Dr. Elliott Attisha of the Henry Ford Health System, shown here with a young patient, has boosted immunization rates in inner city Detroit. Learn how he earned MOC Improvement Practice credit for his project on page 12.

Future of Testing Conference, page 2

Also Inside:
* Pilot MOC Part 3 Exam
* MOC Credit Pathways Expand
* An Update on Collaboratives
The American Board of Pediatrics would like to thank Dr. Elliott Attisha for providing the cover photo and the two photos on pages 12 and 13. They were used with permission from Henry Ford Health Systems.
... The ABP’s quest for excellence is evident in its rigorous evaluation process and in new initiatives undertaken that not only continually improve the standards of its certification but also advance the science, education, study, and practice of pediatrics.

— From the ABP Mission Statement

Dear Colleagues,

Comprehensive examinations have been part of the ABP’s certification process since the organization was founded in 1933. They are essential for a self-regulating profession. Up-to-date medical knowledge is necessary (but not sufficient) to assure the public of “standards of excellence that lead to high-quality health care during infancy, childhood, adolescence, and the transition into adulthood.” (See the ABP mission statement, page 33.)

Some of us remember taking the oral certifying exams in front of luminaries in the field of pediatrics once the written exam had been passed. As the profession grew both in numbers and scope, the oral exam became unwieldy and costly without additional discriminating value, and eventually the secure written exam became the sole method of assessing medical knowledge in pediatrics.

These methods had something in common—they were assessments of learning that had already occurred, meaning they tested a physician’s medical knowledge at a given point in time. Such a comprehensive assessment of what has been learned during residency or fellowship training remains important for the initial certifying exam to become a diplomate of the American Board of Pediatrics. However, in May the ABP Foundation brought together nearly 80 people including general and subspecialty pediatricians as well as experts in testing, medical education, and psychometrics at the Future of Testing Conference (FOTC). The goal of the conference was to explore whether advances in pediatric practice, technology and assessment science, as well as the explosion of medical knowledge, called for other approaches to assessment in the context of a 30-40 year career after residency. (See story, page 2.)

Based on the results of the FOTC, the ABP Board of Directors approved development of a pilot to test the viability of replacing the current maintenance of certification (MOC) Part 3 exam, which is taken once every 10 years in a secure test center, with a longitudinal assessment whereby diplomates receive approximately one question per week (or 12 questions per quarter) on their personal computers or mobile devices. Diplomates will receive immediate feedback on the state of their knowledge of the topic with the specific intent of promoting learning as well as performing a knowledge assessment.

The ABP is not alone in exploring the shift to explicitly incorporate learning into the assessment for MOC. The method described above was pioneered by the American Board of Anesthesiology. A 2010 consensus conference on the role of the regulator has recommended that regulators take educational effects into account when designing a professional assessment (Norcini J, et al. Med Teach. 2011). Several other certifying boards under the auspices of the American Board of Medical Specialties are considering similar steps.

Work has begun on developing a pilot for the general pediatrics MOC exam. Our goal is to launch the pilot in 2017. Along the way, we expect to constantly improve the assessment based on diplomate feedback and experiences.

These efforts are just part of our work to continuously improve certification and maintenance of certification. We are staying busy in many other areas as well. We have developed new pathways for earning MOC credit, especially for practice improvement (see story, page 8), and we are supporting the impressive work of collaborative networks that span the country (see story, page 14). Thank you for your commitment to enhancing the health of children and for working with us to improve assessment and learning that will advance care.

Sincerely,

David G. Nichols, MD, MBA
President & CEO
The Future of Testing: Rethinking MOC Exams  
*Embedding the Exam into Clinical Practice*

As medical knowledge and technology change, so do the ways that people learn. Therefore, the ways that they are assessed about that learning need to change also.

But how? What methods would provide the best measure of a high level of competence for pediatricians? To examine numerous options, the ABP Foundation sponsored a Future of Testing Conference (FOTC) in May in Durham, N.C. Acknowledging that advances in technology have greatly expanded the possibilities for assessing medical knowledge and clinical judgment—including how to better link learning with the assessment process—pediatricians and experts in testing and medical education from around the world convened to explore different methods of assessment.

Many approaches were discussed during the two-day conference, such as:

- Use of online reference materials during exams
- Online or remote proctoring of exams
- Computer-based simulations
- Game-based assessments

“It’s so important for us to understand and appreciate the context in which our measurement methods are operating...to allow us to administer them and draw inferences about learner achievement.”

— William McGaghie, PhD  
Northwestern University Professor of Medical Education, at FOTC
The approach that generated the most excitement at the conference was one presented by the American Board of Anesthesiology (ABA), which was piloting a new approach to its maintenance of certification exams. Through its MOCA Minute™ pilot (MOC-Anesthesiology), the ABA emailed a multiple-choice test question to diplomates every week. Diplomates could decide when to open the question, but once they did, they had one minute to answer it. They received feedback right away. Regardless of whether the question was answered correctly, the correct answer, rationale and links to additional resource materials were displayed on the screen. If the diplomate answered the question incorrectly, follow-up questions on the same topic were sent in subsequent weeks or months.

“MOCA Minute™ allows diplomates to quickly assess their knowledge, and then guides them to resources to strengthen their expertise,” Ann E. Harman, PhD, the ABA’s chief assessment officer, said at the conference. “In addition, it allows for a more valid and reliable measure than the current MOC examination as more data points are collected about a given pediatrician.”

The ABP’s Board of Directors voted in June to pilot a program similar to the ABA approach, but accounting for the differences in pediatric practice compared with anesthesia practice. Since then, several other member boards of the American Board of Medical Specialties (ABMS) have decided to pilot a version of this format. ABP staff and volunteer physicians are working on the delivery platform and writing questions for a pilot, scheduled to begin in 2017. Meanwhile, the ABA expanded MOCA Minute™ to all its diplomates as its new Part 3 Assessment of Knowledge, Judgment and Skills to replace the every 10-year exam.
Curriculum and assessment shouldn’t be separate activities, they should be integrated. Assessment drives learning but learning should also drive assessment; this should be a bi-directional activity.

Eric Holmboe, MD, MACP, FRCP, Senior Vice President for Milestones Development and Evaluation, Accreditation Council for Graduate Medical Education (ACGME), at FOTC

Larry Gruppen, PhD, Professor of Learning Health Sciences, Director of the Master of Health Professions Education Program, University of Michigan, at FOTC

Robert Englander, MD, MPH, Senior Director of Competency-Based Learning and Assessment at the Association for American Medical Colleges (AAMC), at FOTC

The ABP pilot reflects a change in assessment philosophy, says Linda A. Althouse, PhD, the ABP’s Vice President of Psychometrics and Assessment Services.

“The current model for MOC is about the assessment of learning,” she says. “The new pilot will explore whether we can combine the assessment for learning while also assessing that learning occurred. We hope everybody gets every question correct, but that’s not likely. When they miss one, they will learn what they don’t know by getting immediate feedback and information explaining the science that supports the answer.”

Althouse says that with the current model general pediatricians take a four-hour test every 10 years with approximately 200 items.

“With this new model, we expect each pediatrician will answer about 50 questions a year. Over 10 years, that’s at least 500 data points we’ve collected, which will give us a much more detailed analysis of an individual’s competency in medical knowledge and clinical judgment,” she says.

Details of the pilot are still being worked out, she says. Throughout the year, information will be available on the ABP website.

A question often raised is: How many correct answers are needed to “pass”?

“Basically, the model assumes that every diplomate has mastered the necessary knowledge to be certified. This was proven when they passed the initial certification examination. Over time, a diplomate’s response pattern will either confirm or refute this initial belief, allowing the ABP to make a pass/fail judgment,”Althouse says. “But the purpose of testing in this format is to also help pediatricians discover areas they need to know more about and help them build their knowledge should they find a gap. Our goal is that pediatricians will fill any relevant gaps, that more learning will occur, and that all will pass.”
How will this new MOC exam model work?

This new learning and assessment platform will be piloted at the ABP as a replacement for the maintenance of certification examinations that currently are required once every 10 years.

Goals for the pilot include answering these questions:

- Is this new model feasible?
- Is it acceptable to diplomates and other stakeholders?
- Does learning happen through this format?
- Is the assessment reliable?
- Is it sustainable?

Participation in the pilot will be voluntary. Beginning in 2017, participating pediatricians will get a multiple-choice question each week. If the pilot is successful, this new platform could replace the current exam diplomates take in a secure examination facility, Althouse says.

“Our initial focus will be on general pediatrics MOC,” she says. “Diplomates will be able to specify a practice type—ambulatory, inpatient or both—but all will get questions on a core set of knowledge.”

The current plan is to deliver questions three ways—via email, a mobile app or a physician’s personal portfolio on the ABP website. Each physician will be able to switch devices (use email one week, a mobile app the next, for example) without any loss of work.

“Before you open a question, you’ll know how long you have to answer the question,” Althouse says. “All will be multiple choice and the amount of time allowed for the question will vary depending on the complexity of the question.”

If a pediatrician gives the wrong answer, he or she may get another question on the same topic within the next few weeks in addition to a new question.

“The idea is that physicians will learn from these questions,” Althouse says. “We’ll be looking to see if physicians are able to identify areas of weakness and improve in those areas.”

The intent is for physicians to receive 12 to 14 questions each quarter. Physicians may choose when to answer. For example, one person may answer one question a week and another may “save up” and answer a batch of questions once a quarter, Althouse says.

Physicians will be asked how confident they are about their answer before they submit it. This confidence rating will not be used for scoring. They also will be asked how relevant they think the question is to their practice. All the questions will be saved in the diplomate’s individual portfolio for future reference.

No change is proposed in exams for initial certification, either for general pediatrics or subspecialties. Candidates for initial certification will continue to take the relevant examinations of medical knowledge and clinical judgment in a secure test center.
All ABP diplomates who are maintaining their general pediatrics certification (including those also certified in a pediatric subspecialty) may apply to participate in the pilot. If the pilot is successful, the ABP anticipates the new assessment platform will be expanded to cover the ABP’s subspecialty areas.

What about test security?

“With this format, there are some trade-offs between learning and security,” Althouse says. “Questions will be sent in random order, so it’s unlikely pediatricians working together would receive the same question any given week. We expect diplomates to answer questions without collaborating with peers or other individuals. They are free to consult references that they would have access to in their practice, but with time limitations, they’ll need to have some knowledge base to know what to look for. We don’t see that as a security issue.”

Althouse added, “We believe pediatricians will be professional and will take advantage of the opportunity to combine learning with assessment.”

How will pediatricians know when they’ve passed?

Data for the pilot will be used to help determine the appropriate passing standard. Althouse assures diplomates that they will be well aware of their performance and will be notified well in advance if they are falling behind. On average, the pass rate for current MOC general pediatrics and subspecialist exams (by those taking the test for the first time in an MOC cycle) is more than 95 percent, Althouse says, and she doesn’t anticipate that percentage changing significantly. (See chart, page 24.)

Please see Sample MOC Part 3 exam question on the next page.
Sample MOC Part 3 Pilot Exam Question
The following is an example of what an ABP MOC Part 3 exam question might contain. Test takers will be given the opportunity to provide feedback after answering questions.

**Question**
A 16-year-old girl has a fever and rash. Her symptoms began abruptly today with fever, headache, myalgias and nausea. She now has a petechial rash on her extremities that spares her palms and soles. She is hypotensive and tachycardic. A complete blood count reveals thrombocytopenia and leukopenia.

Which of the following is the most likely diagnosis?

A. Infectious mononucleosis  
B. Infective endocarditis  
C. Meningococcemia  
D. Rocky Mountain spotted fever  
E. Toxic shock syndrome

**Answer**
The correct answer is C – Meningococcemia

**Key Learning Objective**
Differential diagnosis of fever and rash

**Reference(s)**


**Critique**
Fever with accompanying rash is a common presentation in pediatric offices and emergency departments. Many causes are benign and self-limited, but the physician must be able to recognize emergencies with this presentation. Rocky Mountain spotted fever, meningococcemia and toxic shock syndrome may all present with fever, malaise, headache, nausea, hypotension/shock and thrombocytopenia. The onset of symptoms is abrupt with meningococcemia. Although the rash may originally appear as macular, it may quickly progress to petechia/purpura. A complete blood count may show leukopenia in addition to thrombocytopenia. Rocky Mountain spotted fever can have a similar presentation, although typically the rash occurs 3-4 days following the fever and is more likely to involve the palms and soles. The rash of toxic shock syndrome is diffuse and may resemble a sunburn. Conjunctivae also may be involved.
Beyond the Test: New Ways to Earn Lifelong Learning and Quality Improvement Credit for MOC

In 2015, the ABP expanded the number of options through which physicians can apply for MOC credit, especially for quality improvement work they already are doing.

National Committee for Quality Assurance (NCQA) Patient-Centered Medical Home (PCMH)

- **762** pediatricians received Improving Professional Practice (Part 4) credit for achieving NCQA PCMH Recognition. Each diplomate received 40 MOC points for his/her efforts.

Quality Improvement Program Development

- **18** applications were approved from individuals who are in a position to develop and lead—and did develop and lead—substantial health care quality initiatives in an organization (i.e., department chairs, chief quality officers, public health department directors). Each earned 40 Improving Professional Practice (Part 4) points.

Lifelong Learning and Self-Assessment (Part 2)

- **16** new activities were developed.
- **30** additional activities were approved.

Quality Improvement Articles, Posters & Platform Presentations

- **88** posters and platform presentations were approved, earning each applicant 20 Improving Professional Practice points (Part 4).
- **55** published articles were approved, earning their authors 25 points each.
Quality Improvement Projects for Small Teams (10 or fewer physicians)

- 212 projects were approved for small teams of physicians – including residents, who can now bank MOC credit. Participating physicians received 25 MOC Part 4 points.

Quality Improvement Projects for Large Teams (more than 10 physicians)

- 261 projects were approved or renewed, each worth 25 MOC Part 4 points.

Performance Improvement Modules (PIMs)

- 5 new PIMs were developed.
- 7 web-based PIMs were approved.

Portfolio Sponsors

- 12 organizations (such as hospitals, professional societies and improvement collaboratives) were approved to sponsor multiple Quality Improvement projects.
Houston Pediatrician Earns MOC Credit from NCQA PCMH Designation

Super excited.

That’s how Jamil Joyner, MD, described herself upon realizing that she could earn ABP MOC Practice Improvement credit for the tremendous amount of work she and colleagues put into earning NCQA Patient Centered Medical Home (PCMH) designation for their organization, Texas Children’s Pediatrics.

With 50 clinical sites, the pediatrics group faced a big challenge in gaining NCQA (National Committee for Quality Assurance) PCMH certification in 2012, and recertification in 2014. PCMH is a primary care model that emphasizes care coordination and communication in practices of all sizes. The goal of the model is to improve the quality, effectiveness and efficiency of care and consequently the patient experience by assigning patients to a personal primary care pediatrician who will coordinate the care team. These goals are consistent with the goals for MOC.

Working toward NCQA PCMH recognition, pediatricians and/or practices document their policies and procedures, evaluate their practice and choose areas in which they think they could improve. They do a baseline assessment of a specific area, develop a plan for improvement, and then measure the results. Activities address not only preventive care and chronic care, but also access to health care and community resources, and management of patient populations. In fact, a recent randomized clinical trial showed that the PCMH approach reduced serious illnesses and costs among chronically ill children. (Mosquera RA, et al. Effect of an enhanced medical home on serious illness and cost of care among high-risk children with chronic illness: a randomized clinical trial. JAMA 2014;312:2640-8.)

In meeting the required six standards set out by NCQA, “we had to align everything from access to lab appointments to mental health issues to the way we track asthma and ADHD,” Dr. Joyner says, “and it seems like there are a million QI (quality improvement) projects within that.”

After all that work, which was worth it, she says, “we were super excited when we saw that MOC requirements could be fulfilled with this.”

Another plus, she notes, is that the entire process of applying for the credit on the ABP website took only about 20 minutes. The ABP recently adopted new policies that allow all pediatricians who can attest that they have participated in quality improvement activities as part of earning NCQA PCMH recognition to also earn MOC credit. Learn more at abp.org.
Boosting Immunization Rates in Inner City Detroit Earns MOC Practice Improvement Credit for Dr. Elliott Attisha

In Detroit, Michigan, four of 10 public school children are behind on required immunizations. The barriers are many, from a lack of transportation to a shortage of health care providers. Henry Ford Health System’s pediatric mobile clinic program is overcoming the challenges by bringing health care directly to the child. While the program provides a full spectrum of health services, immunizations have been an important area of focus.

Dr. Elliott Attisha, medical director of the Children’s Health Project of Detroit, part of Henry Ford Health System’s School-Based & Community Health Program, and his team have found an innovative way to boost immunization rates. The initiative was made possible by CATCH (Community Access To Child Health), a national program of the American Academy of Pediatrics. CATCH supports pediatricians to collaborate within their communities so that all children have access to needed health services and a medical home.

In addition to being a big plus for the students and their schools, Dr. Attisha worked with ABP staff to gain MOC credit for the project, which was a plus for him. For a program like this, all pediatricians involved can get credit. Dr. Attisha’s colleague, Dr. Charles Barone, Chair of Pediatrics at Henry Ford, also received MOC credit.

“We are excited to see the initiative highlighted and hope that other school-based and linked health centers can benefit by using it or a similar idea,” Dr. Attisha says.

Dr. Attisha says most students visit school-based health centers without their parents. While the program is required to keep a signed consent from the parent on file in order to treat the student, the consent for immunizations is even more challenging because it requires confirmation that a parent has viewed the Vaccine Information Statement (VIS) and has given approval to proceed. In addition to the parent not being present, other obstacles include language barriers, literacy issues and inconsistent telephone numbers.

Realizing that most vaccination notification letters to parents never made it back, the team decided to include permission for vaccine administration in the health center consent. This removed the need for a separate signature at the time of immunization. A phone call ensured that the parent received the letter, reviewed the VIS and gave consent to proceed. Since Michigan schools currently do not require Hep A, influenza and HPV vaccines, the decision was made to include those on a separate letter requiring a signature.

“Our initial approach of creating separate letters did have a positive impact on required vaccines. Sadly we didn’t get many signed letters back on the optional but also important vaccines, which include influenza, Hepatitis A and HPV,” Dr. Attisha says.
“The best part was that we received credit for something that we were already doing.”

After discovering that separate notification letters for mandatory and optional vaccines confused parents, they decided to combine them into one letter and remove the separate signature requirement completely. They would then call parents to see if they wanted their children immunized. The calls further provided an opportunity to educate parents, and also strengthened relationships between the clinic staff and parents.

“After incorporating lessons learned, we found our biggest impact was on the non-required vaccines,” he says. “While the schools may not require certain vaccines, the American Academy of Pediatrics treats all vaccines equally. Removing the separation of required/optional vaccines, combined with a follow-up phone call, helped us to further stress and reinforce the message. That seemed to make a difference. When we called, we could use the opportunity to discuss why flu shots are necessary, why HPV and Hep A are also important.”

Thanks to promising results, a similar initiative is planned for Henry Ford’s School-Based Health Centers.

As for submitting the project for MOC credit, ABP staff coached Dr. Attisha on how to track and display the project data to fit quality improvement reporting standards and thus gain credit.

“The staff was super helpful in making sure we had everything in line, at times even providing guidance on tables and graphs,” he says. “I thought it might require a lot of extra work, but it didn’t. The best part was that we received credit for something that we were already doing.”

<table>
<thead>
<tr>
<th>Adjustments to Parent Notification Letter</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012-2013</td>
</tr>
<tr>
<td>2014-2015</td>
</tr>
<tr>
<td>2015-2016</td>
</tr>
</tbody>
</table>

Dr. Elliott Attisha and his colleagues like to have fun at work, but they do not clown around when it comes to tackling health care issues of school children in Detroit.
COLLABORATIVES

What’s New with Collaborative Networks?

Collaborative networks represent a growing and transformative model for improving patient care and outcomes for populations of children. They provide a forum for physicians to share their expertise and experience, while measuring and tracking the impact of changes on performance. Collaborative improvement efforts close the gap of translating evidence into practice.

“In this article, we describe several of the collaborative improvement activities eligible for Part 4 credit that have resulted in measurable changes in both care processes and/or health outcomes,” notes Dr. Carole Lannon, Senior Quality Advisor for the ABP. “These efforts have changed the outcome for children and families and are the result of the hard work of front-line pediatricians and their clinical teams.”

The American Board of Pediatrics has recognized the work of quality improvement (QI) collaboratives as activities eligible for Part 4 MOC credit. Both sponsoring organizations and individual project leaders can use the QI Project Application (QIPA) to gain ABP approval of planned, ongoing or completed QI projects.

Types of collaborative learning include:

- **Portfolios of QI projects** managed by a single institution or organization (e.g., a children’s hospital or a pediatric specialty society). Portfolio projects have addressed primary care, hospital and subspecialty topics, and can involve multisite collaborative improvement projects. The portfolio approach is appropriate for organizations with a well-developed infrastructure for the design, central oversight and management of QI projects that would have three or more QI projects that meet ABP standards in a two-year period. The ABP delegates to the institutional portfolio provider the authority to issue MOC Part 4 credit to participating pediatricians.

- **Multisite Collaborative QI projects** that engage multiple practice teams working together. They share data and quality improvement methods and learning from each other in a variety of ways (in person or virtual meetings, monthly webinars, listserves). These projects involve multiple practices and include short-term, time-restricted learning collaboratives and long-term enduring collaborative improvement networks.

Interested in learning more about collaboratives?

Email mocampeds@abpeds.org

The American Academy of Pediatrics (AAP) Chapter Quality Network (CQN) aims to build chapter capacity to lead improvement efforts with member practices that result in improved care and outcomes for children at a population level. The highlighted states in the map show AAP chapters active in CQN.

AAP Chapters Active in Chapter Quality Network

Used with permission from The American Academy of Pediatrics (AAP) Chapter Quality Network (CQN).
The CON Asthma Project, learning collaborative began in 2009 as a pilot project in the Alabama, Ohio, Oregon and Maine AAP chapters. Since then, it has expanded to include Arkansas, Arizona, California 2, California 4, Georgia and Kentucky in subsequent phases. This collaborative aims to improve asthma through implementation of National Heart, Lung, and Blood Institute (NHLBI) asthma guidelines, facilitation of population-based registries and the pilot of a home visiting program during phase 3. The graph below shows how teams have improved in delivering an “optimal asthma care” bundle to children in their practices.

**Optimal Asthma Care**

Optimal Asthma Care = % of encounters with all of the following: assessment of asthma control, stepwise approach used to adjust treatment, written asthma action plan and children with persistent asthma on a controller medication

The CON ADHD initiative recently launched. It involves the AAP chapters of Arkansas, Georgia, New York 1, New York 2, Ohio and Texas. This learning collaborative aims to improve outcomes for children with ADHD by focusing on diagnosis, medication titration and behavior therapy.

The AAP Quality Improvement Innovation Networks (QuIIN) Practice Improvement Network has engaged 25 primary care practices in the Reducing Diagnostic Errors in Primary Care Pediatrics (Project RedDE!) to assess quality improvement strategies for reducing diagnostic errors relating to adolescent depression, elevated blood pressure and delayed actionable laboratory values.

The National Improvement Partnership Network (NIPN) is a network of more than 20 states with established improvement partnerships, durable state or regional collaboration of public and private partners. The network uses the science of quality improvement and a systems approach to change health care infrastructure and practice (https://www.uvm.edu/medicine/nipn/?Page=topics.html). Vermont’s Improvement Partnership, the Vermont Child Health Improvement Program (VCHIP), provides leadership to NIPN. Improvement partnerships have targeted asthma, behavioral health, autism and developmental screening, patient-centered medical home initiatives, obesity, preschool vision screening and preventive services. Some statewide efforts include:

- **Envision New Mexico** improvement initiatives that have targeted asthma, developmental screening, newborn hearing screening and obesity. Current efforts focus on adolescent health.

- **The Oregon Pediatric Improvement Partnership**, which is focused on improving the medical home for children with special health care needs.

- **The Quality through Technology and Innovation in Pediatrics (QTIP)** in South Carolina, which focuses on Children’s Healthcare Quality Measurement and Improvement Activities, including the patient-centered medical home and behavioral health. These efforts increased rates of developmental and mental health screening, improved medical home access and increased well visit rates for children. (To learn more, visit https://msp.scdhhs.gov/qtip/)

- **Partnerships in Idaho and Utah** that completed similar projects, and also focused on obesity, ADHD, adolescent depression screening, immunizations and asthma.

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**Graph:**

- **Goal:**
  - Month 1: 60%
  - Month 2: 77%
  - Month 3: 82%
  - Month 4: 85%
  - Month 5: 87%
  - Month 6: 88%
  - Month 7: 85%
  - Month 8: 83%
  - Month 9: 84%
  - Month 10: 86%
  - Month 11: 85%
  - Month 12: 82%

- **Pilot, 2010**

- **Phase 2, 2012**

- **Phase 3, 2013**

- **Phase 4, 2015**

Used with permission from the CQN Asthma Project.
The more than 90 children’s hospitals that are members of the Children’s Hospitals’ Solutions for Patient Safety (SPS) Network are driven by a shared goal to urgently reduce and eliminate serious harm across all children’s hospitals. The network covers approximately 50 percent of admissions to children’s hospitals in the U.S. Since 2012, the SPS Network has significantly improved pediatric patient safety by reducing the rates of four Hospital Acquired Conditions (HAC) by more than 40 percent, saved 4,746 children from serious harm, and led to an estimated savings of more than $92 million, with a consistent upward trend in harm prevented every month. The graphic highlights how SPS, participating in the national Center for Medicare and Medicaid Services Partnership for Patients initiative, has made progress addressing the 10 HACs charted.
The Children’s Hospital Association (CHA) sponsors several collaborative networks achieving improvements in a variety of health care settings, including inpatient and ambulatory care in hematology and oncology, PICU central line-associated bloodstream infection (CLABSI) prevention, sepsis prevention, prevention of catheter-related infections in pediatric dialysis centers and post-operative hypothermia prevention in neonates.

The Standardized Care to Improve Outcomes in Pediatric Endstage (SCOPE) renal disease collaborative is focused on preventing infections in pediatric peritoneal dialysis (PD) and hemodialysis (HD) patients across 37 participating centers. The SCOPE dataset has grown to include more than 12,000 follow-up forms, more than 1,000 catheter insertions and almost 500 training events, and represents more than 13,700 catheter-months of data. SCOPE has saved an estimated $2.8 million in prevented infections.

The Childhood Cancers and Blood Disorders Network (CCBDN) focuses on prevention of central line infections in ambulatory pediatric patients with cancer and blood disorders. The network has reduced inpatient CLABSI rates by 29 percent and ambulatory CLABSI rates by 7 percent, resulting in over 1,000 infections and 102 deaths prevented, saving an estimated $35 million. CCBDN recently launched a home health innovation group to engage home health agencies in line care, including a training curriculum and standardized discharge orders.

The Value in Inpatient Pediatrics (VIP) Network, part of the American Academy of Pediatrics Quality Improvement Innovation Networks (QuIIN), engaged 52 U.S.-based hospitals and one international hospital team in the Improving Community-Acquired Pneumonia (ICAP) project; 140 physicians have earned ABP MOC Part 4 credit for their participation in the project. Use of narrow-spectrum antibiotics increased, while use of unnecessary broad-spectrum antibiotics decreased. One ICAP project participant noted, “Working through the project has helped our team gain a greater appreciation for quality improvement and a deeper understanding of its effectiveness.”
PERINATAL CARE

The Vermont Oxford Network (VON), founded in 1988, now includes almost 1,000 neonatal intensive care units and is focused on improving newborn outcomes, especially those of very-low-birth-weight infants. The two-year NICQNext Collaborative: Innovations in Newborn Care 2014–2015 combines Internet-based learning experiences with virtual and face-to-face activities. It focuses on innovation, standardization, the context for improvement, family-centered care and understanding the patient’s journey, and increasing value. As a portfolio provider, VON has integrated MOC Part 4 credit into the standard work of all VON QI collaboratives (see https://public.vtoxford.org/quality-education/moc-ce/maintenance-of-certification-part-4/).

Statewide perinatal quality collaboratives connect perinatal health care teams to improve outcomes for women and infants in obstetric and neonatal care. The Centers for Disease Control and Prevention and the March of Dimes have encouraged the development of such collaboratives.

Examples of state efforts targeting neonatal improvements include:

- **The California Perinatal Quality Care Collaborative**, which has focused on decreasing bloodstream infections in premature infants, increasing the use of breastfeeding/human milk and optimizing delivery room management.

- **The Illinois Perinatal Quality Collaborative**, which has focused on neonatal nutrition for premature infants and a “golden hour” initiative to improve outcomes for infants needing resuscitation and stabilization in the first 90 minutes of life.

- **The New York State Perinatal Quality Collaborative**, which has included a safe sleep initiative in addition to its work in reducing central line-associated bloodstream infections in the NICU and improving enteral nutrition practices.

- **The Perinatal Quality Collaborative of North Carolina**, which in addition to reducing bloodstream infections and improving rates of breastfeeding/human milk, has focused on the importance of partnering with patients and families.
The Ohio Perinatal Quality Collaborative’s (OPQC) initiatives to reduce bloodstream infections and increase the use of breast milk for premature infants are now in “maintenance mode.” Its current focus is on the Neonatal Abstinence (NAS) Project and includes all 52 Levels II and III nurseries in Ohio. Since 2013, the collaborative has significantly decreased the length of treatment and the length of stay for infants with NAS.

Active projects of the Tennessee Initiative Perinatal Care (TIPQC) include breastfeeding promotion and sustainment, smoking cessation and improving outcomes in neonatal abstinence syndrome.
SUBSPECIALTY CARE

- The Cystic Fibrosis Foundation (CFF) has used multiple quality improvement initiatives to improve care and outcomes for children with CF. The life expectancy for a child with CF has doubled in the past 25 years. The CFF is an MOC portfolio provider and its patient registry provides individual, center-specific and aggregate data that can be used for patient care as well as performance feedback and improvement.

- The 84 pediatric teams in the ImproveCareNow (ICN) network, across the United States and United Kingdom, focus on improving outcomes for children with inflammatory bowel disease. The network has improved the percentage of children in remission from 48 percent to 79 percent by standardizing and improving the reliability of care processes. The ICN registry includes data on more than 21,000 patients and 130,000 patient visits. Data are used for population management, pre-visit planning, performance feedback and clinical research. ICN was established in 2007 as the prototype learning collaborative for MOC Part 4 credit.

Clinical Remission Rate
Inflammatory Bowel Disease

Used with permission from ImproveCareNow network.
• **The National Pediatric Cardiology Quality Improvement Collaborative** has improved growth outcomes and decreased mortality in infants with hypoplastic left heart syndrome, a rare and complex congenital heart disease. Between June 2013 and August 2015, cumulative aggregate interstage mortality was reduced by 40 percent, saving an estimated 31 lives. (See Anderson JB, et al. *Circ Cardiovasc Qual Outcomes*. 2015;8:428.)

• **The Pediatric Rheumatology Care and Outcomes Improvement Network (PR-COIN)** is a network of 17 sites across the U.S. and Canada with more than 3,000 patients and 16,000 encounters in its registry. PR-COIN focuses on improving care and outcomes for children with juvenile idiopathic arthritis through collaborative emphasis on pre-visit planning, population management, shared decision-making and self-management support.

**Percent of patients on non-biologic Disease-Modifying Antirheumatic Drugs who had clinic visits in the month and had toxicity labs performed**

*Used with permission from the Pediatric Rheumatology Care and Outcomes Improvement Network (PR-COIN).*
VOLUNTEER SPOTLIGHT: John G. Frohna, MD, MPH

Dr. John Frohna wears many volunteer hats around the ABP. He serves on the Board of Directors, is a member of the Credentials Committee, has helped with developing exam questions and chaired the recent Future of Testing Conference held in May.

As Residency Program Director and Vice Chair for Education in the Department of Pediatrics, University of Wisconsin School of Medicine and Public Health, he works directly with pediatricians at all levels of experience, and believes that testing is a valuable tool for a profession to regulate itself and strive to meet standards of excellence.

He says that chairing the Future of Testing conference helped him learn more about the ABP’s role in assessment, and gave him the opportunity to work with “a great group of planning committee members to create an interactive conference that would help shape the future of testing.” He says he was pleased with the energy and enthusiasm surrounding the conference.

“We covered a number of cutting edge topics, and were able to learn from educational and testing experts from around the country,” he says. “Our keynote speaker, Cees van der Vleuten from Maastricht University in the Netherlands, stimulated a lot of interesting thoughts about assessment programs and what the role of the ABP could be.”

He came away from the conference with the same conclusion as many others: there is no easy solution or quick fix to the very complex issue of testing.

“While we explored many options, it is clear that the field will continue to evolve. There are many emerging technologies in testing, but not all of them are feasible or cost-effective for use in assessing the skills of pediatricians,” he says.

“It’s also complicated by the fact that we are looking at ways to improve initial certification and maintenance of certification—for general pediatrics as well as all of our subspecialties. When you look at the variations in practice, and the resulting assessment needs across the full range of pediatric practice, it’s pretty daunting.”

But he says the outcomes will be worth the investment of time, effort and energy. “When excellence in the care of children is at stake, we want to be sure we get it right,” he says. “That will take time.”
STOCKMAN LECTURE:

Pediatric Residents Would Benefit from More Training on Behavioral, Mental Health Needs

Even as more children present with behavioral and mental health needs, including anxiety and mood disorders or substance abuse, as few as half of physicians emerging from pediatric residency programs believe their training to care for these children is adequate. The solution, says Julia A. McMillan, MD, is to recognize this gap, and put stronger preparation programs in place for residents.

“I believe that every pediatric residency graduate should be expected to be competent in assessing and managing patients with common behavioral and mental health problems before they are considered eligible to sit for the certifying examination of the American Board of Pediatrics,” Dr. McMillan told attendees at the American Academy of Pediatrics national conference in Washington, D.C., where she delivered the 2015 Stockman Lecture on Pediatric Education and Workforce on Oct. 25.

To achieve this goal, “residency programs will need a robust curriculum and effective assessment tools,” such as adopting mental health competencies as part of residency curriculum, assessing residents’ ability to diagnose and manage common behavioral and mental health conditions, and providing oversight by experienced and skilled clinicians, says Dr. McMillan, who is Executive Vice Chair of the Department of Pediatrics and Associate Dean for Graduate Medical Education at Johns Hopkins University School of Medicine.

In her presentation, titled “Mind the Gap: What’s Missing in the Education of Pediatricians?” she cited a 2009 survey of pediatric residency program graduates by Gary Freed, MD, MPH, and others that showed more than 80 percent felt that their training had been adequate in well child care, critical care, and most pediatric subspecialties, while 62 percent indicated that they could have used more training in mental health, and 48 percent wanted more training in behavioral/developmental pediatrics.

At the same time, 20 percent of children in the U.S. have a diagnosable mental health disorder, yet only 20 percent of children who need mental health and substance abuse services receive them. According to the American Academy of Child and Adolescent Psychiatry, there are 8,700 child and adolescent psychiatrists in the U.S., with a projected need of 30,000. The time it takes to get an appointment with a behavioral/developmental specialist or a child psychiatrist can be significant.

“Pediatricians are in the best position to understand the toll that behavioral and mental health problems take on individual children and on families, but feel inadequately prepared to recognize and manage these conditions,” says Dr. McMillan, a former ABP board chair and current chair of the ABP’s Strategic Planning Committee. (See committee spotlight, page 27.)

The ABP offers certification for pediatricians trained in developmental and behavioral pediatrics, but the need far outstrips the numbers who are certified.

“Pediatricians have an opportunity to define themselves in relation to the needs of America’s children,” Dr. McMillan says. “If we don’t ensure that graduates of our training programs are prepared to meet those needs, the relevance of pediatric care to the health of children will be significantly diminished.”

The Stockman Lecture is named for former ABP President & CEO James A. Stockman III, MD. He delivered the inaugural address in 2014.
At a Glance

The ABP’s Work ... by the numbers

Since the ABP began:
• more than 115,000 have been certified in General Pediatrics
• more than 27,000 have been certified in a subspecialty

The ABP awards certificates in General Pediatrics and in the following pediatric subspecialty areas:
• Adolescent Medicine
• Cardiology
• Child Abuse Pediatrics
• Critical Care Medicine
• Developmental-Behavioral Pediatrics
• Emergency Medicine
• Endocrinology
• Gastroenterology
• Hematology-Oncology
• Infectious Diseases
• Neonatal-Perinatal Medicine
• Nephrology
• Pulmonology
• Rheumatology

Certificates are awarded in conjunction with other specialty boards in the areas of:
• Hospice and Palliative Medicine
• Medical Toxicology
• Pediatric Transplant Hepatology
• Neurodevelopmental Disabilities
• Sleep Medicine
• Sports Medicine

2015 Initial Certifying Exam Pass Rates (First-Time Test Takers)

<table>
<thead>
<tr>
<th>Examination</th>
<th>First-Time Takers</th>
<th>Pass Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Pediatrics</td>
<td>3,301</td>
<td>86.1%</td>
</tr>
<tr>
<td>Child Abuse Pediatrics</td>
<td>25</td>
<td>92.0%</td>
</tr>
<tr>
<td>Developmental-Behavioral</td>
<td>61</td>
<td>85.2%</td>
</tr>
<tr>
<td>Emergency Medicine</td>
<td>266</td>
<td>78.9%</td>
</tr>
<tr>
<td>Endocrinology</td>
<td>154</td>
<td>87.0%</td>
</tr>
<tr>
<td>Gastroenterology</td>
<td>181</td>
<td>90.6%</td>
</tr>
<tr>
<td>Hematology-Oncology</td>
<td>261</td>
<td>83.5%</td>
</tr>
<tr>
<td>Infectious Diseases</td>
<td>111</td>
<td>99.1%</td>
</tr>
<tr>
<td>Rheumatology</td>
<td>45</td>
<td>86.7%</td>
</tr>
</tbody>
</table>

2015 MOC Exams (All Subspecialties Combined and GP)

<table>
<thead>
<tr>
<th>Examination</th>
<th>First-Time Takers* (N)</th>
<th>Pass Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOC General Pediatrics</td>
<td>4,840</td>
<td>95.0%</td>
</tr>
<tr>
<td>All MOC Subspecialties</td>
<td>1,422</td>
<td>94.9%</td>
</tr>
</tbody>
</table>

* First-time test takers within the exam cycle.
2014 Financials

Revenue

<table>
<thead>
<tr>
<th>Service</th>
<th>Revenue</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Pediatrics</td>
<td>$11,046,250</td>
<td>40%</td>
</tr>
<tr>
<td>Pediatric Subspecialties</td>
<td>4,927,540</td>
<td>18%</td>
</tr>
<tr>
<td>Maintenance of Certification</td>
<td>8,907,196</td>
<td>32%</td>
</tr>
<tr>
<td>Investment Income</td>
<td>2,777,667</td>
<td>9%</td>
</tr>
<tr>
<td>Other</td>
<td>245,006</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td><strong>$27,903,659</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Expense

<table>
<thead>
<tr>
<th>Service</th>
<th>Expense</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Pediatrics</td>
<td>$5,300,646</td>
<td>22%</td>
</tr>
<tr>
<td>Pediatric Subspecialties</td>
<td>6,099,634</td>
<td>25%</td>
</tr>
<tr>
<td>Maintenance of Certification</td>
<td>10,957,527</td>
<td>45%</td>
</tr>
<tr>
<td>Strategic Initiatives*</td>
<td>1,299,007</td>
<td>5%</td>
</tr>
<tr>
<td>Other</td>
<td>694,652</td>
<td>3%</td>
</tr>
<tr>
<td><strong>Total Expense</strong></td>
<td><strong>$24,351,466</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*Funding for research and other pediatric initiatives to ensure excellence in the education of pediatricians and the delivery of pediatric care.
2015 Committees and Subboards

The ABP appreciates the excellent work of pediatricians who contribute their time, energy and expertise to our committees and subboards, producing examinations and providing direction for certification activities.

Committees

Conflict of Interest
Thomas P. Green
Mary Fran Hazinski
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Rutledge Q. Hutson, Chair

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Alan R. Cohen
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Dongming Zhang

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Kathy J. Jenkins
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Pamela J. Simms-Mackey
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Joseph W. St. Geme III
Daniel C. West

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Alan R. Cohen
Rachel L. Dawkins, AAP Liaison
Echezona E. Ezeanolue
Gary L. Freed
Mary Fran Hazinski
A. Craig Hillemeier
Rutledge Q. Hutson
Marshall L. Land Jr.
George Lister
Stephen Ludwig
Julia A. McMillan, Chair
Victoria F. Norwood
Gregory E. Prazar
Joseph W. St. Geme III
David K. Stevenson
David T. Tayloe Jr.
While most pediatricians agree that it is their responsibility to identify child mental health conditions, most responding to 2004 and 2013 AAP surveys did not feel adequately trained to identify and manage many mental health conditions. Yet a serious shortage of child and adolescent psychiatrists and developmental-behavioral pediatricians makes it difficult for pediatricians to easily refer patients for treatment.

The ABP Strategic Planning Committee, headed by Dr. Julia McMillan, spent a year evaluating the situation and developing recommendations for encouraging additional training and education to help pediatricians prevent, identify and treat behavioral and mental health problems seen in general pediatrics practice.

In its report, the committee said “the crisis regarding mental and behavioral health offers a unique opportunity for the ABP to advocate with its diplomates and partnering organizations to raise awareness of the scope, morbidity, and mortality associated with this crisis.” The committee has sent its report and recommendations to the ABP Board of Directors for consideration. (This topic was also discussed by Dr. McMillan in this year’s Stockman Lecture. See page 23.)
A special thank you to the following ABP committee and subboard members who completed their service in 2015 (beginning service dates are after their names) and especially to those who have dedicated decades to serving the ABP. We appreciate your dedication and commitment to our mission.
Pediatric Endocrinology
David B. Allen
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Erica A. Eugster, Chair
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  Immediate Past Chair
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Dana C. Matthews, Medical Editor

ABP 2015 Annual Report
Publications by ABP Staff in 2015


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**MOC Research Published in 2015**


Dr. Laurel Leslie Joins ABP to Oversee All Research Programs

Laurel K. Leslie, MD, MPH
Vice President, Research

Dr. Leslie facilitates and oversees all research programs for the ABP and the ABP Foundation. She also is the senior staff member of the ABP’s Research Advisory Committee, responsible for the research strategic plan. She came to the ABP from Tufts University School of Medicine, where she was professor of medicine and pediatrics and co-principal investigator of the Tufts Clinical and Translational Science Institute.

Dr. Leslie is board certified in general pediatrics and developmental behavioral pediatrics, and has extensive research experience in the areas of identifying, treating and delivering health services to children and adolescents with medical, developmental and mental health needs.

She says research helps to better prepare and empower pediatricians to improve health outcomes for children and families, and applauds the ABP’s long history of research on educational innovations, workforce development and the public’s perspectives on the role of certification.

“We plan to also examine innovative models of MOC that are relevant and meaningful for pediatricians, whether they are caring for children, implementing educational programs, or conducting research,” she says. “I’m honored to be part of this work.”
Our Mission Statement

The American Board of Pediatrics certifies general pediatricians and pediatric subspecialists based on standards of excellence that lead to high-quality health care during infancy, childhood, adolescence, and the transition into adulthood. The ABP certification provides assurance to the public that a general pediatrician or pediatric subspecialist has successfully completed accredited training and fulfills the continuous evaluation requirements that encompass the six core competencies: patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice. The ABP’s quest for excellence is evident in its rigorous evaluation process and in new initiatives undertaken that not only continually improve the standards of its certification but also advance the science, education, study, and practice of pediatrics.

For General Pediatrics inquiries:
In-training examinations: ite@abpeds.org
Initial certification examinations: gpcert@abpeds.org
Maintenance of Certification: moc@abpeds.org

For Pediatric Subspecialties inquiries:
In-training examinations: site@abpeds.org
Initial certification examinations: sscert@abpeds.org
Maintenance of Certification: moc@abpeds.org

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