# 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 2022.

#### MOCA-Peds content areas

In 2022, MOCA-Peds—Pediatric Nephrology consisted of questions from a total of 48 content areas, broken down as follows:

- 45 learning objectives<sup>1</sup> Each diplomate initially received one question from each of the 45 specific content areas drawn from the pediatric nephrology content outline.
- Three featured readings<sup>1</sup> 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 2022 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 2022. 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).



<sup>&</sup>lt;sup>1</sup>Each 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.

### 2022 Content Area Feedback Report Pediatric Nephrology

	Learning Objective		Percent Correct 25 50 75 100	
1	Energy and protein requirements for children with CKD stages 2–5 and on dialysis–clinical practice	+ +	<del>                                     </del>	
1.	recommendations from the Pediatric Renal Nutrition Taskforce (Featured Reading)		<b>─</b>	
2.	Plan the nutritional regimen for an infant who is receiving peritoneal dialysis.	:		
3.	Know the natural history of IgA nephropathy.		-	
4.	Understand the diagnostic criteria/laboratory abnormalities that characterize the thrombotic			
	microangiopathies.		•	
5.	Plan the treatment of a patient with hepatorenal syndrome.		-	
6.	Interpret urine microscopy in patients with a kidney stone.		•	
7.	Know the appropriate blood pressure reduction targets in patients with chronic kidney disease.		•	
8.	Interpret results of a peritoneal equilibration test (PET) in a child receiving peritoneal dialysis.		-	
9.	Clinical practice recommendations for growth hormone treatment in children with chronic kidney disease			
10	(Featured Reading)			
	Plan the management of post–transplant lymphoproliferative disorders.  Calculate and interpret sensitivity and specificity.	:	-	
11. 12.	Understand the implications of different genetic causes of focal segmental glomerulosclerosis.	:	_	
	Recognize risk factors for progression of chronic kidney disease in childhood.	:		
	Method of Blood Pressure Measurement in Neonates and Infants: A Systematic Review and Analysis (Featured	:	: •	
	Reading)			
15.	Apply laboratory and imaging tests for the diagnosis of renovascular hypertension.		-	
	Identify indications for and timing of surgical interventions for children with vesicoureteral reflux.		-	
17.	Recognize potential pitfalls associated with screening asymptomatic children of adults with autosomal			
	dominant polycystic kidney disease.		•	
18.	Understand the increasing risk of complications of chronic kidney disease (CKD) based on advancing CKD			
	stage.		•	
19.	Develop a management/monitoring plan for the renal manifestations of tuberous sclerosis.		-	
20.	Know the effects and side effects of commonly used classes of antihypertensive medications.		-	
21.	Understand normal and abnormal renal findings in premature infants.		-	
22.	Know the absolute and relative contraindications to kidney transplantation.		-	
23.			-	
24.	Differentiate the nephrotoxic risk of various medications.		•	
25.	, , , , , , , , , , , , , , , , , , , ,		•	
26. 27	Develop a treatment plan based on the clinical and laboratory findings of hypophosphatemic rickets.  Understand the role of podocyte dysfunction in the pathophysiology of minimal change disease.	:	•	
28.	Plan the diagnostic evaluation of a patient with hypercalciuria.		•	
	Appraise the ethical principles involved in decisions on whether to initiate dialysis in children.			
30.	Know how to calculate fractional sodium excretion.			
31.	Know the etiology of urolithiasis.	:	-	
32.	Plan treatment for electrolyte aberrations in alkalosis based on etiology.		•	
33.	Choose appropriate therapy for hyperkalemia based on clinical and laboratory findings.	:	•	
34.	Differentiate between the causes of hyponatremia.		•	
35.	Plan the management of heparin–free hemodialysis.		•	
36.	Plan the management of a patient with neurogenic bladder and incontinence.		-	
37.	Recognize the risk factors for poor school performance in children with chronic kidney disease and			
	end-stage renal disease.			
38.	Differentiate between disease incidence and prevalence.		•	
	Plan the management of a patient with acute allograft dysfunction.		•	
40.	Recognize histologic and clinical manifestations associated with tubulointerstitial nephritis and		•	
44	uveitis (TINU) syndrome.			
41.	Recognize the potential etiologies and plan the evaluation of a child with chronic kidney disease who		•	
42	has a first seizure.	:	: :	
	Understand the diagnosis and treatment of hepatitis–associated glomerular disease.  Predict the complications of acute peritoneal dialysis.		: :	
	Describe the noninfectious complications of immunosuppression.			
	Understand the extrarenal implications of oligohydramnios or urinary tract obstruction.		:	
	Recognize the clinical and laboratory manifestations of an electrolyte abnormality secondary to			
.0.	cystinosis.		•	
47.	Know the indications for kidney biopsy in a patient with hematuria.		•	
	Understand the laboratory and disease characteristics of primary versus secondary glomerular disease.		•	