We propose these revisions to reflect our program experience and advances in medical knowledge, treatment, and methods of evaluating neurological disorders. We last published final rules making comprehensive revisions to section 11.00—the neurological listings for adults (people who are at least 18 years old)—and section 111.00—the neurological listings for children (people under age 18)—on December 6, 1985.6 Although we have made some changes since then, we have not comprehensively revised the rules since 1985.7

How did we develop these proposed rules?

In developing these proposed rules, we considered the public comments we received in response to an ANPRM that we published in the Federal Register on April 13, 2005.8 In the ANPRM, we announced our plans to update and revise this body system, and we invited the public to send us written comments and suggestions. We also considered the public comments we received at an outreach policy conference on “Neurological Disorders in the Disability Programs” that we hosted in New York, New York, on July 28, 2005.9 In addition, we considered comments about neuropathy that we received when we revised the medical criteria for evaluating endocrine disorders.10

We also used information from other sources, including:

- Medical experts in the field of neurology and other related fields,
- Advocacy groups for people with neurological disorders, and people with neurological disorders and their families;
- People who make and review disability determinations and decisions for us in state agencies, in our Office of Quality Performance, and in our Office of Disability Adjudication and Review;
- The published sources we list in the References section at the end of this preamble.

We describe in more detail below the revisions we propose to make to the introductory text of the adult listings, the adult listings, the introductory text of the childhood listings, and the childhood listings.

Why are we proposing to change the name of this body system?

We propose to change the name of this body system from Neurological to Neurological Disorders; revise and expand the introductory text to the neurological disorders body system for both adults (section 11.00) and children (section 111.00); add criteria to the adult and the childhood listings to evaluate the effects of neurological disorders; add criteria to the adult listings based on functional limitations associated with neurological disorders; and make conforming changes in the mental disorders body system in sections 12.00 and 112.00.

How did we develop these proposed rules?

In developing these proposed rules, we considered the public comments we received in response to an ANPRM that we published in the Federal Register on April 13, 2005.8 In the ANPRM, we announced our plans to update and revise this body system, and we invited the public to send us written comments and suggestions. We also considered the public comments we received at an outreach policy conference on “Neurological Disorders in the Disability Programs” that we hosted in New York, New York, on July 28, 2005.9 In addition, we considered comments about neuropathy that we received when we revised the medical criteria for evaluating endocrine disorders.10

We also used information from other sources, including:

- Medical experts in the field of neurology and other related fields,
- Advocacy groups for people with neurological disorders, and people with neurological disorders and their families;
- People who make and review disability determinations and decisions for us in state agencies, in our Office of Quality Performance, and in our Office of Disability Adjudication and Review;
- The published sources we list in the References section at the end of this preamble.

We describe in more detail below the revisions we propose to make to the introductory text of the adult listings, the adult listings, the introductory text of the childhood listings, and the childhood listings.

Why are we proposing to change the name of this body system?

We propose to change the name of this body system from Neurological to Neurological Disorders to make it consistent with our naming of other body systems. We have been renaming all of the other body systems to include the word “disorders” as we revise them, and the name change we are proposing in this notice of proposed rulemaking (NPRM) is consistent with that approach.
What changes are we proposing to the introductory text of the neurological disorders listings for adults?

We propose to expand, revise, and clarify the introductory text to the listings to provide more guidance for our adjudicators, to update it, and to reflect the revised listings. The following chart shows the headings of the current and proposed sections of the introductory text:

<table>
<thead>
<tr>
<th>Current introductory text</th>
<th>Proposed introductory text</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.00A Epilepsy ........................................................................</td>
<td>11.00A Which neurological disorders do we evaluate under these listings?</td>
</tr>
<tr>
<td>11.00B Brain tumors ..................................................................</td>
<td>11.00B What evidence do we need to document your neurological disorder?</td>
</tr>
<tr>
<td>11.00C Persistent disorganization of motor function ..............</td>
<td>11.00C How do we consider adherence to prescribed treatment in neurological disorders?</td>
</tr>
<tr>
<td>11.00D In conditions which are episodic in character .............</td>
<td>11.00D What do we mean by disorganization of motor function?</td>
</tr>
<tr>
<td>11.00E Multiple sclerosis ...................................................</td>
<td>11.00E How do we evaluate communication impairments under these listings?</td>
</tr>
<tr>
<td>11.00F Traumatic brain injury (TBI) .......................................</td>
<td>11.00F What do we mean by bulbar and neuromuscular dysfunction?</td>
</tr>
<tr>
<td>11.00G Amyotrophic Lateral Sclerosis (ALS) ............................</td>
<td>11.00G How do we evaluate a combination of functional limitations under these listings?</td>
</tr>
<tr>
<td></td>
<td>11.00H What is epilepsy, and how do we evaluate it under 11.02?</td>
</tr>
<tr>
<td></td>
<td>11.01I What is vascular insult to the brain, and how do we evaluate it under 11.04?</td>
</tr>
<tr>
<td></td>
<td>11.06J What are benign brain tumors, and how do we evaluate them under 11.05?</td>
</tr>
<tr>
<td></td>
<td>11.00K What is Parkinsonian syndrome, and how do we evaluate it under 11.06?</td>
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<tr>
<td></td>
<td>11.00L What is cerebro palsy, and how do we evaluate it under 11.07?</td>
</tr>
<tr>
<td></td>
<td>11.00M What are spinal cord insults, and how do we evaluate them under 11.08?</td>
</tr>
<tr>
<td></td>
<td>11.00N What is multiple sclerosis, and how do we evaluate it under 11.09?</td>
</tr>
<tr>
<td></td>
<td>11.00O What is amyotrophic lateral sclerosis, and how do we evaluate it under 11.10?</td>
</tr>
<tr>
<td></td>
<td>11.00P What are neurodegenerative disorders of the central nervous system, such as Huntington disease, Friedreich ataxia, and spinocerebellar degeneration, and how do we evaluate them under 11.17?</td>
</tr>
<tr>
<td></td>
<td>11.00Q What is traumatic brain injury, and how do we evaluate it under 11.18?</td>
</tr>
<tr>
<td></td>
<td>11.00R What are coma and persistent vegetative state, and how do we evaluate them under 11.20?</td>
</tr>
<tr>
<td></td>
<td>11.00S What are motor neuron disorders, other than ALS, and how do we evaluate them under 11.22?</td>
</tr>
<tr>
<td></td>
<td>11.00T How do we consider your symptom of fatigue in these listings?</td>
</tr>
<tr>
<td></td>
<td>11.00U How do we evaluate your neurological disorder when it does not meet one of these listings?</td>
</tr>
</tbody>
</table>

The following is a detailed explanation of the proposed changes to the introductory text:

Proposed Section 11.00A—Which neurological disorders do we evaluate under these listings?

In this new section, we explain which neurological disorders we evaluate under these listings and how we evaluate their effects.

Proposed Section 11.00B—What evidence do we need to document your neurological disorder?

In this new section, we describe the kinds of information that we use to establish the existence and severity of your neurological disorder. We also clarify our policy that we will not purchase imaging or laboratory tests that are complex, costly, or invasive.

Proposed Section 11.00C—How do we consider adherence to prescribed treatment in neurological disorders?

We define the phrase “despite adherence to prescribed treatment” that is in proposed listings 11.02 Epilepsy, 11.06 Parkinsonian syndrome, and 11.12 Myasthenia gravis. Medical research shows that these neurological conditions may improve after a period of treatment. This criterion is used for conditions that do not improve despite a regular regimen of medication or other treatment that has been prescribed by a physician for 3 consecutive months.

Proposed Section 11.00D—What do we mean by disorganization of motor function?

In this new section, we define the phrase “disorganization of motor function”. In proposed 11.00D2, we explain the addition of a severity standard for disorganized motor function, which we refer to as “extreme limitation.” We propose to define an extreme limitation as the inability to stand up from a seated position, or the inability to maintain balance in a standing position and while walking, or the inability to use your upper extremities. We then explain what each of these limitations means.
Proposed Section 11.00E—How do we evaluate communication impairments under these listings?

In this section, we propose to provide guidance about how to document communication impairments associated with neurological disorders evaluated under listings 11.04A, 11.07C, and 11.11B. We also explain that communication impairments caused by non-neurological disorders be evaluated under listing 2.09 in the special senses and speech body system.

Although we do not propose to revise the requirements for evaluating communication impairments that are currently in listings 11.04A, 11.07C, and 11.11B, we propose to define the terms “ineffective speech or communication” and “significant interference” in 11.00E1 and 11.00E2. Guidance for evaluating speech and language impairments will be addressed in future regulations, as discussed in ANPRMs published in the Federal Register on April 13, 2005, and February 6, 2012.7

Proposed Section 11.00F—What do we mean by bulbar and neuromuscular dysfunction?

In this section, we propose criteria for evaluating bulbar and neuromuscular dysfunction and explain what characterizes it.

Proposed Section 11.00G—How do we evaluate a combination of functional limitations under these listings?

We propose new functional criteria for evaluating neurological disorders in all listings proposed 11.00F2, coma and persistent vegetative state (PVS). These criteria would give adjudicators another way to evaluate neurological disorders. A person must have marked limitation in physical functioning and marked limitation in at least one of three broad areas of functioning: Activities of daily living; maintaining social functioning; or completing tasks in a timely manner due to deficiencies in concentration, persistence, or pace. We explain each part of this listing in detail in proposed 11.00G.

In proposed 11.00H2, we use essentially the same definition of “marked” as in 14.005, but we would not include the description of “marked” as “more than moderate but less than extreme.” Instead, we include an explanation based on the language describing the rating scale for mental disorders in current §§ 404.1520a(c)(4) and 416.920a(c)(4). This rating scale describes “marked” as the fourth point on a five-point rating scale. We explain that we would not require our adjudicators to use such a scale, but that “marked” would be the fourth point on a scale of “no limitation, mild limitation, moderate limitation, marked limitation, and extreme limitation.”

With this guideline, we would not need to state that “marked” falls between “moderate” and “extreme.”

In proposed 11.00G3, we explain what we mean by “physical functioning,” “activities of daily living,” “social functioning,” and “completing tasks in a timely manner.” We based this proposed section, in part, on current 14.00I6, 14.00I7, and 14.00I8 in our immune system disorders listings.

Proposed Section 11.00H—What is epilepsy, and how do we evaluate it under 11.02?

In proposed 11.00H1, we define epilepsy and acknowledge the various types. We include information about evaluating the most severe types of epilepsy, generalized tonic-clonic and dyscognitive seizures (formerly complex partial seizures), and dyscognitive seizures that may develop into generalized tonic-clonic seizures. In proposed 11.00H2, we clarify the requirement for a detailed description of seizures.

In proposed 11.00H3, we explain that we no longer require serum drug levels and we will therefore not purchase them. When we last revised the listings in 1985, blood drug levels were strong indicators for prescribed treatment compliance because therapeutic ranges had been established for antiepileptic drugs (AEDs) and the ranges were often noted on laboratory results. Many newer AEDs do not have established therapeutic levels, which makes lab results difficult for our adjudicators to interpret. We believe that removing the requirement for obtaining blood drug levels for adjudicative purposes address this issue and simplify evaluation of seizures that satisfy the listing criteria.

We continue to consider blood drug levels available in the evidence in the context of all evidence in the case record.

We propose 11.00H4 in response to requests from our adjudicators for guidance about how to count seizures to satisfy the listing requirements. In proposed 11.00H5, we clarify our longstanding policy that we will not purchase electroencephalography (EEG) and explain when we use EEG test results in making a disability determination or decision.

Proposed Section 11.00I—What is vascular insult to the brain, and how do we evaluate it under 11.04?

In proposed 11.00I1, we describe vascular insult to the brain. In proposed 11.00I3, we clarify the 3-month requirement for evaluating disorganization of motor function in combination with functional limitations resulting from a vascular insult.

Proposed Section 11.00J—What are benign brain tumors, and how do we evaluate them under 11.05?

In proposed 11.00J, we describe benign brain tumors and explain that we evaluate them under the proposed criteria of disorganized motor functioning, oral communication, or a combination of functional limitations.

Proposed Section 11.00K—What is Parkinsonian syndrome, and how do we evaluate it under 11.06?

In proposed 11.00K, we describe Parkinsonian syndrome and explain that we evaluate this disorder using our requirement for adherence to prescribed treatment.

Proposed Section 11.00L—What is cerebral palsy, and how do we evaluate it under 11.07?

In proposed 11.00L, we describe cerebral palsy (CP) and the various signs and symptoms of the disorder. We explain how we consider the signs and symptoms of this disorder when we decide a claim.

Proposed Section 11.00M—What are spinal cord insults, and how do we evaluate them under 11.08?

In this proposed 11.00M, we define spinal cord insults and describe their signs and symptoms. We describe spinal cord insults with complete loss of function of the affected part(s) of the body in proposed 11.00M2, and spinal cord insults with less than complete loss of function of the affected part(s) of the body in proposed 11.00M3. In proposed 11.00M4, we clarify the 3-month requirement for evaluating disorganization of motor function resulting from spinal cord insults.

Proposed Section 11.00N—What is multiple sclerosis, and how do we evaluate it under 11.09?

We propose to expand guidance to our adjudicators on evaluating multiple sclerosis (MS) by explaining that the disorder affects several aspects of functioning. In proposed 11.00N2, we explain how we evaluate the effects of MS using proposed criteria for disorganization of motor functioning or a combination of functional limitations.

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7 70 FR 19351 published on April 13, 2005; 77 FR 5734 published on February 6, 2012.
Proposed Section 11.00O—What is amyotrophic lateral sclerosis, and how do we evaluate it under 11.10?

We explain that amyotrophic lateral sclerosis (ALS) is one type of motor neuron disorder, and we describe our documentation requirements for it. We propose to remove some of the discussion about ALS that is currently in 11.00G. Based on our program experience, we no longer need this guidance on evaluating ALS.

Proposed Section 11.00P—What are neurodegenerative disorders of the central nervous system, such as Huntington disease, Friedreich ataxia, and spinocerebellar degeneration, and how do we evaluate them under 11.17?

We propose to list examples of the types of disorders we evaluate under 11.17. We explain the instances in which we evaluate these disorders under the mental body disorders system (12.00).

Proposed Section 11.00Q—What is traumatic brain injury, and how do we evaluate it under 11.18?

In proposed 11.00Q1, we define traumatic brain injury (TBI) and explain that we evaluate an injury that results in coma or PVS under proposed listing 11.20. In proposed 11.00Q2, we clarify the 3-month requirement for evaluating disorganization of motor function and a combination of functional limitations resulting from a TBI.

Proposed Section 11.00R—What are coma and persistent vegetative state, and how do we evaluate them under 11.20?

In this new section, we explain the differences between coma and PVS. We also describe the common symptoms and signs of these conditions.

Proposed Section 11.00S—What are motor neuron disorders, other than ALS, and how do we evaluate them under 11.22?

In this new section, we provide a general explanation of these disorders and explain how we evaluate them.

Proposed Section 11.00T—How do we consider your symptom of fatigue in these listings?

In this new section, we propose to expand our guidance on how to consider fatigue so that it applies to more neurological disorders. We explain how we evaluate the intensity, persistence, and effects of fatigue. We also provide general guidance for all neurological disorders that may cause or be associated with fatigue, including multiple sclerosis, post-polio syndrome, and myasthenia gravis. In response to the ANPRM comments, we explain how we evaluate the effects of both physical fatigue and mental fatigue.

Proposed Section 11.00U—How do we evaluate your neurological disorder when it does not meet one of these listings?

In this new section, we propose to provide guidance on how to evaluate neurological disorders that do not meet the proposed listings. We explain the steps in our evaluation process that we use in determining whether your disorder is disabling when it does not meet one of the listings.

What changes are we proposing to the neurological disorders listings for adults?

We propose to revise the headings of eight listings, remove two listings, add two listings, and replace reference listings with appropriate criteria to evaluate neurological disorders, except in situations when the neurological disorder has resulted in a communication impairment. The following chart provides a comparison of the current adult listings and the proposed adult listings.

<table>
<thead>
<tr>
<th>Current</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.02</td>
<td>Epilepsy—convulsive epilepsy</td>
</tr>
<tr>
<td>11.03</td>
<td>Epilepsy—nonconvulsive epilepsy</td>
</tr>
<tr>
<td>11.04</td>
<td>Central nervous system vascular accident</td>
</tr>
<tr>
<td>11.05</td>
<td>Benign brain tumors</td>
</tr>
<tr>
<td>11.06</td>
<td>Parkinsonian syndrome</td>
</tr>
<tr>
<td>11.07</td>
<td>Cerebral palsy</td>
</tr>
<tr>
<td>11.08</td>
<td>Spinal cord or nerve root lesions, due to any cause</td>
</tr>
<tr>
<td>11.09</td>
<td>Multiple sclerosis</td>
</tr>
<tr>
<td>11.10</td>
<td>Amyotrophic lateral sclerosis</td>
</tr>
<tr>
<td>11.11</td>
<td>Anterior poliomyelitis</td>
</tr>
<tr>
<td>11.12</td>
<td>Myasthenia gravis</td>
</tr>
<tr>
<td>11.13</td>
<td>Muscular dystrophy</td>
</tr>
<tr>
<td>11.14</td>
<td>Peripheral neuropathies</td>
</tr>
<tr>
<td>11.15</td>
<td>[Reserved]</td>
</tr>
<tr>
<td>11.16</td>
<td>Subacute combined cord degeneration (pernicious anemia)</td>
</tr>
<tr>
<td>11.17</td>
<td>Degenerative disease not listed elsewhere, such as Huntington’s chorea, Friedreich’s ataxia, and spino-cerebellar degeneration.</td>
</tr>
<tr>
<td>11.18</td>
<td>Cerebral trauma</td>
</tr>
<tr>
<td>11.19</td>
<td>Syringomyelia</td>
</tr>
<tr>
<td>11.20</td>
<td>Coma or persistent vegetative state</td>
</tr>
<tr>
<td>11.21</td>
<td>[Reserved]</td>
</tr>
<tr>
<td>11.22</td>
<td>Motor neuron disorders other than ALS</td>
</tr>
</tbody>
</table>

What general criteria are we proposing to add to the neurological disorders listings for adults?

We propose to use the following criteria, as appropriate, to establish the severity of a person’s neurological disorder: Disorganization of motor function, bulbar and neuromuscular dysfunction, and a combination of functional limitations. We describe the three criteria below.

We propose to use the criterion “disorganization of motor function” in all listings, except proposed 11.02 for Epilepsy and 11.20 for coma or PVS. This criterion is analogous to the “disorganization of motor function” criterion that we have in most of the current neurological disorders listings. Our proposed criterion focuses on specific limitations in the ability to stand up, balance, walk, and use fingers, hands, and arms to perform fine and gross motor movements, rather than on

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specific neurological signs and the measureable degree of limitation demonstrated by those signs. This clarification to disorganization of motor function provides more consistency to our determinations of disorganization of motor function under the listings.

We propose to use the criterion bulb and neuromuscular dysfunction in proposed listings 11.11 for Post-polio syndrome, 11.12 for Myasthenia gravis, and 11.22 for Motor neuron disorders to evaluate neurologically-based problems with speaking, swallowing, or breathing. This criterion replaces the bulbar and neuromuscular dysfunction criteria currently used in listings 11.11 and 11.12.

We propose to use the criterion a combination of functional limitations in all of the proposed listings except 11.20 for comat or PVS. We describe the four broad areas of functioning that we use to establish the severity of a person’s neurological disorder in proposed paragraph 11.00G. With the exception of epilepsy, a neurological disorder is of listed severity if it results in marked limitation in physical functioning and marked limitation in one of three other broad areas of functioning.

What changes are we proposing to the neurological disorder listings?

We describe the significant changes to the neurological listings for adults below, following the order of the proposed listings.

Proposed Listing 11.02, Epilepsy

We propose to revise the heading of current 11.02, Epilepsy—convulsive epilepsy, to Epilepsy, and remove current 11.03, Epilepsy—nonconvulsive epilepsy. The current classifications of seizures are “generalized” and “focal” or partial, which are based upon which part and how much of the brain is affected. We describe the most severe types of epilepsy that we propose to evaluate, generalized tonic-clonic seizures and dyscognitive seizures (formerly complex partial seizures). We use terms that are consistent with current medical terminology.

We propose to revise the current epilepsy listing criteria requirement for seizures to occur more frequently than once a month by requiring generalized tonic-clonic seizures to occur at least once a month for at least 3 consecutive months despite adherence to prescribed treatment. We also propose new criteria for generalized tonic-clonic seizures and for dyscognitive seizures that occur less frequently in combination with functional criteria.

In order to simplify and clarify our frequency of seizure requirement, we provide guidance in proposed 11.00H4 on how to count seizures to satisfy the proposed listing criteria.

Listing 11.04, Vascular Insult to the Brain

We propose to revise the heading of current 11.04, Central nervous system vascular accident, to Vascular insult to the brain. In proposed 11.04B, we add the general criteria for evaluating disorganization of motor function as described above.

Listing 11.05, Benign Brain Tumors

We propose to add the general criteria described above for evaluating disorganization of motor function and a combination of functional limitations. We remove references to current listings 11.02, 11.03, and 11.04.

Listing 11.06, Parkinsonian Syndrome

We propose to add a criterion for adherence to prescribed treatment. Medical research shows that Parkinsonian syndrome may be responsive to treatment. We believe that a specific period of time needs to pass during which you are adhering to prescribed treatment before considering the severity of the condition.

Listing 11.07, Cerebral Palsy

We propose to remove the current intelligence quotient (IQ) score criterion because advances in medical knowledge of cerebral palsy and our program experience indicate that an IQ score does not provide us the best measure of a person’s cognitive limitations and may not indicate listing-level severity.

We propose to update the remaining criteria by replacing them with the general criteria described above for evaluating disorganization of motor function and a combination of functional limitations. We add the general criteria described above for evaluating a combination of functional limitations.

Listing 11.08, Spinal Cord Insults

We propose to revise the heading of current 11.08, Spinal cord or nerve root lesions, due to any cause, to Spinal cord insults, to more accurately reflect the disorders we evaluate under this listing. We evaluate insults that primarily affect the spinal cord, such as infections, tumors, hemorrhages and vascular lesions, and anatomical abnormalities, under proposed 11.08. This change clarifies for our adjudicators that we evaluate disorders of the spine, such as nerve root impingement that is primarily a result of bony spine disorders, under the musculoskeletal body system, 1.00, rather than under the neurological listings.

We add the general criteria described above for evaluating a combination of functional limitations, and we remove the reference to current listing 11.04.

Listing 11.09, Multiple Sclerosis

We propose to replace the disorganization of motor function criteria in current 11.09 with the proposed disorganization of motor function criteria. Under the proposed listing, we assess the severity of a visual or mental impairment related to multiple sclerosis using the proposed combination of functional limitations criteria or under a special senses and speech listing in 2.00, or under a mental disorders listing in 12.00, respectively. We also replace the requirement for significant reproducible fatigue with the general criteria described above for evaluating disorganization of motor function and a combination of functional limitations.

Listing 11.11, Post-Polio Syndrome

We propose to revise the heading of current 11.11, Anterior poliomyelitis, to Post-polio syndrome, because modern medicine has mostly eradicated anterior poliomyelitis. We update the current listing criteria by replacing it with the general criteria described above for evaluating disorganization of motor function and a combination of functional limitations. In proposed listing 11.11C, we also propose criteria for evaluating bulbar and neuromuscular dysfunction.

Listing 11.12, Myasthenia Gravis

We propose to update the current listing criteria for significant difficulty with speaking, swallowing, or breathing by replacing it with the general criteria described above for evaluating bulbar and neuromuscular dysfunction. We also add the general criteria described above for a combination of functional limitations. Our program experience shows that it is difficult to evaluate motor weakness under the current listing. We propose to clarify the criteria for evaluating motor weakness by using the general criteria described above for evaluating disorganization of motor function.

We propose to add a criterion for adherence to prescribed treatment. We believe that a specific period of time needs to pass during which you are adhering to prescribed treatment before
considering the severity of the condition.

We replace the current criteria for bulbar dysfunction and significant motor weakness of muscles of extremities with the proposed bulbar and neuromuscular dysfunction criteria in proposed 11.12.

**Listing 11.13, Muscular Dystrophy**

We propose to add the general criteria described above for evaluating disorganization of motor function and a combination of functional limitations. We remove references to current listing 11.04B.

**Listing 11.14, Peripheral Neuropathy**

We propose to revise the heading of current 11.14, *Peripheral neuropathies*, to *Peripheral neuropathy*, because the medical community uses the singular form to refer to the various types of this disorder. Current 11.14 is a reference listing that cross-refers to the disorganization of motor function criteria in current 11.04B and requires that the motor dysfunction occur despite prescribed treatment. We update the current listing criteria for disorganization of motor function by replacing it with the general criteria described above for evaluating disorganization of motor function. We provide an alternative means for evaluating peripheral neuropathy by adding the general criteria described above for evaluating a combination of functional limitations. We remove the prescribed treatment requirement because a person’s response to treatment is variable depending on the underlying cause.

**Listing 11.17, Neurodegenerative Disorders of the Central Nervous System, Such as Huntington Disease, Friedreich Ataxia, and Spinocerebellar Degeneration**

We propose to revise the heading of current 11.17, *Degenerative disease not listed elsewhere, such as Huntington’s chorea, Friedreich’s ataxia, and spinocerebellar degeneration*, to *Neurodegenerative disorders of the central nervous system, such as Huntington disease, Friedreich ataxia, and spinocerebellar degeneration*, to reflect the disorders we evaluate under this listing and current medical terminology. Current 11.17 is a reference listing that cross-refers to the disorganization of motor function criteria in 11.04B and the mental criteria in 12.02. We update the criteria for disorganization of motor function by replacing it with the general criteria described above for evaluating disorganization of motor function. When these disorders result in solely cognitive and other mental function effects, we evaluate the disorder under 12.02.

**Listing 11.18, Traumatic Brain Injury**

We propose to revise the heading of current 11.18, *Cerebral trauma, to Traumatic brain injury*. We add the general criteria described above for evaluating disorganization of motor function and a combination of functional limitations. We remove references to current listings 11.02, 11.03, 11.04, and 12.02. We also move the 3-month requirement for resulting limitations from the current introductory text to the proposed listing.

**Listing 11.20, Coma or PVS.**

In response to questions from our adjudicators, we propose to add 11.20, *coma or PVS*, to evaluate neurological disorders that result in coma or persistent vegetative state.

**Listing 11.22, Motor Neuron Disorders Other Than ALS**

We propose to add 11.22 *Motor neuron disorders for evaluating all such disorders except for ALS*. We add the general criteria described above for evaluating disorganization of motor function, bulbar and neuromuscular dysfunction, and a combination of functional limitations.

**Other Revisions**

We propose to remove current 11.16, *Subacute combined cord degeneration (pernicious anemia)* and current 11.19, *Syringomyelia*. These disorders generally respond to medical treatment and do not reach listing-level severity because they do not become sufficiently severe or do not remain at a sufficient level of severity long enough to meet our 12-month duration requirement. We evaluate these disorders under proposed 11.08 if they result in severe impairment despite medical treatment and intervention.

**What changes are we proposing to the neurological disorders listings for children?**

We propose to remove one childhood listing and revise the heading of another. We propose to add nine childhood listings to parallel the adult listings because many neurological disorders that affect adults also affect children. We are not proposing corresponding childhood listings to proposed adult listings 11.06 for Parkinsonian syndrome, 11.10 for Amyotrophic lateral sclerosis, and 11.11 for Post-polio syndrome because these disorders rarely occur in children. When these disorders do occur in children, we evaluate them under the adult listings, when appropriate, or determine whether they functionally equal the listings. Although we are proposing corresponding childhood listings to most of the proposed adult listings, we propose to add a childhood Multiple Sclerosis listing, 111.21, and maintain current childhood neurological communication listing, 111.09, as is. We are also proposing to remove the current intelligence quotient (IQ) score criterion in listing 111.02 and 111.08 because advances in medical knowledge of epilepsy and spinal cord insults, and our program experience indicate that an IQ score does not provide us the best measure of a child’s cognitive limitations and may not indicate listing-level severity.

The following chart provides a comparison of the current childhood listings and the proposed childhood listings.

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8 See § 416.926(a) of this chapter.
Why are we removing current 111.06, motor dysfunction (due to any neurological disorder)?

Current 111.06 lists the criteria we use to evaluate motor dysfunction due to any neurological disorder in children. We propose to remove current 111.06 because we include disorganization of motor function criteria in each of the proposed childhood neurological listings, as appropriate.

Listing 111.08, Spinal Cord Insults

We propose to revise the heading of current 111.08, Meningomyelocele (and related disorders), to Spinal cord insults, to match the proposed adult heading and to reflect which disorders we evaluate in children, including meningo(myelo)cele, a severe form of spina bifida.

Other Changes

We propose minor conforming changes to the musculoskeletal system listings (1.00).

How should we consider genetic testing when evaluating neurological disorders?

We are requesting information regarding how we could consider genetic testing and/or analysis to document, identify, and evaluate specific medically determinable neurological disorder(s).

Under our current, long-standing policy, we do not require or purchase genetic testing to evaluate disability; however, we do consider all evidence in the record, including genetic testing, when we make a determination or decision of whether you are disabled (See, §§ 404.1520 and 416.920).

What is our authority to make rules and set procedures for determining whether a person is disabled under the statutory definition?

Under the Act, we have full power and authority to make rules and regulations and to establish necessary and appropriate procedures to carry out such provisions. Sections 205(a), 702(a)(5), and 1631(d)(1).

How long would these proposed rules be effective?

If we publish these proposed rules as final rules, they would remain in effect for 5 years after the date they become effective, unless we extend them, or revise and issue them again.

Clarity of These Proposed Rules

Executive Order 12866, as supplemented by Executive Order 13563, requires each agency to write all rules in plain language. In addition to your substantive comments on these proposed rules, we invite your comments on how to make them easier to understand.

For example:
- Would more, but shorter sections be better?
- Are the requirements in the rules clearly stated?
- Have we organized the material to suit your needs?
- Could we improve clarity by adding tables, lists, or diagrams?
- What else could we do to make the rules easier to understand?
- Do the rules contain technical language or jargon that is not clear?
- Would a different format make the rules easier to understand, such as grouping and order of sections, use of headings, paragraphing?

Regulatory Procedures

Executive Order 12866, as Supplemented by Executive Order 13563

We consulted with the Office of Management and Budget (OMB) and determined that this NPRM meets the criteria for a significant regulatory action under Executive Order 12866, as supplemented by Executive Order 13563. Therefore, OMB reviewed it.

Regulatory Flexibility Act

We certify that this NPRM would not have a significant economic impact on a substantial number of small entities because it would affect individuals only. Therefore, the Regulatory Flexibility Act, as amended, does not require us to prepare a regulatory flexibility analysis.

Paperwork Reduction Act

This NPRM does not create any new or affect any existing collections and, therefore, does not require OMB approval under the Paperwork Reduction Act.

References

We consulted the following references when we developed these proposed rules:


Barry, J.J. (2003). The recognition and management of mood disorders as a comorbidity of epilepsy. Epilepsia, 44,
Zinman, L., Ng, E., & Bril, V. (2007). IV

b. In part A table of contents, revising paragraph 11.00;

c. In section 1.00 of part A, revising the introduction to paragraph K;

d. Revising section 11.00 of part A;

e. In section 12.00 of part A, revising paragraph D10, heading of listing 12.01, and listing 12.09f;

f. In part B table of contents, revising the body system name for section 111.00;

g. In section 101.00 of part B, revising the last sentence of paragraph B1 and paragraph K;

h. In section 101.00 of part B, revising the last sentence of paragraph B1 and paragraph K; and

i. Revising section 111.00 of part B to read as follows:

Appendix 1 to Subpart P of Part 404—
Listing of Impairments

* * * * *

12. Neurological Disorders (11.00 and 111.00): [DATE 5 YEARS FROM EFFECTIVE DATE OF FINAL RULES].

* * * * *

11.00 Neurological Disorders.

* * * * *

K. Disorders of the spine, listed in 1.04, result in limitations because of distortion of the bony and ligamentous architecture of the spine and associated impingement on nerve roots (including the cauda equina) or spinal cord. Such impingement on nerve tissue may result from a herniated nucleus pulposus, spinal stenosis, arachnoiditis, or other miscellaneous conditions.

* * * * *

11.00 NEUROLOGICAL DISORDERS

A. Which neurological disorders do we evaluate under these listings? We evaluate epilepsy, amyotrophic lateral sclerosis, coma or PVS, and neurological disorders that cause disorganization of motor function, bulbar and neuromuscular dysfunction, or a combination of functional limitations.

B. What evidence do we need to document your neurological disorder?

1. We need medical evidence to assess the effects of your neurological disorder. Medical evidence should include your medical history, examination findings, relevant laboratory tests, and the results of imaging. Imaging refers to medical imaging techniques, such as x-ray, computerized tomography (CT), magnetic resonance imaging (MRI), and electroencephalography (EEG). The imaging must be consistent with the prevailing state of medical knowledge and clinical practice as the proper technique to support the evaluation of the disorder. In addition, the medical evidence may include descriptions of any prescribed treatment and your response to it. We consider statements you or others make about your impairments, your restrictions, your daily activities, or your efforts to work.

2. We will make every reasonable effort to obtain the results of your laboratory and imaging evidence. We will not purchase imaging or laboratory tests that are complex, costly, or invasive.

C. How do we consider adherence to prescribed treatment in neurological disorders? In 11.02, 11.06, and 11.12, we require that findings occur despite adherence to prescribed treatment. “Despite adherence to prescribed treatment” means that you have taken medication(s) or followed other treatment procedures for your neurological disorder(s) as prescribed by a physician for 3 consecutive months. You may receive your treatment at a health care facility that you visit regularly, even if you do not see the same physician on each visit.

D. What do we mean by disorganization of motor function?

1. Disorganization of motor function means interference with movement of the trunk or lower extremities, or upper extremities (including arms, hands, and fingers). All listings in this body system, except for 11.02, 11.10, and 11.20, include a requirement for disorganization of motor function that results in an extreme limitation in your ability to:

- Stand up; or
- Balance; or
- Walk; or
- Use arms, hands, and fingers to perform fine and gross motor movements.

2. Extreme limitation is the inability to stand up from a seated position, or the inability to maintain balance in a standing position and while walking, or the inability to use your upper extremities.

a. Inability to stand up from a seated position means that once seated you are unable to stand and maintain an upright position without the assistance of another person or the use of an assistive device, such as a walker, a crutch, or a cane.

b. Inability to maintain balance in a standing position means that you are unable to maintain an upright position while standing or walking without the assistance of another person or an assistive device, such as a walker, two crutches, or two canes.

c. Inability to use your upper extremities means that you have an extreme loss of function of both upper extremities that interferes very seriously with your ability to perform fine and gross motor movements. Inability to perform fine and gross motor
movements could include inability to feed oneself, inability to take care of personal hygiene, inability to sort and handle papers or files, or the inability to lift and carry items at or above waist level.

3. We will find you disabled under these listings if you have disorganization of motor function that limits both lower extremities, or both upper extremities, or the trunk and one upper or lower extremity, or one upper extremity and one lower extremity. Examples of extreme limitation that meet this criterion include, but are not limited to, very serious limitation in the ability to:
   a. Stand upright without the risk of falling;
   b. Balance in a seated position without the risk of falling;
   c. Walk without the assistance of a device or person without the risk of falling; and
   d. Use your fingers, hands, and arms to manipulate, grasp, lift, and carry objects.

E. How do we evaluate communication impairments under these listings? We must have a description of a recent comprehensive evaluation including all areas of communication, performed by an acceptable medical source, to document a communication impairment associated with a neurological disorder. A communication impairment may occur when a medically determinable neurological impairment results in dysfunction in the parts of the brain responsible for speech and language. We evaluate communication impairments associated with neurological disorders under 11.04A, 11.07C, or 11.11B. We evaluate communication impairments due to non-neurological disorders under 2.09.

1. Under 11.04A, we need evidence documenting that your central nervous system vascular accident or insult (CVA) and sensory or motor aphasia have resulted in ineffective speech or communication. Ineffective speech or communication means that there is an extreme limitation in your ability to understand or convey your message in simple spoken language resulting in the inability to demonstrate basic communication skills, such as following one-step commands or telling someone about your basic personal needs without assistance.

2. Under 11.07C, we need evidence documenting that your cerebral palsy has resulted in significant interference in your ability to speak, hear, or see. We will find that you have “significant interference” in your ability to speak, hear, or see if your symptoms, such as aphasia, strabismus, or sensorineural hearing loss, seriously limit your ability to function on a sustained basis.

3. Under 11.11B, we need evidence documenting that your post-polio syndrome has resulted in the inability to produce intelligible speech.

F. What do we mean by bulbar and neuromuscular dysfunction? The bulbar region of the brain is responsible for controlling the bulbar muscles in the throat, tongue, jaw, and face. Bulbar and most neuromuscular dysfunction refer to weakness in these muscles resulting in breathing, swallowing, and speaking impairments. Listings 11.11, 11.12, and 11.22 include criteria for evaluating bulbar and neuromuscular dysfunction.

G. How do we evaluate a combination of functional limitations under these listings?

1. We consider all relevant information in your case record to determine the effects of your neurological disorder or your ability to function in the broad areas of functioning: Physical functioning, activities of daily living, social functioning, and completing tasks in a timely manner. To satisfy the combination of functional limitations requirement in these listings, your neurological disorder must result in marked limitation in physical functioning and in at least one of three broad areas of functioning: Activities of daily living; maintaining social functioning; or completing tasks in a timely manner due to deficiencies in concentration, persistence, or pace.

2. Marked limitation means that the signs and symptoms of your neurological disorder interfere seriously with your ability to function independently, appropriately, effectively, and on a sustained basis in work-related activities.

a. Although we do not require the use of such a scale, marked would be the fourth point on a five-point rating scale consisting of no limitation, slight limitation, moderate limitation, marked limitation, and extreme limitation.

b. We do not define marked in terms of specific physical functions, or a specific number of different activities of daily living, or different behaviors in which your social functioning is impaired, or a specific number of tasks that you are able to complete, but by the nature and overall degree of interference with your functioning.

c. Marked limitation also reflects the kind and extent of help you receive and the characteristics of any special supports that may reduce your symptoms and signs and enable you to function. These special supports include help you receive from other people, special appliances or equipment, assistive devices, or medications that enable you to function. The more extensive the help or supports that you need to function, the more limited we will find you to be.

3. Areas of functioning and marked limitation
   a. Physical functioning includes specific motor abilities, such as the ability to stand up, balance, walk, climb, bend, push, pull, lift, carry, reach, grasp, and manipulate. Physical functioning may also include functions of the body that support motor abilities, such as the ability to see, breathe, swallow, and physiological processes that sustain energy level, output, and physical pace. We will find that you have “marked” limitation in this area if your symptoms, such as pain or physical or mental fatigue (see 11.00T) caused by your neurological disorder or its treatment, seriously limit your motor abilities, or the physical functions or physiological processes that support those abilities.

   b. Activities of daily living include, but are not limited to, such activities as doing household chores, grooming and hygiene, using a post office, taking public transportation, or paying bills. We will find that you have “marked” limitation in this area if your symptoms, such as pain or physical or mental fatigue, caused by your neurological disorder or its treatment, seriously limit your ability to perform activities of daily living.

   c. Social functioning includes the ability to interact with others independently, appropriately, effectively, and on a sustained basis. It includes the ability to communicate effectively with others. We will find that you have “marked” limitation in this area if your symptoms, such as pain, physical or mental fatigue, or communication deficits, caused by your neurological disorder or its treatment, seriously limit social interaction on a sustained basis.

   d. Completing tasks in a timely manner involves the ability to sustain concentration, persistence, or pace to permit timely completion of tasks. We will find that you have “marked” limitation in this area if your symptoms, such as pain, physical or mental fatigue, or difficulty concentrating, caused by your neurological disorder or its treatment, seriously limit your ability to sustain concentration or pace adequate to complete tasks.

4. Symptoms and signs of your disorder and the effects of treatment
   a. We will consider your symptoms and signs and how they affect your ability to function on a sustained basis. When we evaluate your functioning, we will consider whether
your symptoms and signs are persistent or intermittent, how frequently they occur and how long they last, their intensity, and whether you have periods of exacerbation and remission.

b. We will consider the effectiveness of treatment in improving the symptoms, signs, and laboratory findings related to your neurological disorder, as well as any aspects of treatment that may interfere with your ability to function. We will consider, for example: the effects of medications you take (including side effects); the time-limited efficacy of some medications; the intrusiveness, complexity, and duration of your treatment (for example, the dosing schedule, need for injections); the effects of treatment, including medications, therapy, and surgery, on your functioning; the variability of your response to treatment; and any drug interactions.

H. What is epilepsy, and how do we evaluate it under 11.02?

1. Epilepsy is a pattern of recurrent and unprovoked seizures that are manifestations of abnormal electrical activity in the brain. There are various types of generalized and “focal” or partial seizures. In adults, the most common potentially disabling seizure types are generalized tonic-clonic seizures and dyscognitive seizures (formerly complex partial seizures).

a. Generalized tonic-clonic seizures are characterized by loss of consciousness accompanied by a tonic phase (sudden muscle tensing causing the person to lose postural control) followed by a clonic phase (rapid cycles of muscle contraction and relaxation, also called convulsions). Tongue biting and incontinence commonly occur during generalized tonic-clonic seizures, and injuries may result from falling.

b. Dyscognitive seizures are characterized by alteration of consciousness without convulsions or loss of muscle control. During the seizure, blank staring, change of facial expression, and automatisms (such as lip smacking, chewing or swallowing, or repetitive simple actions, such as gestures or verbal utterances) may occur. During the course of the seizure, a dyscognitive seizure may progress into a generalized tonic-clonic seizure (see 11.00H1a).

2. We require at least one detailed description of your seizures from someone, preferably a medical professional, who has observed at least one of your typical seizures. If you experience more than one type of seizure, we require a description of each type.

3. Serum drug levels. We do not require serum drug levels; therefore, we will not purchase them. However, if serum drug levels are available in your medical records, we will evaluate them in the context of the other evidence in your case record.

4. Counting seizures. The period specified in 11.02A, B, or C cannot begin earlier than one month after you began prescribed treatment. The required number of seizures must occur within the period we are considering in connection with your application or continuing disability review. When we evaluate the frequency of your seizures, we also consider your adherence to prescribed treatment (see 11.00C). When we determine the number of seizures you have had in the specified period, we will:

a. Count multiple seizures occurring in a 24-hour period as one seizure.

b. Count status epilepticus (a continuous series of seizures without return to consciousness between seizures) as one seizure.

c. Count a dyscognitive seizure that progresses into a generalized tonic-clonic seizure as one generalized tonic-clonic seizure.

d. We do not count seizures that occur during a period when you are not adhering to prescribed treatment without good reason. When we determine that you had good reason for not adhering to prescribed treatment, we will consider your physical, mental, educational, and communicative limitations (including any lack of facility with the English language). We will consider you to have good reason for not following prescribed treatment if the treatment is very risky for you due to its magnitude or unusual nature, or if you are unable to afford prescribed treatment that you are willing to accept, but for which no free community resources are available. We will not follow guidelines in our policy that are not relevant to the number of seizures that you experience. For example, we will not consider amputation of an extremity or cataract surgery in one eye when there is a severe visual impairment not expected to improve with treatment in the other eye to be good reasons to not follow prescribed treatment for your seizures. We will follow guidelines found in our policy, such as §§ 404.1530(c) and 416.930(c) of this chapter, when we determine whether you have a good reason for not adhering to prescribed treatment.

5. Electroencephalography (EEG) testing. We do not require EEG test results; therefore, we will not purchase them. However, if EEG test results are available in your medical records, we will evaluate them in the context of the other evidence in your case record.

I. What is vascular insult to the brain, and how do we evaluate it under 11.04?

1. Vascular insult to the brain (cerebrum, cerebellum, or brainstem), commonly referred to as stroke or cerebrovascular accident, is brain cell death caused by an interruption of blood flow within or leading to the brain, or by a hemorrhage from a ruptured blood vessel or aneurysm in the brain.

2. We need evidence of sensory or motor aphasia that results in ineffective speech or communication under 11.04A. (See 11.00E.) We may evaluate your communication impairment under the functional criteria under listing 11.04C, or under mental listing 12.02.

3. We generally need evidence from at least 3 months after the vascular insult to evaluate your physical limitations and how do we evaluate them under 11.05?

Benign brain tumors are noncancerous (nonmalignant) abnormal growths of tissue in or on the brain that invade healthy brain tissue or apply pressure on the brain or cranial nerves. We evaluate their effects on your motor functioning, oral communication, or on several areas of functioning (see 11.00G3). We evaluate malignant brain tumors under the malignant neoplastic diseases body system in 13.00.

K. What is Parkinsonian syndrome, and how do we evaluate it under 11.06?

Parkinsonian syndrome is a term that describes a group of chronic, progressive movement disorders resulting from loss or decline in the function of dopamine-producing brain cells. Dopamine is a neurotransmitter that regulates muscle movement throughout the body. When we evaluate your Parkinsonian syndrome, we will consider your adherence to prescribed treatment (see 11.00C).

L. What is cerebral palsy, and how do we evaluate it under 11.07?

1. Cerebral palsy (CP) is a term that describes a group of static, nonprogressive disorders caused by abnormalities within the brain that disrupt the brain’s ability to control movement, muscle tone, and posture. The resulting motor deficits manifest very early in a person’s
development, with delayed or abnormal progress in attaining developmental milestones; deficits may become more obvious as the person grows and matures over time.

2. We evaluate your signs and symptoms, such as ataxia, spasticity, flaccidity, atethosis, chorea, and difficulty with precise movements when we determine your ability to stand up, balance, walk, or perform fine and gross motor movements. We will also evaluate your signs, such as dysarthria and apraxia of speech, and receptive and expressive language problems when we determine your ability to communicate. We will consider your other impairments or signs and symptoms that develop secondary to the disorder, such as post-impairment syndrome (a combination of pain, fatigue, and weakness due to muscle abnormalities); overuse syndromes (repetitive motion injuries); arthritis; abnormalities of proprioception (perception of the movements and position of the body); abnormalities of stereognosis (perception and identification of objects by touch); learning problems; anxiety; and depression.

M. What are spinal cord insults, and how do we evaluate them under 11.08?

1. Spinal cord insults are lesions that transect or contuse the spinal cord. Motor signs and symptoms of spinal cord insults include paralysis, flaccidity, spasticity, and weakness.

2. Spinal cord insults with complete loss of function (11.08A) addresses spinal cord insults that result in complete or total motor, sensory, and autonomic function of the affected part(s) of the body.

3. Spinal cord insults with disorganization of motor function (11.08B) addresses spinal cord insults that result in less than complete loss of function of the affected part(s) of the body, reducing, but not eliminating, motor, sensory, and autonomic function.

4. When we evaluate your spinal cord insult, we generally need evidence from at least 3 months after the spinal cord insult to evaluate your disorganization of motor function. In some cases, evidence of your spinal cord insult may be sufficient to determine disability within 3 months after the spinal cord insult.

N. What is multiple sclerosis, and how do we evaluate it under 11.09?

1. Multiple sclerosis (MS) is a chronic, inflammatory, degenerative disorder of the brain and spinal cord that damages the myelin sheath surrounding the nerve fibers in the brain and spinal cord. The damage disrupts the normal transmission of nerve impulses within the brain, and between the brain and other parts of the body causing impairment in muscle coordination, strength, balance, sensation, and vision. There are several forms of MS, ranging from slightly to highly aggressive. Milder forms generally involve acute attacks (exacerbations) with partial or complete recovery from signs and symptoms (remissions). Aggressive forms generally exhibit a steady progression of signs and symptoms with few or no remissions. The effects of all forms vary from person to person.

2. We evaluate your signs and symptoms, such as flaccidity, spasticity, spams, in-coordination, imbalance, tremor, physical fatigue, muscle weakness, dizziness, tingling, and numbness when we determine your ability to stand up, balance, walk, or perform fine and gross motor movements using your arms, hands, and fingers. We will consider your other impairments or signs and symptoms that develop secondary to the disorder, such as mental fatigue; visual loss; trouble sleeping; impaired attention, concentration, memory, or judgment; mood swings; and depression in determining a combination of functional limitations.

O. What is amyotrophic lateral sclerosis, and how do we evaluate it under 11.10? Amyotrophic lateral sclerosis (ALS) is one type of motor neuron disorder. We establish ALS under 11.10 when you have a documented diagnosis of ALS. Documentation must be based on generally accepted methods consistent with the prevailing state of medical knowledge and clinical practice. We require laboratory testing to establish the diagnosis when the clinical findings of upper and lower motor neuron disease are not present in three or more regions. Electrophysiological studies, such as nerve conduction velocity studies and electromyography (EMG), may support your diagnosis of ALS; however, we will not purchase these studies.

P. What are neurodegenerative disorders of the central nervous system, such as Huntington disease, Friedreich ataxia, and spinocerebellar degeneration, and how do we evaluate them under 11.17? Neurodegenerative disorders of the central nervous system are disorders characterized by progressive and irreversible degeneration of neurons or their supporting cells. Over time, these disorders impair many of the body’s motor or cognitive and other mental functions. We consider neurodegenerative disorders of the central nervous system under 11.17 that we do not evaluate elsewhere in section 11.00, such as Huntington disease (HD), Friedreich ataxia, spinocerebellar degeneration, Creutzfeldt-Jakob disease (CJD), progressive supranuclear palsy (PSP), early onset Alzheimer disease, and frontotemporal dementia (Pick disease). When these disorders result in solely cognitive and other mental function effects, we will evaluate the disorder under 12.02.

Q. What is traumatic brain injury, and how do we evaluate it under 11.18?

1. Traumatic brain injury (TBI) is damage to the brain resulting from skull fracture, collision with an external force leading to a closed head injury, or penetration by an object that enters the skull and makes contact with brain tissue. We evaluate TBI that results in coma or persistent vegetative state (PVS) under 11.20.

2. We generally need evidence from at least 3 months after the TBI to evaluate either your physical limitations under 11.18A or the impact that your disorder has on your function under 11.18C. In some cases, evidence of your TBI is sufficient to determine disability within 3 months post-TBI. If we are unable to determine disability within 3 months post-TBI, we will defer adjudication of the claim until we obtain evidence of your neurological disorder at least 3 months post-TBI. If a finding of disability still is not possible at that time, we will again defer adjudication of the claim until we obtain evidence at least 6 months after your TBI.

R. What are coma and persistent vegetative state, and how do we evaluate them under 11.20? Coma is a state of unconsciousness in which a person does not exhibit a sleep/wake cycle, and is unable to perceive or respond to external stimuli. People who do not fully emerge from coma may progress into a persistent vegetative state (PVS). PVS is a condition of partial arousal in which a person may have a low level of consciousness but is still unable to react to external stimuli. In contrast to coma, a person in a PVS retains sleep/wake cycles and may exhibit some key lower brain functions, such as spontaneous movement, opening and moving eyes, and grimacing. Coma or PVS may result from TBI, a nontraumatic insult to the brain (such as a vascular insult, infection, or brain tumor), or a neurodegenerative or metabolic disorder.

S. What are motor neuron disorders, other than ALS, and how do we evaluate them under 11.22? Motor neuron disorders such as progressive bulbar palsy (PLS), and spinal muscular atrophy (SMA) are progressive neurological disorders that
destroy the cells that control voluntary muscle activity, such as walking, breathing, swallowing, and speaking. We evaluate the effects of these disorders on motor functioning, bulbar and neuromuscular functioning, oral communication, or a combination of functional limitations.

T. How do we consider your symptom of fatigue in these listings? Fatigue is one of the most common and debilitating symptoms of some neurological disorders, such as multiple sclerosis, post-polio syndrome, and myasthenia gravis. These disorders may result in physical fatigue (lack of muscle strength) or mental fatigue (decreased awareness or attention). When we evaluate your fatigue, we will consider the intensity, persistence, and effects of fatigue on your functioning. This may include information such as the clinical and laboratory data and other objective evidence concerning your neurological deficit, a description of fatigue considered characteristic of your disorder, and information about your functioning. We consider the effects of physical fatigue on your ability to stand up, balance, walk, or perform fine and gross motor movements using the criteria described in 11.00D. We consider the effects of physical and mental fatigue when we evaluate your combination of functional limitations described in 11.00G.

U. How do we evaluate your neurological disorder when it does not meet one of these listings? If your neurological disorder does not meet the criteria of any of these listings, we must also consider whether your impairment(s) meets the criteria of a listing in another body system.

If you have a severe medically determinable impairment(s) that does not meet a listing, we will determine whether your impairment(s) medically equals a listing. See §§ 404.1526 and 416.920 of this chapter. If your impairment(s) does not meet or medically equal the criteria of a listing, you may or may not have the residual functional capacity to engage in substantial gainful activity, which we determine at the fourth, and if necessary, the fifth steps of the sequential evaluation process in §§ 404.1520 and 416.920 of this chapter. See also §§ 404.1545, 404.1560, 416.945, and 416.960 of this chapter. We use the rules in §§ 404.1594 and 416.994 of this chapter, as appropriate, when we decide whether you continue to be disabled.

11.01 Category of Impairments, Neurological Disorders

11.02 Epilepsy—documented by a detailed description of a typical seizure and characterized by A, B, C, or D:

A. Generalized tonic-clonic seizures (see 11.00H1a), occurring at least once a month for at least 3 consecutive months (see 11.00H4) despite adherence to prescribed treatment (see 11.00C).

OR

B. Dyscognitive seizures (see 11.00H1b), occurring at least once a week for at least 3 consecutive months (see 11.00H4) despite adherence to prescribed treatment (see 11.00C).

OR

C. Generalized tonic-clonic seizures (see 11.00H1a), occurring at least once every 2 months for at least 4 consecutive months (see 11.00H4) despite adherence to prescribed treatment (see 11.00C); and marked limitation in one of the following:

1. Physical functioning (see 11.00G3a); or

2. Activities of daily living (see 11.00G3b); or

3. Maintaining social functioning (see 11.00G3c); or

4. Completing tasks in a timely manner due to deficiencies in concentration, persistence, or pace (see 11.00G3d).

OR

D. Dyscognitive seizures (see 11.00H1b), occurring at least once every 2 weeks for at least 3 consecutive months (see 11.00H4) despite adherence to prescribed treatment (see 11.00C); and marked limitation in one of the following:

1. Physical functioning (see 11.00G3a); or

2. Activities of daily living (see 11.00G3b); or

3. Maintaining social functioning (see 11.00G3c); or

4. Completing tasks in a timely manner due to deficiencies in concentration, persistence, or pace (see 11.00G3d).

11.03 [Reserved]

11.04 Vascular insult to the brain, characterized by A, B, or C:

A. Sensory or motor aphasia resulting in ineffective speech or communication (see 11.00E1) persisting for at least 3 consecutive months after the insult.

OR

B. Disorganization of motor function (see 11.00D1), resulting in extreme limitation (see 11.00D2) in the ability to stand up, balance, walk, or perform fine and gross motor movements, persisting for at least 3 consecutive months after the insult.

OR

C. Marked limitation (see 11.00G2) in physical functioning (see 11.00G3a) and in one of the following areas, both persisting for at least 3 consecutive months after the insult:

1. Activities of daily living (see 11.00G3b); or

2. Social functioning (see 11.00G3c); or

3. Completing tasks in a timely manner due to deficiencies in concentration, persistence, or pace (see 11.00G3d).

11.05 Benign brain tumors, characterized by A or B:

A. Disorganization of motor function (see 11.00D1), resulting in extreme limitation (see 11.00D2) in the ability to stand up, balance, walk, or perform fine and gross motor movements.

OR

B. Marked limitation (see 11.00G2) in physical functioning (see 11.00G3a), and in one of the following:

1. Activities of daily living (see 11.00G3b); or

2. Social functioning (see 11.00G3c); or

3. Completing tasks in a timely manner due to deficiencies in concentration, persistence, or pace (see 11.00G3d).

11.06 Parkinsonian syndrome, characterized by A or B despite adherence to prescribed treatment for at least 3 consecutive months (see 11.00C):

A. Disorganization of motor function (see 11.00D1), resulting in extreme limitation (see 11.00D2) in the ability to stand up, balance, walk, or perform fine and gross motor movements.

OR

B. Marked limitation (see 11.00G2) in physical functioning (see 11.00G3a), and in one of the following:

1. Activities of daily living (see 11.00G3b); or

2. Social functioning (see 11.00G3c); or

3. Completing tasks in a timely manner due to deficiencies in concentration, persistence, or pace (see 11.00G3d).

11.07 Cerebral palsy, characterized by A, B, or C:

A. Disorganization of motor function (see 11.00D1), resulting in extreme limitation (see 11.00D2) in the ability to stand up, balance, walk, or perform fine and gross motor movements.

OR

B. Marked limitation (see 11.00G2) in physical functioning (see 11.00G3a), and in one of the following:

1. Activities of daily living (see 11.00G3b); or

2. Social functioning (see 11.00G3c); or

3. Completing tasks in a timely manner due to deficiencies in concentration, persistence, or pace (see 11.00G3d).
C. Significant interference in communication due to speech, hearing, or visual defect (see 11.00E2).

11.08 Spinal cord insults,
characterized by A, B, or C:
A. Complete loss of function, as described in 11.00M2, persisting for 3 consecutive months after the insult (see 11.00M4).
OR
B. Disorganization of motor function (see 11.00D1), resulting in extreme limitation (see 11.00D2) in the ability to stand up, balance, walk, or perform fine and gross motor movements persisting for 3 consecutive months after the insult (see 11.00M4).
OR
C. Marked limitation (see 11.00G2) in physical functioning (see 11.00G3a) and in one of the following areas, both persisting for 3 consecutive months after the insult (see 11.00M4):
1. Activities of daily living (see 11.00G3b); or
2. Social functioning (see 11.00G3c); or
3. Completing tasks in a timely manner due to deficiencies in concentration, persistence, or pace (see 11.00G3d).

11.09 Multiple sclerosis,
characterized by A or B:
A. Disorganization of motor function (see 11.00D1), resulting in extreme limitation (see 11.00D2) in the ability to stand up, balance, walk, or perform fine and gross motor movements.
OR
B. Marked limitation (see 11.00G2) in physical functioning (see 11.00G3a), and in one of the following:
1. Activities of daily living (see 11.00G3b); or
2. Social functioning (see 11.00G3c); or
3. Completing tasks in a timely manner due to deficiencies in concentration, persistence, or pace (see 11.00G3d).

11.10 Amyotrophic lateral sclerosis
established by clinical and laboratory findings.

11.11 Post-polio syndrome,
characterized by A, B, C, or D:
A. Disorganization of motor function (see 11.00D1), resulting in extreme limitation (see 11.00D2) in the ability to stand up, balance, walk, or perform fine and gross motor movements.
OR
B. Unintelligible speech.
OR
C. Bulbar and neuromuscular dysfunction (see 11.00F), resulting in:
1. Acute respiratory failure requiring mechanical ventilation; or
2. Need for supplemental enteral nutrition via a gastrostomy or parenteral nutrition via a central venous catheter.
OR
D. Marked limitation (see 11.00G2) in physical functioning (see 11.00G3a), and in one of the following:
1. Activities of daily living (see 11.00G3b); or
2. Social functioning (see 11.00G3c); or
3. Completing tasks in a timely manner due to deficiencies in concentration, persistence, or pace (see 11.00G3d).

11.12 Myasthenia gravis,
characterized by A, B, or C despite adherence to prescribed treatment for at least 3 months (see 11.00C):
A. Disorganization of motor function (see 11.00D1), resulting in extreme limitation (see 11.00D2) in the ability to stand up, balance, walk, or perform fine and gross motor movements.
OR
B. Bulbar and neuromuscular dysfunction (see 11.00F), resulting in:
1. One myasthenic crisis requiring mechanical ventilation; or
2. Need for supplemental enteral nutrition via a gastrostomy or parenteral nutrition via a central venous catheter.
OR
C. Marked limitation (see 11.00G2) in physical functioning (see 11.00G3a), and in one of the following:
1. Activities of daily living (see 11.00G3b); or
2. Social functioning (see 11.00G3c); or
3. Completing tasks in a timely manner due to deficiencies in concentration, persistence, or pace (see 11.00G3d).

11.13 Muscular dystrophy,
characterized by A or B:
A. Disorganization of motor function (see 11.00D1), resulting in extreme limitation (see 11.00D2) in the ability to stand up, balance, walk, or perform fine and gross motor movements.
OR
B. Marked limitation (see 11.00G2) in physical functioning (see 11.00G3a), and in one of the following:
1. Activities of daily living (see 11.00G3b); or
2. Social functioning (see 11.00G3c); or
3. Completing tasks in a timely manner due to deficiencies in concentration, persistence, or pace (see 11.00G3d).

11.14 Peripheral neuropathy,
characterized by A or B:
A. Disorganization of motor function (see 11.00D1), resulting in extreme limitation (see 11.00D2) in the ability to stand up, balance, walk, or perform fine and gross motor movements.
OR
B. Marked limitation (see 11.00G2) in physical functioning (see 11.00G3a), and in one of the following:
1. Activities of daily living (see 11.00G3b); or
2. Social functioning (see 11.00G3c); or
3. Completing tasks in a timely manner due to deficiencies in concentration, persistence, or pace (see 11.00G3d).

11.15 [Reserved]
11.16 [Reserved]
11.17 Neurodegenerative disorders
of the central nervous system, such as Huntington disease, Friedreich ataxia, and spinocerebellar degeneration,
characterized by A or B:
A. Disorganization of motor function (see 11.00D1), resulting in extreme limitation (see 11.00D2) in the ability to stand up, balance, walk, or perform fine and gross motor movements.
OR
B. Marked limitation (see 11.00G2) in physical functioning (see 11.00G3a), and in one of the following:
1. Activities of daily living (see 11.00G3b); or
2. Social functioning (see 11.00G3c); or
3. Completing tasks in a timely manner due to deficiencies in concentration, persistence, or pace (see 11.00G3d).

11.18 Traumatic brain injury,
characterized by A or B:
A. Disorganization of motor function (see 11.00D1), resulting in extreme limitation (see 11.00D2) in the ability to stand up, balance, walk, or perform fine and gross motor movements, persisting for at least 3 consecutive months after the injury.
OR
B. Marked limitation (see 11.00G2) in physical functioning (see 11.00G3a), and in one of the following areas, persisting for at least 3 consecutive months after the injury:
1. Activities of daily living (see 11.00G3b); or
2. Social functioning (see 11.00G3c); or
3. Completing tasks in a timely manner due to deficiencies in concentration, persistence, or pace (see 11.00G3d).

11.19 [Reserved]
11.20 Coma or persistent vegetative state, persisting for at least 1 month.
11.22 Motor neuron disorders other than ALS, characterized by A, B, or C: A. Disorganization of motor function (see 11.00D1), resulting in extreme limitation (see 11.00D2) in the ability to stand up, balance, walk, or perform fine and gross motor movements.

OR

B. Bulbar and neuromuscular dysfunction (see 11.00F), resulting in: 1. Acute respiratory failure requiring invasive mechanical ventilation; or 2. Need for supplemental enteral nutrition via a gastrostomy or parenteral nutrition via a central venous catheter. OR

C. Marked limitation (see 11.00G2) in physical functioning (see 11.00G3a), and in one of the following: 1. Activities of daily living (see 11.00G3b); or 2. Social functioning (see 11.00G3c); or 3. Completing tasks in a timely manner due to deficiencies in concentration, persistence, or pace (see 11.00G3d).

11.00G3b); or

11.00G3a), resulting in: 1. Acute respiratory failure requiring invasive mechanical ventilation; or 2. Need for supplemental enteral nutrition via a gastrostomy or parenteral nutrition via a central venous catheter. OR

11.00G3c); or

11.00G3d).

12.00 MENTAL DISORDERS

D. Documentation. **

10. Traumatic brain injury (TBI). In cases involving TBI, follow the documentation and evaluation guidelines in 11.00Q.

12.01 Category of Impairments, Mental Disorders

12.09 Substance Addiction Disorders: **

I. Seizures. Evaluate under 11.02.

Part B

111.00 Neurological Disorders.

101.00 MUSCULOSKELETAL SYSTEM

B. Loss of function.

1. General. ** Impairments with neurological causes are to be evaluated under 111.00ff, as appropriate.

K. Disorders of the spine, listed in 101.04, result in limitations because of distortion of the bony and ligamentous architecture of the spine and associated impingement on nerve roots (including the cauda equina) or spinal cord. Such impingement on nerve tissue may result from a herniated nucleus pulposus, spinal stenosis, arachnoiditis, or other miscellaneous conditions.

111.00 NEUROLOGICAL DISORDERS

A. Which neurological disorders do we evaluate under these listings?

We evaluate epilepsy, coma or persistent vegetative state, and neurological disorders that cause disorganization of motor function, or bulbar and neuromuscular dysfunction.

B. What evidence do we need to document your neurological disorder?

1. We need medical evidence to assess the effects of your neurological disorder. Medical evidence should include your medical history, examination findings, relevant laboratory tests, and the results of imaging. Imaging refers to medical imaging techniques, such as x-ray, computerized tomography (CT), magnetic resonance imaging (MRI), and electroencephalography (EEG). The imaging must be consistent with the prevailing state of medical knowledge and clinical practice as the proper technique to support the evaluation of the disorder. In addition, the medical evidence may include descriptions of any prescribed treatment and your response to it. We consider statements you or others make about your impairments, your restrictions, your daily activities, or, if you are an adolescent, your efforts to work.

2. We will make every reasonable effort to obtain the results of your laboratory and imaging evidence. We will not purchase imaging or laboratory tests that are complex, costly, or invasive.

C. How do we consider adherence to prescribed treatment in neurological disorders?

In 111.02 and 111.12, we require that findings occur despite adherence to prescribed treatment. “Despite adherence to prescribed treatment” means that you have taken medication(s) or followed other treatment procedures as prescribed by a physician for 3 consecutive months. You may receive your treatment at a health care facility that you visit regularly, even if you do not see the same physician on each visit.

D. What do we mean by disorganization of motor function?

1. Disorganization of motor function means interference with movement of the trunk or lower extremities, or upper extremities (including arms, hands, and fingers). All listings in this body system, except for 111.02 and 111.20, include a requirement for disorganization of motor function that results in extreme limitation in your ability to stand up, balance, walk, or use arms, hands, and fingers to perform fine and gross motor movements.

2. Extreme limitation is the inability to stand up from a seated position, the inability to maintain balance in a standing position and while walking, or the inability to use your upper extremities. a. Inability to stand up from a seated position means that once seated you are unable to stand and maintain an upright position without the assistance of another person or an assistive device, such as a walker, a crutch, or a cane.

b. Inability to maintain balance in a standing position means that you are unable to maintain an upright position while standing or walking without the assistance of another person or an assistive device, such as a walker, two crutches, or two canes.

c. Inability to use your upper extremities means that you have an extreme loss of function of both upper extremities that interferes very seriously with your ability to perform fine and gross motor movements. Inability to perform fine and gross motor movements could include inability to feed oneself, inability to pick up small objects, inability to control a pencil or crayon, or inability to throw a ball.

3. We will find you disabled under these listings if you have disorganization of motor function that limits both lower extremities, or both upper extremities, or the trunk and one upper or lower extremity, or one upper extremity and one lower extremity. Examples of extreme limitation that meet this criterion include, but are not limited to, very serious limitation in the ability to:

a. Stand upright without the risk of falling;

b. Balance in a seated position without the risk of falling;

c. Walk without the assistance of a device or person without the risk of falling; and
d. Use your fingers, hands, and arms to manipulate, grasp, lift, and carry objects.

4. For children who are not yet able to balance, stand up, or walk independently, we consider their function based on assessments of limitations in the ability to perform comparable age-appropriate activities with the lower and upper extremities, given normal developmental expectations. For such children, an extreme level of limitation means developmental expectations at no more
than one-half (1⁄2) of the child’s chronological age.

E. What do we mean by bulbar and neuromuscular dysfunction?

Listings 111.12 and 111.22 include criteria for evaluating bulbar and neuromuscular dysfunction. Some neuromuscular disorders affect functions of the bulbar region of the brain, which controls vital functions such as breathing, swallowing, and speaking.

F. What is epilepsy, and how do we evaluate it under 111.02?

1. Epilepsy is a pattern of recurrent and unprovoked seizures that are manifestations of abnormal electrical activity in the brain. There are various types of generalized and “focal” or partial seizures. In children, the most common potentially disabling seizure types are generalized tonic-clonic seizures, dyscognitive seizures (formerly complex partial seizures), and absence seizures.

a. Generalized tonic-clonic seizures are characterized by loss of consciousness accompanied by a tonic phase (sudden muscle tensing causing the child to lose postural control) followed by a clonic phase (rapid cycles of muscle contraction and relaxation, also called convulsions). Tongue biting and incontinence commonly occur during generalized tonic-clonic seizures, and injuries may result from falling.

b. Dyscognitive seizures are characterized by alteration of consciousness without convulsions or loss of muscle control. During the seizure, blank staring, change of facial expression, and automatism (such as lip smacking, chewing or swallowing, or repetitive simple actions, such as gestures or verbal utterances) may occur. During the course of the seizure, a dyscognitive seizure may progress into a generalized tonic-clonic seizure (see 111.00F1a).

c. Absence seizures (petit mal) are also characterized by an alteration in consciousness, but are shorter than other generalized seizures (e.g., tonic-clonic and dyscognitive) seizures, generally lasting for only a few seconds rather than minutes. They may present with blank staring, change of facial expression, lack of awareness and responsiveness, and a sense of lost time after the seizure. They are never preceded by an aura. Although absence seizures are brief, frequent occurrence may limit functioning. This type of seizure usually does not occur after adolescence.

2. We require at least one detailed description of your seizures from someone, preferably a medical professional, who has observed at least one of your typical seizures. If you experience more than one type of seizure, we require a description of each type.

3. Serum drug levels. We do not require serum drug levels; therefore, we will not purchase them. However, if serum drug levels are available in your medical records, we will evaluate them in the context of the other evidence in your case record.

4. Counting seizures. The period specified in 111.02A or B cannot begin earlier than one month after you began prescribed treatment. The required number of seizures must occur within the period we are considering in connection with your application or continuing disability review. When we evaluate the frequency of your seizures, we also consider your adherence to prescribed treatment (see 111.00C). When we determine the number of seizures you have had in the specified period, we will:

a. Count multiple seizures occurring in a 24-hour period as one seizure.

b. Count status epilepticus (a continuous series of seizures without return to consciousness between seizures) as one seizure.

c. Count a dyscognitive seizure that progresses into a generalized tonic-clonic seizure as one generalized tonic-clonic seizure.

d. We do not count seizures that occur during a period when you are not adhering to prescribed treatment without good reason. When we determine that you had a good reason for not adhering to prescribed treatment, we will consider your physical, mental, educational, and communicative limitations (including any lack of facility with the English language). We will consider whether the condition may limit your ability to control movement or to interact with people. We will not follow guidelines in our policy that are not relevant to the number of seizures that you experience. For example, we will not consider amputation of an extremity or cataract surgery in one eye.

5. Electroencephalography (EEG) testing. We do not require EEG test results; therefore, we will not purchase them. However, if EEG test results are available in your medical records, we will evaluate them in the context of the other evidence in your case record.

G. What is vascular insult to the brain, and how do we evaluate it under 111.04?

1. Vascular insult to the brain (cerebrum, cerebellum, or brainstem), commonly referred to as stroke or cerebrovascular accident, is brain cell death caused by an interruption of blood flow within or leading to the brain, or by a hemorrhage from a ruptured blood vessel or aneurysm.

2. We generally need evidence from at least 3 months after the vascular insult to evaluate your physical limitations under 111.04. In some cases, evidence of your vascular insult is sufficient to determine disability within 3 months post-vascular insult. If we are unable to determine disability within 3 months after your vascular insult, we will defer adjudication of the claim until we obtain evidence of your neurological disorder at least 3 months post-vascular insult.

H. What are benign brain tumors, and how do we evaluate them under 111.05?

Benign brain tumors are noncancerous (nonmalignant) abnormal growths of tissue in or on the brain that invade healthy brain tissue or apply pressure on the brain or cranial nerves. We evaluate their effects on your motor functioning or oral communication. We evaluate malignant brain tumors under the malignant neoplastic diseases body system in 113.00.

I. What is cerebral palsy, and how do we evaluate it under 111.07?

1. Cerebral palsy (CP) is a term that describes a group of static, nonprogressive disorders caused by abnormalities within the brain that disrupt the brain’s ability to control movement, muscle coordination, and posture. The resulting motor deficits manifest very early in a person’s development, with delayed or abnormal progress in attaining developmental milestones; deficits may become more obvious as the person grows and matures over time.

2. We evaluate your signs and symptoms, such as ataxia, spasticity, flaccidity, athetosis, chorea, and difficulty with precise movements when we determine your ability to stand up,
balance, walk, or perform fine and gross motor movements. We will also evaluate your signs, such as dysarthria and apraxia of speech, and receptive and expressive language problems when we determine your ability to communicate. We will consider your other impairments or signs and symptoms that develop secondary to the disorder, such as post-impairment syndrome (a combination of pain, fatigue, and weakness due to muscle abnormalities); overuse syndromes (repetitive motion injuries); arthritis; abnormalities of proprioception (perception of the movements and position of the body); abnormalities of stereognosis (perception and identification of objects by touch); learning problems; anxiety; and depression.

J. What are spinal cord insults, and how do we evaluate them under 111.08?

1. Spinal cord insults are lesions that transect or contuse the spinal cord. Motor signs and symptoms of spinal cord insults include paralysis, flaccidity, spasticity, and weakness.

2. Spinal cord insults with complete loss of function (111.08A) addresses spinal cord insults that result in complete lack of motor, sensory, and autonomic function of the affected part(s) of the body.

3. Spinal cord insults with disorganization of motor function (111.08B) addresses spinal cord insults that result in less than complete loss of function of the affected part(s) of the body, reducing, but not eliminating, motor, sensory, and autonomic function.

4. When you evaluate your spinal cord insult, we generally need evidence from at least 3 months after the spinal cord insult to evaluate your disorganization of motor function. In some cases, evidence of your spinal cord insult may be sufficient to determine disability within 3 months after the spinal cord insult.

K. What are communication impairments associated with neurological disorders, and how do we evaluate them under 111.09?

Communication impairments result from medically determinable neurological disorders that cause dysfunction in the parts of the brain responsible for speech and language. Under 111.09, we must have a description of a recent comprehensive evaluation including all areas of affective and effective communication, performed by a qualified professional, to document a communication impairment associated with a neurological disorder.

1. Under 111.09A, we need documentation from a qualified professional that your neurological disorder has resulted in a speech deficit which significantly affects your ability to communicate. Significantly affects means that you demonstrate serious limitation in communicating, and you are not easily understood or interpreted by individuals who are unfamiliar to you.

2. Under 111.09B, we need documentation from a qualified professional that shows that your neurological disorder has resulted in a comprehension deficit that results in ineffective verbal communication for your age. Ineffective verbal communication means that you demonstrate serious limitation in your ability to communicate orally on the same level as other children of the same age and level of development.

3. Under 111.09C, we need documentation of a neurological disorder that has resulted in hearing loss. Your hearing loss will be evaluated under listing 102.10 or 102.11.

4. We evaluate speech deficits due to non-neurological disorders under 2.09.

L. What are neurodegenerative disorders of the central nervous system, such as juvenile Huntington disease and Friedreich ataxia, and how do we evaluate them under 111.17?

Neurodegenerative disorders of the central nervous system are disorders characterized by progressive and irreversible degeneration of neurons or their supporting cells. Over time, these disorders impair many of the body’s motor or cognitive and other mental functions. Under 111.17, we consider neurodegenerative disorders of the central nervous system that we do not evaluate elsewhere in section 111.00, such as juvenile onset Huntington disease (HD) and Friedreich ataxia. When these disorders result in solely cognitive and other mental function effects, we will evaluate the disorder under 112.02.

M. What is traumatic brain injury, and how do we evaluate it under 111.18?

1. Traumatic brain injury (TBI) is damage to the brain resulting from skull fracture, collision with an external force leading to a closed head injury, or penetration by an object that enters the skull and makes contact with brain tissue. We evaluate TBI that results in coma or persistent vegetative state under 111.20.

2. We generally need evidence from at least 3 months after the TBI to evaluate your physical limitations under 111.18A. In some cases, evidence of your TBI is sufficient to determine disability within 3 months post-TBI. If we are unable to determine disability within 3 months post-TBI, we will defer adjudication of the claim until we obtain evidence of your neurological disorder at least 3 months post-TBI. If a finding of disability still is not possible at that time, we will again defer adjudication of the claim until we obtain evidence at least 6 months after your TBI.

N. What are coma and persistent vegetative state, and how do we evaluate them under 111.20?

Coma is a state of unconsciousness in which a child does not exhibit a sleep/wake cycle, and is unable to perceive or respond to external stimuli. Children who do not fully emerge from coma may progress into persistent vegetative state (PVS). PVS is a condition of partial arousal in which a child may have a low level of consciousness but is still unable to react to external stimuli. In contrast to coma, a child in a PVS retains sleep/wake cycles and may exhibit some key lower brain functions, such as spontaneous movement, opening and moving eyes, and grimacing. Coma or PVS may result from TBI, a nontraumatic insult to the brain (such as a vascular insult, infection, or brain tumor), or a neurodegenerative or metabolic disorder.

O. What is multiple sclerosis, and how do we evaluate it under 111.21?

1. Multiple sclerosis (MS) is a chronic, inflammatory, degenerative disorder of the brain and spinal cord that damages the myelin sheath surrounding the nerve fibers in the brain and spinal cord. The damage disrupts the normal transmission of nerve impulses within the brain and between the brain and other parts of the body causing impairment in muscle coordination, strength, balance, sensation, and vision. There are several forms of MS, ranging from slightly to highly aggressive. Milder forms generally involve acute attacks (exacerbations) with partial or complete recovery from signs and symptoms (remissions). Aggressive forms generally exhibit a steady progression of signs and symptoms with few or no remissions. The effects of all forms vary from child to child.

2. We evaluate your signs and symptoms, such as flaccidity, spasticity, spasms, in-coordination, imbalance, tremor, physical fatigue, muscle weakness, dizziness, tingling, and numbness. When we determine your ability to stand up, balance, walk, or perform fine and gross motor
movements, such as using your arms, hands, and fingers.

**P. What are motor neuron disorders, and how do we evaluate them under 111.22?**

Motor neuron disorders are progressive neurological disorders that destroy the cells that control voluntary muscle activity, such as walking, breathing, swallowing, and speaking. The most common motor neuron disorders in children are progressive bulbar palsy and spinal muscular dystrophy syndromes. We evaluate the effects of these disorders on motor functioning, bulbar and neuromuscular functioning, or a combination of functional limitations.

**Q. How do we consider your symptom of fatigue in these listings?**

Fatigue is one of the most common and debilitating symptoms of some neurological disorders, such as multiple sclerosis and myasthenia gravis. These disorders may result in physical fatigue (lack of muscle strength) or mental fatigue (decreased awareness or attention). When we evaluate your fatigue, we will consider the intensity, persistence, and effects of fatigue on your functioning. This may include information such as the clinical and laboratory data and other objective evidence concerning your neurological deficit, a description of fatigue considered characteristic of your disorder, and information about your functioning. We consider the effects of physical fatigue on your ability to stand up, balance, walk, or perform fine and gross motor movements using the criteria described in 111.00D.

**R. How do we evaluate your neurological disorder when it does not meet one of these listings?**

If your neurological disorder does not meet the criteria of any of these listings, we must also consider whether your impairment(s) meets the criteria of a listing in another body system. If you have a severe medically determinable impairment(s) that does not meet a listing, we will determine whether your impairment(s) medically equals a listing. See §§ 404.1526 and 416.926 of this chapter. If your impairment(s) does not meet or medically equal a listing, we will consider whether your impairment(s) functionally equals the listings. See §§ 416.924(a) and 416.926(a) of this chapter. We use the rules in § 416.994(a) of this chapter when we decide whether you continue to be disabled.

111.01 Category of Impairments, Neurological Disorders

111.02 Epilepsy, documented by a detailed description of a typical seizure and characterized by A or B:

A. Generalized tonic-clonic seizures (see 111.00F1a), occurring at least once a month for at least 3 consecutive months (see 111.00F4) despite adherence to prescribed treatment (see 111.00C).

OR

B. Dyscognitive seizures (see 111.00F1b) or absence seizures (see 111.00F1c), occurring at least once a week for at least 3 consecutive months (see 111.00F4) despite adherence to prescribed treatment (see 111.00C).

111.03 [Reserved]

111.04 Vascular insult to the brain, characterized by disorganization of motor function (see 111.00D1), resulting in extreme limitation (see 111.00D2) in the ability to stand up, balance, walk, or perform fine and gross motor movements, persisting for at least 3 consecutive months after the insult.

111.05 Benign brain tumors, characterized by disorganization of motor function (see 111.00D1), resulting in extreme limitation (see 111.00D2) in the ability to stand up, balance, walk, or perform fine and gross motor movements.

111.06 [Reserved]

111.07 Cerebral palsy, characterized by disorganization of motor function (see 111.00D1), resulting in extreme limitation (see 111.00D2) in the ability to stand up, balance, walk, or perform fine and gross motor movements.

111.08 Spinal cord insults, characterized by A or B:

A. Complete loss of function, as described in 111.00J2, persisting for 3 consecutive months after insult (see 111.00J4).

OR

B. Disorganization of motor function (see 111.00D1), resulting in extreme limitation (see 111.00D2) in the ability to stand up, balance, walk, or perform fine and gross motor movements persisting for 3 consecutive months after the insult (see 111.00J4).

111.09 Communication impairment, associated with documented neurological disorder. And one of the following:

A. Documented speech deficit which significantly affects (see 111.00K1) the clarity and content of the speech.

OR

B. Documented comprehension deficit resulting in ineffective verbal communication (see 111.00K2) for age.

111.10 Impairment of hearing as described under the criteria in 102.10 or 102.11.

111.11 [Reserved]

111.12 Myasthenia gravis, characterized by A or B despite adherence to prescribed treatment for at least 3 months (see 111.00C):

A. Disorganization of motor function (see 111.00D1), resulting in extreme limitation (see 111.00D2) in the ability to stand up, balance, walk, or perform fine and gross motor movements.

OR

B. Bulbar and neuromuscular dysfunction (see 111.00E), resulting in:

1. One myasthenic crisis requiring mechanical ventilation; or

2. Need for supplemental enteral nutrition via a gastrostomy or parenteral nutrition via a central venous catheter.

111.13 Muscular dystrophy, characterized by disorganization of motor function (see 111.00D1), resulting in extreme limitation (see 111.00D2) in the ability to stand up, balance, walk, or perform fine and gross motor movements.

111.14 Peripheral neuropathy, characterized by disorganization of motor function (see 111.00D1), resulting in extreme limitation (see 111.00D2) in the ability to stand up, balance, walk, or perform fine and gross motor movements.

111.15 [Reserved]

111.16 [Reserved]

111.17 Neurodegenerative disorders of the central nervous system, such as Juvenile Huntington disease and Friedreich ataxia, characterized by disorganization of motor function (see 111.00D1), resulting in extreme limitation (see 111.00D2) in the ability to stand up, balance, walk, or perform fine and gross motor movements.

111.18 Traumatic brain injury, characterized by disorganization of motor function (see 111.00D1), resulting in extreme limitation (see 111.00D2) in the ability to stand up, balance, walk, or perform fine and gross motor movements persisting for at least 3 consecutive months after the injury.

111.19 [Reserved]

111.20 Coma or persistent vegetative state, persisting for at least 1 month.

111.21 Multiple sclerosis, characterized by disorganization of motor function (see 111.00D1), resulting in extreme limitation (see 111.00D2) in the ability to stand up, balance, walk, or perform fine and gross motor movements.
111.22  Motor neuron disorders, characterized by A or B:
   A. Disorganization of motor function (see 111.00D1), resulting in extreme limitation (see 111.00D2) in the ability to stand up, balance, walk, or perform fine and gross motor movements. OR
   B. Bulbar and neuromuscular dysfunction (see 111.00E), resulting in:
      1. Acute respiratory failure requiring invasive mechanical ventilation; or
      2. Need for supplemental enteral nutrition via a gastrostomy or parenteral nutrition via a central venous catheter.