Multiple Sclerosis Certified Specialist Examination

Candidate Handbook 2021

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<th>Application Deadline*</th>
<th>Testing Window</th>
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<tr>
<td>December 8, 2020</td>
<td>January 9 – January 23, 2021</td>
</tr>
<tr>
<td>May 5, 2021</td>
<td>June 5 – June 19, 2021</td>
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*Applications will not be accepted after this deadline

Administered by:

1350 Broadway, Suite 800 | New York, NY 10018
www.ptcny.com/contact
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This Handbook contains necessary information about the Multiple Sclerosis Certified Specialist Examination. Please retain it for future reference. Candidates are responsible for reading these instructions carefully. This Handbook is subject to change.
# CONTACT INFORMATION

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<td><a href="http://www.ptcny.com">www.ptcny.com</a></td>
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<tr>
<td>(212) 356-0660</td>
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<td>• Apply for examination</td>
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<td>• Obtain general application policy and procedure information</td>
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<td>• Obtain information about testing policies and procedures</td>
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<td>(800) 741-0934</td>
</tr>
<tr>
<td>• Schedule test appointment</td>
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<td>• Reschedule test appointment (within the same testing period)</td>
</tr>
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<td>• Cancel test appointment</td>
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<td>• Find directions to test site</td>
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<th>Consortium of Multiple Sclerosis Centers (CMSC)</th>
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<td><a href="http://www.mscare.org">www.mscare.org</a></td>
</tr>
<tr>
<td>(201) 487-1050</td>
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<tr>
<td>• General information</td>
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# ATTENTION CANDIDATES

This handbook contains necessary information about the Multiple Sclerosis Certified Specialist (MSCS) Examination. It is required reading for those applying and taking the Examination. All individuals applying for the examination must comply with the policies, procedures, and deadlines in this Handbook and attest to this by signing the Candidate Attestation found on the application. Please retain this handbook for future reference. This handbook is subject to change. See [www.ptcny.com](http://www.ptcny.com) for handbook updates.
PURPOSES OF MULTIPLE SCLEROSIS CERTIFICATION

Multiple Sclerosis is a complex and lifelong disease that affects many aspects of an individual’s life. Management across the lifetime of multiple sclerosis will require the expertise of multiple disciplines working together to meet the dynamic needs of the person and the family. Rapid advances in the treatment of multiple sclerosis require that health professionals have the basic knowledge and skills necessary to provide optimal care. The Consortium of Multiple Sclerosis Centers supports a voluntary certification process that reflects the knowledge of multiple disciplines in the specialized area of multiple sclerosis care. The Multiple Sclerosis Certified Specialist designation provides formal recognition of a specialized body of knowledge felt to be necessary to provide optimal care to those individuals and families living with multiple sclerosis.

Certification is intended to promote quality and consistent care to those living with multiple sclerosis by:

1. Formally recognizing knowledge across the multiple disciplines that are necessary for multiple sclerosis care delivery.
2. Establishing a level of knowledge required to be a Multiple Sclerosis Certified Specialist.
4. Providing a standard of knowledge requisite for certification, thereby assisting the employer, public, and members of the health professions in the assessment of healthcare professionals involved in multiple sclerosis care.

DEFINITION OF MULTIPLE SCLEROSIS CARE

Multiple sclerosis care may cover clinical practice concepts underlying clinical practice, assessment and interventions in clinical practice, advocacy, education, and research. This may include but is not limited to health professionals who practice in the following settings:

- Private Medical Practices
- Rehabilitation Centers (acute or sub-acute)
- Hospitals
- Multiple Sclerosis Centers or Clinics
- Home or Community Care Programs
- Nursing Homes
- Assisted Living Facilities
- Pharmaceutical or other Commercial Organization
- Academic Programs
- Research Facilities
THE CERTIFICATION PROCESS

REVIEW
• Review the Handbook in its entirety

APPLY
• Apply and pay the application fee online at www.ptcny.com

SCHEDULE
• Receive the Scheduling Authorization email
• Make an appointment with Prometric

PREPARE
• Review Content Outline
• Review References

TEST
• Take the Examination
• PTC sends Score Reports to Candidates

CERTIFICATION
ELIGIBILITY REQUIREMENTS

It is suggested that candidates have a minimum of one year of experience in providing services for or interacting with individuals with multiple sclerosis. Candidates must meet the following requirements:

1. Be a currently licensed healthcare professional. A copy of your license (or appropriate equivalent) must be submitted with your application.
2. Complete and file an Application for the Multiple Sclerosis Certified Specialist Examination.
3. Pay the required fee.

COMPLETION OF APPLICATION

Step 1 – Complete Application
Go to http://www.ptcny.com/test-sponsors/CMSC to view examination testing periods, application deadlines, and link to the online application. You must complete the examination application in full, using your name exactly as it appears on your current government issued photo ID such as a driver’s license or a passport. Applications are not considered complete until all information and payment has been provided. The completed application can be submitted and paid for online. Retain the link to the application and your login information.

Please note, for new applications you will be asked to create a PIN number. This PIN will be used when going into your existing application.

Step 2 – Submit Examination Fee and Application for Review
Receive email from PTC stating that your payment and application has been received and under review.

Step 3 – Receive Approval of Application
Receive email from PTC stating that your application has been approved.

Step 4 – Receive Scheduling Authorization and Schedule Testing Appointment
Within eleven (11) weeks prior to the start of the testing period, candidates will receive a Scheduling Authorization from PTC via email from notices@ptcny.com. The Scheduling Authorization includes an eligibility number and information on how to set up your examination location, date, and time through Prometric. Retain this document.

You must present your current driver’s license, passport, or U.S. Military ID at the testing center at the time of your examination appointment or you will be refused admission. The name on the ID must exactly match the name on the Scheduling Authorization.

Applicants who are not approved to sit for the examination or whose applications are incomplete 21 days prior to the first day of the testing window will receive a refund of their application fee minus the $75 administrative fee. Refunds will be processed approximately 30 days after the end of the testing period.
EXAMINATION ADMINISTRATION AND SCHEDULING

The Multiple Sclerosis Certified Specialist Examination is administered during an established two-week testing window on a daily basis, excluding holidays, at computer-based testing facilities managed by Prometric.

Scheduling Examination Appointments

Approximately eleven (11) weeks prior to the start of the testing window, approved candidates will be emailed a Scheduling Authorization from notices@ptcny.com. Please ensure you enter your correct email address on the application and add the ‘ptcny.com’ domain to your email safe list. If you do not receive a Scheduling Authorization eight (8) weeks prior to the start of your chosen testing window, contact the Professional Testing Corporation at (212) 356-0660 or online at www.ptcny.com/contact.

The Scheduling Authorization will indicate how to schedule your examination appointment with Prometric as well as the dates during which testing is available. Appointment times are first-come, first-served, so schedule your appointment as soon as you receive your Scheduling Authorization in order to maximize your chance of testing at your preferred location and on your preferred date. Candidates who wait until the last minute run the risk of missing out on their preferred date, time, and testing center. Candidates unable to schedule an appointment will forfeit their fees.

Candidates unable to take the examination during their chosen testing window will need to reapply for the examination and pay a new application fee.

After you make your test appointment, Prometric will send you a confirmation email with the date, time, and location of your exam. Please check this confirmation carefully for the correct date, time, and location. Contact Prometric at (800) 741-0934 if you do not receive this email confirmation or if there is a mistake with your appointment.

Note: International candidates may also schedule, reschedule, or cancel an appointment online at http://www.prometric.com/CMSC.

IMPORTANT!

You MUST present your current driver’s license, passport, or U.S. military ID at the test center. Expired, temporary, or paper driver’s licenses will NOT be accepted.

The first and last name on your Scheduling Authorization MUST exactly match the first and last name on your photo ID.

Fees will not be refunded for exams missed because of invalid ID.
Rescheduling Examination Appointments within a Testing Period

Candidates are able to reschedule their examination appointments within the same testing period as long as the request is submitted within the timeframe described below. Reschedule within the permitted timeframe by calling or going to the Prometric website: http://www.prometric.com/CMSC.

<table>
<thead>
<tr>
<th>Time Frame</th>
<th>Reschedule Permitted?</th>
<th>Stipulations</th>
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<tr>
<td>Requests submitted 30 days or more before the original appointment</td>
<td>Yes</td>
<td>None</td>
</tr>
<tr>
<td>Requests submitted 29 to 5 days before the original appointment</td>
<td>Yes</td>
<td>Candidate must pay Prometric a rescheduling fee of $50.</td>
</tr>
<tr>
<td>Requests submitted less than 5 days before the original appointment</td>
<td>No</td>
<td>Candidates who do not arrive to test for their appointment will be considered a no-show and all their examinations fees will be forfeited. Candidates will need to reapply and pay full examination fees for a future testing period.</td>
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Transferring to a New Testing Period

Candidates unable to take the examination during their scheduled testing period may request a ONE-TIME transfer to a future testing period. There is a transfer fee of $200.00. After you have transferred once by paying the $200.00 fee, you will need to pay the full examination fee in order to transfer a second time; so, please plan carefully.

Please note: requests to transfer to a new testing period must be received within 30 days of your originally scheduled testing period.

Candidates wishing to transfer to a new testing period need to follow the steps below.

2. Click “Start New Application.”
3. Choose CMSC-MSCS in the first drop-down menu; then choose the new examination period in the second drop down menu and fill out the rest of the information on the page.
4. Fill out the application making sure you answer yes to the question asking if you are transferring.
5. When you have finished the application, click “Submit Transfer Request.”
6. PTC Support will send you an email letting you know your transfer application was approved and that you can log back into your application and pay the one-time $200.00 transfer fee.

Call 212-356-0660 if you have any questions regarding the transfer process.
If candidates are unable to attend the examination on the date for which they registered and elect not to transfer to another testing period the application will be closed and all fees will be forfeited. There will be no refund of fees.

The transfer fee is based on costs and is not punitive in nature. The transfer fee must be paid at the time the request is approved. The candidate is responsible for contacting Prometric and canceling the original examination appointment, if one was made.

Exams may only be transferred to a new testing period once; please plan carefully.

Please note: Transferring your Examination only refers to instances when a candidate is unable to take their exam during a testing period for which they have already applied. Candidates who did not pass their examination and are retaking the examination need to pay the full Examination Fee.

Failing to Report for an Examination

If you fail to report for an examination, you will forfeit all fees paid to take the examination. A completed application form and examination fee are required to reapply for the examination.

**EXAMINATION FEES**

<table>
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<tr>
<th>Fee Type</th>
<th>Amount</th>
<th>Details</th>
</tr>
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</table>
| Application Fee                   | US $345.00 | • Non-refundable\(^1\)  
• Non-transferable  
• Includes testing center fees  
• Includes non-refundable $75 administrative fee |
| Rescheduling Fee                  | US $50.00 | • Applies to candidates who need to move their appointment within their current testing period  
• Payable directly to Prometric  
• Reschedule with Prometric online or over the phone |
| Transfer Fee                       | US 200.00 | • Applies to candidates who need to move to a new testing period  
• Must submit new application & fee to PTC |

⚠️ All fees are non-refundable and non-transferable.

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\(^1\) Applicants who are ineligible to take the examination or whose applications are incomplete by the application deadline will have their examination fees returned minus an administrative fee.
There will be no refund of fees except if applicants are ineligible for the examination. Ineligible candidates will be refunded their fees minus an administrative fee. **Please be advised: Prometric does not have the authority to grant transfers to another testing period or refunds.**

**Veterans Administration Employees**

Current employees of the Veterans Administration may sit for the MSCS Examination for a $50 discount.

If you are currently employed by the VA you will be asked to upload a copy of your VA ID card at the time of application.

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**SPECIAL ACCOMMODATIONS**

CMSC and PTC support the intent of and comply with the Americans with Disabilities Act (ADA). PTC will take steps reasonably necessary to make certification accessible to persons with disabilities covered under the ADA. According to the ADA, an individual with a disability is a person who has a physical or mental impairment that substantially limits a major life activity (such as seeing, hearing, learning, reading, concentrating, walking) or a major bodily function (such as neurological, endocrine, or digestive system).

The information you provide and any documentation regarding your disability and special test accommodations will be held in strict confidence.

All approved testing accommodations must maintain the psychometric nature and security of the examination. Accommodations that fundamentally alter the nature or security of the exam will not be granted.

Special testing arrangements may be made upon receipt of the Application, examination fee, and a completed and signed Request for Special Needs Accommodations Form, available from [www.ptcny.com/PDF/PTC_SpecialAccommodationRequestForm.pdf](http://www.ptcny.com/PDF/PTC_SpecialAccommodationRequestForm.pdf) or by calling PTC at (212) 356-0660.

This Form must be uploaded with the online application no later than 8 weeks prior to the start of your chosen testing window. Candidates who do not submit their Special Accommodations Form with their application may not be able to test during their chosen testing period and therefore be subject to rescheduling or transfer fees.

**Only those requests made and received on the official Request for Special Needs Accommodations Form will be reviewed.** Letters from doctors and other healthcare professionals must be accompanied by the official Form and will not be accepted without the Form. All requests must be made at the time of application. Accommodations cannot be added to an existing exam appointment.

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**PREPARING FOR THE EXAMINATION**

- Check your government issued photo ID (driver’s license, passport or U.S. Military ID) when you make your examination appointment. Is it expired? Does the first and last name on your ID match the first and last name on your Scheduling Authorization email? Proctors at the Prometric testing center will refuse admission to candidates with expired IDs, IDs with names that do not match their records, and temporary paper IDs. Candidates will be marked as no-shows and will forfeit their exam fees.
• Check your PTC Scheduling Authorization email and Appointment Confirmation email from Prometric to make sure everything is accurate (i.e. your name, exam name, appointment date, time and location).

• Make yourself familiar with the location of your chosen testing site and any requirements they may have for parking and check the weather and traffic conditions before you leave for the testing center. Make sure you give yourself plenty of time to arrive as late arrival may prevent you from testing.

• In the event of inclement weather, check the Prometric website for site closures: https://www.prometric.com/closures.

• Prometric’s website provides information on what you can expect on your test day, including a walkthrough of check in and security procedures: https://www.prometric.com/test-center-security.

• This Handbook provides the Content Outline for the Examination (see appendix). Use these to help you start studying for the examination.

• Review the Rules for the Examination on the next page before your appointment.

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**WHAT TO EXPECT AT THE TESTING CENTER**

PTC has partnered with Prometric Testing Centers to deliver examinations to candidates. Here is what you can expect when you arrive at your Prometric Testing Center.

• **Candidate Check-In**
  
  o Candidates will be asked to present their IDs
  o Candidates will be asked to empty and turn out their pockets
  o Candidates will be “wanded” or asked to walk through a metal detector
  o Inspection of eyeglasses, jewelry, and other accessories will be conducted. Jewelry other than wedding and engagement rings is prohibited.
  o Religious headwear may be worn into the testing room; however, it may be subject to inspection by a testing center administrator before entry into the testing room is permitted.
  o Prometric provides lockers for candidates to store their purses, mobile phones, jackets, food, drinks and medical supplies.

• **During the Exam**
  
  o No breaks are scheduled during the exam. Candidates who must leave the testing room to take a break will not be given extra time on the exam
  o Accessing mobile phones or study materials during the examination is prohibited
  o Smoking is prohibited at the testing center
  o All examinations are monitored and may be recorded in both audio and video format
Please keep in mind: other exams will be administered at the same time as your examination. Therefore, examinees may hear ambient noises such as typing, coughing, or people entering and exiting the testing room that cannot be avoided. Prometric is unable to provide a completely noise-free environment. However, headphones may be requested to minimize impact.

Please see Prometric’s website for more information about what to expect on testing day.

**RULES FOR THE EXAMINATION**

Please read the information below carefully. You are responsible for adhering to the examination rules while at the testing center.

- You must present your current driver’s license, passport, or US Military ID at the testing center. Candidates without valid ID will NOT be permitted to test. Temporary or paper copies of your ID will not be accepted.

- Electronic devices that can be used to record, transmit, receive, or play back audio, photographic, text, or video content, including but not limited to, cell phones, laptop computers, tablets, Bluetooth devices; wearable technology (such as smart watches), MP3 players (such as iPods), pagers, cameras, and voice recorders are not permitted to be used and cannot be taken in the examination room. Prometric provides lockers for your personal items.

- No papers, books, or reference materials may be taken into or removed from the testing room.

- No questions concerning content of the examination may be asked during the examination session. The candidate should read carefully the directions that are provided on screen at the beginning of the examination session.

- Candidates are prohibited from leaving the testing room while their examination is in session, with the sole exception of going to the restroom.

- Bulky clothing, such as sweatshirts (hoodies), jackets, coats, and hats (except hats worn for religious reasons), and most types of jewelry may not be worn while taking the examination. Proctors will ask you to remove such items and place them in your locker. Please see Prometric’s statement on Test Center Security for more information.

- All watches and “Fitbit” type devices cannot be worn during the examination.

- Food/beverages are not permitted inside the testing room. Leave these items in your assigned locker.

Contact PTC at (212) 356-0660 or www.ptcny.com/contact with any questions about the Examination Rules.

Violation of any of the rules listed above may lead to forfeiture of fees, dismissal from the testing room, and cancellation of your test scores.
TESTING CONDITIONS OR EXAMINATION FEEDBACK

Any candidate who feels that the examination effort was negatively impacted by the test center conditions should notify the proctor immediately. The situation should also be reported to PTC at www.ptcny.com/contact within 3 business days of the test appointment. Any comments about the test itself should also be reported to PTC at www.ptcny.com/contact within 3 business days of the test appointment.

REPORT OF RESULTS

Candidates will be notified in writing by PTC within four weeks of the close of the testing period whether they have passed or failed the examination. Scores on the major areas of the examination and on the total examination will be reported. Successful candidates will also receive certificates from the CMSC.

SCORING PROCEDURE

Prior to administration of the examination, representatives from the CMSC Certification Committee and the Professional Testing Corporation meet to review all test items for accuracy. At this meeting, the passing score for the examination is set using recognized psychometric methods. The passing score represents the number of test items determined necessary for the candidate to answer correctly to be considered as having minimal basic knowledge of multiple sclerosis.

In order to protect the security and integrity of the certification examination, neither CMSC nor the Professional Testing Corporation will release examination items, candidate responses, or keys to any candidate or agency.

Setting the Passing Score

The passing score for the Multiple Sclerosis Certified Specialist Examination has been reviewed and approved by CMSC and has been determined using a criterion-referenced methodology.

REQUESTING A HANDSCORE

Candidates who fail the examination may request a hand scoring of their data file. Hand scoring is a manual check of the data file by the testing service to determine if there have been any errors in scoring. Although the probability of such an error is extremely remote, this service is available. Requests for hand scoring must be received by PTC no later than 90 days after the date of the examination by completing and returning the Request of Handscore form on www.ptcny.com with payment of $25. Candidates who fail the examination will not be permitted to see the examination questions. For reasons of test security, no candidate is allowed to review the examination or any of its items.

To ensure correct reporting of results, PTC automatically performs handscores of examinations of candidates who score within 3 points of passing as a quality control measure. Thus, it is extremely doubtful that any examination results will change from “fail” to “pass” through handscoring.
CONFIDENTIALITY OF EXAMINATION SCORES

CMSC will release the individual test scores ONLY to the individual candidate. Any questions concerning test results should be referred to CMSC or PTC.

REEXAMINATION

The Multiple Sclerosis Certified Specialist Examination may be taken as often as desired, upon filing of a new Application and fee. There is no limit to the number of times the examination may be repeated.

ATTAINMENT OF CERTIFICATION & RECERTIFICATION

Eligible candidates who pass the Multiple Sclerosis Certified Specialist Examination are eligible to use the registered designation MSCS after their names and will receive certificates from the CMSC. A registry of Multiple Sclerosis Certified Specialists will be maintained by the CMSC and may be reported in its publications.

Certification as a Multiple Sclerosis Certified Specialist is recognized for a period of five years at which time the candidate must retake and pass the current Certification Examination for Multiple Sclerosis Specialist or meet such alternative requirements as are in effect at that time in order to retain certification. Additional information can be found at http://www.ptcny.com/test-sponsors/CMSC.

REVOCATION OF CERTIFICATION

Certification will be revoked for any of the following reasons:

1. Falsification of Application.
2. Revocation of current healthcare credential or license.

The Appeals Committee of the CMSC provides the appeal mechanism for challenging revocation of Board Certification. It is the responsibility of the individual to initiate this process.

CONTENT OF THE EXAMINATION

The Multiple Sclerosis Certified Specialist Examination is a computer-based examination composed of a maximum of 150 multiple-choice, objective questions with a total testing time of two (2) hours. The content for the examination is described in the Content Outline on the next page.

The questions for the examination are obtained from individuals with expertise in multiple sclerosis and are reviewed for construction, accuracy, and appropriateness by the CMSC.

CMSC, with the advice and assistance of the Professional Testing Corporation, prepares the examination.

The Multiple Sclerosis Certified Specialist Examination will be weighted in approximately the following manner:

I. Fundamentals of Multiple Sclerosis 25%
II. Multidisciplinary Management of Multiple Sclerosis 60%
III. Patient Empowerment 15%
I. FUNDAMENTALS OF MULTIPLE SCLEROSIS

A. Disease Process
   1. Pathophysiology
      a. Immune Dysfunction
      b. Destruction of Myelin
      c. Axonal Damage or Loss
   2. Theories of Etiology
      a. Genetics
      b. Environmental
      c. Other
   3. Epidemiology
      a. Geographic Distribution
      b. Gender/Age of Onset/Ethnicity

B. Diagnosis of Multiple Sclerosis
   1. Diagnostic Criteria
   2. Presenting Clinical Symptoms
   3. Diagnostic Testing
      a. Clinical Examination
      b. Imaging
      c. Evoked Potentials
      d. Lumbar Puncture
      e. Laboratory Testing
   4. World Health Organization Classification

C. Clinical Course and Natural History
   1. Relapsing Remitting
   2. Secondary Progressive
   3. Primary Progressive
   4. Radiologically Isolated Syndrome
   5. Clinically Isolated Syndrome (CIS)
   6. Advanced Disease
   7. Pediatric MS

II. MULTIDISCIPLINARY MANAGEMENT OF MULTIPLE SCLEROSIS

A. Relapse
   1. Definition and Recognition
   2. Interventions
      a. Pharmacologic Management
      b. Rehabilitation Services
      c. Psychosocial Support

B. Disease Modifying Therapies
   1. Purpose
   2. Disease Modifying Agents
      a. Interferons
         1) Administration
         2) Adverse Effects
      b. Glatiramer Acetate
      1) Administration
      2) Adverse Effects
      3. Immunosuppressants
      4. Infusible Medications
         a. Natalizumab
            1) Administration
            2) Adverse Effects
         b. Alemtuzumab
            1) Administration
            2) Adverse Effects
         c. Ocrelizumab
            1) Administration
            2) Adverse Effects
      5. Oral Medications
         a. Fingolimod
            1) Administration
            2) Adverse Events
         b. Teriflunomide
            1) Administration
            2) Adverse Events
         c. Dimethyl Fumarate
            1) Administration
            2) Adverse Events
      6. Other

C. Symptoms (Description/Rehabilitation Strategies/Pharmacologic Interventions)
   1. Fatigue
   2. Pain
   3. Spasticity
   4. Tremor and Incoordination
   5. Weakness
   6. Altered Mobility and Balance Problems
   7. Visual Impairment
   8. Cognitive Dysfunction
   9. Elimination Dysfunction
   10. Altered Speech and Swallowing
   11. Sexual Dysfunction
   12. Altered Sensation
   13. Emotional Problems
      a. Depression
      b. Anxiety
   14. Other

D. Health Maintenance
   1. Wellness Strategies
      a. Nutrition
      b. Exercise and Productivity
      c. Immunizations
      d. Recreation
### e. Health Screening
### f. Stress Management
### g. Spirituality
### h. Activities of Daily Living

#### 2. Prevention of Complications
- a. Osteoporosis
- b. Contractures
- c. Skin Breakdown
- d. Aspiration
- e. Sepsis
- f. Falls
- g. Trauma

#### 3. Rehabilitation
- a. Physical Therapy
- b. Occupational Therapy
- c. Cognitive Rehabilitation
- d. Speech/Language Therapy
- e. Vocational Therapy
- f. Assistive Devices/Technology

### Psychosocial Issues
1. Response to Chronic Illness
2. Support Network
3. Cultural Factors
4. Family and Relationships
5. Vocational Options
6. Financial Concerns

### 7. Abuse and Neglect
### 8. End of Life Issues

#### F. Complementary and Alternative Therapies
#### G. Adherence to Treatment
#### H. Models of Care

#### III. PATIENT EMPOWERMENT

##### A. Advocacy
1. Patient Rights
2. Negotiating the Healthcare System

##### B. Patient and Family Education
1. Disease Specific Issues
2. Goal Setting/Life Planning
3. Community Resources
4. Legal Issues
5. Advance Directives
6. Clinical Research
   a. Protection of Human Subjects
   b. Informed Consent
   c. Phases
   d. Types of Research
   e. Resources and Information
SAMPLE EXAMINATION QUESTIONS

In the following questions, choose the one best answer.

1. Which of the following is a Black Box Warning for Natalizumab?
   1. PML
   2. Fatal Liver Disease
   3. Cardiac Arrhythmias
   4. Autoimmune Conditions

2. What percentage of multiple sclerosis patients are likely to experience cognitive dysfunction during the course of their illness?
   1. Less than 5%
   2. 10 – 20%
   3. 30 – 40%
   4. 45 – 60%

3. Which of the following pathological features is most associated with increasing disability?
   1. Axonal loss
   2. Optic Nerve Damage
   3. Inflammation on MRI
   4. Oligoclonal bands on CSF

4. Which of the following is the most common legal issue that patients with multiple sclerosis face?
   1. Financially motivated divorce
   2. Discrimination in the community
   3. Lawsuits against insurance companies
   4. Determination of reasonable workplace accommodations

5. What is the most common mobility issue in patients with MS?
   1. Gait dysfunction
   2. Balance disorders
   3. Coordination deficits
   4. Proprioceptive dysfunction

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<tr>
<th>ANSWER KEY</th>
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ONLINE PRACTICE TEST FOR MULTIPLE SCLEROSIS CERTIFIED SPECIALISTS

WHAT IS IT: A practice test consisting of 50 questions with a testing time of 2 hours taken over the internet

WHY TAKE IT: To experience taking a computerized exam, to review an example of the type of content included in the Multiple Sclerosis Certified Specialist Examination, and to learn more about question format, style, and level of difficulty

SCORE REPORT: After completing the online practice test, you will receive an instant score report showing test performance in each of the content areas. The score report does not provide correct answers or indicate which questions were answered correctly and incorrectly

NOTE: The online practice test is an optional tool candidates may use as they prepare for the certification examination. While the practice test may help candidates identify areas of strengths and weakness, it should not be used as the only means to determine candidate preparedness or readiness to test. Since the practice test is NOT intended to be a study guide nor the sole source of preparation for the actual certification examination, candidates are NOT provided with the answer key, rationales for each question, nor notification of which specific items were answered correctly or incorrectly.

Though the specific questions that are on the practice test will not appear on the actual certification examination, it allows candidates to become familiar with the style of questions that may be asked. The instant score report received after practice test submission shows overall test performance as well as performance in each of the content areas. Candidates may find this information useful in determining future study needs. Once the practice test is scored, candidates cannot return to the test to review the questions. Performance on the practice test does not guarantee similar performance on the actual certification examination.

The PTC Online Testing System does not demonstrate the testing software used during the certification examinations. Those who purchase the online practice test should be aware that they will use a different testing platform when they take certification examinations at designated proctored testing centers.

The practice test is not a requirement for certification eligibility nor does it contribute in any way to success on the certification examination. There are many ways candidates should prepare for the certification examination. Candidates should use a variety of resources and consider their own education and experiences. Review the content outline and reference materials listed in the handbook for additional exam-related information.

FEE: $50 by credit card

APPLY: Go to https://secure.ptcny.com/webtest/ and select Online Practice Test for Multiple Sclerosis Specialists

FURTHER INFO: Visit www.ptcny.com or call Professional Testing Corporation at 212-356-0660
# REFERENCES

The Consortium of Multiple Sclerosis Centers (CMSC) has prepared a suggested reference list to assist in preparing for the Multiple Sclerosis Certified Specialist Examination. These references contain journals and textbooks which include information of significance to multiple sclerosis care. Inclusion of certain journals and textbooks on this list does not constitute an endorsement by the CMSC of specific professional literature which, if used, would guarantee candidates successful passing of the certification examination.

## JOURNALS

<table>
<thead>
<tr>
<th>Journal</th>
<th>Website</th>
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<tbody>
<tr>
<td>MS Journal</td>
<td><a href="http://msj.sagepub.com">http://msj.sagepub.com</a></td>
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<tr>
<td>MS and Related Disorders</td>
<td><a href="http://www.msard-journal.com">http://www.msard-journal.com</a></td>
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<tr>
<td>Neurology</td>
<td><a href="http://www.neurology.org">http://www.neurology.org</a></td>
</tr>
<tr>
<td>International Journal of MS Care</td>
<td><a href="http://www.ijmsc.org">http://www.ijmsc.org</a></td>
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## WEBSITES

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<thead>
<tr>
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<tbody>
<tr>
<td>The International Organization of MS Therapists (IOMSRT)</td>
<td><a href="http://iomsrt.org">http://iomsrt.org</a></td>
</tr>
<tr>
<td>The International Organization of MS Nurses (IOMSN)</td>
<td><a href="http://www.iomsn.org">http://www.iomsn.org</a></td>
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<tr>
<td>Multiple Sclerosis Association of America (MSAA)</td>
<td><a href="http://www.mymsaa.org">http://www.mymsaa.org</a></td>
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<tr>
<td>National MS Society (NMSS)</td>
<td><a href="http://www.nationalmssociety.org">http://www.nationalmssociety.org</a></td>
</tr>
<tr>
<td>The Consortium of MS Centers</td>
<td><a href="http://www.mscare.org">http://www.mscare.org</a></td>
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## BOOKS

- *Nursing practice in MS, Fourth Edition (A Core Curriculum)*. Editors: June Halper MSN, APN-C, MSCN, FAAN, and Colleen Harris, MN, NP, MSCN