

**DEPARTMENT OF HEALTH AND HUMAN SERVICES
NATIONAL INSTITUTES OF HEALTH
NATIONAL CENTER FOR COMPLEMENTARY
AND INTEGRATIVE HEALTH**

**NATIONAL ADVISORY COUNCIL FOR COMPLEMENTARY
AND INTEGRATIVE HEALTH
MINUTES OF THE SIXTY-FOURTH MEETING
October 6, 2017**

NACCIH Members Present

Dr. Martin Blaser, New York, NY¹
Dr. Donald Brater, Indianapolis, IN
Dr. Tracy Gaudet, Washington, DC
Dr. Steven George, Durham, NC
Dr. Christine Goertz, Davenport, IA
Dr. Joel Greenspan, Baltimore, MD
Dr. Bin He, Minneapolis, MN
Dr. Patricia Herman, Santa Monica, CA
Dr. Steven Hersch, Charlestown, MA¹
Dr. Susmita Kashikar-Zuck, Cincinnati, OH
Dr. Janice Kiecolt-Glaser, Columbus, OH¹
Dr. Jean King, Worcester, MA
Dr. Helene Langevin, Boston, MA
Dr. Eric Schoomaker, Bethesda, MD

¹Telephone

SPEAKERS

Dr. Francis Collins, Bethesda, MD
Dr. Lawrence Tabak, Bethesda, MD
Dr. Christina Mikosz, Atlanta, GA
Ms. Theresa Toigo, Beltsville, MD

NACCIH Members Not Present

Dr. Alice Clark, University, MS
Dr. Lynn DeBar, Portland, OR
Dr. Richard Niemtow, Alexandria, VA
Dr. Cynthia Price, Seattle, WA
Dr. Reed Tuckson, Sandy Springs, GA

Federal Staff Present

Inna Belfer, ORWH, NIH
Barbara Sorkin, ODS, NIH

Members of the Public:

Dan Cite

Laura Honesty

Wei Liu

I. Closed Session

The first portion of the sixty-fourth meeting of the National Advisory Council for Complementary and Integrative Health (NACCIH) was closed to the public, in accordance with the provisions set forth in Sections 552b(c)(4) and 552b(c)(6), Title 5, U.S.C., and Section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. Appendix 2).

A total of 144 applications were assigned to NACCIH. Applications that were noncompetitive, not discussed, or were not recommended for further consideration by the scientific review groups were not considered by Council.

Council agreed with staff recommendations on 63 applications, requesting \$16,368,318 in total costs.

II. Open Session—Call to Order

The open session convened at 9:45 a.m. Dr. Partap Khalsa, NACCIH Executive Secretary, called the meeting to order. He explained that the meeting was being videocast live and that the archived videocast would be available in a week or two. The minutes of the June 2017 and August 2017 NACCIH meetings were approved unanimously.

III. NACCIH Director's Welcome and NACCIH Report

Dr. David Shurtleff, Acting Director of NACCIH and Acting Chairperson of the Council, began his presentation by asking for a moment of silence in memory of NACCIH program director Dr. Carol Pontzer, who died in July.

Dr. Josephine Briggs has left her position as NACCIH director after 9 years. Dr. Shurtleff said that much of the Center's progress during that time has been directly attributable to Dr. Briggs's leadership. Dr. Briggs will work with NACCIH on epidemiology projects with Dr. Richard Nahin, as well as becoming Editor-in-Chief of the *Journal of the American Society of Nephrology*. Other notable departures include executive officer Wendy Liffers, who has retired, and program director Dr. Eve Reider and budget officer Hoa Thanh, who are moving to other agencies. Four Council members are ending their terms at this meeting: Drs. Brater, Hersch, Kiecolt-Glaser, and Schoomaker. Dr. Shurtleff thanked them for their service and presented certificates and plaques to those attending in person.

NIH is operating under a continuing resolution until December 8, 2017. NACCIH received a large budget increase in FY 2017. For FY 2018, the President has proposed a substantial budget decrease, but the Senate has proposed an increase. Drs. Briggs and Shurtleff met with majority staff members of the House of Representatives, who showed interest in the new National Institutes of Health (NIH)-Department of Defense (DoD)-Department of Veterans Affairs (VA) Pain Management Collaboratory, which NACCIH is leading.

Changes in policies on how NIH accepts, reviews, and oversees clinical trials research will affect grant applications received on or after January 25, 2018. Highlights of recent research include the launch of the NIH-DoD-VA pain management collaboratory, the Food and Drug Administration's (FDA) acceptance of an Investigational New Drug application for the smoking cessation aid cytisine based on preclinical research supported by NCCIH, a publication from the intramural research program (IRP) on a special class of neurons that responds to mechanical pain, an analysis of the cost-effectiveness of mindfulness-based stress reduction and cognitive-behavioral therapy for chronic low-back pain (CLBP), the negative results of the Creatine Safety, Tolerability & Efficacy in Huntington's Disease (CREST-E) trial, and a study of yoga, physical therapy, or education for CLBP.

The National Institute of Neurological Disorders and Stroke's Board of Scientific Counselors conducted a midterm review of the NCCIH IRP's tenure-track investigators and was impressed with the progress and quality of their work. NCCIH participated in NIH's #OpioidAwareChat on September 29, which had impressive reach, with 4,777 tweets and 138 million total impressions. The 2017 Straus Lecture, a conversation between former Surgeon General Dr. Vivek Murthy and NIH Director Dr. Francis Collins, focused on stress and the steps people can take to reduce its effects. Dr. Murthy saw promise in many of the approaches NCCIH studies. Upcoming events include an on-campus workshop for fellows and trainees led by program director Dr. Lanay Mudd and the launch of Know the Science educational tools on the NCCIH Web site, in conjunction with a presentation on science communication by Dr. Alan Leshner.

IV. Comments by Dr. Josephine Briggs, Director Emeritus

Dr. Briggs focused her comments on research areas where she believes more remains to be accomplished. Our health care system, she noted, is disease focused; patient-centered care usually gets lip service only. Cost limitations can be important drivers, she said, but the relatively low-cost modalities NCCIH studies often get little attention. Thus, although NIH is not a health care system, it is our responsibility to ask hard questions about the health care system through the research enterprise.

Dr. Briggs noted that she sees NCCIH as being created as a change agent and driven by the concern that some health care practices were being ignored by the research enterprise. As its leader, Dr. Briggs has had the privilege of becoming an insider while maintaining an outsider's perspective and the opportunity to follow up on topics that may have been neglected. She urged that NCCIH and NIH be brave about letting new ideas come in and noted that peer review panels do not need to be shielded from unconventional ideas.

Over the years, NCCIH has paid much attention to the range of research questions about health practices, progressing from basic science to translational research to efficacy studies to outcomes and effectiveness research. A great deal has been accomplished in research on translation and efficacy, and NCCIH has assumed a leadership role in the outcomes and effectiveness area. However, Dr. Briggs expressed concern that the current strong focus on translational research may be discouraging the curiosity-driven research that is the hallmark of good basic science. A translational mindset does not necessarily reward surprises, but surprises in basic science can lead to major discoveries.

Dr. Briggs then touched on the pain/opioid crisis, an area in which she believes NCCIH can have a positive impact based on our research on nondrug approaches to managing pain as well as understanding

mechanisms underlying pain. She noted that international data show dramatic differences in drug-related deaths, with the United States having an unusually high rate. It is important to admit that

- Opioid dependency and pain often coexist
- Addiction is a disease; so is chronic pain
- Substance abuse and pain need integrated care
- Medication-assisted therapy needs to be part of integrated pain care
- Medications alone will never be the whole answer.

Dr. Briggs concluded by saying that she leaves NCCIH in superb hands and that she is proud of where the Center is today. Being director of NCCIH was a thrilling job and she has enjoyed it.

Discussion: Dr. Blaser congratulated Dr. Briggs on her excellent service as director. Dr. Schoomaker noted that half of all Nobel Prizes go to researchers motivated by curiosity and stressed that a delicate balancing act exists between getting the translational results that society needs while not discouraging investigators' innovation. Dr. Gaudet thanked Dr. Briggs for her service and expressed concern that the current mechanisms for funding research require researchers to have a proposed mechanism for what they propose to study before they investigate it. Dr. Briggs replied that balance is needed. The pendulum has swung to an emphasis on translation, but it is important to be open to discovery research as well.

Dr. Goertz asked Dr. Briggs what inspired her to become increasingly passionate about the Center's work during her years as director. Dr. Briggs said that she sees an incredible need for system change. The concept that people can learn cognitive skills that can help them in many parts of their lives is powerful; seeing the potential in gentle, less invasive approaches and realizing that the current health care system favors high technology has been very influential for her.

V. NIH's Next Generation Researchers Initiative

NIH Principal Deputy Director Dr. Lawrence Tabak updated Council on the Next Generation Researchers Initiative, a program to promote the long-term growth, stability, and diversity of the biomedical research workforce by increasing the number of scientists at relatively early stages of their careers who receive NIH research funding.

The current hypercompetitive environment, in which increasing numbers of people are competing for funding and established investigators are outcompeting younger ones, has created a situation that discourages talented young people from pursuing careers in biomedical research. Thus, a generation of potential researchers may be lost. During the past 25 years, the proportion of NIH funding going to scientists at relatively early career stages has declined, with both Early Stage Investigators (ESIs; those who are within 10 years of the end of their training and have not yet received a substantial independent NIH research award) and Early Established Investigators (EElS; those within 10 years of receiving their first substantial independent NIH award) feeling the impact.

NIH established the Next Generation Researchers policy to prioritize awards that fund ESIs and EElS. This effort complies with the 21st Century Cures Act, which directs the NIH director to promote policies that will promote earlier independence and increased funding for new investigators, and supports the NIH-Wide Strategic Plan's objective to enhance stewardship by recruiting and retaining an outstanding

research workforce and enhancing workforce diversity. Good stewardship also requires short-term assessment of the impact of NIH-funded research. NIH has developed tools to assess the influence of research publications, including the Relative Citation Ratio, but additional approaches are needed.

All NIH ICs have committed to ensuring support for highly meritorious ESIs and EEIs. NIH has established a working group of the Advisory Committee to the Director to refine and implement the Next Generation initiative and will use public meetings, conferences, and the Next Generation public Web site to communicate progress to the community.

Discussion: Dr. Langevin commented that the concept of losing a generation is crucial; her own son abandoned biomedical research for a more stable career field. Dr. Tabak replied that biomedical research needs to be made attractive to young people, and this will not happen if they see junior faculty struggling. Dr. He commented that the struggle in the United States is far greater than in China. He urged that the U.S. government increase total funding for biomedical research.

Dr. King said that wisdom is being lost because the funding pie is finite and asked whether young researchers can be encouraged to be independent while still working with senior scientists through a multiple principal investigator approach. Dr. Tabak said that although he supports team science, it is also important to get the next generation independently launched in their careers. Young investigators should not be made to feel that they cannot get a grant unless a more senior researcher is involved.

Dr. Blaser suggested creating separate funding pools, where grant applicants compete with others at the same stage in their careers, perhaps with ESIs competing for smaller grants. Dr. Tabak said that a stratified approach could have unintended consequences if it limits young investigators to small awards that give them just enough money to fail. However, the idea of discrete pots of resources for investigators at different stages of their careers is interesting.

VI. Concept Clearance: Discovery and Biological Signatures of Diet-Derived Microbial Metabolites

Dr. Craig Hopp, deputy director of the Division of Extramural Research, presented a proposed initiative to solicit research to characterize compounds produced by microbial metabolism of dietary phytochemicals, identify the bacteria responsible for their production, establish the biological signatures that define their interaction with a biological system, and coordinate and oversee the sharing of the data produced. This targeted investment, which is aligned with NCCIH's current strategic plan, may help to elucidate why a diet high in fruits and vegetables is healthy and provide a basis for clearer recommendations regarding the coadministration of specific combinations of dietary factors and probiotics. The objectives to be met by this concept include

- Using multiomics approaches to discover new diet-derived metabolites, establish their relationship with specific bacteria, determine their biological activity in models of psychological or immunological stress, and identify their phenotypic-level biological signatures
- Using metabolic approaches to establish the pharmacokinetic properties of the metabolites
- Where dietary natural products have been associated with resilience to stress, using metabolic phenotyping to identify metabolites that might mediate the effect

- Where certain bacteria have been associated with resilience to stress, using metabolic phenotyping to identify dietary phytochemicals that might mediate the effect
- Using multiomics approaches to discover sex-specific differences in the production or activity of metabolites
- Developing resources to harmonize activities of microbiome researchers and coordinate data sharing.

Discussion: Dr. Blaser strongly supported the initiative but expressed concern that preliminary findings could lead to the proliferation of dietary supplements not supported by clinical research. He recommended linking the initiative to a means of testing the important candidates in clinical trials. Dr. Hopp explained that the proposed research would be in the discovery phase. Dr. Shurtleff explained that early-phase clinical trials on promising candidates could be started quickly using the Center’s phased clinical trials funding process. Dr. Briggs added that clarity about the regulatory implications of this work would be helpful.

A motion to approve the concept was made, seconded, and passed unanimously.

Dr. Schoemaker ended the morning session by presenting a plaque to Dr. Briggs on behalf of the Defense and Veterans Center for Integrative Pain Management in recognition of her leadership.

VII. National Pain Strategy and Federal Pain Research Strategy: Responding to the Prescription Opioid Epidemic

The afternoon session of the Council meeting featured a series of presentations on the responses of Federal agencies to the prescription opioid epidemic.

NIH—Status of NIH’s Efforts to Address the Opioid Crisis

NIH Director Dr. Collins began his presentation by recognizing Dr. Briggs for her wise guidance to NCCIH and to NIH as a whole and presented her with a gift—a pair of earrings bearing the symbols of yin and yang to reflect the combination of the heart and the brain that she represents so well.

Dr. Collins noted that overdose death rates showed a huge increase between 1999 and 2015. More people are now dying from opioid overdose than died from HIV/AIDS at the peak of that epidemic. The opioid epidemic poses huge challenges. Twenty-five million U.S. adults have pain every day, and many take opioids, even though their effectiveness for chronic pain has not been demonstrated. More than 2 million Americans are addicted to opioids, and 80 percent of those who are addicted began with prescription medicines. Medication-assisted treatment for opioid use disorders is effective, but it is drastically underutilized, and the relapse rate is high, probably because it is not used long enough for the brain changes caused by opioid addiction to be reversed. Research has revolutionized the understanding of addiction and pain, but limited options for treatment of addiction and overdose are available, and new, nonaddictive pain medicines are urgently needed.

NIH’s role in addressing this crisis involves research in three areas:

- Developing safe, effective, nonaddictive strategies to manage pain
- Finding new and innovative medications and technologies for opioid addiction treatment

- Developing interventions to reduce mortality from opioid overdose and link patients to treatment.

NIH has been working with experts from academia, industry, and Government to develop a public-private partnership for research on pain and opioid use disorders. These efforts respond to a recommendation from the President's Commission on Combating Drug Addiction and the Opioid Crisis. Two new partnership efforts are being developed: one involves developing new formulations and combinations of medications to treat opioid use disorders and prevent or reverse overdoses, and the second involves accelerating development of new nonaddictive pain therapies.

NIH is also supporting research on nondrug approaches for pain management. At a Senate committee hearing on the opioid crisis the day before Council, attention was particularly drawn to the research on nonpharmacologic approaches supported by the new NIH-DoD-VA Pain Management Collaboratory. Agencies across the Department of Health and Human Services are working together in a coordinated effort to address pain. The Interagency Pain Research Coordinating Committee (IPRCC) developed the National Pain Strategy (NPS), which has served as a blueprint for research, and the Federal Pain Research Strategy (FPRS) is about to be released. The Centers for Disease Control and Prevention (CDC) and the FDA have played key roles in the development of the FPRS.

Discussion: Dr. Schoemaker commented on the importance of Dr. Collins's support at the Senate committee hearing for the types of approaches NCCIH studies. Too often, pain management is left out of discussions of the opioid crisis. Dr. Schoemaker expressed concern that NIH's research strategy focuses primarily on the development of drugs, despite the existence of nondrug approaches that can be used today. Dr. Collins agreed that this is a concern but noted that it has been difficult to maintain pain clinics that offer nondrug approaches, perhaps because of reimbursement issues. Dr. Schoemaker agreed that the business model of American health care does not favor a patient-centered multidisciplinary approach to care.

Dr. Gaudet stated that the opioid crisis is fundamentally a systems issue. A redesign of care, with a patient-centered focus, is needed. Dr. Briggs added that one reason for excitement around the new NIH-DoD-VA initiative is that it will take place in health care systems truly different from most of those in the country.

Dr. Collins noted that the All of Us Research Program (formerly known as the Precision Medicine Initiative Cohort Study), a longitudinal study of a million people, will launch in April and will provide opportunities a few years from now to put interesting studies on a platform with a large amount of baseline data. Dr. Briggs added that pain is a topic where the All of Us Research Program can provide answers to important questions.

Dr. Collins thanked Dr. Shurtleff for taking on the role of Acting Director of NCCIH and explained that NIH is putting together a search committee to find the next permanent director of the Center.

CDC—Guideline for Prescribing Opioids for Chronic Pain

Participating remotely from Atlanta, Dr. Christina Mikosz, Medical Officer in the CDC's Division of Unintentional Injury Prevention, began her presentation by showing data on the dramatic increase in overdose deaths involving opioids between 2000 and 2015. Primary care providers, who commonly treat

chronic noncancer pain, account for about half of opioid pain medications dispensed; they report concern about opioids and say that they have insufficient training in this area. These providers are the primary audience for the CDC's guideline for opioid prescribing, which was released in March 2016 after a development process that involved extensive analysis and review.

The CDC's key activities include improving data quality and tracking trends, strengthening state efforts by scaling up effective public health interventions, and supplying health care providers with resources to improve patient safety. The CDC guideline includes 12 recommendations grouped into 3 conceptual areas: determining when to initiate or continue opioids for chronic pain; opioid selection, dosage, duration, follow-up, and discontinuation; and assessing risk and addressing harms of opioid use. Key points include recommendations that opioids should not be first-line or routine therapy for chronic pain, that providers should offer a taper if opioids cause harm or are not helping, and that providers should evaluate and address risks for opioid-related harms before starting and periodically during opioid therapy.

Implementation of the guideline focuses on four priority areas: translation and communication, clinical training, health system implementation, and insurer/pharmacy benefit manager implementation. The CDC has developed educational materials for health care providers, including the second in a series of interactive training modules, and has released a mobile app. Five things insurers can do to address the opioid epidemic are covering nonpharmacologic therapies, making it easier to prescribe nonopioid medications, reimbursing patient counseling and care coordination, promoting more judicious use of high dosages of opioids, and increasing access to evidence-based treatment of opioid use disorder. The CDC just launched a communications campaign for consumers to raise their awareness of the risks of prescription opioid use. The campaign includes first-person stories about harm linked to opioids.

FDA—Opioid Analgesic REMS: Blueprint for Health Care Professional Training

Theresa Toigo, Associate Director for Drug Safety Operations at the FDA, discussed her agency's use of risk evaluation and mitigation strategies (REMS) to address opioid safety. A REMS is a required risk management plan that goes beyond ordinary drug labeling. When the FDA determines that a REMS is required, drug manufacturers develop it, and after FDA approval, the manufacturers implement it.

In 2009, the FDA notified manufacturers of extended-release or long-acting (ER/LA) opioid pain relievers that their products would require a REMS. This REMS was unusual because of its large scope and the involvement of multiple manufacturers. Its primary component was prescriber training, and manufacturers are meeting this requirement by providing grants to continuing education (CE) providers to develop CE based on an FDA blueprint. Training is voluntary, but more than 400,000 health care providers have participated. However, many providers who prescribe ER/LA opioids—the principal targets of the program—have not participated, possibly because they receive training about opioids from other sources.

In early 2017, based on recommendations from two advisory committees, the FDA released draft revisions to the blueprint for the opioid REMS that would (1) expand it to include immediate-release (IR) opioids as well as ER/LA opioids and (2) expand its content to ensure that health care providers receive information on the principles of acute and chronic pain management, nonpharmacologic and pharmacologic treatments for pain, and the basic elements of addiction medicine and opioid use

disorders. A wide variety of stakeholders have provided comments on the draft revisions, and the FDA plans to have a final revised blueprint, which will be included in the approved REMS. The modified REMS will require that training be made available to both prescribers and other health care providers involved in the management of patients with pain, including nurses and pharmacists. Some of the training made available under the current REMS already includes the new topics. The FDA is considering comments on the need for mandatory education.

Update: NCCIH's Pain-Related Activities

Dr. Shurtleff reviewed NCCIH's pain-related activities, including the Center's pain working group, which provides a forum for interaction and information exchange among extramural, intramural, policy, review, and communications staff. Its ongoing activities include coordinating and expanding staff outreach; making NCCIH's priorities, activities, and scientific progress known to other agencies, working groups, and other stakeholders; and aligning NCCIH research with national pain research directives, including the NPS and FPRS.

The NPS, released in March 2016, is a roadmap toward evidence-based care for pain, with recommendations for both a research agenda and strategies for pain management. NCCIH is represented on two of its implementation working groups, with Dr. Nahin serving as co-chair of the group on population research and Dr. Shurtleff serving as a member of the group on service delivery and payment. The FPRS will focus on prioritizing research recommendations as a basis for a long-term strategic plan to coordinate and advance the Federal research agenda. Dr. Khalsa was a member of the FPRS NIH Steering Committee and is the Federal representative to its work group on chronic pain and chronic pain management. All of the work groups, regardless of their specific focus, emphasize research on nonpharmacologic and self-care approaches.

Many areas of emphasis in these national pain research plans align with NCCIH's strategic plan, but some gap areas exist where NCCIH could move forward. These include

- Extramural data mining and reporting from surveys—an area where NCCIH has in-house expertise
- Studying natural products for pain (e.g., cannabinoids, kratom) and innovative approaches for pain management (e.g., the arts and pain, the role of emotional well-being in preventing or treating pain)
- Dissemination and implementation, including physician and patient education; this is being done as part of the NIH-DoD-VA initiative, but NCCIH could also work with Federal partners in this area in other contexts
- Investing resources in the area of lifespan research and going beyond the single projects currently under way in both the intramural and extramural research programs
- Developing systematic programs on the transition from acute to chronic pain and how to prevent it
- Increasing the emphasis on disparities in NCCIH's pain research program.

General Council Discussion

Dr. Schoemaker commented that what NCCIH has been doing is not just a carve-out; it is overarching. NCCIH is one of the few groups that focuses on pain, rather than opioids, as the fundamental issue. Chronic pain is a very complex problem, and opioids are only one of the approaches used in its

treatment—and they are not particularly effective. Strategically, NCCIH can work to keep the focus on pain and on the fact that opioids are not the only possible treatment.

Dr. Kashikar-Zuck pointed out that patients in rural areas far from a large medical center have difficulty accessing approaches other than medication. Dr. Mikosz agreed that access is an important issue. In certain geographic areas, the options recommended in treatment guidelines may not be readily available. Dr. Langevin commented that health care providers need help to follow the CDC guideline's recommendation to work with patients to taper opioids to lower dosages. She also asked whether the CDC guideline includes approaches such as relaxation techniques or mindfulness. Dr. Mikosz explained that CDC has spelled-out guidance about tapering opioids and is developing online training on this topic. The CDC guideline does not mention relaxation techniques or mindfulness but does say that patients need to have a psychosocial support system in place.

Dr. Goertz said that there is a need for physician and patient education about how patients can access various forms of complementary and integrative health and about how primary care physicians might find practitioners to whom they would feel comfortable making referrals. Another gap area, and one that could be an important topic for research, is the sequencing of interventions; for example, patients could be randomized to see a physical therapist or chiropractor first. Dr. Shurtleff noted that combining or sequencing interventions is discussed in NCCIH's strategic plan.

Dr. King pointed out the importance of considering the basic mechanisms of pain and keeping disparities and gender differences in focus. Dr. Shurtleff explained that mechanistic research is in NCCIH's current strategic plan and that there has been much discussion of disparities. Dr. Gaudet commented on the need to think in innovative ways about the delivery of care. Adding more tools for pain management is helpful, but without changes in the system for providing care, it is not a solution. Dr. Shurtleff added that pain doesn't fit tidily into a medical model. The FDA and CDC are working to deal with tremendous challenges related to opioid use and need to focus on that area. As a Center, NCCIH can contribute a different perspective by focusing on pain management, which will hopefully reduce the need for opioids. Dr. Gaudet noted that the VA experience suggests that having an integrated program in place can help patients to discontinue opioids; just advising them to do so is not sufficient.

In response to a question from Dr. King, Ms. Toigo said that everyone agrees that training on opioids for health care providers is critical, but REMS may not be the best way to make it mandatory. Dr. Briggs added that Drug Enforcement Administration (DEA) licensure is not under FDA control. She also commented that the FDA and CDC investments in provider education are impressive, but it might have been even better if they had been evaluated systematically to assess their effectiveness.

Dr. Langevin commented that years ago, a move from the use of opioids during childbirth to relaxation-based methods was implemented in partnership with nursing, and that this situation has parallels with what could be done now for chronic pain. Dr. Schoemaker commented that there has been an increasing move toward a productivity-based system of care, in which short health care visits are prioritized and providers are reimbursed for procedures and drugs.

Dr. Shurtleff thanked everyone for their comments and said that this topic would be discussed again at the next Council meeting. NCCIH cannot change the health care system but can provide research

evidence that can inform policy. He welcomes Council members' comments on the best areas to focus on in the next few years.

VIII. Public Comment and Adjournment

No public comments were offered.

The meeting was adjourned at 3:00 p.m.

We hereby certify that, to the best of our knowledge, the foregoing minutes are accurate and complete.

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