http://www.cdc.gov/ncipc/wisqars/">http://www.cdc.gov/ncipc/wisqars/</a></li> </ol>
--	--

**Movement disorders:** Parkinson's disease, ataxia, chorea, Huntington's disease, multiple system atrophy, myoclonus, Progressive supranuclear palsy, tardive dyskinesia, Wilson's disease, corticobasal degeneration syndrome, CP/spasticity

### Multiple sclerosis

**Neuromuscular:** ALS, botulism, congenital myasthenic syndromes, congenital myopathies, inclusion body myositis, Lambert-Eaton syndrome, Motor neuron disease, mitochondrial myopathy, Muscular dystrophy, Myasthenia gravis, Peripheral neuropathy, Polymyositis

**Dementia:** Alzheimer's and mild cognitive impairment