

# Implications for Multiple Sclerosis in the Era of the Affordable Care Act: A Clinical and Managed Care Perspective

## Physician Credit

*Instructions for Receiving Continuing Physician Education (CME)  
Credit: Testing and Grading Information*

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## Pharmacy Credit

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## Sample of Online Posttest

Choose the best answer for each of the following:

1. Which of the following is considered a risk factor for developing multiple sclerosis (MS)?
  - A. Family history of MS
  - B. High vitamin D levels
  - C. Living close to the equator
  - D. Male sex
2. GB is a 32-year-old Caucasian female who was recently diagnosed with relapsing-remitting multiple sclerosis (RRMS). She was first diagnosed after an acute episode of optic neuritis from which she has completely recovered. Her current symptoms include fatigue and some minor muscle weakness which do not affect her ability to ambulate. GB is concerned about her long-term prognosis and

would like to know the likelihood of her eventually needing some assistance with walking. What factors does GB possess that indicate a positive long-term prognosis?

- A. Caucasian race
- B. Female sex
- C. Optic neuritis at disease onset
- D. B and C

3. Without treatment, what percentage of patients with RRMS will progress to develop secondary-progressive MS within 10 years?
  - A. 10%
  - B. 30%
  - C. 50%
  - D. 70%

4. Which of the following criteria is a major focus of the Expanded Disability Status Scale (EDSS)?
- Ambulation
  - Cognitive functioning
  - Quality of life
  - Socioeconomic status
5. Which of the following could be considered a primary or tertiary symptom of MS?
- Depression
  - Fatigue
  - Osteoporosis
  - Urinary tract infections
6. Which of the following is likely the largest contributor to the cost burden placed on society by patients with MS?
- Disease-modifying treatments
  - Hospitalization
  - Loss of productivity
  - Rehabilitation
7. Which of the following is the strongest predictor of the cost associated with treating a patient with MS?
- Age
  - EDSS score
  - Number of relapses
  - Use of disease-modifying treatment
8. DS is a 31-year-old female who was diagnosed with RRMS several years ago. She has been treated with interferon beta-1a since her initial diagnosis. Recently, the frequency of her exacerbations has increased, new active lesions were revealed by a magnetic resonance imaging (MRI) scan, and neutralizing antibodies were noted in her laboratory work-up. Her past medical history is significant for hypertension and diabetes. Which of the following would be the most appropriate treatment strategy for DS at this time?
- Double the interferon beta-1a dose
  - Switch to an interferon beta-1b
  - Switch to an oral disease-modifying treatment
  - Switch to mitoxantrone
9. The team is considering the use of fingolimod for DS, but based on her baseline characteristics, she may be at increased risk for which of the following adverse effects?
- Dyslipidemia
  - Dyspnea
  - Macular edema
  - Pancreatitis
10. DS inquires about the use of an oral therapy—specifically, dimethyl fumarate. Which of the following adverse events should she be made aware of to help ensure adherence to therapy?
- Flushing
  - Glucose dysregulation
  - Photosensitivity
  - Risk of progressive multifocal leukoencephalopathy
11. Which of the following statements is true regarding the management of MS?
- Combining interferon beta and glatiramer acetate improves patient outcomes
  - Making indirect comparisons of annualized relapse rates between medications for MS may lead to incorrect conclusions
  - The presence of neutralizing antibodies alone should prompt a change in therapy for MS
  - The risk of left ventricular dysfunction secondary to mitoxantrone therapy is low
12. JS is a 28-year-old female who presents to the neurology clinic. During her visit, she inquires about the safety of her current therapy for MS, teriflunomide, during pregnancy, and verbalizes the desire to have a child within the next 6 months. Given the circumstances, the most appropriate course of action for JS' therapy is to:
- Continue teriflunomide with a 50% dose reduction
  - Continue teriflunomide; of the available MS medications, teriflunomide is the safest for pregnant women
  - Discontinue teriflunomide, use an accelerated elimination protocol, and switch to fingolimod
  - Discontinue teriflunomide, use an accelerated elimination protocol, and switch to glatiramer acetate

## Posttest

13. Prior to initiating therapy with natalizumab, patients should be evaluated for risk factors for progressive multifocal leukoencephalopathy, which include:
- A. Age greater than 45 years
  - B. Testing seropositive for anti-John Cunningham virus (JCV) antibody
  - C. Diabetic neuropathy
  - D. Female gender
14. Which of the following impact(s) patient adherence to MS therapy?
- A. Cost of treatment
  - B. Concerns of drug efficacy
  - C. Medication route of administration
  - D. All of the above
15. In 2013, where did MS rank in terms of highest per member per year spend for the specialty prescription drug class in the United States?
- A. 1st
  - B. 2nd
  - C. 3rd
  - D. 4th
16. JF is a 57-year-old female who was diagnosed with RRMS approximately 30 years ago. She has missed a lot of work in recent years due to increasing disability and more frequent relapse episodes. She reports to her physician that her physical functioning has been declining and that she will be taking an early retirement package. JF has a prescription for 1 glatiramer acetate injection daily, but reports injection anxiety and fear of needles. All of the following are potential outcomes of treatment nonadherence, except:
- A. Decreased total medical costs
  - B. Increased risk of hospitalization
  - C. Increased risk of MS relapse
  - D. None of the above
17. Given her circumstances, which of the following is the most appropriate consideration for JF's MS treatment?
- A. Switching from daily injection to 3 times per week injection
  - B. Switching to an oral disease-modifying therapy
  - C. Switching to intramuscular interferon beta-1a once weekly
  - D. Switching to subcutaneous interferon beta-1b 3 times per week
18. In JF's case, which of the following is considered an indirect cost of MS?
- A. Early retirement
  - B. Filling a prescription for glatiramer acetate
  - C. Hospitalization for acute relapse
  - D. Obtaining a walker to assist with walking
19. Based on research regarding out-of-pocket expenses and prescription abandonment rate, at what amount of out-of-pocket expense would JF be expected to abandon her prescription 25% of the time?
- A. \$50
  - B. \$100
  - C. \$200
  - D. \$400
20. Which of the following considerations of the Affordable Care Act is most relevant to JF?
- A. Guaranteed coverage for individuals participating in clinical trials
  - B. Expanded coverage for early retirees
  - C. Improved preventive health coverage
  - D. Increased payments for rural healthcare providers