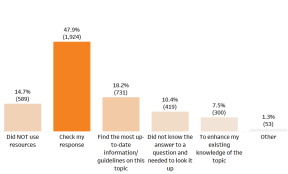
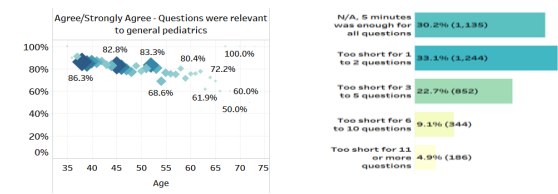




2017 Pilot Summary

Summary of the 2017 MOCA-Peds pilot, use patterns, feasibility, acceptability, and scoring.



We are delighted to share with you results from our 2017 pilot of MOCA-Peds.

MOCA-Peds was developed in 2015-16 as an alternative to the current maintenance of certification (MOC) proctored examination taken at a secure testing center. Hundreds of pediatricians helped develop MOCA-Peds.

In 2017, more than 5,000 pediatricians participated in a yearlong pilot and provided feedback through surveys and focus groups.

Two of our core values at the ABP are transparency and continuous quality improvement. This report was developed with those values in mind.

We welcome your input at mocapeds@abpeds.org.



David G. Nichols, MD, MBA

American Board of Pediatrics
President and CEO

How do I use this report?

This “Slidedoc” report is a novel reporting method being widely adopted by evaluators. Its goal is to increase the breadth of information that can be delivered, decrease text, and provide quick navigation throughout.

Click any item in this running Table of Contents to jump ahead or backward.

Look for these boxes and highlighted text for important concepts on the page.

Underlined text is hyperlinked and will take you to that page (eg, [Table of Contents](#)).

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Pilot Overview

A brief summary of
pilot components



- *Brief description of MOCA-Peds*
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- *Components of the MOCA-peds platform*
- *Sample questions, rationales, and learning objectives*
- *MOCA-Peds development*

01

What is MOCA-Peds?

“MOCA-Peds” stands for Maintenance of Certification Assessment for Pediatrics.

It is a **new, web-based assessment option** for pediatricians to meet their medical knowledge requirement (Part 3) as part of the ABP’s Maintenance of Certification (MOC) program.

Prior to MOCA-Peds, pediatricians were required to visit a **secure test center to take a proctored exam** to meet their MOC requirement.

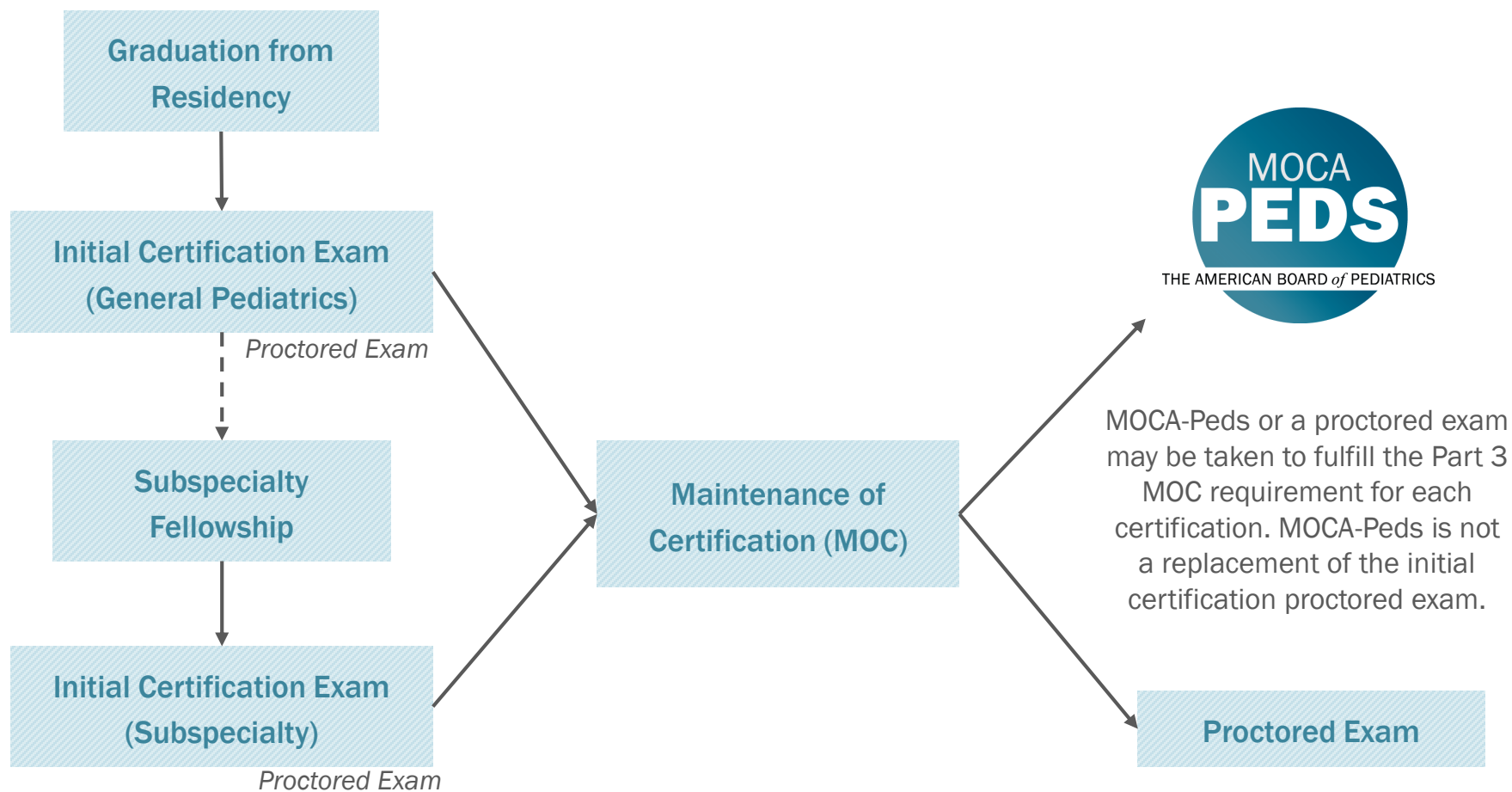


To ensure that the MOCA-Peds model and web-based platform would be an acceptable and feasible option for pediatricians, the ABP:

- Developed MOCA-Peds with pediatrician input in 2015-16
- Piloted MOCA-Peds in 2017 and 2018 with more than 11,000 pediatricians
- Contracted with [RTI International](#) for assistance with development and evaluation, including data collection and analysis

This report describes the results of the 2017 pilot.

Where does MOCA-Peds fit into Certification?



What were the components of the model?

Key components of the 2017 MOCA-Peds model included:

- 20 questions delivered **each quarter** of the year (80 total questions in 2017)
- Questions could be completed **at any time** during that quarter
- **Learning objectives** (question topics) provided before the start of the pilot and available from the home page
- **Answer, references, and rationale given immediately after answer submission**
- **5 minutes** available to answer each question
- **Resources of choice** (eg, books, internet) could be used while answering questions
- **Question History** page to review answers to completed questions and compare to peers' answers

To be eligible to participate in the 2017 pilot a pediatrician had to:

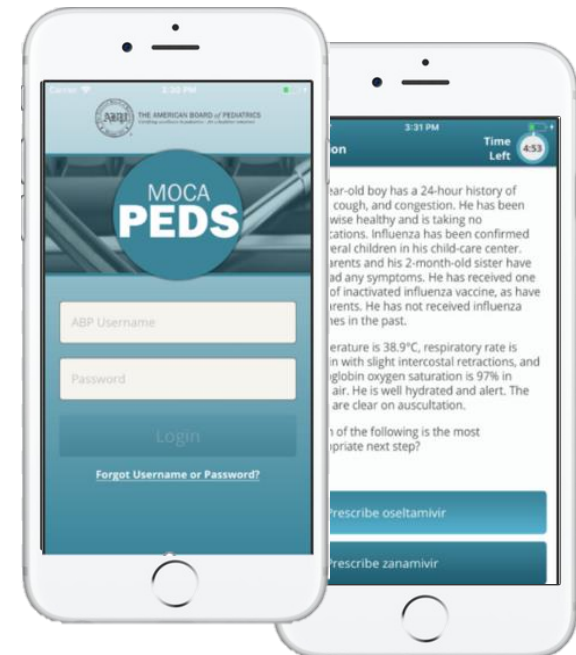
- Be due for their MOC Part 3 exam in 2017
- Be meeting MOC requirements
- Complete a registration survey
- Participate in quarterly surveys

What were the components of the platform?

All questions are made available over the internet and can be completed on a computer, laptop, tablet, or smartphone.

Components of the web-based platform were:

- **Regular reminders** sent via email and optional text message
- **Mobile device access** made available in quarter 2 with a dedicated app (iOS/Android)
- **Security maintained by**
 - Personal login to platform
 - Participation Agreement to abide by the MOCA-Peds Code of Conduct (ie, group work and sharing questions not allowed)
 - Questions delivered in random order to each participant



Sample MOCA-Peds question from the 2017 pilot

GENERAL PEDIATRICS

Question

03:56
LEFT

For the past 5 days, a 9-year-old girl has experienced intermittent, bifrontal, "band-like," nonthrobbing headaches associated with neck muscle tightness but no nausea or sensory disturbances. The headaches improve with ibuprofen. She was a passenger in an automobile that was struck head-on by another vehicle 10 days ago. She did not lose consciousness but experienced mild confusion and difficulty sleeping for several days thereafter. Findings on current physical examination are normal.

Which of the following is the most likely diagnosis?

☒ Postconcussion headache

☐ Analgesic overuse

☐ Migraine

☐ Pseudotumor cerebri

☐ Subdural hematoma

Submit Answer

By clicking the "Submit Answer" button above, you are attesting to compliance with the MOCA-Peds Participation Agreement.

Timer

5 minutes given for each question. Timer allows participant to track how much time is remaining.

Item/Question Stem and Query

Most questions in MOCA-Peds are delivered as clinical vignettes.

Answer Choices

All MOCA-Peds questions are multiple-choice questions.

Submission Button

Once an answer is selected, it may be submitted using this button. The system will save an answer already chosen in case of a dropped connection before submission.

Sample confidence & relevance question from 2017 pilot

Question: Confidence & Relevance

You have selected:

Postconcussion headache

Why am I being asked this?

Your responses to these questions do not affect your score but may be used in determining the future questions you will receive. A summary of your confidence and relevance ratings as they relate to your individual performance can be found on the My Performance page.

How CONFIDENT are you that you answered this question correctly?

Not at all

Slightly

Moderately

Very

How RELEVANT is this question to your practice?

Not at all

Slightly

Moderately

Very

Submit Response

Following each question and prior to seeing the correct answer, pediatricians are asked two questions:

Confidence Question

Pediatricians use this to rate their confidence in their chosen answer.

Relevance Question

Pediatricians use this to rate the relevance of that question to their practice.

These data are:

- Presented to the participants to guide their learning
- Used by the ABP to develop better questions

Sample MOCA-Peds response from 2017 pilot

Top of answer feedback screen

MOCA PEDS
THE AMERICAN BOARD OF PEDIATRICS

Question: Feedback
General Pediatrics

☐ **Bookmark Question** ?

For the past 5 days, a 9-year-old girl has experienced intermittent, bifrontal, "band-like," nonthrobbing headaches associated with neck muscle tightness but no nausea or sensory disturbances. The headaches improve with ibuprofen. She was a passenger in an automobile that was struck head-on by another vehicle 10 days ago. She did not lose consciousness but experienced mild confusion and difficulty sleeping for several days thereafter. Findings on current physical examination are normal.

Which of the following is the most likely diagnosis?

The answer selected is: **CORRECT**

- Postconcussion headache ✓
- Analgesic overuse
- Migraine
- Pseudotumor cerebri
- Subdural hematoma

Learning Objective:

Know the differential diagnosis of headache.

Rationale:

Post-traumatic headaches develop within 1 week of an episode of head or neck trauma and may have qualities resembling migraine or tension headaches along with persistence of one or more postconvulsive symptoms such as sleep or mood disturbances. The true incidence of post-

From the Home Page

A personalized question history, annual learning objectives, and personalized performance report are available from the menu on the left.

Answer Feedback

With each question, the correct and incorrect answers are explained.

Learning Objective

This identifies the specific learning objective for this question. The total list of learning objectives is available from the home page.

Rationale

See next page.

Sample MOCA-Peds response from 2017 pilot

Bottom of feedback screen

BOARD of PEDIATRICS

- Dashboard
- Question
- Question History
- Learning Objectives
- My Performance
- Help and Policies

«

Learning Objective:

Know the differential diagnosis of headache.

Rationale:

Post-traumatic headaches develop within 1 week of an episode of head or neck trauma and may have qualities resembling migraine or tension headaches along with persistence of one or more postconcussive symptoms such as sleep or mood disturbances. The true incidence of post-traumatic headache is controversial, but the majority of headaches after mild concussion appear to subside within 2 weeks, so an initial period of conservative management is indicated before treating with medications such as topiramate, ordering further imaging evaluations for structural complications (assuming the initial imaging evaluation was normal), or referring to a mental health professional. Low doses of caffeine can be a useful adjunct to analgesics in the treatment of migraine but are not indicated for post-traumatic headaches of recent onset. Children with post-traumatic headaches should not engage in sports or vigorous exercise until they are symptom-free at rest and with normal activity and are cleared by a qualified medical provider. Post-traumatic headaches, especially those that persist longer than 3 months, may be complicated by disorders of mood, cognition, or sleep; psychiatric, behavioral, and educational interventions are often necessary to improve these children's chronic pain and functional difficulties.

References:

Blume HK. Headaches after concussion in pediatrics: a review. *Curr Pain Headache Rep.* 2015;19:42. Available at: <https://www.ncbi.nlm.nih.gov/pubmed/26163164>. Accessed November 9, 2016.

Kacperski J, Arthur T. Management of post-traumatic headaches in children and adolescents. *Headache.* 2016;56:36-48. Available at: <http://onlinelibrary.wiley.com/doi/10.1111/head.12737/full>. Accessed November 9, 2016.

Learning Objective

This identifies the specific learning objective for this question. The total list of learning objectives is available from the home page.

Rationale

Rationales are written by the pediatricians who also write the original question. The rationale explains the reason one answer is correct and other options are incorrect.

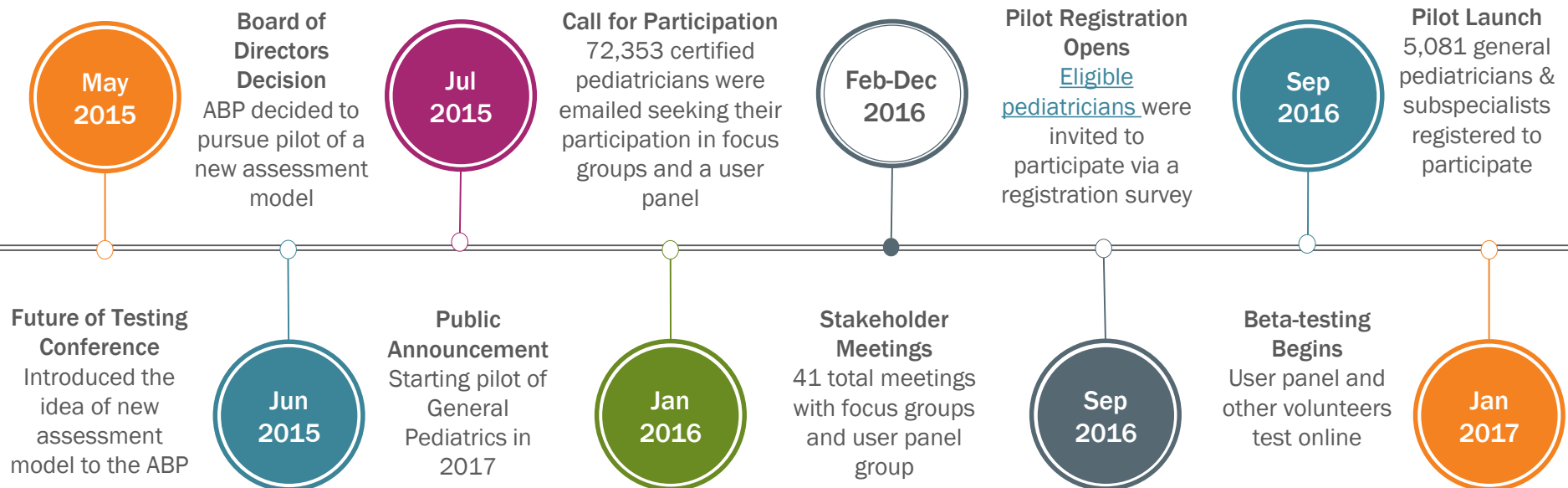
References

References are included for each question. References in the public domain are prioritized.

How was the MOCA-Peds model developed?

The initial MOCA-Peds model was developed by ABP staff based on literature reviews, review of other assessment models, and expert consultation.

In 2016, a total of 41 meetings were held with pediatricians to seek their ideas for refining the MOCA-Peds model. Many participated in focus groups or in user panels. Their feedback led to multiple refinements to the initial MOCA-Peds model and the web-based platform.



Participants

Demographics and
characteristics of
participating
pediatricians



-
- *Pilot participants*
 - *Participant distribution by age, gender, and medical school graduation type*
 - *Participant attitudes toward learning and technology*

02

Who registered to participate in the 2017 pilot?

Of 6,814 eligible pediatricians, 5,081 (74.6%) registered to participate in the pilot. 5,031 (99.0%) of those registered completed at least one MOCA-Peds question. 10 individuals opted-out over the course of the year.

Of those registered:

- 73.1% were general pediatricians
- 26.9% were subspecialists maintaining both their subspecialist certification and General Pediatrics certification.

Of the 1,733 who did not register, the majority took the proctored exam at a secure testing center in 2017.

Participants by Certification Area*

		Participant Count	Participant %
General Pediatrics	General Pediatrics	3,712	73.1%
Subspecialists**	Neonatal-Perinatal Medicine	318	6.3%
	Pediatric Critical Care Medicine	174	3.4%
	Pediatric Emergency Medicine	167	3.3%
	Pediatric Hematology-Oncology	128	2.5%
	Pediatric Cardiology	113	2.2%
	Pediatric Infectious Diseases	68	1.3%
	Pediatric Endocrinology	64	1.3%
	Pediatric Pulmonology	59	1.2%
	Pediatric Gastroenterology	58	1.1%
	Developmental-Behavioral Pediatrics	48	0.9%
	Adolescent Medicine	46	0.9%
	Pediatric Nephrology	46	0.9%
	Pediatric Rheumatology	28	0.6%
	Child Abuse Pediatrics	20	0.4%
	Sports Medicine	11	0.2%
	Hospice and Palliative Medicine	7	0.1%
	Sleep Medicine	7	0.1%
	Neurodevelopmental Disabilities	6	0.1%
	Medical Toxicology	1	0.0%
Total		5,081	100.0%

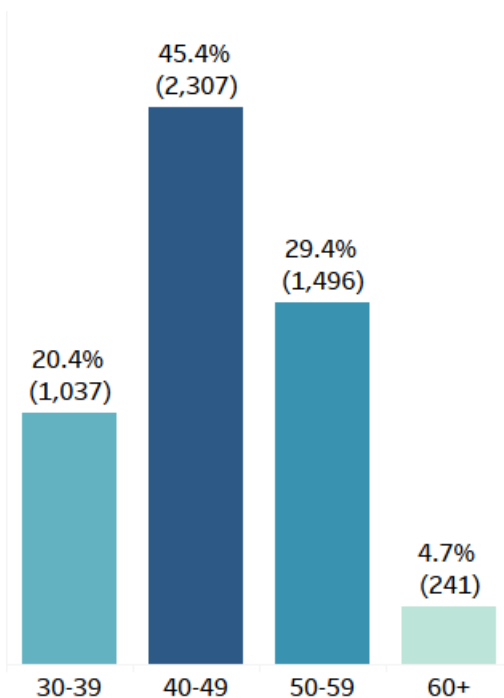
*Data from the Registration Survey (n=5,081) and ABP's Certification Management System.

**Only accounts for a pediatrician's first subspecialty certification.

What do we know about those who registered for the pilot?

Age Distribution

Close to half of the pilot registrants were 40-49 years of age.



Gender Distribution

66.1% (3,359) of pilot registrants were female; 33.9% (1,722) were male.

Medical School Location Distribution

78.1% (3,968) of pilot registrants attended American medical schools; 21.9% (1,113) attended international medical schools.

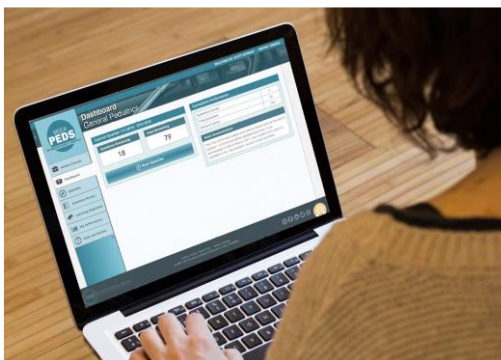
Age distribution was skewed toward older pediatricians compared to the overall pediatric workforce because eligible participants were at least 5 years removed from their initial certification date.

Gender and medical school location distributions closely matched the overall pediatric workforce. For more information about the overall pediatric workforce, please visit the [ABP website](#).

What were attitudes toward learning and technology?

In the Registration Survey, participants were asked several questions about lifelong learning and technology prior to starting the pilot. These results suggested that participants would appreciate the added features that promote learning and that a web-based platform would be feasible for the majority of participants.

96.9% of pediatricians
“Agreed or Strongly Agreed” that lifelong learning is a professional responsibility of all physicians



Lifelong Learning

- 86.5% “Agreed or Strongly Agreed” that they routinely participate in CME programs (eg, live events, online courses) to improve patient care.
- 70.3% “Agreed or Strongly Agreed” that they routinely search computer databases to find out about new developments in pediatrics.

Comfort with Technology

- Nearly all pediatricians were at least moderately comfortable with a computer/laptop (99.7%).
- A small number were not comfortable with smartphone (3.6%) and tablet usage (7.0%).
- All but 1.1% were at least moderately comfortable finding clinical information online.

Access to Technology

- Only 7 individuals (0.1%) indicated limited access to the Internet.
- 56.6% indicated having access to an academic library. This was associated with employment at an academic medical center.

Pilot Questions & Answers

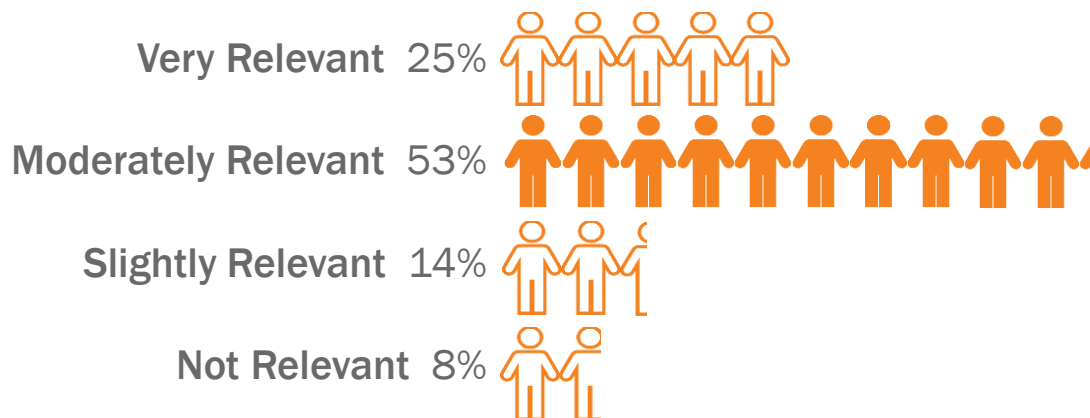
Information on
MOCA-Peds'
questions and
answers feedback



-
- *Question relevance to clinical practice*
 - *Question relevance to general pediatrics*
 - *Usefulness of rationales and references given*

03

Were questions relevant to your clinical practice?



How is the ABP using this and other information to improve MOCA-Peds?

This information helps us to understand the relevance of the MOCA-Peds questions to general pediatrics.

In addition, participants are asked to rate each question for its relevance to their personal practice. Participants can also comment following each question if they disagree with the answer. In 2017, over 8,000 comments were sent and reviewed by the volunteer question writers and ABP staff.

Ultimately, the ratings and comments help the ABP to build a better assessment, including the delivery more relevant questions to individual pediatricians.

Following each MOCA-Peds question, pediatricians were asked to rate the relevance of that individual question to their personal practice.

An example of this question can be [found on page 10](#).

As shown above, **78% of the questions had their most common rating as either “Very Relevant” or “Moderately Relevant.”**

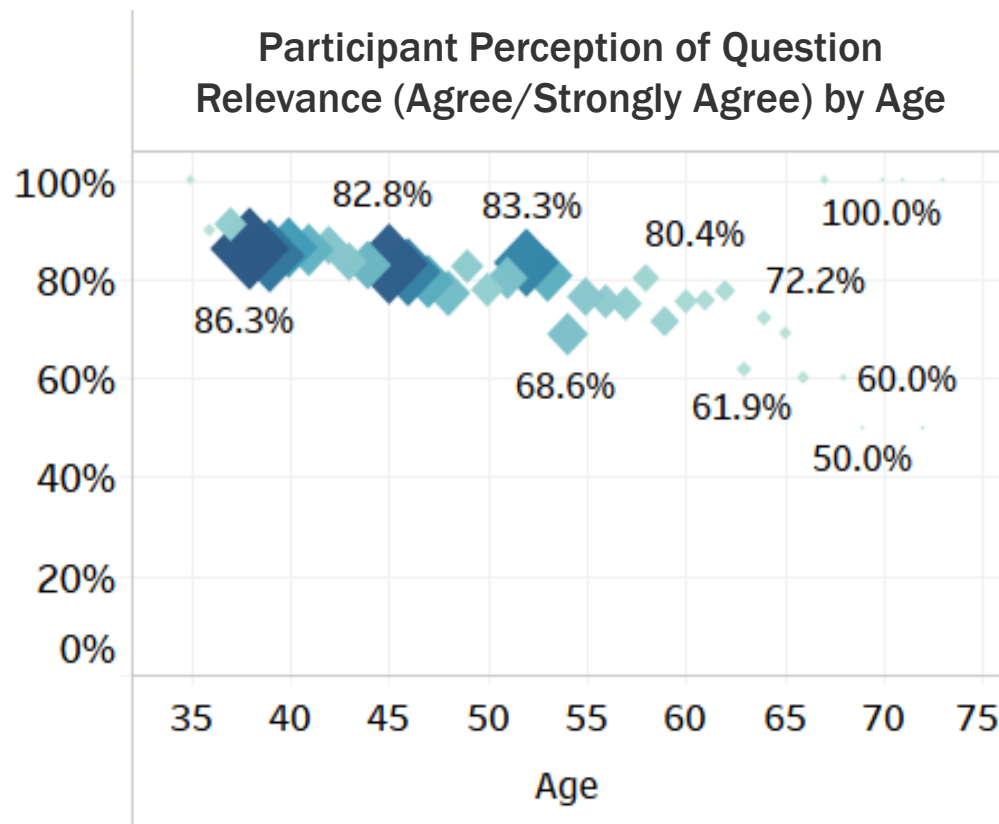
This 78% includes both general pediatricians and pediatric subspecialists taking MOCA-Peds for their General Pediatrics certification. It also includes pediatricians who self-described as not clinically active.

Were questions relevant to general pediatrics?

In the quarter 4 survey, **81.5% (3,268) “Agreed or Strongly Agreed”** that the questions from quarter 4 were relevant to general pediatrics. These results were similar for all of the quarterly surveys.

This graph displays percent agreement by age. The size and color of each diamond indicates the number of participants at that age (the darkest/largest diamond represents 347 pediatricians at age 38). Overall, there was not a great deal of difference by age.

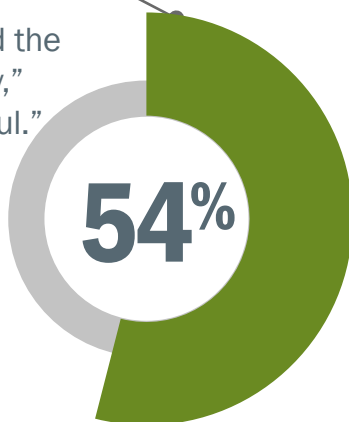
These results include both general pediatricians and pediatric subspecialists.



How useful were the feedback components provided?

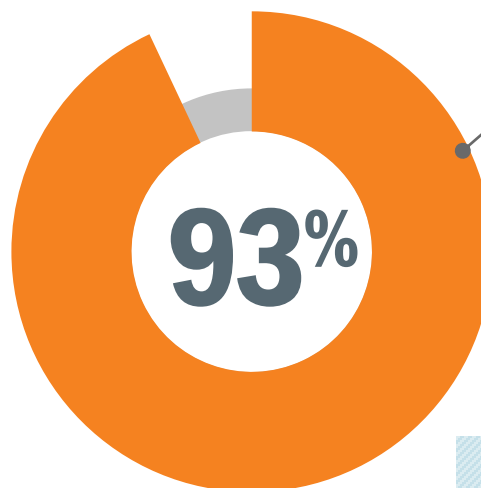
References

54% of pediatricians rated the references as “Moderately,” “Very,” or “Extremely Useful.”



Rationales

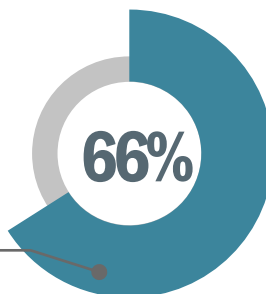
93% of pediatricians rated the rationales as “Moderately,” “Very,” or “Extremely Useful.”



Rationales provided after the question were clearly cited as the most useful component of MOCA-Peds.

Question History Page

66% of pediatricians rated the question history page (accessing prior questions and answer feedback) as “Moderately,” “Very,” or “Extremely Useful.”



When answering a question *incorrectly*, 94% said they "Frequently or Very Frequently" read the rationale.

Conversely, when answering *correctly*, 66% said they "Frequently or Very Frequently" read the rationale.

Using Resources

Which resources were used during the pilot and why

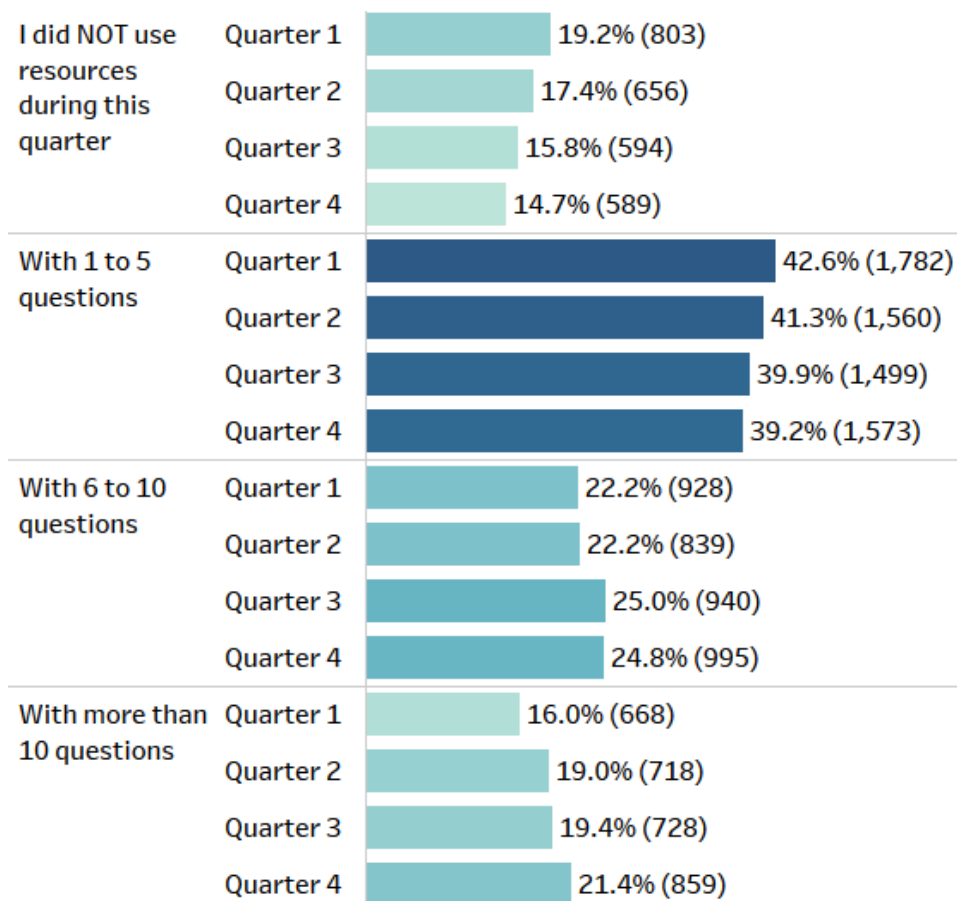


-
- *Use of resources across quarters*
 - *Most common resources used and reasons for use*

04

Were resources (eg, Internet, books) used during questions?

2017 Resource Usage During Questions by Quarter



Following each quarter, the evaluation surveys asked if resources were used *while* answering individual questions.

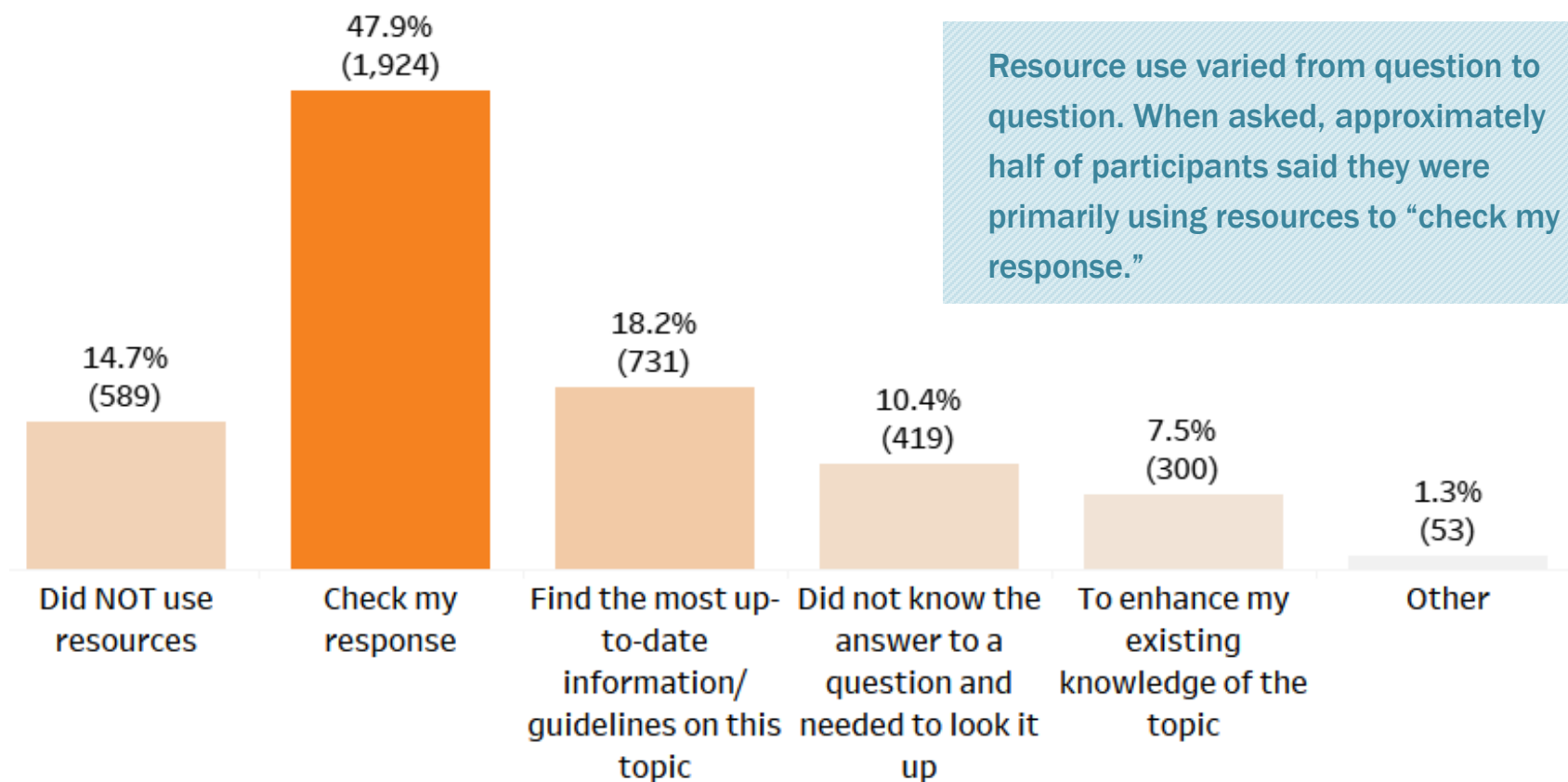
The majority reported using resources for 1 or more questions (81%). This percentage increased during the pilot.

The *most popular* resources were:

- Search engines (eg, Google, Yahoo)
- UpToDate
- Government websites (eg, CDC, NIH, NICHD)
- Professional sites (eg, AAP)

Why were pediatricians using resources?

Participants' Report of Resource Use During Quarter 4



Time

Several perspectives
on participants'
“time” in the pilot
(eg, average time
per question, time in
preparation, total
time spent)

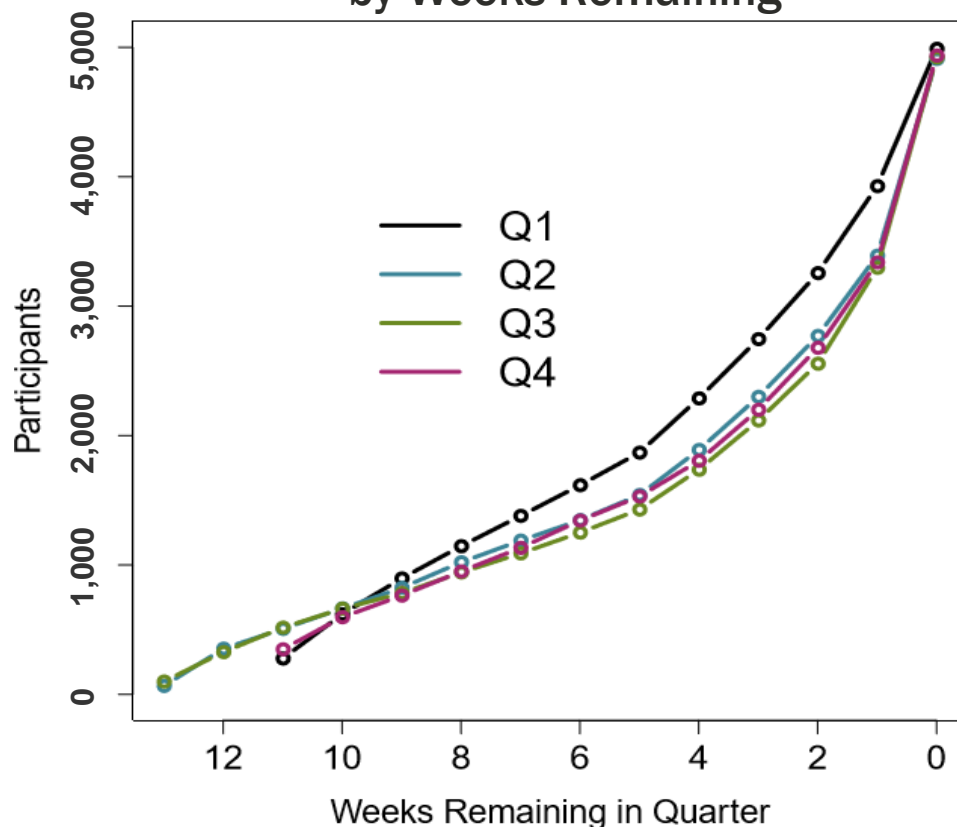


-
- *Quarterly participation*
 - *Weekly participation*
 - *Time taken to answer questions*
 - *Time spent preparing*
 - *Time spent on MOCA-peds overall*

05

When did participants complete their quarterly questions?

Participants Completing Each Quarter by Weeks Remaining



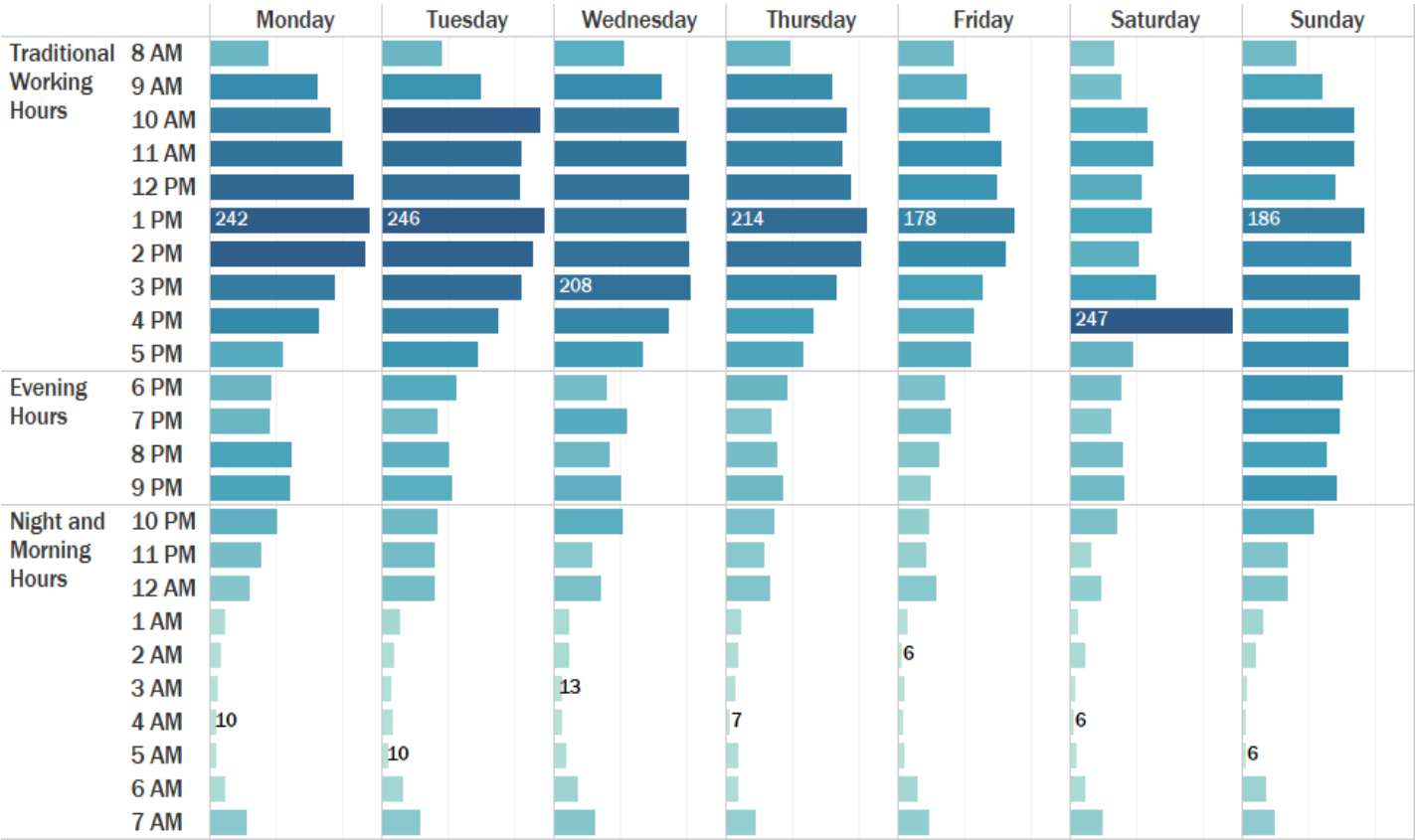
Participants could complete their questions any time during the quarter, which typically aligned with calendar quarters. They could also answer questions across the quarter in any way that worked best for them (eg, doing several questions a week or doing all at one time).

This graph shows the number of participants completing questions by the weeks remaining in the quarter for each quarter. The quarter's deadline is week 0.

Other data not displayed on this graph showed that many participants completed their 20 questions in batches (eg, in one sitting). For example, when comparing start and stop times in quarter 4, 62% answered all 20 questions in 1 batch, within 2 hours. This includes untimed portions such as reading answer rationales.

When did pediatricians participate in MOCA-Peds?

Number of Logins by Hour and Day of Week



During the 2017 pilot, pediatricians logged in predominantly during weekday working hours.

Sunday had a larger number of sessions in the 4th quarter than previous quarters, likely because the final day for that quarter fell on a Sunday.

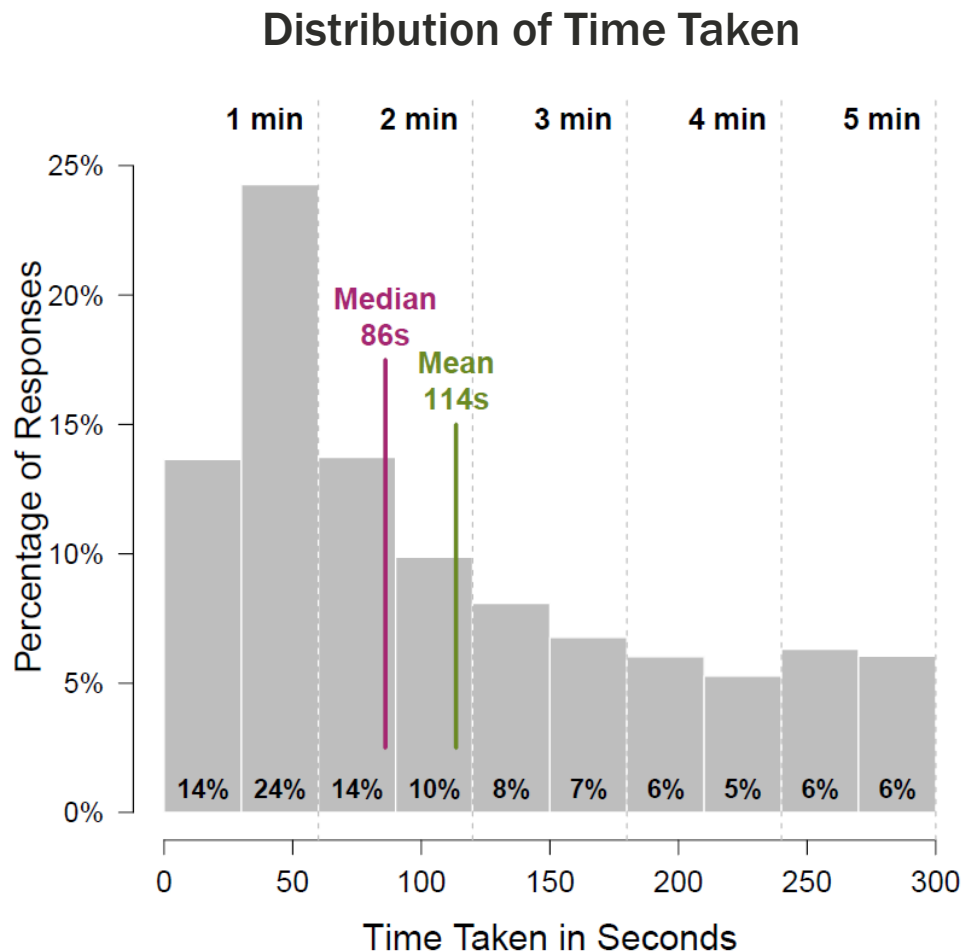
Anonymous user data from Google Analytics in the 4th quarter of 2017 (09/01/17–12/31/17). Maximum and minimum shown for each day. Not corrected for time zone differences; Google Analytics time was set to Eastern Standard.

How long did it take to answer MOCA-Peds questions?

While 5 minutes were available to answer each individual question, the average time spent reading the question and submitting an answer was 1 minute, 54 seconds (114s). This takes into account every pediatrician and every answer/response (n=+400,000).

Although a large percentage of questions were answered within 1 or 2 minutes (62%), the response times varied per pediatrician by question.

This did not include time spent answering confidence and relevance prompts, nor reading the answer's rationale and other materials.



Is there enough time to answer questions?

Although the average time to answer a question was 1 minute and 54 seconds, data on [the previous graph](#) showed that some questions took longer. On the evaluation surveys, some pediatricians asked for more time per question.

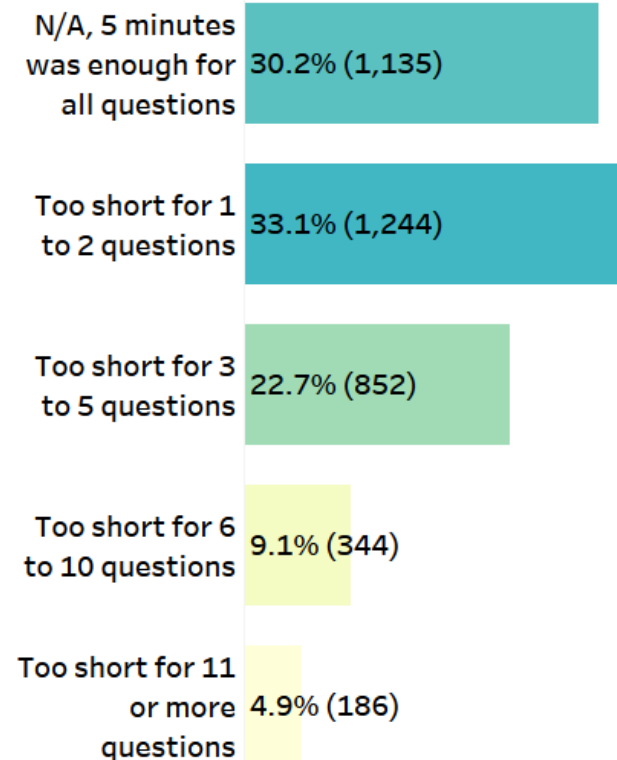
To better understand whether there was sufficient time to answer the questions, the ABP asked two related questions in the Quarter 3 Evaluation Survey:

Survey Question 1) “I had enough time to answer each question.”
78.8% of participants answered "Agreed or Strongly Agreed".

Survey Question 2) “How often did you feel the 5-minute time limit was too short for questions within each quarter (20 questions)?”

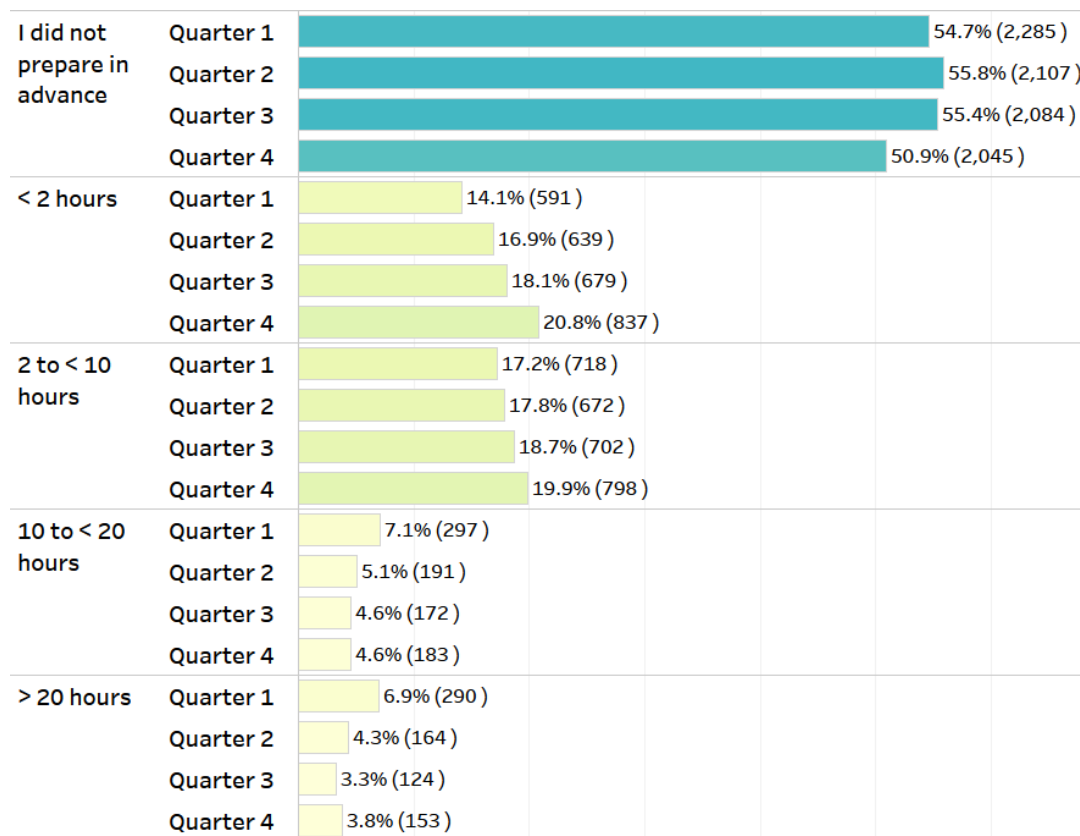
Results shown in the graph to the right, indicate **that 63.3% felt this was true for 2 or fewer questions. About 14% felt this was true for 6 or more questions.**

Participant Perceptions of 5-Minute Time Limit



Before starting, how much time did pediatricians study?

2017 Preparation Time Before Starting Questions by Quarter



Participants varied greatly in their preparation habits. About half of those participating in MOCA-Peds did not study at all.

There were no significant differences by quarter. Across the quarters, however, preparation time appears to decrease minimally for those participating.

The most popular preparation resources were:

- UpToDate
- AAP's PREP® The Curriculum
- Search engines (eg, Google, Yahoo)
- Professional sites (eg, AAP)

How much time was spent preparing for and participating in MOCA-Peds overall?

A large number (~50%) of participants reported no preparation for MOCA-Peds before taking questions.

Related to studying, in quarter 4, about 50% of participants reported the usefulness of the **learning objectives**, offered at the beginning of the year.



On average, pediatricians spent 3 hours and 50 minutes logged into MOCA-Peds for the entire 2017 pilot.

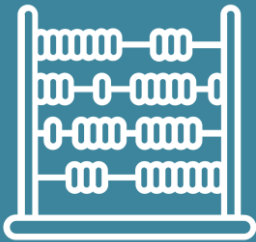
This does not take into account time spent off the MOCA-Peds platform (eg, studying learning objectives, reviewing materials offline).

In the End-of-Pilot Survey, pediatricians self-reported on the overall time spent on the pilot, including all facets (eg, studying, taking questions, reading rationales, and reviewing question histories).

Hours Spent Overall	% Responding
< 5 hours	26.6%
5 to < 10 hours	26.5%
10 to < 20 hours	22.7%
20 to < 40 hours	15.8%
> 40 hours	8.4%

Scoring Results

How the pilot
was scored
and what the
results were



-
- *Standard setting*
 - *Scaled scoring*
 - *Passing rate for the pilot*
 - *Implications for 2019 and beyond*
 - *Comparison to proctored exam*

06

How was the passing score determined for the pilot in 2017?

Standard Setting

For all of its assessments (including MOCA-Peds), the ABP brings in practicing pediatricians to participate in a well-established psychometric process known as "standard-setting" that is used to determine the "passing score" or "cut score."

For the 2017 pilot, a panel of pediatricians, both MOCA-Peds participants and non-participants, were brought to the ABP to help set the passing standard.

During the process, the standard setting panel reviewed a large sample of questions from the pilot, thoroughly discussed the level of knowledge necessary to safely practice general pediatrics, and made judgments about how a practicing general pediatrician would perform on each question. The panelists' responses were collected and used to calculate the passing score.



What is a scaled score and how is it used?

Scaled Scoring

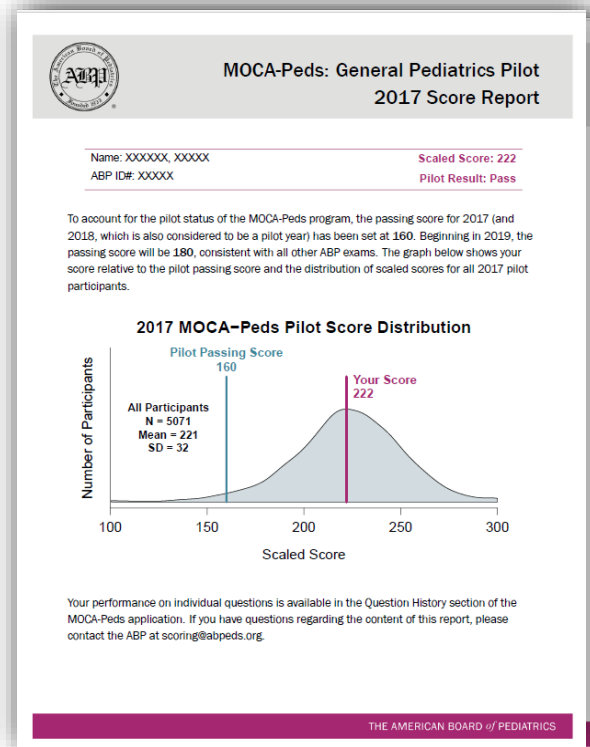
In addition to the standard-setting process, the ABP reports each individual pediatrician's performance using "scaled scores", which are simply **scores that have been adjusted to account for the difficulty of the questions a pediatrician receives.**

Because pediatricians are randomly assigned a set of questions from a larger pool of available questions, scaled scores help to ensure that a participant is neither advantaged nor disadvantaged by receiving a slightly easier or harder set of questions.

In the 2017 pilot, a final scaled score of 1 corresponded to approximately 5% correct or fewer, and a scaled score of 300 corresponded to approximately 95% correct or greater.

After calculating scaled scores at the end of the year, individual score reports were made available in mid-January 2018. See the sample report to the right.

End-of-Year Score Report



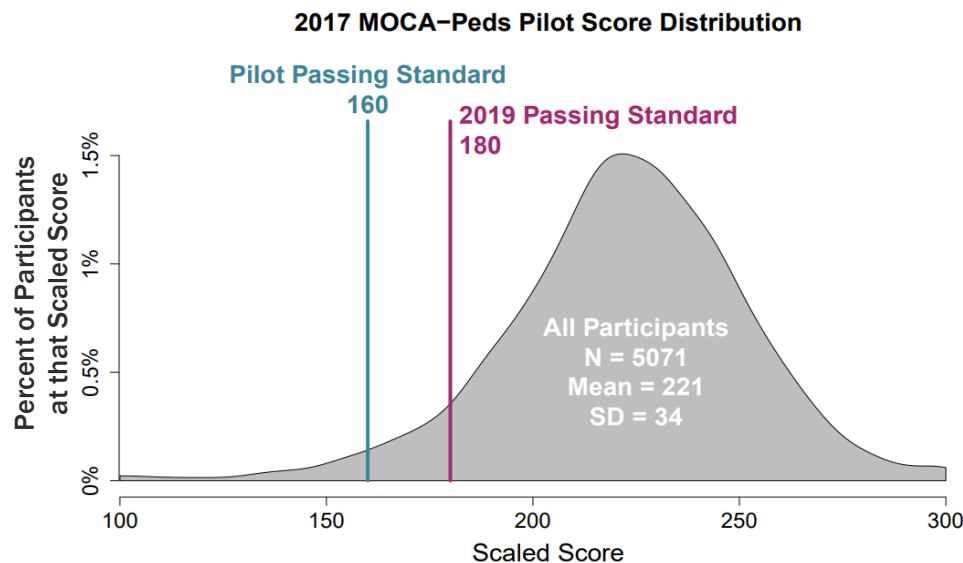
What was the MOCA-Peds passing rate in 2017?

Passing Rate

With the **passing standard set at 160**, **96% of all registered participants in the 2017 pilot passed**. This includes individuals who registered but did not complete any MOCA-Peds questions. If we limit the analysis to **those who completed 60 questions or more**, **98% passed** (average scaled score of 223 on a scale of 1 to 300).

Prior to starting the pilot, the ABP decided to set the MOCA-Peds *pilot passing standard score at 160 for the 2017 and 2018 pilot years*. This is slightly lower than the 180 standard score used for all other ABP examinations.

This was to take into account any issues related to the pilot year as the web-based platform was tested and revised



[Click here](#) to see the anticipated pass rate starting in 2019. →

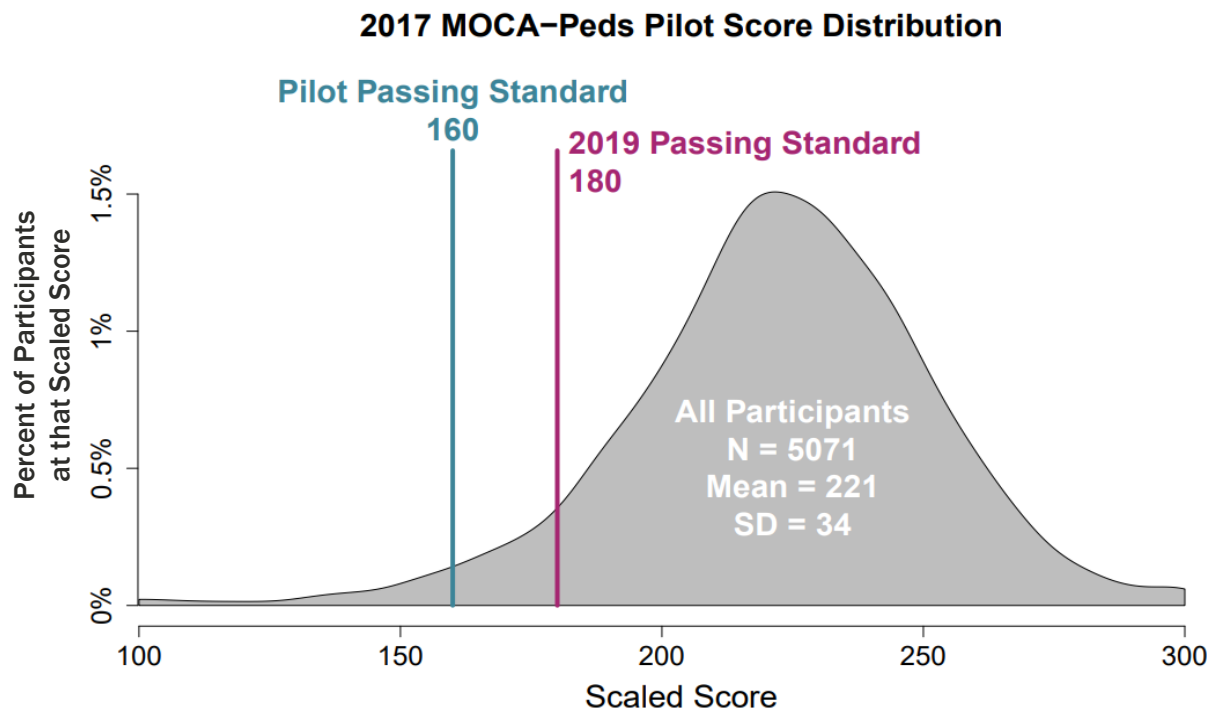
What is the projected passing rate once the pilot is complete?

Starting in 2019, the passing standard score will be set at 180, consistent with all other ABP examinations.

96% of participants in the 2017 pilot who completed all 80 questions would have passed if the passing standard had been set to 180 instead of 160.

This passing rate is consistent with the passing rate for the proctored MOC exam in 2017.

Based on these data, the ABP anticipates that the majority of pediatricians who actively participate in MOCA-Peds in 2019 will pass.



How did MOCA-Peds compare to the proctored exam?

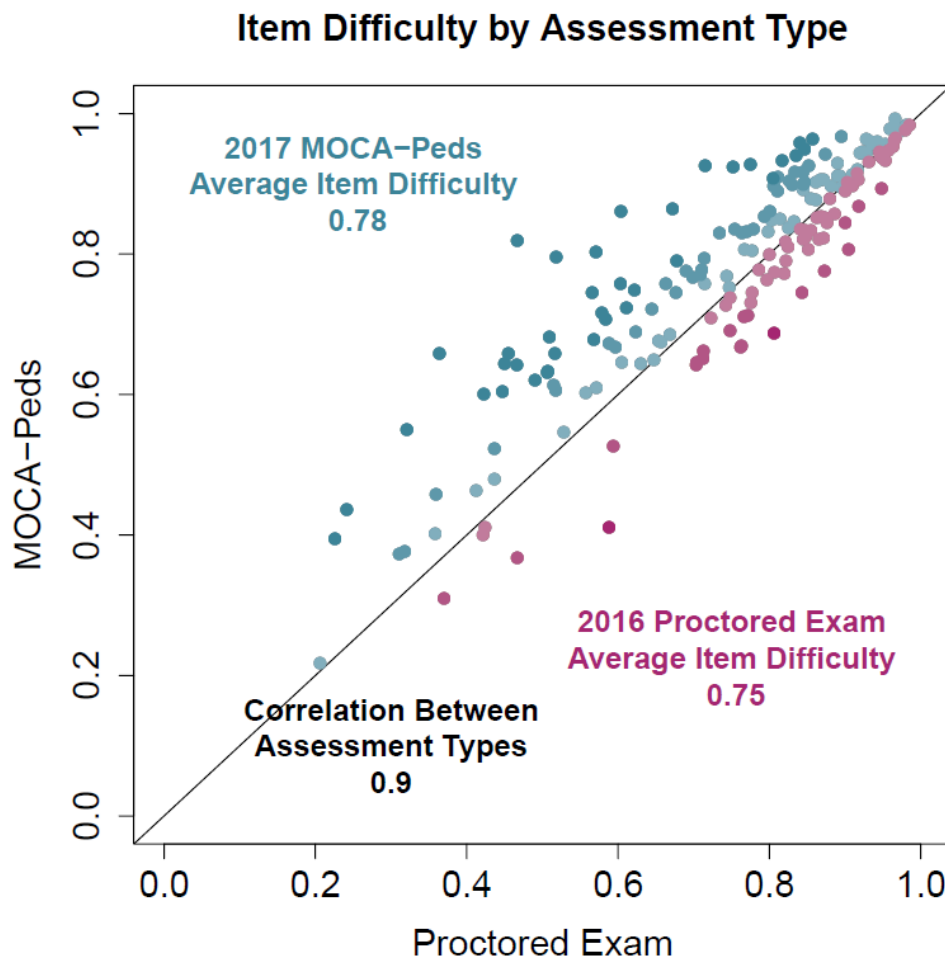
Using Item Difficulty to Assess the Validity of MOCA-Peds

To help validate the assessment properties of MOCA-Peds, questions asked in the MOCA-Peds pilot in 2017 were administered on the MOC proctored exam in 2016.

ABP staff then looked at the **item difficulty** for each question. The item difficulty describes the proportion of test takers who answered that particular question correctly. Item difficulty ratings for MOCA-Peds were compared to the 2016 proctored exam.

Results

There was a strong, positive correlation between item difficulties on the 2017 pilot and the 2016 proctored exam, showing that items performed similarly between the two testing modalities. The mean difference in item difficulties of 0.03 shows that test takers performed slightly better on the items, on average, when they had access to resources of their choice.



Learning

Pediatrician self-reported learning and clinical practice change as a result of participation



-
- *Proctored exam vs MOCA-Peds*
 - *Learning from participation*
 - *Learning and practice change*

07

How do learning opportunities compare between MOCA-Peds and the proctored exam?



MOCA-Peds

One of the primary reasons the ABP chose to pilot MOCA-Peds was to increase the available learning opportunities for pediatricians while still providing an assessment of medical knowledge and clinical judgement.

Learning opportunities in MOCA-Peds in 2017 included:

- Opportunity to review 40 learning objectives prior to completing any questions, as opposed to the proctored exam where questions may be on any topic in the content outline
- Opportunity to use resources while answering questions
- Inclusion of rationale and references following each question
- Opportunity to complete another question on the same learning objective, later in 2017, to reinforce previously reviewed material
- Inclusion of question history page to review past questions and answers
- Inclusion of peer benchmarking for each question



Proctored Exam

Focus groups were held with practicing pediatricians in 2016 to provide input on the development of MOCA-Peds. The two most common statements about the proctored exam were:

- “I cram for the exam and forget everything after the fact.”
- “No feedback is given on how I did on the exam except a score.”

Focus group participants were generally excited about the anticipated learning opportunities in the 2017 pilot.

How did MOCA-Peds effect learning and practice change?

Respondent Self-Report of Learning and Clinical Practice Change

On the End-of-Pilot Survey in January 2018, we asked, “Did you **learn, refresh, or enhance your medical knowledge** based on using MOCA-Peds in the 2017 pilot?”

2.4% (n=69) said **“No.”**

97.6% (n=2,787) said “Yes.”

Those who answered “Yes” were then asked, “**Were you able to apply any of what you learned to your clinical practice?**”

21.2% (n=592) said, “**No, because my practice area is not general pediatrics focused**” or “**No for any other reason.**”

16.8% (n=464) said “No, but I plan to moving forward.”

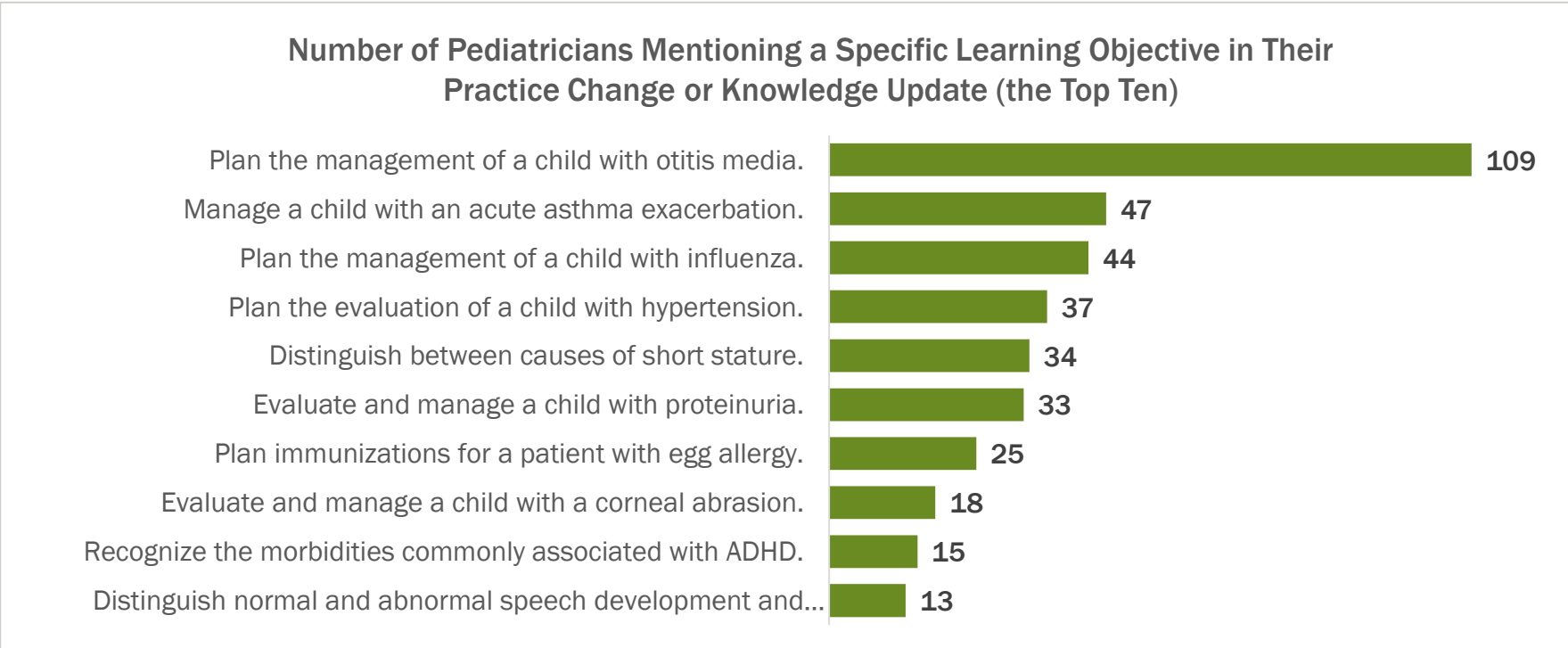
62.0% (n=1,727) said “Yes, I have already.”

These 62% were then asked “What was the **most significant practice change(s)** you made as a result of participation in the 2017 pilot?” Their responses are on the [next page](#).

What are examples of pediatrician practice change?

Over 1,400 responded to “What was the most significant practice change(s) you made as a result of participation in the 2017 pilot?”

Many commented that they were conducting a more thorough patient history or reading new guidelines. Over 700 pediatricians mentioned a practice change. Many noted a specific clinical area matching to one of the pilot’s learning objectives. A preliminary analysis is below.



What are specific examples of pediatrician practice change?

Some quotes from “What was the most significant practice change(s) you made as a result of participation in the 2017 pilot?”

“I identified a Kawasaki pt based on review - not common in our practice – potentially life saving ; that is just one instance...”

“1. I became aware of my deficiency in acute drug intoxication 2. Honestly, I thought I was better at behavioral pediatrics than this assessment indicated; I will work on that 3. Excellent review of allergies”

“The pilot helped me see where my deficiencies were in evaluating developmental milestones in well child care.”

“Started to pay attention to features of Autism.”



“I'm a neonatologist with a follow-up clinic for babies discharged from the NICU. In many areas I realized that some of my practice in the clinic might have been dated. I now have far more frequent discussions with both my general and subspecialty peds colleagues regarding the outpatient care of my former patients seen in their clinics. Having to go read up on the topics I got wrong in my answers was also enlightening [...] I truly believe that this should be the way of the future to ensure practitioners keep up to date.”

Conclusions

Pediatricians'
perspectives
from the pilot

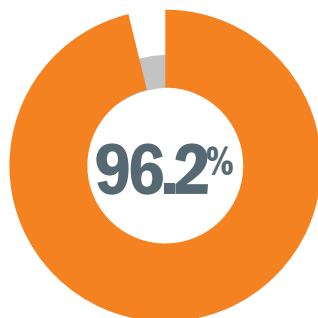


-
- *Pediatricians choice about MOCA-Peds vs. the proctored exam*
 - *Feasibility of MOCA-Peds*
 - *ABP's decisions about MOCA-Peds*

08

Will participants choose MOCA-Peds in the future?

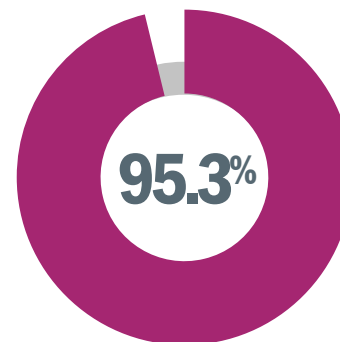
The majority of pilot participants prefer MOCA-Peds for their **General Pediatrics Certification** over a proctored exam.



Of all participants responding to the End-of-Pilot Survey, **96.2% (n=2,748)** said they would rather use the operational version of MOCA-Peds (starting in 2019) to maintain their General Pediatrics certification than the proctored exam. This included both general pediatricians and subspecialists.

1.4% (n=40) preferred the proctored exam and 2.4% (n=68) were not going to continue to maintain their general pediatrics certification.

The majority of subspecialty pilot participants prefer MOCA-Peds for their **Subspecialty Certification** over a proctored exam.



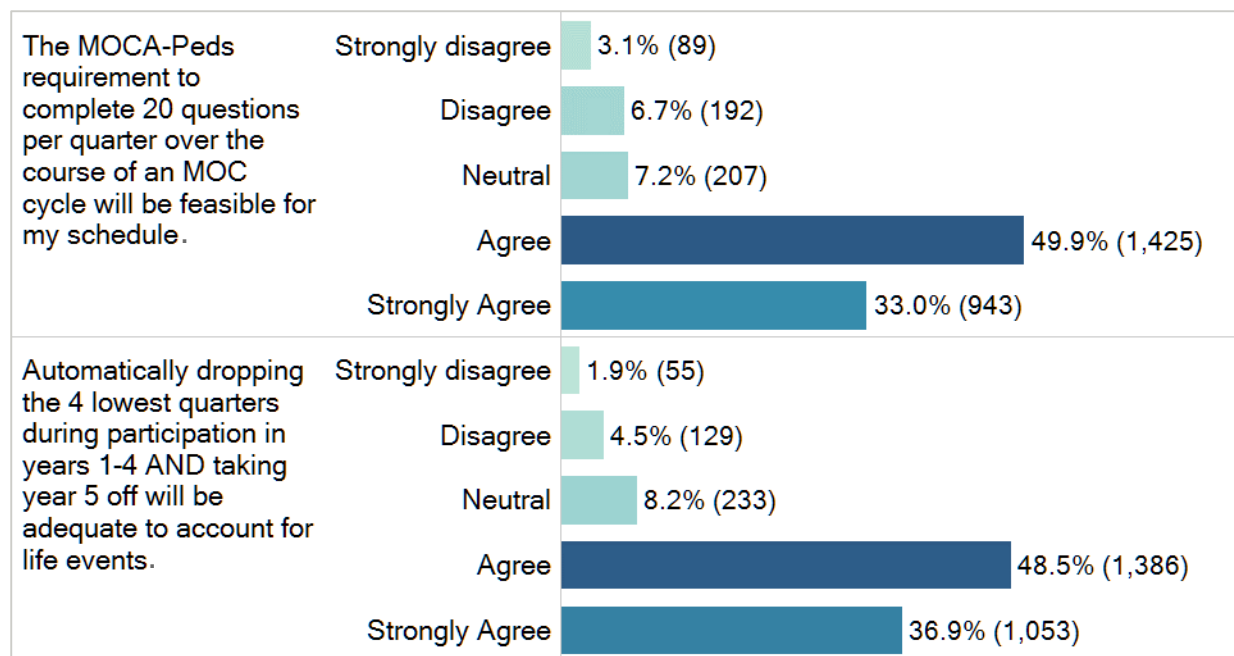
Of the 720 subspecialists responding to the End-of-Pilot Survey, **95.3% (n=686)** said they would rather participate in the operational version of MOCA-Peds (once available in their subspecialty) to maintain their subspecialty certification than the proctored exam.

2.1% (n=15) would prefer the proctored exam and 2.6% (n=19) were not going to continue to maintain their subspecialty certification.

Is MOCA-Peds feasible for pediatricians?

The data below explore pediatricians' attitudes toward participating in MOCA-Peds on a regular basis beyond just a 1-year pilot. Please continue to the "What's Next" section for a more in-depth explanation of the operational version of MOCA-Peds starting in 2019.

On the End-of-Pilot Survey, participants read a description of how the ABP planned to implement the operational version of MOCA-Peds in 2019. They were then asked to rate its feasibility.



Based on positive feedback from the 2017 MOCA-Peds pilot, those of us serving on the ABP's Board of Directors approved MOCA-Peds as an alternative for meeting the assessment requirement in continuing certification.

While most participants preferred MOCA-Peds, the ABP Board of Directors is committed to providing choice and feasibility for pediatricians maintaining their certification. Therefore, the proctored exam will continue to be an option for those who prefer it over MOCA-Peds.

All of us on the ABP Board of Directors hope that MOCA-Peds helps pediatricians to identify their personal knowledge gaps, learn new information as it becomes available, and continue applying what they learn to improve care to their patients.

Thank you to all the pilot participants for your openness to try a new ABP program and for your honest feedback. Together, we can continue to improve the ABP's continuous certification program and help children and families.



Ann E. Burke, MD

2018 Chair, ABP Board of Directors

Wright State University Boonshoft School of Medicine

Professor of Pediatrics

Director, Pediatric Residency Training Program

What's Next

2018, 2019
and beyond



-
- *2018 pilot*
 - *2019 launch for General Pediatrics*
 - *Subspecialty certificates launching in 2019 and after*
 - *Changes to MOCA-Peds starting in 2019*

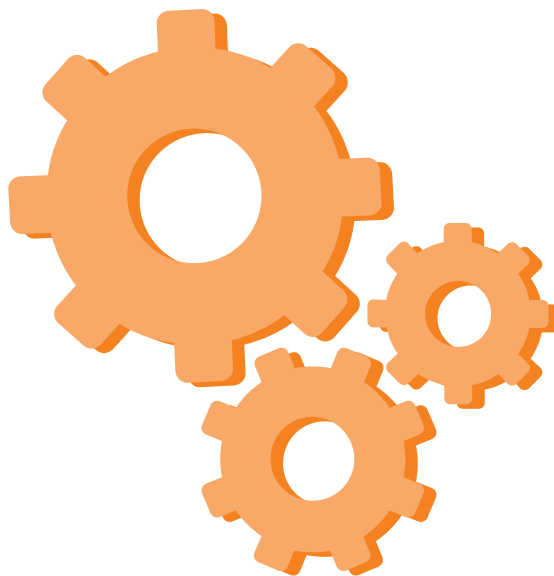
09

What is happening in 2018?

2018 Pilot

In 2018, a brand new cohort of 6,025 pediatricians registered to participate in the pilot (81.1% of the 7,562 registered in 2018). As of August 2018, most have continued to participate each quarter.

Although not required for certification, a few thousand of the participants from the 2017 pilot have continued to participate in 2018. Those meeting the passing standard in 2018 will receive Part 2 MOC credit for their participation, as they did in 2017.



2018 Pilot Evaluation

The ABP, again in coordination with [RTI International](#), is collecting evaluation survey data from the 2018 participants and will continue to analyze and disseminate the data from 2017 and 2018 as quickly as possible.

Several modifications to the program have already been made (eg, inclusion of reference articles prior to taking questions). Survey and focus group data will continue to help the ABP understand areas for further improvement of MOCA-Peds.

What is happening in 2019?

If you are a pediatrician and want to learn about your options, please log in to your [ABP Portfolio](#).

To learn more about MOCA-Peds, please visit [our website](#).



General Pediatrics

Starting in January 2019, those scheduled to start MOCA-Peds will transition into the operational version of MOCA-Peds instead of the pilot version.



Pediatric Subspecialties in 2019

Also starting in January 2019, the ABP will launch operational versions of MOCA-Peds for 3 pediatric subspecialties:

- *Child Abuse Pediatrics*
- *Pediatric Gastroenterology*
- *Pediatric Infectious Diseases*

Pediatric Subspecialties after 2019

The ABP plans to make MOCA-Peds available to several subspecialties each year through 2022. Launch dates have been planned for the remaining pediatric subspecialties. Those anticipated dates can be found on our [website](#).

For now, the Part 3 proctored exam requirement for subspecialties have been postponed until MOCA-Peds is available for that subspecialty.

What changes are coming in 2019 and beyond?

For those participating in 2019, the operational version of MOCA-Peds will look slightly different than the 2017 and 2018 pilot. Many of these changes are based on pediatrician feedback received during the pilot.

Questions/Repeat Questions

In the pilot, each of the 40 learning objectives had 2 related questions on that topic area (80 total questions).

Starting in 2019, 45 learning objectives will be provided each year. There will be at least one question per learning objective with some of the questions being repeated based on whether the question was answered correctly and ratings on confidence and relevance.

Featured Readings

Additionally, MOCA-Peds will include questions on recently published articles and/or guidelines. These will be provided for early review prior to the assessment start each year.

The ABP's article selection criteria requires that articles:

- Have been recently published
- Define/reshape standard of care
- Are either a systematic review or meta-analysis
- Include new evidence or have important clinical implications

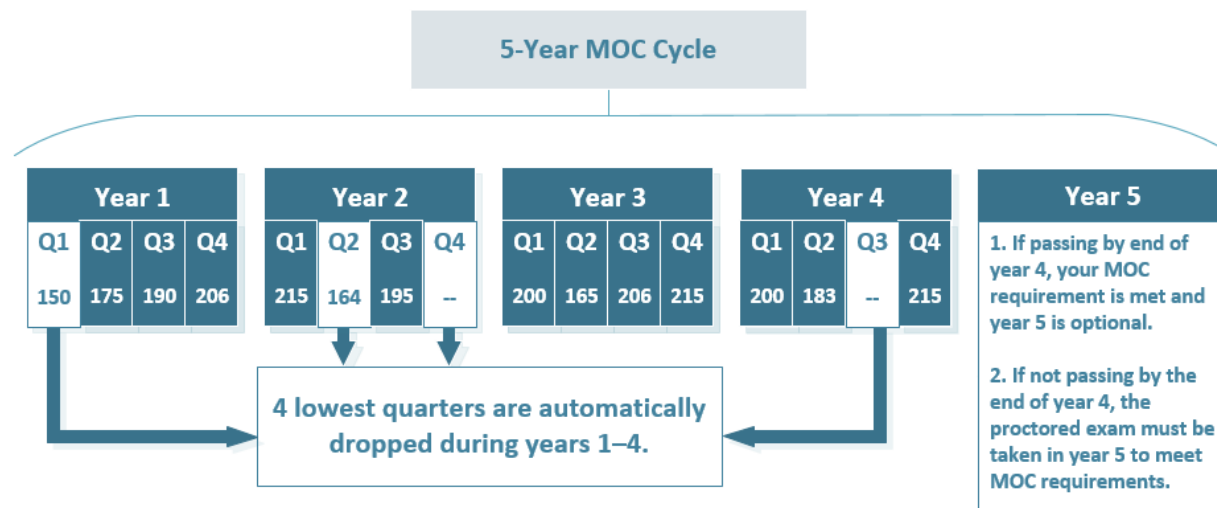
Altogether, a pediatrician will receive around 60–72 questions per year starting in 2019.

What changes are coming in 2019 and beyond?

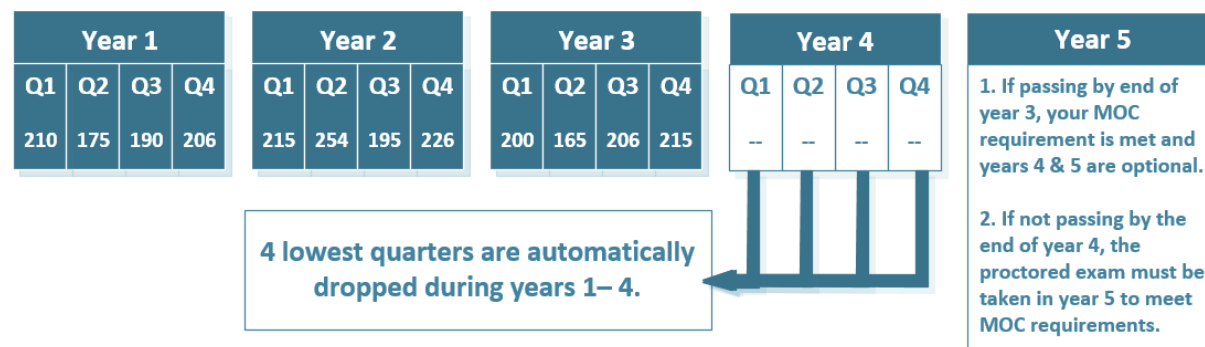
Beginning in 2019, MOCA-Peds will run through an entire MOC Cycle, but...

- Year 5 is optional if one meets the passing standard across years 1–4.
- If a pediatrician does not meet the passing standard, he or she will need to take the proctored exam in year 5 to meet MOC requirements.
- To increase flexibility and account for life circumstances, each pediatrician's **lowest-scoring 4 quarters** will be dropped in years 1–4.

Example 1. MOCA-Peds with 4 dropped quarters throughout years 1–4



Example 2. MOCA-Peds with 4 dropped quarters in year 4



Sources/Info

Description of
data sources



-
- *Survey data sources*
 - *Other data sources*
 - *Thank you*

10

What survey data sources were used?

Participants in the 2017 pilot were invited to share their perspectives in up to 6 different surveys. All MOCA-Peds surveys were administered by [RTI International](#) and responses were anonymized before any results were shared with ABP staff.

Registration Survey

This survey took place prior to the start of MOCA-Peds in the fall of 2016. It functioned both to register participants for the pilot and to collect basic demographic information.

- Invited to register for the MOCA-Peds pilot: 6,814
- Registered: 5,081
- Participation rate: 74.6%

4 Quarterly Evaluation Surveys

Each of these surveys were sent via email within 1–3 weeks of a participant completing 20 quarterly questions.

	Invited to Participate	Completed Survey	Participation Rate
Quarter 1	5,015	4,181	83.4%
Quarter 2	4,913	3,773	76.8%
Quarter 3	4,923	3,761	76.4%
Quarter 4	4,936	4,016	81.4%

In each quarter, a small number of participants did not complete their 20 questions and did not receive the quarterly survey from RTI International.

End-of-Pilot Survey

This survey was sent *only* to those participants who met the passing standard for the pilot. Participation was not required.

- Invited to participate: 4,855
- Completed survey: 2,856
- Participation rate: 58.8%

Other data sources



Google Analytics (GA)

The MOCA-Peds system is linked into the free Google Analytics (GA) site. GA anonymously captures key statistics (eg, web access counts, site navigation patterns, time on page).



MOCA-Peds System

When participants log in to MOCA-Peds, the IT system captures a number of data points such as “time spent per question” and “start/stop times for each MOCA-Peds quarter.”



Focus Groups and User Panels

Although not discussed in detail, more than 20 focus groups and user panels were held between 2016 and 2017. The groups reviewed survey responses, provided feedback on MOCA-Peds questions and online platform, and provided input about communication materials to pediatricians.

THANK YOU

Thank you to the 5,000+ pediatricians who participated in MOCA-Peds in 2017. MOCA-Peds would not have been possible without your willingness to try something new and your commitment to lifelong learning.

Thank you to the 200+ pediatricians who met with us for focus groups and user panels in 2016-17. Your time was invaluable in developing MOCA-Peds.

Thank you to the MOCA-Peds Task Force, General Pediatrics Committee, and Content Development Teams for taking dedicated time out of your practices to help write new questions and rationales for the 2017 MOCA-Peds pilot and future releases.

Thank you to ABP staff who worked on developing, designing, coding, making decisions on, and supporting MOCA-Peds.



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Learn more:

For MOCA-Peds [general info](#)
For MOCA-Peds [research and evaluation information](#)

Questions?

For MOCA-Peds related questions, please contact mocapeds@abpeds.org
For research/evaluation questions, please contact research@abpeds.org

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