



American Board of Psychiatry and Neurology, Inc.

A Member Board of the American Board of Medical Specialties (ABMS)

CERTIFICATION EXAMINATION IN NEURODEVELOPMENTAL DISABILITIES

The American Board of Psychiatry and Neurology, Inc. (ABPN) is a not-for-profit corporation dedicated to serving the public interest and the professions of psychiatry and neurology by promoting excellence in practice through certification and continuing certification processes.

The ABPN designs and develops the initial certification examination in neurodevelopmental disabilities to assess the knowledge and reasoning skills needed to provide high quality patient care in the broad domain of the specialty. It utilizes two-dimensional content specifications. Within the two-dimensional format, one dimension is comprised of disorders and topics while the other is comprised of competencies and mechanisms that cut across the various disorders of the first dimension. By design, the two dimensions are interrelated and not independent of each other. All the questions on the examination will fall into one of the disorders/topics and will be aligned with a competency/mechanism. For example, a question about the Dimension 1 topic of dyscalculia may focus on the Dimension 2 topics of treatment or systems-based practice.

Candidates should use the detailed content outline as a guide to prepare for the initial certification examination. Please note that no single examination tests everything on the content outline.

For more information, please contact us at questions@abpn.org or visit our website at www.abpn.org.



American Board of Psychiatry and Neurology, Inc.

A Member Board of the American Board of Medical Specialties (ABMS)

CERTIFICATION EXAMINATION IN NEURODEVELOPMENTAL DISABILITIES

Content Blueprint

200 QUESTIONS	
Dimension 1	
Neurologic disorders and Topics	
01. Normal development	4-6%
02. Genetic and developmental disorders	8-10%
03. Cognitive disorders	8-10%
04. Learning disabilities	7-9%
05. Communication disorders	6-8%
06. Autism spectrum disorder	8-10%
07. Attention-deficit and disruptive behavior disorders	7-9%
08. Motor disabilities	8-10%
09. Developmental psychiatric disorders	4-6%
10. Neuro-ophthalmologic and neuro-otologic disorders	4-6%
11. Neurodevelopmental disorders associated with major medical conditions	5-7%
12. Brain and spinal trauma	4-6%
13. Epilepsy and episodic disorders	1-3%
14. Neuroimmunologic and paraneoplastic CNS disorders	1-3%
15. Disorders due to toxins, drugs, and physical agents	4-6%
16. Questions not associated with a specific neurologic disorder	5-7%



American Board of Psychiatry and Neurology, Inc.

A Member Board of the American Board of Medical Specialties (ABMS)

CERTIFICATION EXAMINATION IN NEURODEVELOPMENTAL DISABILITIES

Content Blueprint

200 QUESTIONS	
Dimension 2	
Physician Competencies and Mechanisms	
A. Neuroscience and mechanism of disease	12-14%
B. Clinical aspects of neurologic disease	44-46%
C. Diagnostic procedures	14-16%
D. Treatment/Management	15-17%
E. Interpersonal and communication skills	3-5%
F. Professionalism	1-3%
G. Practice-based learning and improvement	1-3%
H. Systems-based practice	2-4%

A more detailed content outline is shown below.



American Board of Psychiatry and Neurology, Inc.

A Member Board of the American Board of Medical Specialties (ABMS)

CERTIFICATION OF EXAMINATION IN NEURODEVELOPMENTAL DISABILITIES

Detailed Content Outline

Dimension 1 Neurologic disorders and topics	
01. Normal development	
A.	Development through the life cycle
01.	Infancy
02.	Childhood
03.	Adulthood
04.	Late life
B.	Sleep disorders
C.	Normal test results
01.	Cognitive
02. Genetic and developmental disorders	
A.	Heritable disorders of metabolism
B.	Peroxisomal disorders
C.	Lysosomal disorders
D.	Chromosomal disorders
01.	Trinucleotide repeat disorders
E.	Sporadic, gene-related disorders
F.	Developmental disorders of skull and brain structure
G.	Neurocutaneous syndromes
H.	Teratogens
XX.	Other
03. Cognitive disorders	
A.	Global developmental delay
B.	Intellectual developmental disorder (intellectual disability)
04. Learning disabilities	
A.	Dyslexia
B.	Dyscalculia
C.	Dysgraphia
05. Communication disorders	
A.	Social (pragmatic) communication disorder
B.	Childhood-onset fluency disorder (stuttering)
C.	Language disorder
06. Autism spectrum disorder	
07. Attention-deficit and disruptive behavior disorders	
08. Motor disabilities	
A.	Static and progressive encephalopathies
B.	Neuromuscular disorders
01.	Muscular dystrophies



American Board of Psychiatry and Neurology, Inc.

A Member Board of the American Board of Medical Specialties (ABMS)

02. Myopathies
03. Motor neuropathies
04. Plexopathies
C. Hypotonia
D. Dystonia
E. Stereotypies
F. Tic disorders
01. Provisional tic disorder
02. Chronic tic disorder
03. Tourette disorder
G. Cerebral palsy
H. Spasticity
I. Developmental coordination disorder
XX. Other
09. Developmental psychiatric disorders
A. Obsessive-compulsive and related disorders
B. Impulse-control and conduct disorders
01. Conduct disorder
02. Disruptive mood dysregulation disorder
03. Impulse-control disorder
04. Oppositional defiant disorder
05. Intermittent explosive disorder
C. Depressive disorders
D. Anxiety disorders
E. Somatic symptom and related disorders
01. Functional neurological symptom disorder
02. Somatic symptom disorder
F. Trauma- and stressor-related disorders
01. Adjustment disorder
02. Posttraumatic stress disorder
G. Elimination disorders
XX. Other
10. Neuro-ophthalmologic and neuro-otologic disorders
A. Neuro-ophthalmology
01. Disorders of the optic nerve
02. Disorders of the retina
03. Other lesions of optic pathways
04. Disorders of the pupil
05. Disorders of ocular motility
a. Electroclinical syndromes
b. Cerebral/cortical visual impairment
c. Strabismus



American Board of Psychiatry and Neurology, Inc.

A Member Board of the American Board of Medical Specialties (ABMS)

d. Congenital cataracts
e. Congenital glaucoma
06. Intraocular manifestations of stroke
B. Neuro-otology
01. Vestibular disease
C. Hearing loss, including inherited and acquired
01. Sensorineural
02. Conductive
03. Central auditory processing disorder
XX. Other
11. Neurodevelopmental disorders associated with major medical conditions
A. Cancer
B. Cardiovascular
C. Cerebrovascular disease
01. Neonatal/perinatal stroke
02. Moyamoya disease
D. Complex congenital heart disease
E. Endocrine
F. Gastrointestinal
G. Low birth weight/prematurity
01. Hyperbilirubinemia
H. Multiple congenital anomalies
I. Neuroinfectious diseases
J. Nutritional deficiencies
01. Vitamins A and D
02. B vitamins
a. Biotin
b. Cobalamin
c. Folic acid
d. Niacin
e. Pyridoxine
f. Thiamine
03. Vitamin E
04. Copper deficiency
05. Protein calorie malnutrition
K. Pulmonary
L. Renal
M. Sickle cell disease
N. Spina bifida
XX. Other
12. Brain and spinal trauma
A. Brain trauma



American Board of Psychiatry and Neurology, Inc.

A Member Board of the American Board of Medical Specialties (ABMS)

B.	Spinal trauma
C.	Nonaccidental trauma in children
D.	Drowning/near drowning
E.	Brain death
F.	Disorders of consciousness
	01. Persistent vegetative state
	02. Minimally conscious state
G.	Hypoxic-ischemic encephalopathy
XX.	Other
13. Epilepsy and episodic disorders	
14. Neuroimmunologic and paraneoplastic CNS disorders	
A.	CNS vasculitis and microangiopathies
	01. Aicardi-Goutières syndrome
B.	Neuroimmunologic/paraneoplastic CNS syndromes
	01. Acute disseminated encephalomyelitis and variants
	02. Neuromyelitis optica
	03. Transverse myelitis
	XX. Other
15. Disorders due to toxins, drugs, and physical agents	
A.	Exposure to chemicals
	01. Carbon monoxide
	02. Organophosphates
	03. Toluene
	XX. Other
B.	Exposure to metals
	01. Lead
	02. Mercury
	03. Other
C.	Effects of drug use
	01. Fetal exposure
	a. Alcohol
	b. Amphetamines
	c. Cannabis
	d. Cocaine
	e. Hallucinogens
	f. Heroin
	g. Iatrogenic/therapeutic drugs
	h. Inhalants
	i. Opioids
	j. Sedative-hypnotics
	xx. Other
	02. Substance use



American Board of Psychiatry and Neurology, Inc.

A Member Board of the American Board of Medical Specialties (ABMS)

a. Alcohol
b. Amphetamines
c. Cannabis
d. Cocaine
e. Hallucinogens
f. Heroin
g. Inhalants
h. Opioids
i. Sedative-hypnotics
xx. Other
03. Therapeutic use
a. Iatrogenic/therapeutic drugs
b. Other
XX. Other
D. Effects of ionizing radiation
XX. Other
16. Questions not associated with a specific neurologic disorder
A. Neurology law
B. Community resources



American Board of Psychiatry and Neurology, Inc.

A Member Board of the American Board of Medical Specialties (ABMS)

Dimension 2	
Physician Competencies and Mechanisms	
A. Neuroscience and mechanism of disease	
01.	Neuroanatomy
	a. Cerebral cortex
	b. Connecting systems
	c. Basal ganglia/thalamus
	d. Brainstem
	e. Cerebellum
	f. Cranial nerves
	g. Spinal cord
	h. Spinal roots/peripheral nerves
	i. Neuromuscular junction/muscle
	j. Embryology and neural development
	k. Radiologic anatomy, cerebral blood vessels (angiography or MRA)
	xx. Other
02.	Neuropathology
	a. Trauma (cranial and spinal)
	b. Metabolic/toxic/nutritional diseases
	c. Congenital/developmental anomalies
	xx. Other
03.	Neurochemistry
	a. Lipid metabolism
	b. Neurotransmitters
	c. Other
04.	Neurophysiology
	a. Synaptic transmission
	b. Reflexes
	c. Cerebellar function
	d. Cortical organization and function
	e. Blood-brain barrier
	xx. Other
05.	Neurogenetics/molecular neurology, and neuroepidemiology
	a. Mendelian-inherited diseases
	b. Other modes of inheritance
	c. Nucleotide repeat disorders
	xx. Other
06.	Development
	a. Developmental theory
	b. Language development
	i. Normal
	ii. Abnormal



American Board of Psychiatry and Neurology, Inc.

A Member Board of the American Board of Medical Specialties (ABMS)

c. Other
B. Clinical aspects of neurologic disease
01. Epidemiology/etiology
02. Risk factors
a. Risk factors for genetic/metabolic disorders
b. Other (e.g., nutritional deficiencies)
03. Signs and symptoms
04. Comorbidities
a. Psychiatric issues
b. Cognitive issues
c. Medical complications
xx. Other
05. Course of illness
06. Prognosis
07. Complications of illness
08. Quality of life
XX. Other
C. Diagnostic procedures
01. Neuroimaging
a. Structural imaging (computed tomography, magnetic resonance imaging)
b. Spine and spinal cord neuroimaging (CT, MRI, myelogram, ultrasound)
c. Other
02. EEG (routine EEG, LTME, subdural and cortical EEGs)
03. Laboratory studies
a. Biochemical studies
b. Infectious studies
c. Other
04. Neuropsychological and cognitive testing
a. Language
b. Executive function
c. Developmental screening
05. Cardiac testing
a. Cardiac ultrasound
06. Genetic testing
a. Newborn screening
07. Testing of special senses (e.g., hearing, vision)
XX. Other
D. Treatment/Management
01. Pharmacotherapy
a. Antiseizure medications
b. Drugs for sleep disorders
c. Drugs for movement disorders



American Board of Psychiatry and Neurology, Inc.

A Member Board of the American Board of Medical Specialties (ABMS)

d.	Drugs for psychiatric disorders (sedative-hypnotics, antianxiety agents, antidepressants, antipsychotics)
e.	Vitamins/minerals/nutrients
f.	Drugs for autonomic dysfunctions
g.	Drugs for dementia/cognition/alertness
h.	Spasticity treatments
i.	Botulinum toxin
ii.	Tizanidine
iii.	Baclofen
iv.	Benzodiazepines
v.	Dantrolene
xx.	Other
xx.	Other
i.	Sedation
ii.	Stimulants
iii.	Adrenergics
02.	Surgical treatment/interventions
03.	Rehabilitation
a.	Assistive devices
b.	Assistive technologies
c.	Physical therapy and occupational therapy
d.	Speech
e.	Swallowing
f.	Education
g.	Cognitive therapy
h.	Early intervention
04.	Family-centered care
05.	Psychotherapy, biofeedback, behavioral therapy, etc.
06.	Reassurance, observation, lifestyle modification, etc.
07.	Specific dietary treatment
08.	Genetic counseling
09.	Complications of management
10.	Gene therapy/enzyme replacement therapy/stem cell replacement
11.	Nonsurgical/nonpharmacological
12.	Prevention
XX.	Other
E. Interpersonal and communication skills	
01.	Communication
a.	Ableism
b.	Neurodiversity
02.	Management of conflict
03.	Patient and family education



American Board of Psychiatry and Neurology, Inc.

A Member Board of the American Board of Medical Specialties (ABMS)

a. Drug information
b. Adherence
c. Safety issues
i. Drug and alcohol risks
d. School and work situations
i. IEPs
ii. Americans with Disability Act (ADA)
iii. Disability
iv. School/work action plans
XX. Other
F. Professionalism
01. Professional behavior
02. Adherence to ethical principles (e.g., informed consent, research issues, clinical care)
03. Participation in the professional community
04. Sensitivity to diverse patient populations
05. End-of-life issues and brain death
06. Fatigue management/burnout
XX. Other
G. Practice-based learning and improvement
01. Development and execution of lifelong learning
a. Self-assessment and self-improvement
b. Use of evidence-based guidelines
c. Critical review of scientific literature
xx. Other
02. Formal practice-based quality improvement
03. Other
H. Systems-based practice
01. Patient safety and the healthcare team
a. Medical errors and their prevention
b. Communication in patient safety
c. Regulatory and educational activities related to patient safety
i. Individuals with Disabilities Education Act (IDEA)
ii. Americans with Disabilities Act (ADA)
iii. Section 504 of the Rehabilitation Act
iv. Katie Beckett Waiver
v. Medicaid
vi. Medicare
vii. Supplemental Security Income (SSI)
viii. Guardianship
xx. Other
02. Resource management
a. Parity



American Board of Psychiatry and Neurology, Inc.

A Member Board of the American Board of Medical Specialties (ABMS)

	b. Access to care
	c. Negotiation with payers
	xx. Other
03.	Community-based care
	a. Community-based programs
	b. Prevention
	c. Recovery and rehabilitation
	d. Knowledge of the legal aspects of neurological practice
	xx. Other
04.	Referral for appropriate consultation/decision making
05.	Working with local and national disease-based and advocacy groups
XX.	Other