Purpose of this report

The purpose of this report is to provide feedback to the pediatric nephrology 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 48 content areas assessed in 2020.

MOCA-Peds content areas

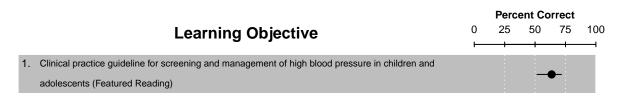
In 2020, MOCA-Peds—Pediatric Nephrology consisted of questions from a total of 48 content areas, broken down as follows:

- 45 learning objectives¹ Each diplomate initially received one question from each of the 45 specific content areas drawn from the pediatric nephrology content outline.
- Three featured readings¹ Each diplomate also received two questions per featured reading (eg, clinical guidelines, journal articles) for a total of six featured reading questions.

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 2020 according to the specifications described in the bulleted list above.

Understanding this report

This report provides a graphical summary of diplomate performance on each of the 48 content areas assessed in 2020. 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).



¹Each diplomate also received 15 "repeat" questions selected from their original subset of learning objective and featured reading questions. Performance on the repeat administrations is not included in this report.

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 nephrology. It was not designed to provide the pediatric community with diagnostic feedback pertaining to specific content areas within pediatric nephrology. 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.

2020 Content Area Feedback Report Pediatric Nephrology

	Lograina Objective	0	Percent Correct			100
	Learning Objective	<u> </u>		-	- i	—
1.	Clinical practice guideline for screening and management of high blood pressure in children and				_	
	adolescents (Featured Reading)					
2.	Recognize the clinical and laboratory manifestations of respiratory acidosis.				•	
3.	Know how kidney structure and function change as the kidney matures after birth.			_	•	
4.	Plan the management of a patient with hyperosmolarity after brain injury.				•	_
5.	Understand the limits of renal replacement therapy in a patient with a drug overdose.			-	•	
6.	Recognize de novo kidney disease in a patient with a kidney transplant.				•	
7.	History of childhood kidney disease and risk of adult end-stage renal disease (Featured Reading)				•	
8.	Understand basic descriptions of data such as mean and median.				•	
9.	Differentiate between the types of polycystic kidney disease.				-	_
10.	Recognize obesity–related hypertension.				-	—
11.	Understand the factors that influence the prescription of peritoneal dialysis dwell volume.				-	
12.	Recognize the conditions for transplantation in a patient who is HIV positive.				-	—
13.	Plan the management of recirculation in hemodialysis.				-	
14.	Understand how perinatal ureteral obstruction may affect long-term renal function.				-	_
15.	Understand the principles of ethics of research in human subjects.				•	
16.	Perinatal diagnosis, management, and follow-up of cystic renal diseases: a clinical practice					
	recommendation with systematic literature reviews (Featured Reading)				_	—
17.	Plan the management of kidney involvement in a patient with systemic lupus erythematosus.				4)
18.	Plan the pharmacologic management of a patient with anemia of chronic kidney disease.				-	—
19.	Understand the implications of intermittent gross hematuria in children.					
20.	Understand the role of caloric intake in the pathogenesis of growth failure in chronic kidney disease.			•		•
21.	Know how to measure glomerular filtration rate using cystatin C.					•
22.	Understand the pathogenesis of nephronophthisis.					•
23.	Recognize the role of heredity in childhood hypertension.					
24.	Know the recommended approach for the diagnosis of secondary hypertension in childhood.				-	•
25.	Recognize the clinical manifestations of abnormal calcium metabolism in a patient with chronic kidney					
	disease.					•
26.	Identify the genetic causes of hypokalemia.					•
27.	Plan the diagnostic evaluation of a patient with C3 glomerulopathy.					
28.	Understand the factors contributing to water retention in children.				_	
29.	Understand the common side effects of immunosuppressive medications.					
	Understand the natural history of acquired cystic disease.					
31.	Understand the pathophysiology of prerenal azotemia.		:	:	:	
32.	Interpret the results of radionuclide scan to rule out ureteropelvic junction obstruction.		:	:	:	
33.	Know the relative indications for initiation of chronic dialysis.		: :	:	:	
34.	Recognize risk factors for graft loss.		:	:	:	
35.	Know the indications for hemodialysis in a patient with rapidly progressive glomerulonephritis.		:	:	:	
36.	Plan the management of a patient with tumor lysis-induced hypocalcemia.					
	Recognize the role of structural abnormalities in urinary incontinence.		:	:	:	
37.			:	:	1	
38.	Plan the medical management of a patient with atypical hemolytic-uremic syndrome.					
39.	Plan the management of a patient with urolithiasis.					
40.	Recognize the coagulation risk of membranous nephropathy.					•
41.	•					•
4.5	childhood.					
42.	Understand the factors that influence dialysis modality selection.					•
43.	Recognize the manifestations of acute antibody–mediated transplant rejection.					•
44.	Interpret the results of urinalysis in a patient with post–infectious acute glomerulonephritis.					•
45.	Understand the management of sodium in acute kidney injury.					•
46.	Know how urinary tract obstruction may cause acute kidney injury.					•
47.	Know the recommended approach for the diagnosis of hypertension in childhood.					•
48.	Know the contraindications for growth hormone therapy in a patient with chronic kidney disease.					•

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 = 95).