Purpose of this report

The purpose of this report is to provide feedback to the pediatric endocrinology 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 2021.

MOCA-Peds content areas

In 2021, MOCA-Peds—Pediatric Endocrinology 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 endocrinology 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 2021 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 2021. 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 endocrinology. It was not designed to provide the pediatric community with diagnostic feedback pertaining to specific content areas within pediatric endocrinology. 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.

2021 Content Area Feedback Report Pediatric Endocrinology

	Lograina Objective	0	Perce	ent Cor	rect	100
	Learning Objective	<u> </u>	-			
1.	Distinguish diabetic ketoacidosis from hyperglycemic hyperosmolar state (HHS).			—)	
2.	Explain the difference between prevalence and incidence.				•	_
3.	Manage glucose abnormalities in cystic fibrosis–related diabetes (CFRD).			-	—	
4.	Describe the factors that alter cortisol-binding globulin.		-		•	_
5.	Construct a differential diagnosis for a patient with an increased upper:lower segment ratio.				-	
6.	Interpret diagnostic imaging for the diagnosis of pituitary hormone deficiency.				-	_
7.	Differentiate between disease incidence and prevalence.		:	÷	•	
8.	Analyze the risk for diabetes in the relatives of a child with type 1 diabetes.				-	
9.	Evaluate an infant with midline facial defect.				•	
10.	Describe the effect of obesity on tests of thyroid function.				•	
11.	Manage bone health in patients receiving long-term glucocorticoid treatment.		_		•	_
12.	Recognize various forms of adrenocorticotrophic (ACTH) resistance.				-	
13.	Hypothalamic–Pituitary and Growth Disorders in Survivors of Childhood Cancer: An Endocrine Society					
	Clinical Practice Guideline 2018 (Featured Reading)					
14.	Identify genetic causes of neonatal hyperinsulinemic hypoglycemia.				-)
15.	Describe the effect of growth hormone (GH) treatment on adult stature in Turner syndrome.				-	—
16.	Evaluate a child with a thyroid nodule.				-) —
17.	Recommend potential uses of aromatase inhibitors in pediatric patients.				-	-
18.	Describe the effects of thyroid hormone on the growth hormone–insulin–like growth factor–1 (GH–IGF–1)				_4	
	axis.					_
19.	Investigate an infant with microphallus and bilateral cryptorchidism.				-	D
20.	Recommend management of Graves disease in a child with significant ophthalmopathy.				—	•
21.	Describe genetic mutations causing peripheral precocious puberty.			1	—	•
22.	Explain the utility of chromogranin A measurement in the evaluation of pheochromocytoma.				-	•
23.	Manage patients recovering from chronic hypothalamic–pituitary–adrenal (HPA) axis suppression due to					
	exogenous glucocorticoids.					
24.	Describe the factors that affect the response to growth hormone (GH) provocative testing.					•
25.	Contrast the treatment of central and nephrogenic diabetes insipidus.					
26.	Diagnosis and management of pseudohypoparathyroidism and related disorders: first international					_
	Consensus Statement 2018 (Featured Reading)					•
27.	Distinguish between consent and assent in research with children.			:		•
28.	Use of Gonadotropin–Releasing Hormone Analogs in Children: Update by an International Consortium 2019		·			_
	(Featured Reading)					•
29.	Differentiate nutritional from inherited causes of rickets.					•
30.	Recognize the limitations of dual–energy x–ray absorptiometry (DXA) in assessing bone mineral density.					•
31.	Differentiate among the different forms of congenital adrenal hyperplasia (CAH).				_	•
32.	Recognize medications that cause hyperglycemia.				_	•
33.	Differentiate maturity–onset diabetes of the young (MODY) from other types of childhood diabetes.		÷	:		
34.	Evaluate mineral disturbances in an infant of a diabetic mother.		•	•		•
35.	Manage Cushing disease.			:		
36.	Predict the clinical implications of defects in anti–Mullerian hormone (AMH) synthesis or action.					•
37.	Predict the impact of diet modification on low–density lipoprotein (LDL) cholesterol concentrations.					
38.	Define the role of genetic testing for multiple endocrine neoplasia (MEN)1 in families.					•
39.	Propose evaluation of an infant born to a mother with a history of Graves disease.					•
40.	Distinguish thyroxine–binding globulin (TBG) deficiency from hypothyroidism.					•
41.	Predict the pituitary hormone deficiencies associated with POU1F1 mutations.			i i		
42.	Distinguish type 1 from type 2 diabetes in an adolescent with obesity.		•		_	•
43.	Distinguish obesity from pathologic causes of tall stature.					•
44.	Investigate the impact of adrenal insufficiency on the hypothalamic–pituitary–thyroid (HPT) axis.					
45.	Differentiate Hashitoxicosis from Graves disease.					•
46.	Describe the hormonal basis of the pubertal growth spurt.					
47.	Contrast genotype and phenotype of Turner syndrome versus Noonan syndrome.					
48.	Predict the impact of circadian variation on the hypothalamic–pituitary–adrenal (HPA) axis.					
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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 2021 (N = 137).