Specific acupressure improved pain at 1 to 7 days post-treatment and improved physical function, but there was only low-certainty evidence that it improved pain within 2 hours of treatment. Similarly, there was low-certainty evidence that TENS improved pain within 2 hours or at 1 to 7 days following treatment.

Regarding opioids, the evidence reviews found high-certainty evidence that acetaminophen plus opioids reduced pain at 1 to 7 days and also improved symptom relief. However, none of the other interventions reviewed (transbuccal fentanyl, tramadol, acetaminophen plus ibuprofen plus codeine or oxycodone) were associated with improvements in more than 1 clinical outcome.

Additional evidence showed increased risks of neurologic and gastrointestinal adverse effects associated with opioid interventions, and combination therapies with opioids were more expensive than similar interventions without opioids. Based on these and other substantial potential harms, the guideline recommends that clinicians should avoid prescribing opioids except in cases of severe injury or patient intolerance of first-line therapeutic options.

Family Physician Panelist Perspective

Kenneth Lin, MD, MPH, a professor in the Department of Family Medicine at Georgetown University Medical Center in Washington, DC, represented the AAFP as a panelist in the guideline's creation. He told *AAFP News* that the guideline should raise awareness among family physicians that for most patients with acute pain from non-low back musculoskeletal injuries, topical or oral NSAIDs are as effective, if not more effective, than opioids while producing fewer adverse effects.

In particular, Lin said that the strong recommendation for topical NSAIDs will likely change the way many family physicians currently treat patients with acute pain from these types of injuries.

"I think that most FPs have tended not to think of topical NSAIDs as effective relief for acute musculoskeletal injury pain," Lin said. "Although topicals are currently more expensive than oral NSAIDs, hopefully the topical NSAID diclofenac becoming available over the counter will drive down prices for these therapies."

The FDA approved a topical gel containing diclofenac for OTC use in February.

Lin added that the Academy has numerous resources available to help FPs combat the opioid crisis, including a collection of content curated by *American Family Physician* and additional resources in the AAFP Patient Care section of the AAFP website.

Finally, in patients with severe musculoskeletal injury pain who do require opioid treatment, Lin recommended that family physicians prescribe shorter courses (eg, 3 days instead of 7 to 10) to reduce the likelihood of persistent opioid use.

AAFP News

From the American Board of Family Medicine

Ann Fam Med 2020;18:566-569. https://doi.org/10.1370/afm.2619.

EVOLVING CERTIFICATION TO MEET TODAY'S NEEDS: THE ABFM'S KSA REVISION INITIATIVE

Why Knowledge Self-Assessment?

The American Board of Medical Specialties (ABMS) implemented the Maintenance of Certification Program as a way to provide a comprehensive approach to lifelong learning, self-assessment, and quality improvement for physicians in all specialties.[1] As demonstrated in a systematic review of 62 studies, physician knowledge, skills, and adherence to evidence-based medicine tend to decline as a function of time from initial training.[2] In addition, there is robust evidence that physicians, like other experts, are inaccurate in their own self-assessment—we simply do not always realize what we don't know.[3] Thus, a key role of Board Certification is to provide a guided, objective, independent, self-assessment program that goes beyond traditional, self-selected continuing medical education (CME). Ongoing self-assessment also supports acquisition of new knowledge and skills as changes in medical knowledge necessitate changes in practice, and it reinforces a broad knowledge base when physicians' scope of practice narrows over time. Participation in continuous certification empowers physicians to develop their own learning strategies supported by tools that can help direct their lifelong learning, while at the same time helping to assure the public they have demonstrated that they have the tools to provide high-quality care.

In 2004, the American Board of Family Medicine (ABFM) introduced self-assessment modules (SAMs), which consisted of a 60-item knowledge assessment followed by a corresponding computerized clinical simulation. Each SAM was divided into specific competencies and diplomates had to correctly answer 80% of the items in each competency to successfully complete the requirement. Diplomates were also presented with rationales and references for questions they

missed and were allowed multiple attempts to complete the activity successfully. SAMs were purposefully created to present an in-depth and challenging exposure to the content area in order to assist in the identification of knowledge gaps, not to simply reinforce what one already knew.[4] By 2012, SAMs covering 16 different topic areas had been created, drawn from the 20 priority areas identified by the Institute of Medicine.[5]

In 2016, the ABFM announced several changes in the continuous certification process, resulting from feedback provided by diplomates and the commitment to ensure that its programs were aligned with best practices in assessment, measurement, and quality improvement. Feedback on the knowledge assessment portion of the SAMs was very favorable; however, diplomates were less favorable about the clinical simulation.[6,7] Therefore, the knowledge assessment portion of the SAMS was uncoupled from the clinical simulation and the simulations were made optional. The knowledge assessments were renamed Knowledge Self-Assessments (KSAs) and the simulations were discontinued in 2019.

In the current continuous certification program, physicians are required to earn 50 certification points and acquire 150 CME credits during each 3-year stage. Self-Assessment and Lifelong Learning requirements now offer 2 options: (1) completing at least 1 ABFM-developed 60-question, topic-specific KSA activity, or (2) completing 4 quarters of Continuous Knowledge Self-Assessment (CKSA), consisting of 25 questions each quarter across a broad range of topics.

Improving KSAs

As part of ABFM's commitment to continual improvement of our certification activities, in 2019 we began evaluating and substantially revising the KSAs. A review of diplomate feedback over time has suggested the need for a more robust and transparent updating process and revealed frustration with the multiple true-false question format. At the same time, our Board of Directors were eager to add topics that would be more relevant, supportive of a broader scope of care, and reflective of changes in health care. We have made a number of changes to the KSAs activities, including transitioning all questions to a single best answer multiple-choice format and completing a thorough review of all questions including updates of the critiques and references. Some KSAs were combined into a single activity (eg, Well Child Care and Childhood Illness became a single KSA on Care of Children). Other topics such as Hypertension and Diabetes are in the process of a content overhaul to ensure that it is up to date and relevant. This internal evaluation also identified opportunities to cover important areas that could become new modules, such as palliative care, addiction medicine, and high-value care. Many of these topics were suggested by diplomates in surveys and focus group conversations at state chapter and other meetings.

The new process maintains the annual review of topics for evidence updates and a substantial review of each KSA every 3 years that includes revision or replacement of up to 20 items. Comments made by participants are regularly reviewed and considered at each step in the revision process. Additionally, we have instituted an internal peer-review process and enhanced our medical librarian support to ensure effective search capabilities across topics. In some cases, we have partnered with external experts for peer review and/or development of new KSAs. For example, the new Palliative Care KSA released earlier this year was accomplished by a knowledge development team through the Interstate Postgraduate Medical Association (IPMA). The American Academy of Family Physicians' (AAFP) Advanced Life Support in Obstetrics course will be added as a KSA-qualifying option in early 2021. A reliable mechanism for more frequent review of diplomate comments on KSA questions, and, when indicated, real time revision or replacement of questions was also established. We believe that this creates an ideal model of partnering with diplomates to help ensure up-to-date content. A schedule of the KSA revision initiative is shown in Table 1.

Lastly, the revision process also includes improvements in the KSA platform, providing participants with the ability to review critiques to any question they have already answered, not just the ones they answered incorrectly. Additional platform updates were designed to enhance the ease of navigation and improve the user experience for diplomates. The standard for successful completion was also changed from 80% correct in each competency area to 80% overall (48 out 60), in as many attempts as necessary.

What Are We Learning So Far?

In April of this year, the new Care of Children KSA was made available as the first newly revised KSA, combining content from the Well Child Care KSA and Childhood Illness KSA. As with all KSAs, completion of the Care of Children KSA fulfills the self-assessment requirement and earns the diplomate 10 certification points and 8 CME credits. It has been completed by 955 diplomates and 601 residents to date, with more than 400 currently in progress. Thus far this new activity is receiving higher ratings from participants with respect to relevance to practice (89%), usefulness (94%), currency of information provided (93%), and overall favorability (92%). Moving to a single best answer multiple-choice format for all

Table 1. ABFM KSA Revision Timeline

Current KSA Topic Title	New KSA Topic Title	Anticipated Deployment Date
(new)	Palliative Care	Released May 8. 2020
Childhood Illness Well Child Care	Care of Children	Released April 23. 2020
Hypertension	Hypertension	Released September 11, 2020
Coronary Heart Disease Heart Failure	Heart Disease	Released August 6, 2020
Diabetes	Diabetes	End of March 2021
Preventive Medicine Health Behaviors	Health Counseling and Preventive Care	End of March 2021
Asthma	Asthma	End of March 2021
Depression Mental Health	Mental Health Care	End of March 2021
Vulnerable Elderly	Care of Older Adults	End of June 2021
Maternity Care Women's Health	Care of Women	End of June 2021
Hospital Management	Care of Hospitalized Patients	End of June 2021
Pain Management	Care of Patients With Pain and Addiction	End of June 2021

60 items, eliminating multiple true-false questions, and the new standard for successful completion have helped to increase the successful completion rate on the first attempt by 3.15 percentage points compared to the average rates on the 2 former KSAs (9.63%, compared to 5.55% and 5.15% for Well Child Care and Childhood Illness, respectively). The commitment to keeping the KSA challenging, with a goal of identifying knowledge gaps, was preserved in this revision process, but seems to have eliminated the frustration of the multiple true-false format, which previously comprised 70% of KSA questions.

The new Palliative Care KSA has been completed by 612 diplomates and 163 residents, with a 12.5% successful completion rate on the first attempt. Nearly 25% of all participants are physicians with a certificate of added qualifications (CAQ) in Hospice and Palliative Care. Feedback about currency of content (94%), relevance to practice (84%), usefulness (85%), and overall favorability of the activity (92%) has been very positive. Similarly, the new Heart Disease KSA, a combination of the former Heart Failure and Coronary Artery Disease KSAs, has been completed by 301 diplomates and 62 residents, with similarly higher ratings from early participants.

Next Steps

All KSAs will be updated by mid-2021, after which they will be scheduled into the new, ongoing revision process. We are already analyzing diplomate practice data and feedback to inform the choice of new KSA topics that could be added in the coming years. In partnership with the AAFP, we expect to add an alternative self-assessment activity on Health Equity in 2021. We will more explicitly link KSAs to a corresponding performance improvement activity in order to facilitate the translation of new knowledge into practice and increase the relevance of both activities. Finally, a journal article activity will be piloted in 2021, where diplomates will be able to read and answer questions about selected evidence-based, practice-changing articles as a self-assessment activity. In all of this, we will continue to engage diplomates and key partners to continually improve the suite of self-assessment options available to diplomates in Family Medicine Continuing Certification.

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References

1. Hawkins RE, Lipner RS, Ham HP, Wagner R, Holmboe ES. American Board of Medical Specialties Maintenance of Certification: theory and evidence regarding the current framework. *J Contin Educ Health Prof.* 2013;33(Suppl 1):S7-S19.
2. Choudhry NK, Fletcher RH, Soumerai SB. Systematic review: the relationship between clinical experience and quality of health care. *Ann Intern Med.* 2005;142(4):260-273.
3. Davis DA, Mazmanian PE, Fordis M, Van Harrison R, Thorpe KE, Perrier L. Accuracy of physician self-assessment compared with observed measures of competence: a systematic review. *JAMA.* 2006;296(9):1094-1102.
4. Hagen MD. Knowledge assessment responses in the ABFM self-assessment modules (SAMs). *Ann Fam Med.* 2012;10(6):573-574.
5. Institute of Medicine. *Priority Areas for National Action: Transforming Health Care Quality.* Washington, DC: The National Academies Press; 2003.

6. Brooks EM, Gonzalez M, Eden AR, O'Neal J, Sabo RT, Etz RS. What family physicians really think of maintenance of certification part ii activities. *J Contin Educ Health Prof.* 2017;37(4):223-229.

7. Puffer JC. A message from the president of the American Board of Family Medicine (ABFM). *J Am Board Fam Med.* 2016;29(6):815-816.

STFM SOCIETY OF TEACHERS OF FAMILY MEDICINE **From the Society of Teachers of Family Medicine**

Ann Fam Med 2020;18:569. https://doi.org/10.1370/afm.2623.

PEER-REVIEWED REPORTS IN MEDICAL EDUCATION RESEARCH (PRIMER) ACCEPTED FOR INCLUSION IN PUBMED CENTRAL

STFM's online journal provides a dissemination opportunity for new researchers and small studies

Peer-reviewed Reports in Medical Education Research (PRiMER), was accepted for full participation in PubMed Central (PMC), an archive of biomedical and life sciences journal literature at the US National Institutes of Health's National Library of Medicine.

"We are excited about passing this scientific and scholarly milestone. Indexing in PMC will greatly increase the visibility of *PRiMER* content, increase citations of our journal articles, and attract new authors," said Christopher Morley, PhD, *PRiMER* editor-in-chief.

PRiMER publishes small, rigorously designed original research briefs in medical education and health workforce policy, as well as medical student and resident research.

"*PRiMER* was developed to both introduce newer scholars to academic publishing in primary care medical education, as well as to provide an outlet for smaller studies by experienced researchers and educational scholars," said Dr Morley. "Having articles from *PRiMER* included in PubMed Central will expose the journal's content to wider audiences and increase its connection to other related PubMed content benefitting the authors, the journal, and the primary care research community as a whole."

In order to be accepted for full participation, *PRiMER* had to meet all scientific, editorial, and technical quality specifications that together establish the journal's adherence to the highest standards for peer review and scientific publishing. Participation guarantees a perpetual home for the full text of every *PRiMER* article, beyond the journal itself. It also provides indexing for *PRiMER* articles in PubMed, the world's top literature citation database for life science and medical research.

"We are thankful for Dr Morley's vision during the journal's creation and grateful to STFM leadership for their strong support. We also appreciate all the hard work of the *PRiMER* editorial team, editorial board, reviewers, and authors," said Traci Brazelton, CAE, STFM director of publications, who served as *PRiMER* managing publisher since its inception.

In July 2020, Sam Grammer took over the role of managing publisher for *PRiMER*. Mr Grammer brings more than 15 years of experience in academic publishing to the position, 9 of which were spent serving as a content specialist for the National Library of Medicine's Bookshelf project.

For more information about *PRiMER*, visit journals.stfm.org/PRiMER and follow the journal via Twitter at https://twitter.com/PRiMER_Journal

By Traci Brazelton, CAE
STFM Director of Publications

NAPCRG **From NAPCRG**

Ann Fam Med 2020;18:569-570. https://doi.org/10.1370/afm.2622.

2020 PBRN CONFERENCE HIGHLIGHTS

Living Laboratories for Innovation and Dissemination/Implementation in Our Communities

Most of the care for most of the patients most of the time is provided in community-based primary care practices. Generating new knowledge by conducting research in these practices and communities, and implementing research findings, is widely recognized as necessary to achieve better health for populations. It is *the* way to meet patients where they are to derive the insights that shape practice beyond textbooks. Practices and communities are like living laboratories.

This Living Laboratory theme served as the backdrop for the 2020 NAPCRG Practice-Based Research Network Conference, which brought together the energy of nearly 130 participants from the United States, Canada, and Japan and Australia in a first-ever virtual environment on August 13-14, 2020. Sponsored by AHRQ, the conference featured an array of on-demand presentations and an online poster hall, all of which have remained available to registered attendees for continued access. The ability to go back to presentations has enhanced continued learning.

Plenary speakers focused on fundamentals like implementation sustainability and implementation science:

- Implementation Sustainability, Dr Sharon Straus