



MOCA-Peds—Pediatric Infectious Diseases 2019 Content Area Feedback Report

Purpose of this report

The purpose of this report is to provide feedback to the pediatric infectious diseases community regarding content areas of strength and weakness, information which may be useful for identifying potential gaps in knowledge and guiding the development of educational materials. Using data from the American Board of Pediatrics' (ABP) Maintenance of Certification Assessment for Pediatrics (MOCA-Peds), this report summarizes diplomate performance on the questions within each of the 49 content areas assessed in 2019.

MOCA-Peds content areas

In 2019, *MOCA-Peds—Pediatric Infectious Diseases* consisted of questions from a total of 49 content areas, broken down as follows:

- *45 learning objectives* — Each diplomate received a total of 60 questions associated with the set of 45 specific content areas drawn from the [pediatric infectious diseases content outline](#). Those 60 questions consisted of 45 “new” questions (one for each learning objective) and 15 identical “repeat” questions selected from the original set of 45 new questions.
- *4 featured readings* — Each diplomate also received 8 questions (2 questions per featured reading) associated with the 4 featured readings (eg, clinical guidelines, journal articles).

It is important to note that a pool of questions was developed for each learning objective and for each featured reading. Questions were then drawn from the pool and administered to diplomates throughout 2019, adhering to the specifications described above (1 new question per learning objective, 2 new questions per featured reading, 15 repeat questions).

Understanding this report

This report provides a graphical summary of diplomate performance on each of the 49 content areas assessed in 2019. Within the graphic and in the example below, the point (•) reflects the average percent correct for all questions within that learning objective or featured reading. The bar (—) reflects the range of percent correct values for the questions within that learning objective or featured reading. More specifically, the bar's lower endpoint indicates the most difficult question (ie, answered correctly by the lowest percentage of diplomates) and the bar's upper endpoint indicates the easiest question (ie, answered correctly by the highest percentage of diplomates).



A note of caution

Many factors (eg, specific content of the question, wording of the question, plausibility of the incorrect answers) can impact diplomate performance on any question. It is thus difficult to determine if poor performance on a single question, or small set of questions, within a given content area reflects a true gap in diplomate knowledge or if the question(s) associated with that content area were difficult for other reasons (or some combination of both). Collectively, the entire set of MOCA-Peds questions (across all content areas) constitutes a psychometrically valid assessment of the diplomate's overall level of knowledge. Performance within a given content area is based on fewer questions, however, and is therefore less useful for making inferences about diplomate knowledge in that specific content area.

It is important to note again that for security reasons, a pool of questions was developed for each content area so that each diplomate received a unique set of questions. In addition, the number of questions can vary from one content area to the next. In cases where a content area had a relatively large pool of questions, the number of diplomates who answered each question was reduced, which diminished the statistical precision of each question's percent correct value. In cases where a content area had a relatively small number of questions, each question was answered by a larger number of diplomates, but the overall breadth of the content being assessed within that content area was constrained, which limits the generalizability of the results.

In other words, MOCA-Peds was designed to assess individual diplomates with respect to their overall level of knowledge in pediatric infectious diseases. It was not designed to provide the pediatric community with diagnostic feedback pertaining to specific content areas within pediatric infectious diseases. The results within this report may be informative and useful for that secondary purpose, but they should be interpreted with a degree of caution.

Additional notes

- To protect the security of the content of the assessment, the questions themselves, along with information about the number of questions in the pool for any particular learning objective or featured reading, are not provided in this report.
- This report contains data aggregated across many diplomates participating in the MOCA-Peds program and cannot be used to make inferences or draw conclusions regarding any particular diplomate.

2019 Content Area Feedback Report

Pediatric Infectious Diseases

Learning Objective

Percent Correct
0 25 50 75 100

Learning Objective	Percent Correct
1. Understand effects of immunizations of siblings on infections in immunocompromised patients.	85
2. Interpret laboratory susceptibility test results in the context of different sites of infection.	80
3. Know the viral infections that can be severe or chronic in children with antibody deficiency.	75
4. Recognize the important viral pathogens causing infection in children undergoing stem cell transplantation.	70
5. Diagnosis, treatment, and long-term management of Kawasaki disease: a scientific statement for health professionals from the American Heart Association (Featured Reading)	75
6. Understand the epidemiology and clinical features of hookworm infections.	70
7. Interpret mean and standard deviation in normally distributed data sets.	75
8. Diagnose and plan the management of a patient with acute osteomyelitis.	70
9. Recognize the risk factors for and clinical presentation of different infectious causes of bacterial endocarditis.	75
10. Plan the management of infections caused by pathogens that have developed resistance during therapy.	70
11. Plan the management of household contacts of a patient who has pulmonary tuberculosis.	75
12. Recognize the host defense defects associated with an increased risk of pneumococcal sepsis.	70
13. Recognize the clinical features of different infectious causes of polyarthritis.	70
14. Recognize the infections most likely transmitted from adult to child or child to adult in a child care center.	70
15. Recognize the clinical features of different infectious causes of malignant otitis externa.	70
16. Know examples of bacterial resistance mediated by enzymatic inactivation of the antibiotic.	75
17. Official American Thoracic Society/Infectious Diseases Society of America/Centers for Disease Control and Prevention clinical practice guidelines: diagnosis of tuberculosis in adults and children (Featured Reading)	75
18. Identify the pathogens likely to be associated with lung abscess secondary to foreign body aspiration.	70
19. Recognize anatomic factors that predispose to recurrent bacterial meningitis.	75
20. Know the sensitivity and specificity of methods other than culture used in the diagnosis of fungal infection.	70
21. Recognize situations in which combinations of antibiotics are necessary to prevent emergence of resistance.	70
22. Recognize the clinical manifestations of Aspergillus infections in immunocompromised hosts.	70
23. Recognize primary and secondary vaccine failure.	70
24. Recognize situations in which combinations of antibiotics are necessary to provide synergistic bacterial killing.	70
25. Recognize situations in which serologic testing is a preferred laboratory method.	70
26. 2017 Infectious Diseases Society of America clinical practice guidelines for the diagnosis and management of infectious diarrhea (Featured Reading)	75
27. 2017 Infectious Diseases Society of America's clinical practice guidelines for healthcare-associated ventriculitis and meningitis (Featured Reading)	75
28. Recognize the respiratory and non-respiratory tract manifestations of infection with Mycoplasma pneumoniae.	70
29. Understand the different routes of transmission of zoonotic pathogens.	70
30. Understand relative advantages and disadvantages of different formulations of amphotericin B.	70
31. Recognize clinical manifestations of infections caused by Clostridium species and plan appropriate management.	70
32. Recognize the risk factors for and clinical presentation of different infectious causes of keratitis.	70
33. Know the most common pathogens causing bacteremia in children undergoing hemodialysis.	70
34. Recognize the clinical features of different infectious causes of vesiculoulcerative genital lesions.	70
35. Recognize risk factors associated with Salmonella gastroenteritis.	70
36. Know the recommended approach to prevention of varicella infection in exposed children.	70
37. Know the pathogens associated with colitis in immunocompromised children.	70
38. Understand the clinical features of enterovirus infections in neonates and plan appropriate diagnostic testing.	70
39. Recognize indications for administration of Td booster and TIG after injury.	70
40. Know the appropriate indications for initiating antiviral therapy in an immunocompetent host.	70
41. Know the recommended approach to prevention of measles infection in exposed children.	70
42. Understand the epidemiology and treatment of infections caused by Eikenella corrodens.	70
43. Know the pathogens that cause invasive disease in children with chronic granulomatous disease.	70
44. Recognize risk factors for and epidemiologic features of Yersinia enterocolitica infection.	70
45. Diagnose and plan the management of a patient with intrathoracic infection due to Histoplasma capsulatum.	70
46. Recognize and plan therapy for a patient with Streptobacillus moniliformis infection.	70
47. Plan the management of a patient with invasive Staphylococcus aureus infection.	70
48. Know the infections for which bactericidal antimicrobial therapy is required.	70
49. Recognize the fetal infection risks associated with travel for women of child-bearing age.	70

Sample: Included in the sample were all diplomates who currently have a Part 3 (exam) requirement that could be fulfilled through MOCA-Peds and answered at least one question in 2019 (N = 103).