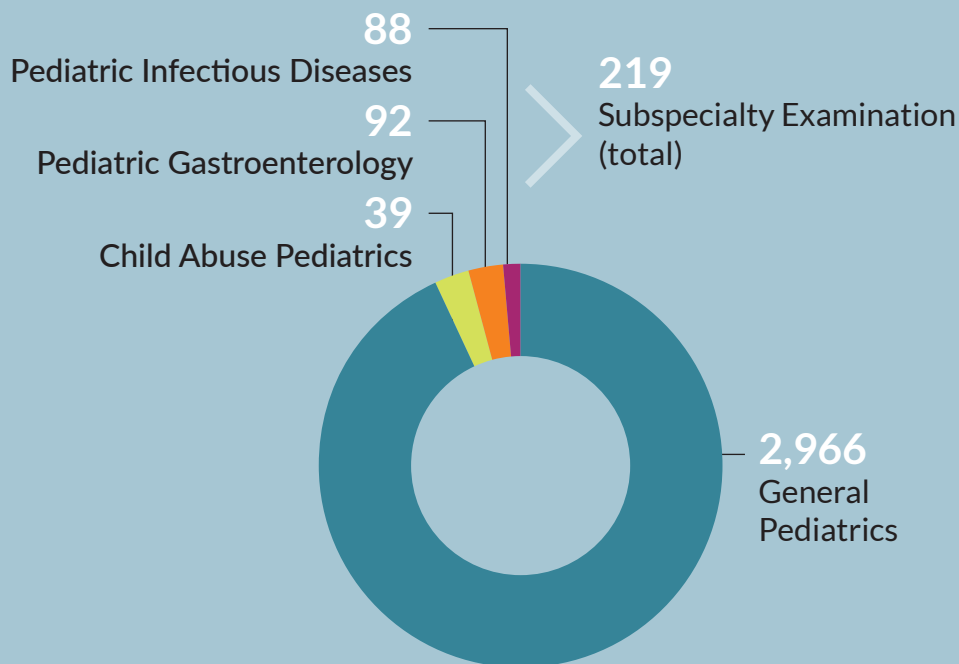# MOCA PEDS
THE AMERICAN BOARD of PEDIATRICS

A Brief Review of Participation in MOCA-Peds in 2019

In 2019, the American Board of Pediatrics (ABP) launched the Maintenance of Certification Assessment for Pediatrics (MOCA-Peds). MOCA-Peds is an online, non-proctored longitudinal assessment of pediatric medical knowledge developed as an alternative to the proctored exam given in a secure testing center. Starting in 2019, participation in MOCA-Peds during one's Maintenance of Certification (MOC) cycle satisfies the cognitive exam requirement (Part 3) and grants Self-Assessment Credit (Part 2) to those meeting the passing standard.

MOCA-Peds Cognitive Exam (Part 3) Participation by Exam Type*

88
Pediatric Infectious Diseases

92
Pediatric Gastroenterology

39
Child Abuse Pediatrics

219
Subspecialty Examination (total)

2,966
General Pediatrics

*Includes MOCA-Peds cognitive exam (Part 3) participants who answered at least 80% of all available questions.
Source: ABP Certification Management System.*

Over 3,000 eligible pediatricians participated in MOCA-Peds for Part 3 credit in 2019:

- 2,966 eligible pediatricians participated in MOCA-Peds for General Pediatrics, completing at least 80% of all available questions.

- 219 of 277 subspecialists participated in one of the three subspecialty examinations made available for eligible pediatricians in 2019 (i.e., Child Abuse Pediatrics, Pediatric Gastroenterology, and Pediatric Infectious Diseases). See table below for more details. The number of subspecialists participating in subspecialty exams is expected to increase as MOC cycles continue to renew each year and additional subspecialty exams are made available.

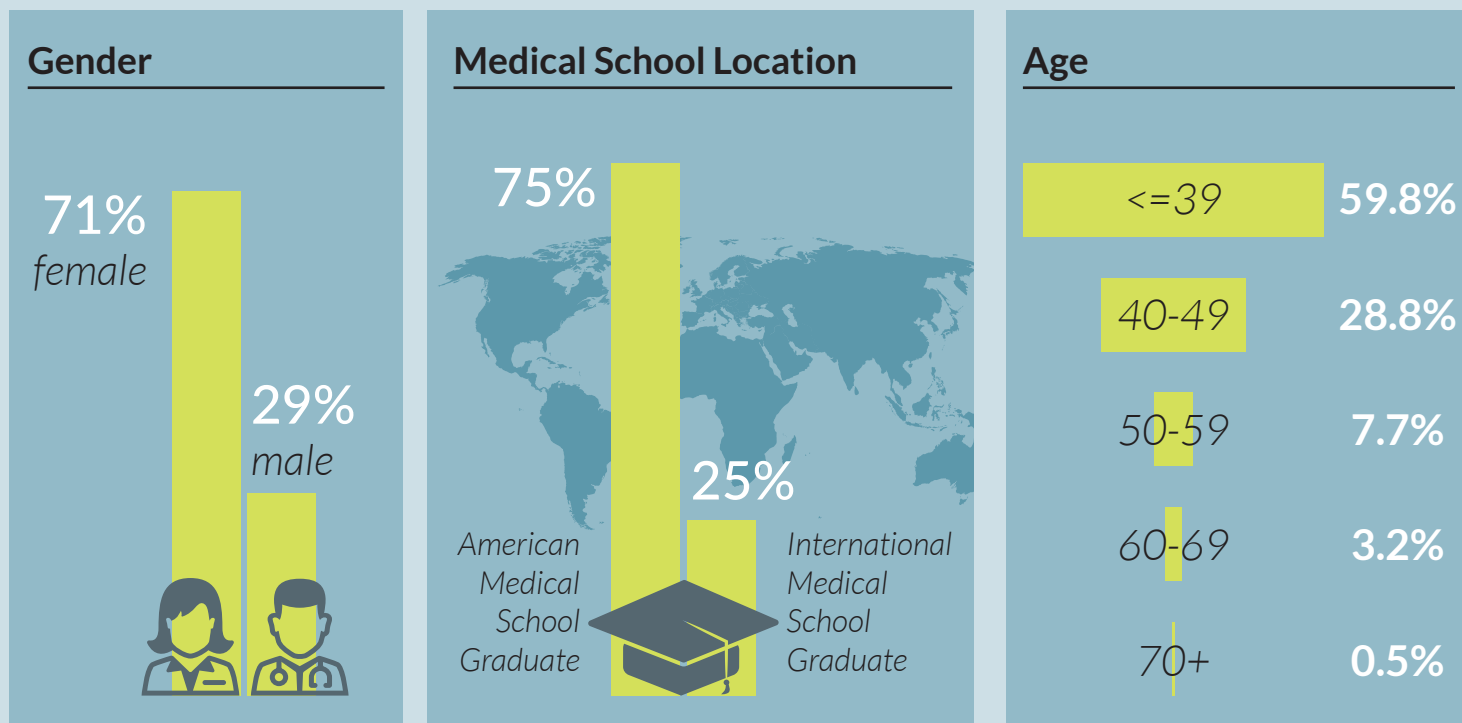# MOCA-Peds Cognitive Exam (Part 3) Question Completion Rates by Exam Type

MOCA-Peds was offered to all certified pediatricians whose MOC cycle was eligible for renewal in 2019 in General Pediatrics, Child Abuse Pediatrics, Pediatric Gastroenterology, and Pediatric Infectious Diseases.

The majority of participants in MOCA-Peds for all exam types offered in 2019 completed 80% or more questions administered (see below).

	Exam Type			
	General Pediatrics	**Child Abuse Pediatrics**	**Pediatric Gastroenterology**	**Pediatric Infectious Diseases**
Total number eligible to participate	3,851 **100%**	48 **100%**	121 **100%**	108 **100%**
Answered one or more questions	3,572 **92.8%**	46 **95.8%**	113 **93.4%**	103 **95.4%**
Answered at least 80% of questions	2,966 **77.0%**	39 **81.3%**	92 **76.0%**	88 **81.5%**
Answered all questions	2,906 **75.5%**	39 **81.3%**	89 **73.6%**	86 **79.6%**

Source: ABP Certification Management System.

Participation Demographics: Cognitive Exam (Part 3)*

Gender

71% *female*

29% *male*

Medical School Location

75% *American Medical School Graduate*

25% *International Medical School Graduate*

Age

<=39	59.8%
40-49	28.8%
50-59	7.7%
60-69	3.2%
70+	0.5%

* Includes MOCA-Peds cognitive exam (Part 3) participants who answered at least 80% of all available questions.
Source: ABP Certification Management System.

Reasons for Not Completing All MOCA-Peds Questions in 2019

Pediatricians participating in MOCA-Peds were asked to complete a web-based survey at the end of 2019. Those who did not complete all available questions in MOCA-Peds (i.e., did not complete some or all questions during 2019) were asked to indicate their reason(s) for not completing all questions.

Pediatricians selected the following reasons for not completing some or all MOCA-Peds questions during 2019:*

I had schedule conflicts that made it impossible to complete the questions.

35.2%

I do not recall receiving any reminders to complete MOCA-Peds.

23.8%

I decided to take the quarter off and let it be dropped from my score.

3.9%

I put off completing the questions and simply ran out of time.

34.4%

I did not know about MOCA-Peds.

16.0%

I changed my mind about the MOCA-Peds program and no longer wish to participate.

1.6%

Some other reason.

27.3%

I did not receive enough information or understand MOCA-Peds enough to begin questions.

13.7%

I prefer to take the proctored examination at a later time.

1.2%

Survey question was multi-select (i.e., participants were able to select more than one reason for missing quarters). Survey participants that did not complete some or all quarters in 2019 received this question (n=256).
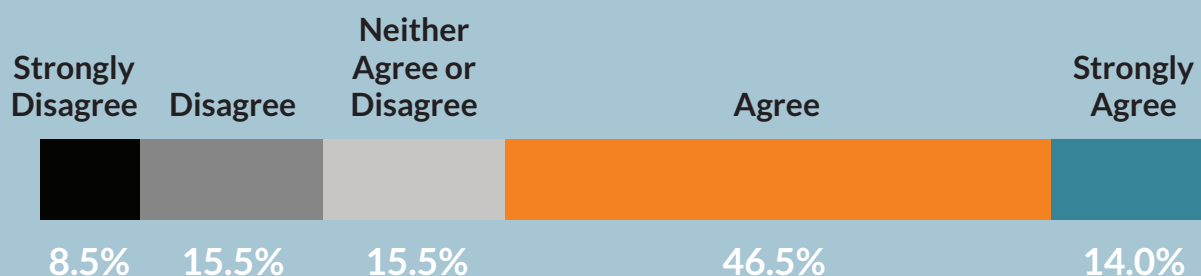
Survey Participation

Pediatricians who participated in any available versions of MOCA-Peds for credit in Self-Assessment (Part 2) or Cognitive Exam (Part 3) were asked to complete a survey about their experiences with MOCA-Peds at the end of 2019. Unless otherwise indicated in footnotes, the majority of figures include data from survey respondents who participated in MOCA-Peds for Part 3 credit from any of the available versions and completed all available quarters (n = 1774). Data from General Pediatrics and subspecialty exam participants are presented in aggregate due to small sample sizes in the subspecialties, unless otherwise noted.

"I received enough information from the ABP to make an informed decision about participating in MOCA-Peds this year."

Survey participants who missed at least one quarter of the 2019 MOCA-Peds exam questions were asked to rate their agreement with the preceding statement.*

Approximately 60% of survey participants who responded to this question agreed (agree and strongly agree) that they received enough information from the ABP to make an informed decision about participating in MOCA-Peds suggesting that something other than informational availability affected their decision to participate.

Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
8.5%	15.5%	15.5%	46.5%	14.0%

The figure includes data from survey respondents participating in MOCA-Peds for Part 3 credit for any exam and did not complete all quarters in 2019 (n = 258). Data from General Pediatrics and subspecialty exam participants are presented in aggregate due to small sample sizes in the subspecialties.

Percent Currently Meeting Passing Standard by Exam Type

The following figure provides a breakdown of the percent of pediatricians currently meeting the passing standard in MOCA-Peds in 2019 (i.e., reached a scaled score of 180 across all questions that year). **These scores should not be taken as the final scores for participants, as the overall passing score will be calculated over a period of four years, with the four lowest quarters being dropped automatically for an individual.** Also, if needed, two extra quarters can be dropped due to COVID-19 in 2020. These intermediate scores are calculated and used at the quarter level to award Part 2 credit.

Percent of questions answered	Exam Type			
	General Pediatrics	Child Abuse Pediatrics	Pediatric Gastroenterology	Pediatric Infectious Diseases
At least 80%	93%	97%	89%	93%
100%	94%	97%	91%	94%

Source: ABP Certification Management System.
Limited to all MOCA-Peds participants answering at least 80% of their MOCA-Peds questions.

TIME TO COMPLETE

Median Question Response Times (Time to complete)

This figure provides a distribution of the median response times (in minutes) across all four quarters in 2019 by exam type.

Key insights:

- Based on the median response times, the majority of pediatricians responded to questions more quickly than the five-minute time limit. While not shown in this median distribution, pediatricians answering individual questions did fall beyond the ranges depicted.

- All exams had median item response times of three minutes or less.

- The majority of questions for all exam types took around one to two minutes to answer.

### 2019 Median Item Response Times
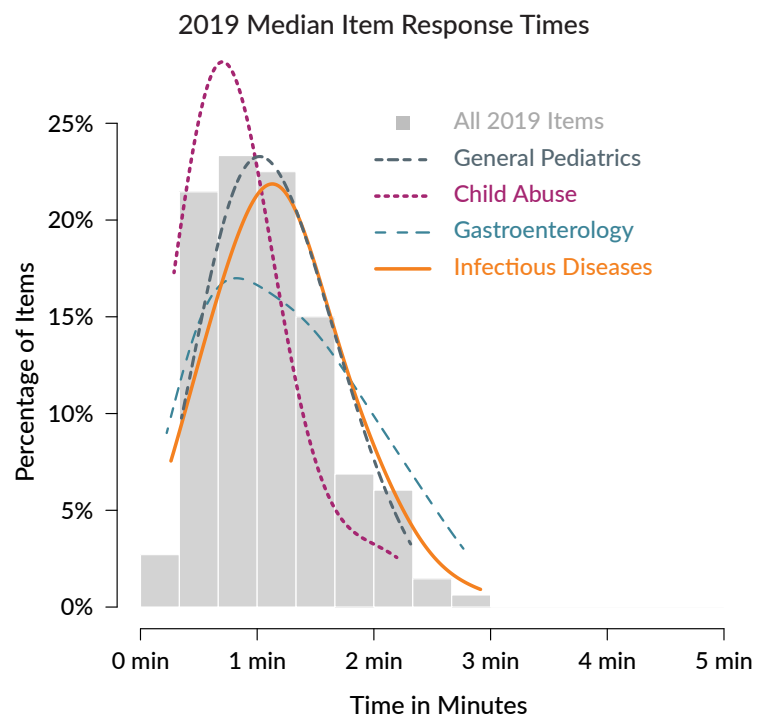
Quarterly Completion by Weeks Remaining

This figure depicts the proportion of MOCA-Peds participants completing their quarterly questions at different time points across each quarter in 2019.

Key insights:

- A small number of participants in each exam completed all of their questions within the first two weeks of a quarter.

- A majority of participants completed their questions within the last two weeks of a quarter.
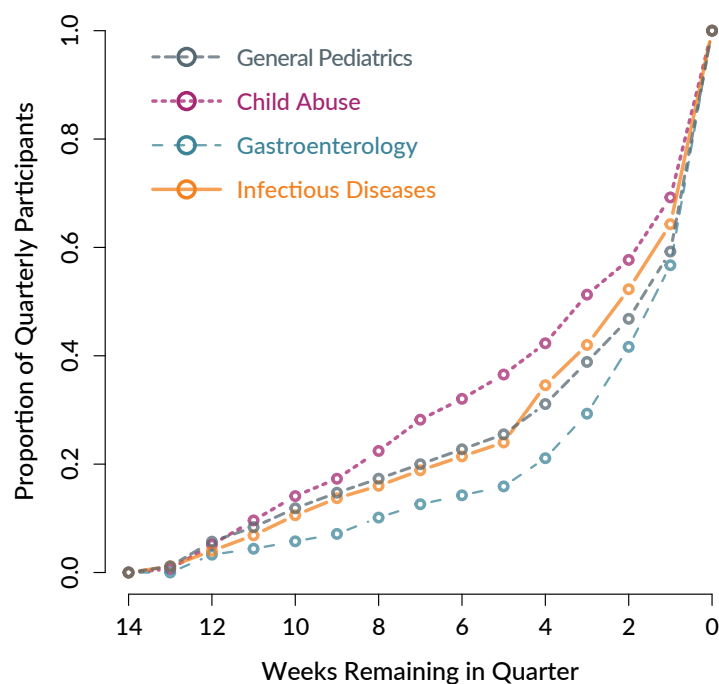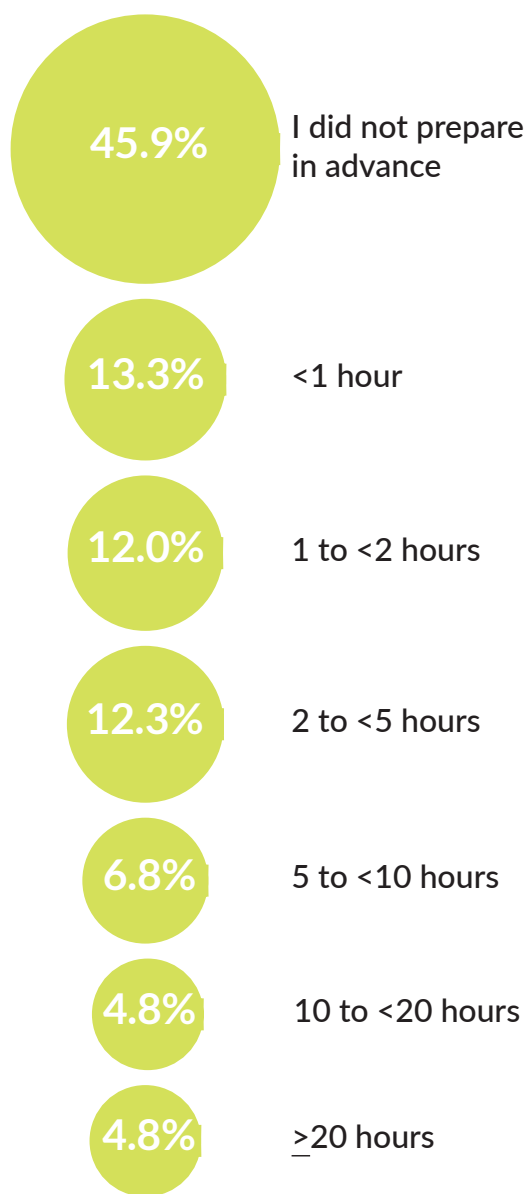
PREPARATION

Time Spent Preparing to Answer 2019 Questions

The following figure represents the time that survey respondents indicated they spent preparing in advance of taking questions.*

This includes time spent studying, reviewing/reading features articles or other literature, or reviewing previously taken questions under the "Question History" section of MOCA-Peds.

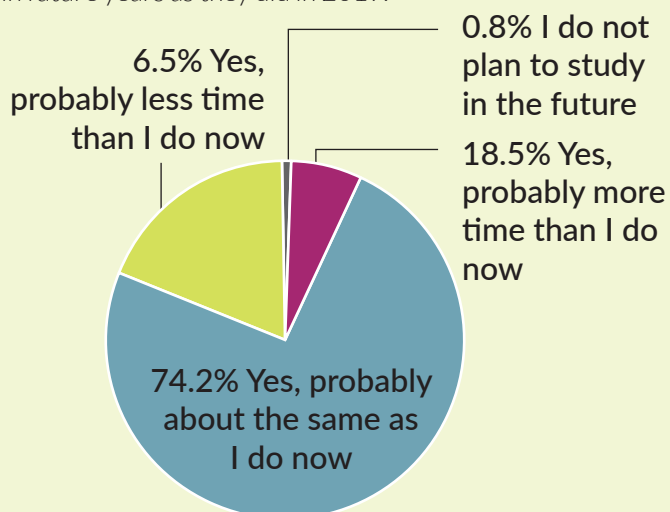Nearly half (45.9%) indicated they did not prepare prior to answering items in MOCA-Peds.

45.9% I did not prepare in advance

13.3% <1 hour

12.0% 1 to <2 hours

12.3% 2 to <5 hours

6.8% 5 to <10 hours

4.8% 10 to <20 hours

4.8% >20 hours

* *This figure includes data from survey respondents who completed all quarters in MOCA-Peds and were participating for Part 3 credit in any exam type. Data from General Pediatrics and subspecialty exam participants are presented in aggregate due to small sample sizes in the subspecialties.*

Preparation Plans for Future MOCA-Peds Exams

The following figure provides an overview of survey respondents' preparation plans for future MOCA-Peds exams.*

The majority of survey respondents (74.2%) who received this question* indicated they would likely continue to prepare at the same levels in future years as they did in 2019.
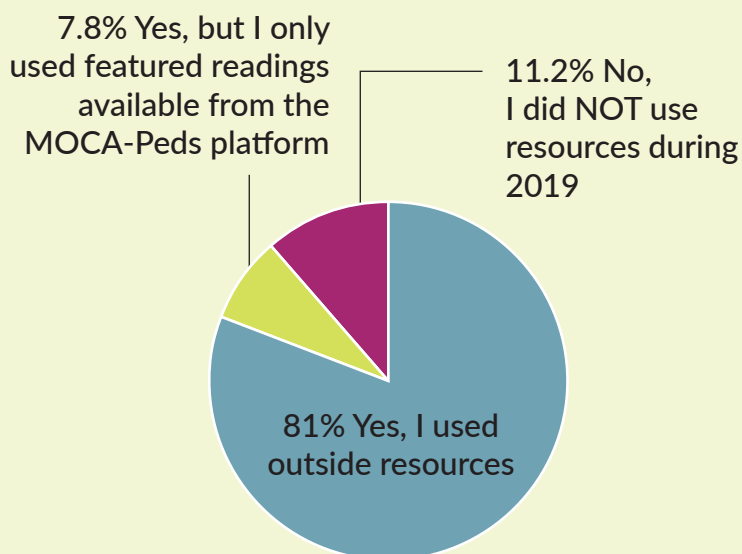
6.5% Yes, probably less time than I do now

0.8% I do not plan to study in the future

18.5% Yes, probably more time than I do now

74.2% Yes, probably about the same as I do now

* *This figure includes data from survey respondents who completed all quarters in MOCA-Peds, were participating for Part 3 credit in any exam type, and **indicated that they had prepared in advance in a previous survey question** (n= 960). Data from General Pediatrics and subspecialty exam participants are presented in aggregate due to small sample sizes in the subspecialties.*

Resources Used While Answering Questions

Use of external resources is allowed when answering questions in MOCA-Peds. To better understand the use of resources, survey participants were asked to indicate if and how they used resources while answering questions in MOCA-Peds.*

The majority of survey respondents (81.0%) indicated that they accessed and used external resources while answering questions in MOCA-Peds.

7.8% Yes, but I only used featured readings available from the MOCA-Peds platform

11.2% No, I did NOT use resources during 2019

81% Yes, I used outside resources

* *This figure includes data from survey respondents who completed all quarters in MOCA-Peds and were participating for Part 3 credit in any exam type. Data from General Pediatrics and subspecialty exam participants are presented in aggregate due to small sample sizes in the subspecialties.*

Top Resources Used to Prepare BEFORE ANSWERING Questions

The figure below provides an overview of the top five resources used to prepare before answering questions in MOCA-Peds.*

Three out of the five top resources that participants found most helpful were materials that are provided by the ABP and accessible via the MOCA-Peds system – Answer Feedback, Learning Objectives, and Featured Readings.**

The most-used resource selected by survey respondents was Answer Feedback available in the Question History section of MOCA-Peds.

MOCA-Peds	*Answer Feedback (rationale and references) available in Question History*	**83%**
	Featured Readings available in Exam Content	**52%**
	Learning Objectives available in Exam Content	**43%**
Outside Resources	*UpToDate*	**58%**
	Peer-reviewed publications	**33%**

** This figure includes data from survey respondents who completed all quarters in MOCA-Peds, were participating for Part 3 credit in any exam type, and **indicated that they prepared in advance** (n=960). Data from General Pediatrics and subspecialty exam participants are presented in aggregate due to small sample sizes in the subspecialties.*

** Survey question was multi-select (i.e., participants were able to select more than one resource used to prepare before answering the questions).

Top Resources Used WHILE ANSWERING Questions

The figure below provides an overview of the top resources accessed while answering questions in MOCA-Peds.* The resource that most pediatricians used while answering questions was UpToDate (63%), followed closely by General Search Engines (44%).**

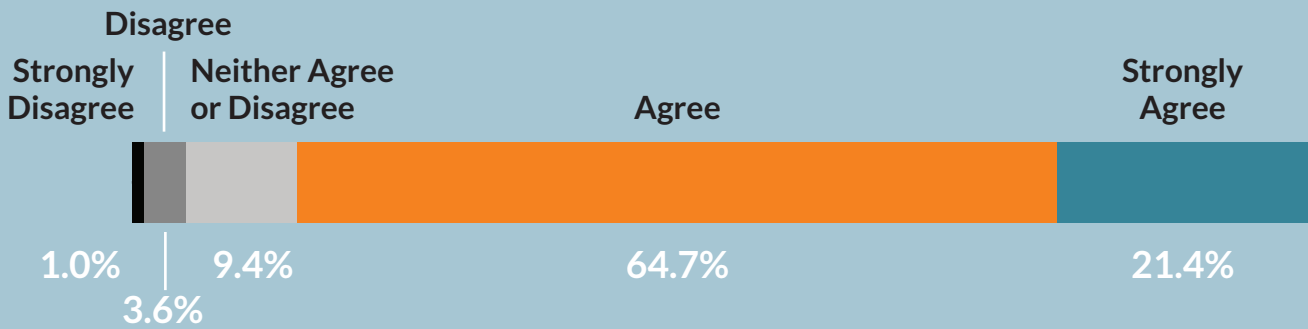|	
UpToDate	**63%**
General search engines (e.g., Google, Yahoo, Bing)	**44%**
Government websites (e.g., CDC, NIH, NICHD)	**33%**
MOCA-Peds: Featured Readings available in Exam Content	**33%**
Free information website (e.g., WebMD, the Mayo Clinic Platform, Wikipedia)	**33%**
Professional association website (e.g., AAP, American College of Cardiology)	**33%**
Peer-reviewed publications	**33%**

** This figure includes data from survey respondents who completed all quarters in MOCA-Peds, were participating for Part 3 credit in any exam type, and **indicated that they accessed resources while answering questions** (n=1575). Data from General Pediatrics and subspecialty exam participants are presented in aggregate due to small sample sizes in the subspecialties.*

** Survey question was multi-select (i.e., participants were able to select more than one resource used while answering questions).
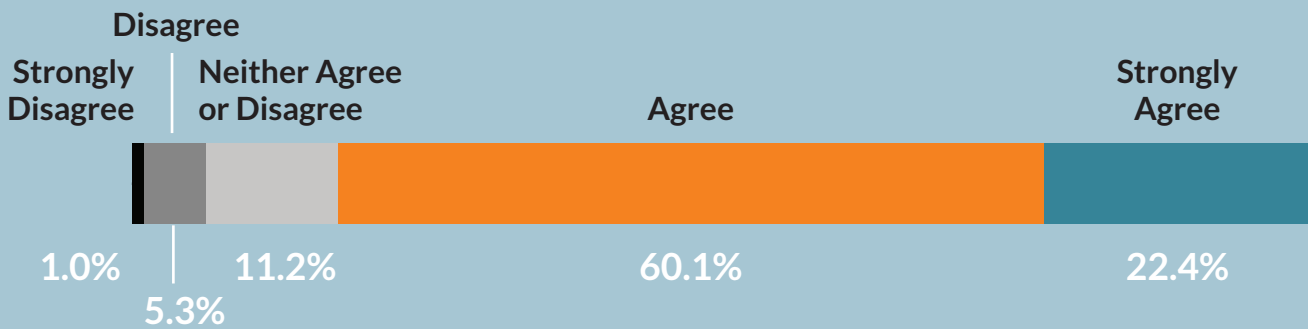
FEEDBACK

Survey respondents were asked to provide their level of agreement with a series of items designed to gather feedback on pediatricians' experience with MOCA-Peds, including question difficulty and relevance.
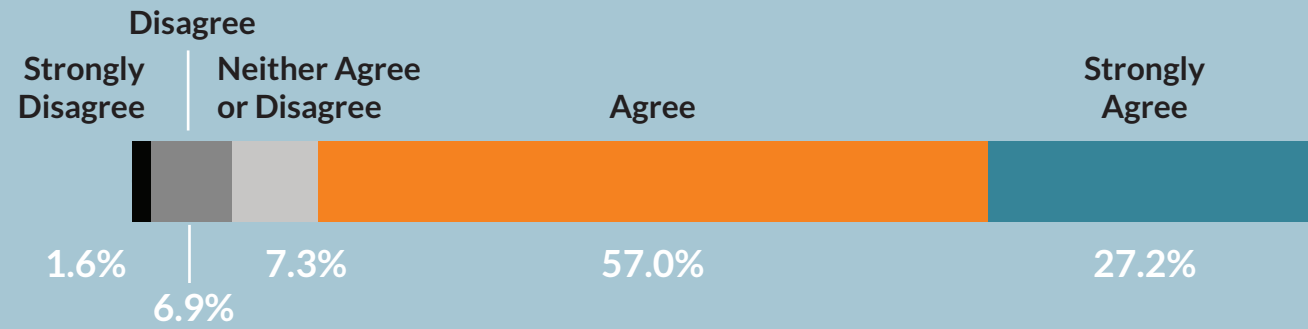
Question difficulty was appropriate.*

Disagree

| Strongly Disagree | Neither Agree or Disagree | Agree | Strongly Agree |

1.0%   9.4%   64.7%   21.4%

3.6%

Questions assessed my clinical judgment, going beyond factual recall.*

Disagree

| Strongly Disagree | Neither Agree or Disagree | Agree | Strongly Agree |

1.0%   11.2%   60.1%   22.4%

5.3%

I had enough time to answer each question.*

Disagree

| Strongly Disagree | Neither Agree or Disagree | Agree | Strongly Agree |

1.6%   7.3%   57.0%   27.2%

6.9%

* These figures include data from survey respondents who completed all quarters in MOCA-Peds and were participating for Part 3 credit in any exam type. Data from General Pediatrics and subspecialty exam participants are presented in aggregate due to small sample sizes in the subspecialties.

Questions in the General Pediatrics version of MOCA-Peds were relevant to general pediatrics.*
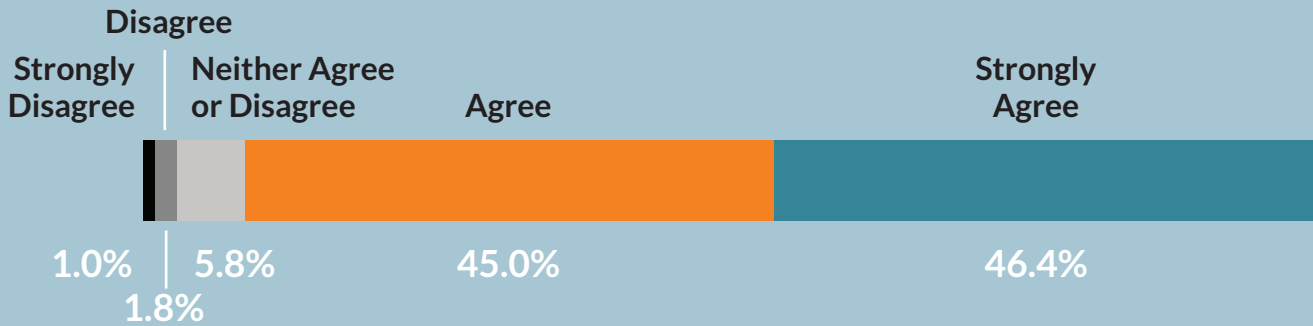
Disagree

Strongly Disagree | **Neither Agree or Disagree** | **Agree** | **Strongly Agree**

1.0% | 5.8% | 45.0% | 46.4%

1.8%
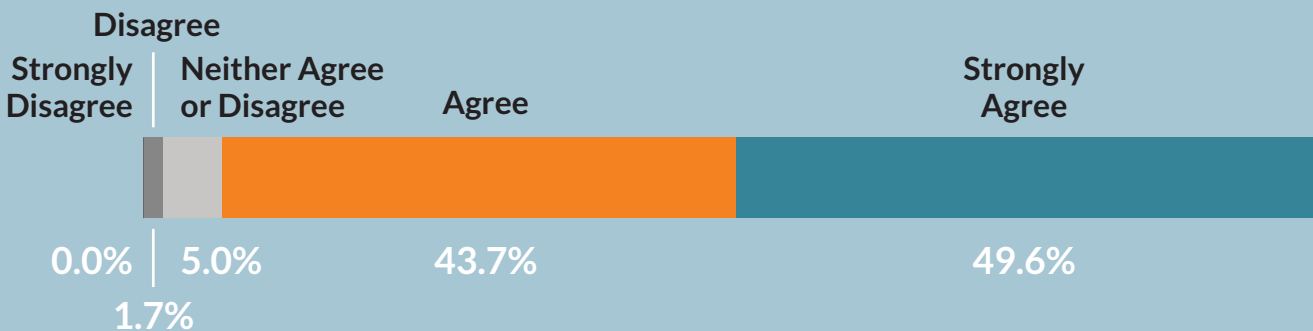
* This figure includes data from survey respondents who completed all quarters in MOCA-Peds and were participating for Part 3 credit for General Pediatrics (n=1686).

Questions in the subspecialty version(s) of MOCA-Peds were relevant to my subspecialty.*

Disagree

Strongly Disagree | **Neither Agree or Disagree** | **Agree** | **Strongly Agree**
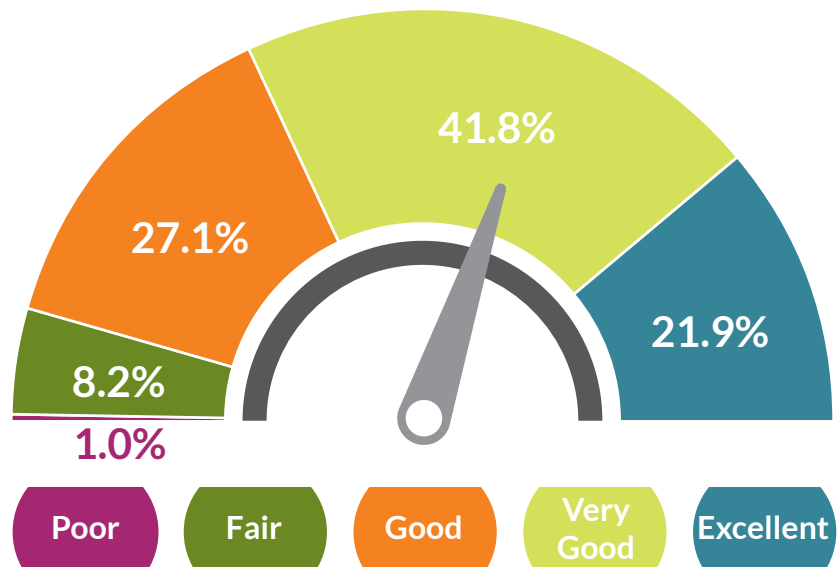
0.0% | 5.0% | 43.7% | 49.6%

1.7%

* This figure includes data from survey respondents who completed all quarters in MOCA-Peds and were participating for Part 3 credit in one of the three subspecialty exam types (n=119). Data from General Pediatrics and subspecialty exam participants are presented in aggregate due to small sample sizes in the subspecialties.

Overall quality of the questions.

Survey respondents were asked to rate the overall quality of MOCA-Peds questions based on their experience participating in 2019.*

The majority of respondents (63.7%) indicated the quality of questions was "Very Good" or "Excellent," with over 90% indicating that MOCA-Peds questions were "Good" or better.

* This figure includes data from survey respondents who completed all quarters in MOCA-Peds and were participating for Part 3 credit in any exam type. Data from General Pediatrics and subspecialty exam participants are presented in aggregate due to small sample sizes in the subspecialties).

1.0%
8.2%
27.1%
41.8%
21.9%

Poor | **Fair** | **Good** | **Very Good** | **Excellent**

LEARNING AND APPLYING KNOWLEDGE

Survey respondents were asked if they learned, refreshed, or enhanced their knowledge from participation in MOCA-Peds in 2019. A follow-up question was then asked to gauge if and how pediatricians were able to apply what they learned to their clinical practice.

Did you learn, refresh, or enhance your medical knowledge based on participating in MOCA-Peds in 2019?

The majority of respondents (93.2%) indicated they had learned, refreshed, or enhanced their medical knowledge as a result of participating in MOCA-Peds.*
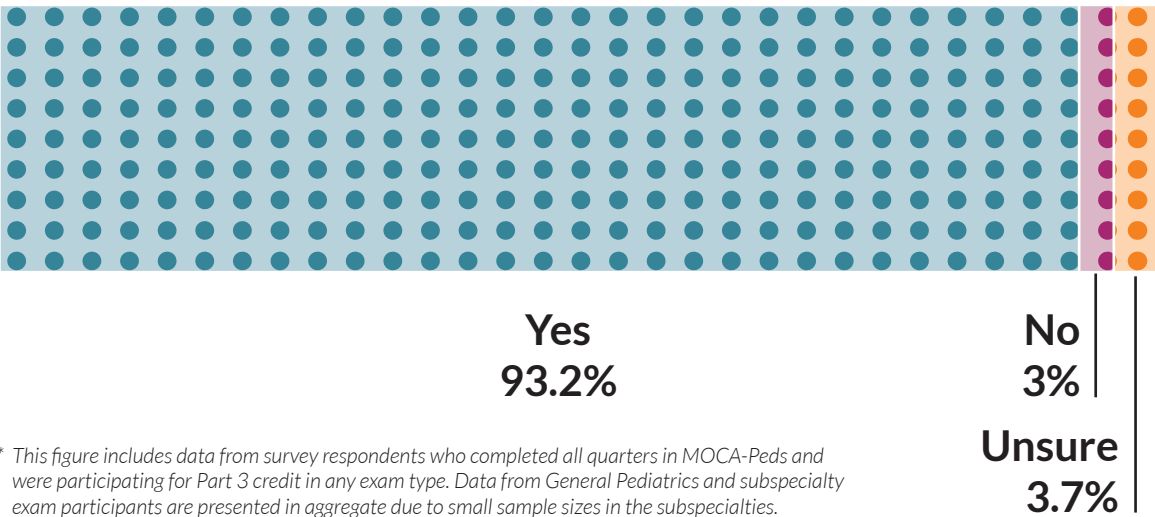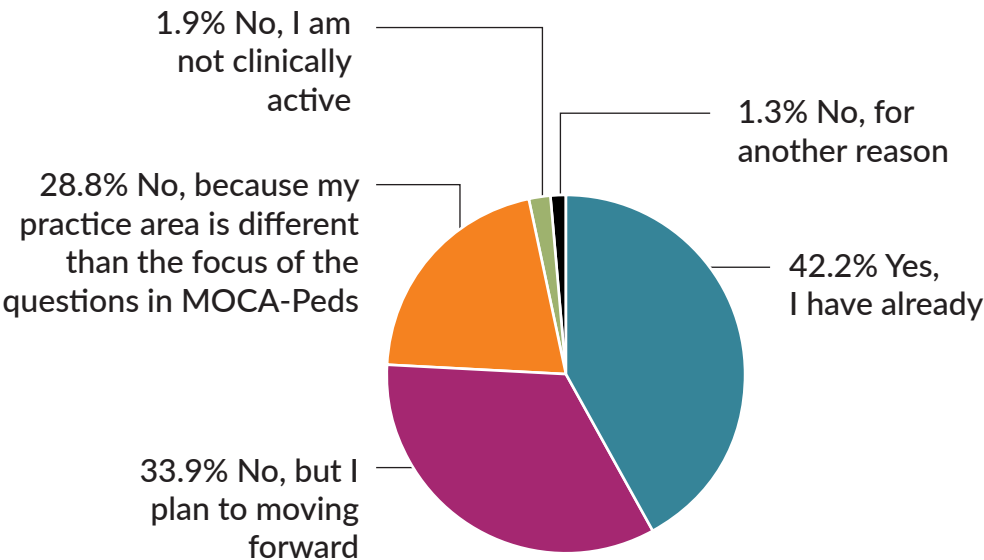
Yes
93.2%

No
3%

Unsure
3.7%

This figure includes data from survey respondents who completed all quarters in MOCA-Peds and were participating for Part 3 credit in any exam type. Data from General Pediatrics and subspecialty exam participants are presented in aggregate due to small sample sizes in the subspecialties.

Were you able to apply any of what you learned from MOCA-Peds in 2019 to your clinical practice?

The majority of survey respondents indicated that they had either already applied what they had learned from MOCA-Peds to their clinical practice (42.2%), or they planned to do so (33.9%) moving forward.*

1.9% No, I am not clinically active

1.3% No, for another reason

28.8% No, because my practice area is different than the focus of the questions in MOCA-Peds

42.2% Yes, I have already

33.9% No, but I plan to moving forward
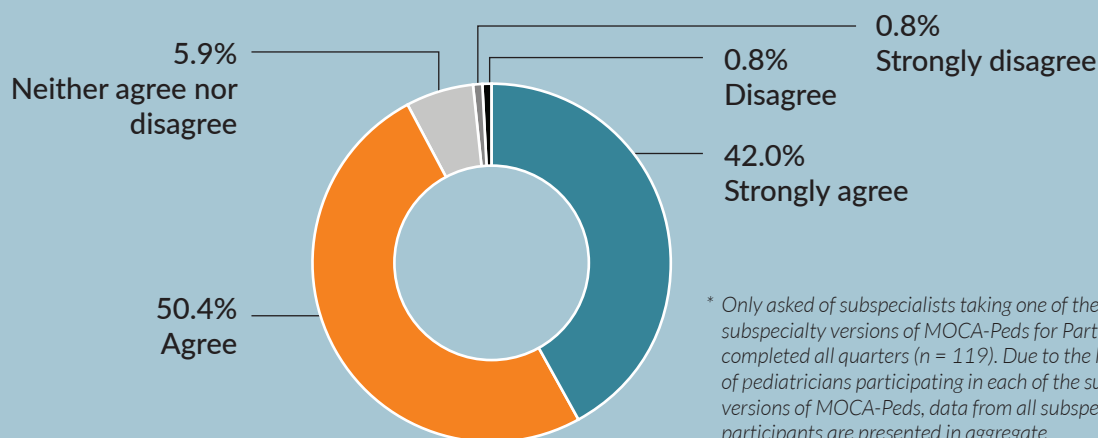
This figure includes data from survey respondents who completed all quarters in MOCA-Peds and were participating for Part 3 credit in any exam type, and indicated they had learned from MOCA-Peds in a previous question (n=1654). Data from General Pediatrics and subspecialty exam participants are presented in aggregate due to small sample sizes in the subspecialties.
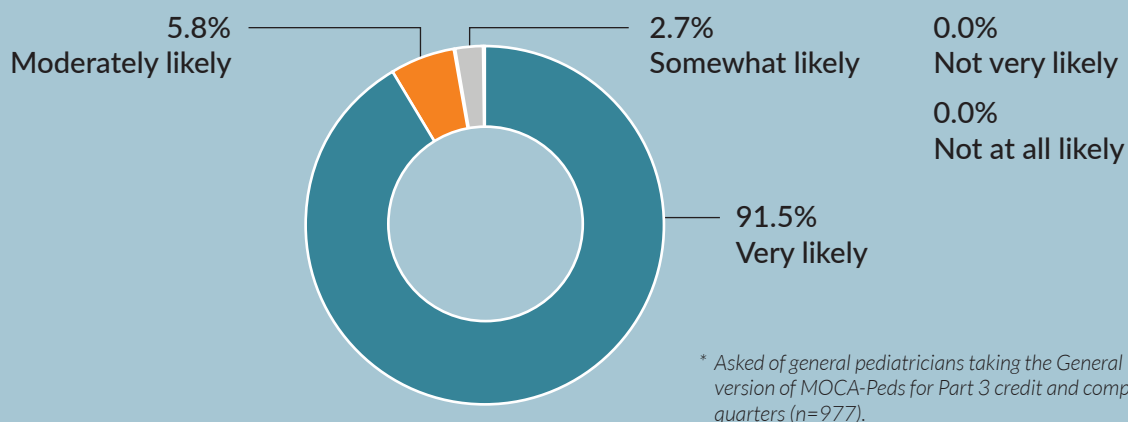
PLANS FOR FUTURE USE

The majority of respondents (90.1%) participating in one of the three subspecialty exam areas agreed or strongly agreed that the MOCA-Peds model would work well for their subspecialty exam.

The vast majority of participants indicated that they were moderately likely or very likely to maintain their General Pediatrics (97.3%) or subspecialty (95.3%) certification using MOCA-Peds in the future.
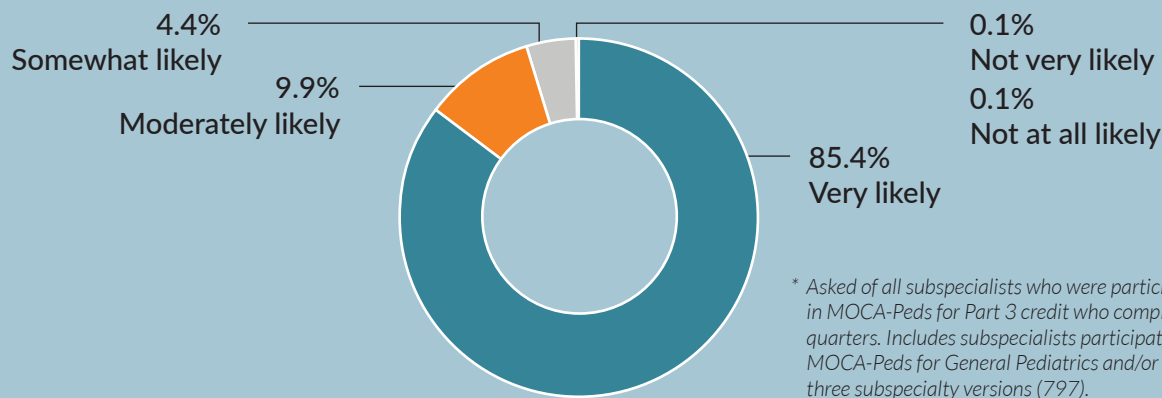
The MOCA-Peds model works well for my subspecialty area(s).*

5.9%
Neither agree nor disagree

0.8%
Strongly disagree

0.8%
Disagree

42.0%
Strongly agree

50.4%
Agree

Only asked of subspecialists taking one of the three subspecialty versions of MOCA-Peds for Part 3 credit and completed all quarters (n = 119). Due to the low number of pediatricians participating in each of the subspecialty versions of MOCA-Peds, data from all subspecialty exam participants are presented in aggregate.

How likely are you to continue with MOCA-Peds to maintain your General Pediatrics certification this MOC cycle?*

5.8%
Moderately likely

2.7%
Somewhat likely

0.0%
Not very likely

0.0%
Not at all likely

91.5%
Very likely

Asked of general pediatricians taking the General Pediatrics version of MOCA-Peds for Part 3 credit and completed all quarters (n=977).

How likely are you to continue with MOCA-Peds to maintain your subspecialty certification this MOC cycle?*

4.4%
Somewhat likely

9.9%
Moderately likely

0.1%
Not very likely

0.1%
Not at all likely

85.4%
Very likely

Asked of all subspecialists who were participating in MOCA-Peds for Part 3 credit who completed all quarters. Includes subspecialists participating in MOCA-Peds for General Pediatrics and/or one of three subspecialty versions (797).

How likely are you to recommend MOCA-Peds to a fellow pediatrician?

Survey respondents were asked to rate, on a scale from 1 to 10, where 1 = "Extremely unlikely" and 10 = "Extremely likely," how likely they would be to recommend MOCA-Peds to a fellow pediatrician. The majority indicated that they would be "Extremely likely" to recommend MOCA-Peds to a fellow pediatrician.*
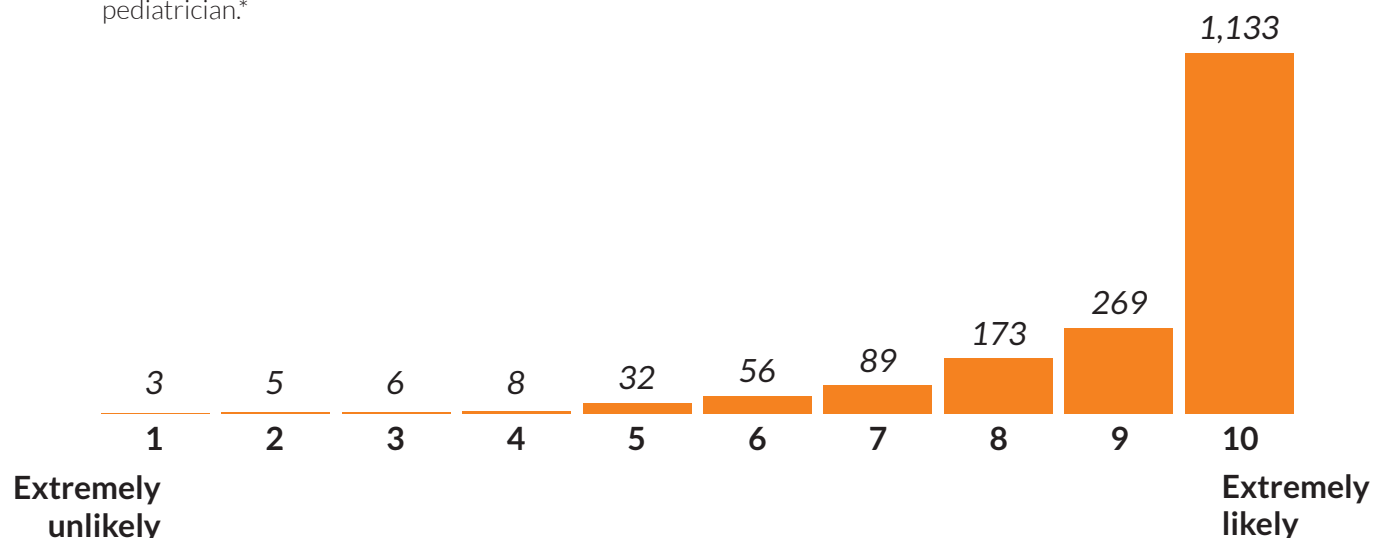
3	5	6	8	32	56	89	173	269	1,133
1	2	3	4	5	6	7	8	9	10

Extremely unlikely   **Extremely likely**

* *This figure includes data from survey respondents who completed all quarters in MOCA-Peds and were participating for Part 3 credit in any exam type. Data from General Pediatrics and subspecialty exam participants are presented in aggregate due to small sample sizes in the subspecialties.*

PART 2

How many participated in MOCA-Peds for Self-Assessment (Part 2) credit

Lifelong Learning and Self-Assessment (Part 2) of MOC is designed to help pediatricians assess and enhance the clinical knowledge and skills that are important to their individual practices, using activities developed by the ABP and other organizations. Pediatricians must earn at least 40 points for Part 2 activities every five years, regardless of how many certifications they maintain.

Though MOCA-Peds' primary goal is to fulfill the Part 3 requirement, pediatricians can participate in MOCA-Peds and receive up to 5 points a year (25 points over the 5-year MOC cycle) toward their Part 2 requirement.

Over 2,000 pediatricians participated in MOCA-Peds for Part 2 credit in 2019, completing at least 80% of all available questions (General Pediatrics = 2,129; Child Abuse Pediatrics = 3; Pediatric Gastroenterology = 29; Pediatric Infectious Diseases = 19).
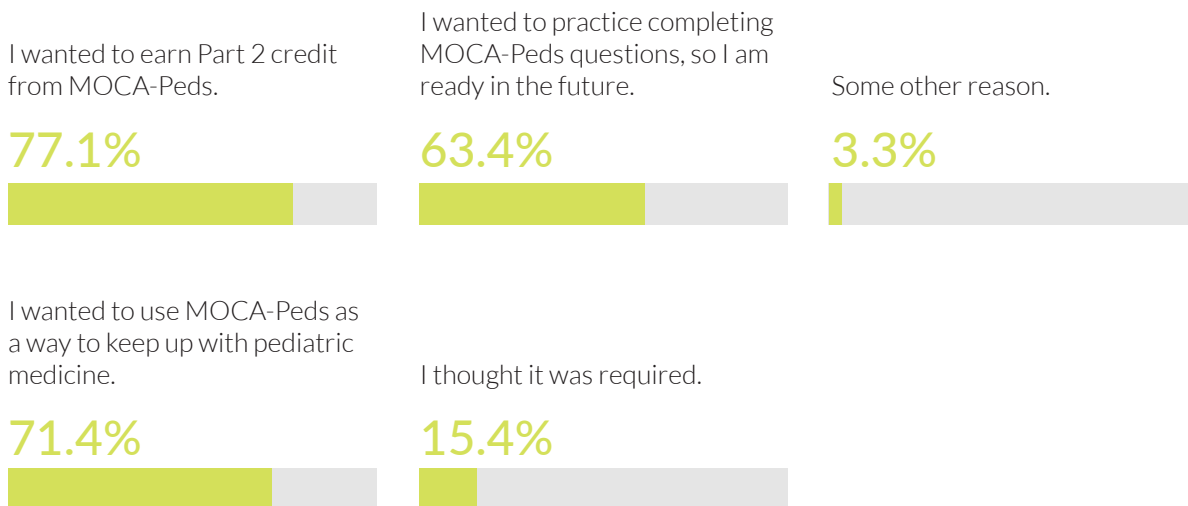
Part 2 for General Pediatrics	N	%	
Number eligible	**8,395**		100%
Answered no questions	4,159		49.5%
Answered one or more questions	4,236		50.5%
Answered at least 80% of questions	2,129		25.4%
Answered all questions	2,037		24.3%

Source: ABP Certification Management System.

Reasons for Participating in MOCA-Peds for Part 2 Credit

1,540 pediatricians who participated in MOCA-Peds for Part 2 credit completed the 2019 MOCA-Peds Follow-Up Survey.

Survey respondents who participated in MOCA-Peds for Part 2 credit were asked to indicate their reasons for participating.* The majority of respondents (77.1%) indicated they participated because they wanted to earn Part 2 credit from MOCA-Peds, with 71.4% indicating they wanted to use MOCA-Peds as a way to keep up with pediatric medicine and 63.4% indicating they wanted to practice MOCA-Peds to prepare for their future assessments.**

I wanted to earn Part 2 credit from MOCA-Peds.

77.1%

I wanted to practice completing MOCA-Peds questions, so I am ready in the future.

63.4%

Some other reason.

3.3%

I wanted to use MOCA-Peds as a way to keep up with pediatric medicine.

71.4%

I thought it was required.

15.4%

 * This survey item was asked of Part 2 participants who completed all quarters in MOCA-Peds for any exam type. Data from General Pediatrics and subspecialty exam participants are presented in aggregate due to small sample sizes in the subspecialties.

** Survey question was multi-select (i.e., participants were able to select more than one reason for participating in MOCA-Peds for Part 2 credit).

Data presented are from the ABP Certification Management System and the 2019 MOCA-Peds Follow-Up Survey.

For questions about MOCA-Peds, please contact mocapeds@abpeds.org.
For questions about the survey research, please contact research@abpeds.org.

THE AMERICAN BOARD of PEDIATRICS
Certifying excellence in pediatrics – for a healthier tomorrow

Developed in collaboration with RTI International

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