Medicine Responds to Addiction Symposium II
October 25, 2016

Hosted by
Office of National Drug Control Policy

in collaboration with
National Institute on Drug Abuse
National Institute on Alcohol Abuse and Alcoholism
Substance Abuse and Mental Health Services Administration
Centers for Disease Control and Prevention
Health Resources and Services Administration
National Cancer Institute
Department of Veterans Affairs

Proceedings
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Background

In 2015, 21.7 million people in the United States needed treatment for a substance use disorder (SUD)* involving alcohol or drugs other than nicotine,† but only 10.8 percent received any form of inpatient, residential, or outpatient treatment.‡ Of those who do receive care, few receive evidence-based services.

On October 25, 2016, the White House Office of National Drug Control Policy (ONDCP) hosted the second “Medicine Responds to Addiction” Symposium that explored and promoted the development of model Centers of Excellence in Addiction Medicine at academic medical centers in the United States. The meeting was hosted in collaboration with Federal partners, including National Institute on Drug Abuse (NIDA), National Institute on Alcohol Abuse and Alcoholism (NIAAA), Substance Abuse and Mental Health Services Administration (SAMHSA), Health Resources and Services Administration (HRSA), Centers for Disease Control and Prevention (CDC), National Cancer Institute (NCI), and Department of Veterans Affairs (VA). The symposium built upon a previous symposium in September 2015 that brought together medical leaders to advance addiction medicine and addiction medicine fellowship training programs.‡

The purpose of the Centers of Excellence is to demonstrate that quality addiction prevention, treatment, and recovery services can be made available across healthcare sectors by expanding Addiction Medicine (ADM) specialty training and integrating an ADM curriculum and ADM testing throughout medical education and primary care physician specialty training. These goals will be accomplished by:

- Integrating core curriculum in addiction medicine across medical education and graduate physician training in all primary specialties and through the American Board of Medical Specialties (ABMS);
- Developing the new ABMS national level certification examination in addiction medicine, and the new Accreditation Council for Graduate Medical Education’s (ACGME) accreditation requirements for physician training in addiction medicine;
- Assuring that level-appropriate test questions related to this curriculum are included as part of the curriculum-test continuum;
- Highlighting emerging ACGME-accredited addiction medicine fellowship training programs as anchors of these Centers of Excellence; and

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* According to the U.S. Department of Health and Human Services (HHS), Office of the Surgeon General. (November 2016) “Substance use disorder (SUD) is an independent illness that significantly impairs health and function and may require specialty treatment. SUD can range from mild to severe. Severe and chronic substance use disorders are commonly referred to as addictions.”

† No national data include the number of individuals who receive treatment for addiction involving nicotine.

‡ Held in September 2015 in the Eisenhower Executive Office Building by the Office of National Drug Control Policy and co-hosted by The American Board of Addiction Medicine (now the Addiction Medicine Foundation) in collaboration with NIDA, NIAAA, and other Federal agency partners, the Symposium fueled dramatic change in the field of addiction medicine. The new subspecialty of addiction medicine was approved by the American Board of Medical Specialties and accepted for accreditation by the Accreditation Council of Graduate Medical Education; fellowship training programs in addiction medicine grew to 40 with another 10 in development; and core curriculum will soon be available for use across medical education and training.
Recognizing the role of Federal collaborators and philanthropy in establishing gold standard education and training in the new field of addiction medicine.

The 80 participants attending the symposium included 40 representatives from academic institutions, 9 representatives from medical boards and accreditors, 5 representatives from medical associations, 8 representatives from philanthropic foundations, and 18 Federal partners. (See Appendix A for the list of participants.)

Symposium participants discussed the state of the art of addiction science, a model approach to addiction medical education, integrated curriculum and core competencies on prevention of risky substance use and treatment and management of addiction, and critical partners for implementation. In three separate panels, medical leaders, champions, and advocates shared information about their roles in and contributions to the addiction medicine field. Participants broke into four workgroups to identify challenges, opportunities, and next steps in the development of the addiction medicine field. (See Appendix B for the symposium agenda.)

Opening and Introduction of Director Botticelli

June Sivilli, M.A., Division Chief, Public Health and Public Safety, Office of National Drug Control Policy

Ms. Sivilli welcomed attendees and discussed details of the day’s agenda. With the exception of the breakout groups, all sessions of the meeting were livestreamed on the WhiteHouse.gov website and a shorter segment was posted to YouTube. She introduced Mr. Michael Botticelli, Director of ONDCP, and facilitated the meeting.

Welcome and Meeting Purpose

Michael Botticelli, M.Ed., Director, Office of National Drug Control Policy

Director Botticelli reviewed highlights from the previous symposium and some of the events that have happened since, including addiction medicine’s approval as a new subspecialty by the ABMS and acceptance for accreditation by the Accreditation Council for Graduate Medical Education (ACGME). He described the meeting purpose as emphasizing the role of Academic Centers of Excellence, as well as possible changes in medical school education and training that can make a difference for people with SUDs.

Key Points of Presentation:

- There is still a lack of willingness to treat people with SUD in medical settings.
- Forty percent of counties in the United States do not have an outpatient medical provider. SAMHSA has focused efforts on how to get Drug Addiction Treatment Act (DATA)-waivered physicians to serve these parts of the country. Only one in nine people with an SUD receives care and treatment needed. We must do a better job of understanding and treating addiction.
• The current opioid epidemic has taught us a lot about disconnects between SUD and medical practice.
• In 2015, 52,000 people died from a drug overdose, 33,000 involving opioids.²
• Law enforcement has begun to acknowledge that America cannot incarcerate its way out of the SUD problem and wants to work with the medical community and the public health community. Law enforcement across the country is suggesting that better access to treatment is the best thing the Federal government can do to help with SUD.
• ONDCP has asked Congress for $1.1 billion for SUD prevention and treatment support services but Congress has yet to act.§
• SUD issues need to be a core part of our healthcare profession’s education and training, particularly universal screening, early intervention, identifying at-risk individuals, and diagnosing.
• While most people who misuse prescription opioids do not transition to heroin, four out of five recent heroin initiates had previously misused prescription opioids.³
• Many prescribers do not receive adequate training on pain management or SUDs in medical school. On average, medical schools spend less than 11 hours on prescriber education.⁴ Unfortunately, the only information some prescribers receive about opioids comes from the very companies that manufacture the opioids.
• The Centers for Disease Control and Prevention (CDC) have released their Guideline for Prescribing Opioids for Chronic Pain, and already hundreds of nursing and pharmacy schools have committed to integrating those guidelines into their curricula. Fourteen states have passed mandatory prescriber education requirements.
• Adequate reimbursement for SUD treatment is critical. ONDCP is a member of the Task Force established by the President to ensure that the parity regulations are appropriately implemented and enforced at the state and Federal levels.

State of the Art of Addiction Science, Practice, and Service

George Koob, Ph.D., Director, National Institute on Alcohol Abuse and Alcoholism

Key Points of Presentation:
• The cost and scope of alcohol addiction in economic terms is enormous. Less than 10 percent of people with an alcohol use disorder get any medication whatsoever, and less than 20 percent receive any treatment.
• NIAAA’s research has produced three general principles:
  – Addiction is an incentive salience disorder;
  – Addiction is a reward deficit disorder/stress surfeit disorder; and
  – Addiction is an executive function disorder.
• Modern neurobiology that is being innovated by the Brain Research through Advancing Innovative Neurotechnologies® (BRAIN) initiative of the National Institutes of Health (NIH) allows us to drill down into very specific circuits that we

§ On December 13, 2016, President Obama signed the 21st Century Cures Act, legislation that includes $1 billion to combat the prescription opioid and heroin epidemic.
know are activated during stress and that overlap with the circuits activated during withdrawal from substance abuse.

- About 90,000 deaths in America each year involve alcohol. This figure includes deaths due to health effects, car crashes, and the roughly 25 percent of opioid overdoses which involve alcohol.
- Addiction is a chronic, relapsing brain disorder with potential for recurrence and recovery. Addiction involves a three-stage cycle that becomes more severe with continued substance use: the binge/intoxication stage, the withdrawal/negative affect stage, and the preoccupation/anticipation stage. The cycle is associated with dramatic and persistent changes in three principal brain regions: basal ganglia, extended amygdala, and prefrontal cortex. Disruptions in these brain regions enable substance-associated cues to trigger substance seeking, reduce sensitivity of brain reward systems, and heighten activation of brain stress symptoms, as well as reduce functioning of brain executive control systems.
- Brain changes persist long after substance use stops; it is unknown to what degree these changes may be reversed or how long reversal may take.
- Adolescence is a critical at-risk period for substance use, especially alcohol, and addiction. All addictive drugs have especially harmful effects on the adolescent brain, which is still undergoing significant development.

Nora Volkow, M.D., Director, National Institute on Drug Abuse

Key Points of Presentation:
- We cannot afford to continue to ignore SUD in the healthcare system. The first issue we have to address is the proper training of those in the healthcare system.
- Imaging technologies have allowed us to document in a clear-cut way that addiction is a disorder of the brain. Imaging technologies allow us for the first time to look into the brain of a person with an addiction and actually assess whether that brain is working properly. By identifying which areas are not working properly, we can begin to understand why the person is struggling with drug-taking behavior.
- Repeated drug use changes the brain and weakens the brain’s dopamine system. Drugs activate the dopaminergic pathways, stimulating reward systems. Those reward systems are hardwired in our brains to motivate our actions and to help us learn very rapidly things that are salient and important for our survival. Because of this, they trigger neuroadaptations. Repeated use of drugs reduces levels of dopamine D2 receptors. Animals born with low levels of dopamine D2 receptors are much more prone to impulsive behavior and intake of drugs.
- Using a combination of human and animal studies, we can interrogate the brain and look at what happens when the level of those receptors goes down. With a reduction in D2 receptors, we see a decrease in the level of executive function, the area indispensable for us to exert control over our behavior.
- With these tools, we have also started to explore why some people who take drugs become addicted and others do not. One factor is genetic, but development also has an effect, which is why prevention interventions are important to teach medical students. All of us come with vulnerabilities that are not driven purely by our genetics. Environmental exposures play a major role. Social
deprivation profoundly reduces the receptors that make us vulnerable to compulsive administration of drugs.

- By learning about these circuits, we learn how we can intervene. Addiction can be treated. The extent of brain circuit recovery varies significantly, but it is clear that treatment significantly improves the outcomes. Treatment is not being sought as frequently as we would hope for several reasons, including negative attitudes or prejudice and a belief that treatment does not work.
- Just like hypertension, addiction is a chronic disease that requires continued care.
- Approximately every 9 minutes a person dies from an opioid overdose. The 2015 National Survey on Drug Use and Health (NSDUH) found that 20.8 million people 12 and older in the United States had a substance use disorder in the past year, 88.9 percent of whom did not receive specialty treatment for an SUD\(^5\). One of the problems is that the infrastructure is inadequate to accommodate the treatment needs of the nation.

Kana Enomoto, Principal Deputy Director, Substance Abuse and Mental Health Services Administration

**Key Points of Presentation:**

- SAMHSA’s mission is to transfer scientific theory and understanding into practice in order to help people struggling with mental illness or SUD.
- A major accomplishment for SAMHSA in the past year has been to establish the position of Chief Medical Officer and hire Dr. Anita Everett.
- SAMHSA is ensuring the delivery of state-of-the-art services by supporting innovation and practice improvement. It recently released the MATx mobile app to support medication-assisted treatment of opioid use disorder.
- Since the beginning of his term, Surgeon General Vivek Murthy has been a tireless advocate on issues of addiction and mental health. In the upcoming Surgeon General’s Report,** the chapter on alcohol, drugs, and health, and other chapters on prevention, treatment, recovery, and healthcare systems, are intended to raise public awareness and help the public to understand that SUDs are medical illnesses and issues for medical providers across the board. All providers need to understand the burden that problematic substance use creates for their patients.
- Addiction treatment has been separate from the rest of health care for too long, and integration of treatment can improve the quality, safety, and effectiveness of all healthcare services.
- Not only do we need to increase the pipeline of specialty workforce providers in behavioral health; we also need to be able to make the best use of the providers available and to leverage allies across healthcare professions.
- SAMHSA recently issued two rules on buprenorphine prescribing. The Comprehensive Addiction and Recovery Act also expanded access to buprenorphine prescribing to nurse practitioners and

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**On November 17, 2016 the report *Facing Addiction in America: The Surgeon General’s Report on Alcohol, Drugs, and Health* was published.**
physicians’ assistants. In the last year, there has been a 72-percent increase in the number of applications for DATA waivers. This is very good news, promising to get more patients access to this potentially life-saving medication.

- SAMHSA has been strategically distributing grants to institutions that it believes will become force multipliers—grants that will scale up an evidence based practice that can make a change not just for one locality or provider but for the whole system. More than 15,000 healthcare professionals have been trained in screening, brief intervention, and referral to treatment (SBIRT), including 600 residents. Two million people have been screened or received treatment through SBIRT. Of those screened, 15 percent were at risk, 2.5 percent being referred for brief treatment, and 2.5 percent referred for specialty treatment.

- Secretary Burwell’s primary goals in addressing the opioid crisis include improving prescriber practices, increasing the use of naloxone, and expanding access to medication-assisted treatment.

A Model Approach to Addiction Medical Education: Key Components

Facilitators: Kevin Kunz, M.D., M.P.H., Executive Vice President, The Addiction Medicine Foundation, and David Stern, M.D., Executive Dean and Vice-Chancellor for Clinical Affairs, University of Tennessee College of Medicine and the University of Tennessee Health Science Center

Kevin Kunz, M.D., M.P.H.

Key Points of Presentation:

- Medicine is now formally responding to the need for a workforce of qualified addiction medicine physicians. Expected next steps include the further expansion of addiction medicine fellowships, a modern approach to building the physician workforce through educational modernization throughout medical school and post-medical school training, and the emergence of Centers of Excellence in addiction medicine.

- Of the 2.6 million total deaths in the United States each year, 19 percent are attributable to nicotine, 3.5 percent to alcohol, 1 percent to opioids, and 1 percent to other illicit drugs. One of every four deaths in America is attributable to one of these substances.

- Addiction medicine’s recognition by the American Board of Medical Specialties (ABMS) and its sponsoring member board, the American Board of Preventive Medicine (ABPM), as well as recognition of addiction medicine fellowship training by the Accreditation Council on Graduate Medical Education (ACGME) has brought this needed field of medical practice into the “House of Medicine”. The availability of this new field to physicians from all medical specialties can place prevention, treatment and recovery services within reach over the broad range of primary care and other clinical practices.

- There is a continuum of addiction medicine competencies that will need to be added to the curriculum from medical school through residencies and fellowship training. Clinical experts, faculty, and change agents coming from fellowships drive the science, practice, teaching, and education through all physician training. Fellowships become epicenters for successful responses to medical problems and addiction medicine fellowships are essential, as medicine and American health care systems seek to address endemic and epidemic substance use.
• The field of addiction medicine is on track and hopes to see 125 addiction medicine fellowships by 2025. To actualize this goal, continued funding support from philanthropy, state and Federal government, and other sources is necessary.

George Thibault, M.D., President, The Josiah Macy Jr. Foundation

Key Points of Presentation:
• The size, composition, and distribution of skills of the healthcare workforce will determine the success of healthcare reform. Therefore, innovations in health professions education are needed to prepare the workforce of tomorrow. Health professions need to align with the changing needs of society and changing delivery systems.
• The Macy Foundation has chosen six areas of innovation:
  – interprofessional education;
  – new models for clinical education;
  – new content to complement the biological sciences;
  – new educational models based on competency rather than time;
  – new educational technologies; and
  – faculty development for teaching and educational innovation.
• Each of these areas of innovation would support improved education in pain management and substance use disorders.
• In addition to breaking down silos between medical professions, we need to develop closer ties between education and the healthcare delivery system so that the educational process is informed by the needs and changes of the delivery system and the delivery system incorporates the educational mission.
• In all aspects of the education and delivery system, we need to be much more outward-focused, focused on the needs of the patient and the community, which should drive our educational process and drive our delivery system.
• Four medical schools in Massachusetts have collaborated on developing a curriculum for addressing SUDs. This is a good example of breaking down silos between medical schools, between medicine and public health, and calling for an interprofessional approach.

David Stern, M.D.

Key Points of Presentation:
• The approach to addiction should resemble the approach to cancer by being clinically multidisciplinary and should foster research that cuts across clinical and basic science to put together the elements needed for targeted therapies. Educationally, approaches should span everything from screening programs in the community to training people in community-oriented approaches.
• There are many factors in transitions of care which a multidisciplinary approach will affect in important ways.
• Gene-environment interactions, genomics, and personalized medicine are going to be the future of health care, and will apply to everything from the vulnerability to SUDs to the susceptibility to the complications and the pace/completeness of the recovery. An integrated approach will be needed to move the field forward.
• Addiction clinics are the perfect place for interdisciplinary education.
• We have a number of firm impact metrics (medical and economic) for what success would look like, including:
  - reduced incidence and prevalence of SUDs;
  - reduced medical complications of addiction;
  - reduced costs of healthcare for patients with risky substance use/addiction and associated complications;
  - reduced social consequences linked to risky substance use; and
  - reduced iatrogenic harm.

Panel Responders:

Sarah Wakeman, M.D., FASM, Assistant Professor of Medicine and Medical Director, Substance Use Disorder Initiative, Massachusetts General Hospital, Harvard Medical School

• Substance use, including all addictive drugs - not just opioids - is the epidemic of our times. Yet unlike the early years of the HIV epidemic when we waited for science to catch up and for treatments to be discovered, we already know what works for addiction.
• For example, no one should ever die from an opioid overdose. We have naloxone, along with proven health strategies to keep at-risk people safe and provide effective treatment.
• It is long past time for medicine and society to work together to meet this great need. What is required is true ownership of the crisis and implementation of known strategies and treatments.
• Undoing the historic legacy of incarceration and prejudice will require educating not only our population but also our policymakers and healthcare providers about the nature of this complex brain disease. It will also require relentless advocacy to change policy and practice.
• Harvard Medical School will be seeking ACGME accreditation for its addiction medicine fellowship as soon as it becomes available. As soon as the ABPM sponsors the first ABMS-level addiction medicine certification, all of its addiction medicine physicians will become credentialed and certified.

Alison Whelan, M.D., Chief Medical Education Officer, Association of American Medical Colleges

• An important paradigm shift in medical education is mastering the competencies of communication skills and interprofessional teamwork.
• While every medical school does include content on SUD in both required and elective courses, in both didactic and clinical work, it is integrated and taught in a different way at each medical school.
• The continuum of the educational world is an area in which all of us need to continue to expand. It is imperative to reach out to those physicians doing the work every day.
• MedEdPORTAL is a Web-based, open access repository of peer-reviewed teaching and learning modules. Members of the Association of American Medical Colleges (AAMC) have made major efforts to expand its content in addiction medicine, and they look forward to working with others to build a larger collection of submissions focused on addiction medicine.
Mary Lieh-Lai, M.D., Senior Vice President for Medical Accreditation, Accreditation Council for Graduate Medical Education

- Accreditation decisions are based on compliance with standards, and they provide assurance that a sponsoring institution/program meets the quality standards for which it prepares its graduates. ACGME's primary goal is to prepare physicians who can provide good patient care in the future.
- Each specialty or subspecialty application has to adhere to the sponsoring institution's requirements, the common program requirements, and the specialty/subspecialty-specific requirements.
- The fellowship for the subspecialty of addiction medicine was approved by the ACGME Board of Directors on June 11, 2016. The fellowship accreditation for approval allows anyone who has successfully completed specialty training to apply for a fellowship in addiction medicine.

Donald E. Melnick, M.D., MACP, President, National Board of Medical Examiners

- The National Board of Medical Examiners (NBME) is best known as the developer and co-owner of the United States Medical Licensing Examination (USMLE). It also provides extensive assessment tools for use in undergraduate and graduate medical education, self-assessment tools for students, and assessment tools for other healthcare professionals.
- NBME has co-administered the Addiction Medicine Certification Exam since the first exam in 1986, and its members feel they have helped the exam evolve and grow as the field has come of age.
- With the recognition of addiction medicine as a subspecialty of the ABMS Member Board in Preventive Medicine, NBME's support relationship with the American Board of Addiction Medicine will come to an end, but its members are eager to help where they can to encourage the momentum of the new subspecialty.
- In 2010, NBME was invited by ONDCP to work with others to identify ways to place greater emphasis on substance misuse and addictions in the USMLE program. Central to the recommendations of this group was the need to shift the focus from acute issues related to substance misuse to SUD as a chronic disease. This resulted in a substantial increase in examination content related to SUD and addiction. Volunteers from the field interested in contributing to this work are welcome.

Hugh Mighty, M.D., M.B.A., FACOG, Dean and Vice President of Clinical Affairs, Howard University College of Medicine

- In 1997, Howard University Hospital created the Alcohol Research Center to facilitate multidisciplinary research and collaboration that would lead to a reduction in alcohol morbidity and mortality among minority populations. Howard has continued to develop new programs since then, including SBIRT medical residency and medical professional programs.
- Howard is proud to have progressed to its addiction medicine fellowship program, which will be housed in the Department of Community Health and Family Medicine and will be strongly supported by experienced and dedicated faculty. The fellowship will leverage Howard University’s unique position in serving diverse and underserved populations, particularly in the District of Columbia.
Jan Willcox, D.O., FACOFP, Dean, Edward Via College of Osteopathic Medicine (VCOM), Virginia Campus

- VCOM is a private nonprofit osteopathic medical school with a mission to create physicians for rural and underserved Appalachia. Sixty-six percent of the 1,800 graduated physicians have returned to work in the Southern Appalachian states.
- Much of the charge of the National Board of Osteopathic Medical Examiners is to protect the public, and it is able to initiate the formative process early on.
- In addition to opioid addiction as part of the behavioral sciences in second year, VCOM is integrating prescribing and substance misuse within core third-year curriculum, with a fourth-year elective in addiction medicine.
- VCOM’s goal is to establish an addiction medicine fellowship, but it has encountered struggles in finding a program director who is interested in developing it in a rural and underserved area.

Christen Johnson, Medical Student, President, Student National Medical Association

- Medical students at some institutions are learning addiction medicine skills but are then assigned physicians or attending physicians who do not have the necessary experience with addiction to impart to students the sensitivities they need to be successful.
- When addiction is viewed as a disease, it changes the way students are able to expand their skills. Implicit bias and cultural misunderstanding often overshadow the socioeconomic factors that complicate the care of patients with addiction.
- Creating physicians who are culturally competent, socially conscious, and clinically excellent, the mission of the Student National Medical Association (SNMA), is the first step to overcoming the challenges that addiction presents for the medical community. Addiction medicine training is critical. The Student National Medical Association (SNMA) is currently working on including a plenary session on addiction medicine at its national conference. The 2016-2017 SNMA presidential agenda made researching and countering bias in medical education a top priority.

Implementation – Part I: Integrated Curriculum and Core Competencies on Prevention of Risky Substance Use and Treatment of Addiction

Facilitator: Patrick G. O’Connor, M.D., M.P.H., FACP, Dan and Amanda Adams Professor of General Medicine and Chief, General Internal Medicine, Yale School of Medicine; Director, The Addiction Medicine Foundation

- Engaging physicians is a critical step in ensuring that patients receive state-of-the-art addiction prevention and treatment.
- Physician education on addiction has lagged far behind education on other important chronic diseases, such as diabetes, cancer and cardiovascular disease. However, physician education on addiction needs to be given a priority level at least as high as these chronic diseases.
- Leaders in medical education need to enhance addiction education at all levels – medical school, residency, fellowship, and continuing medical education – to ensure that physicians are adequately trained to provide the care and services that their patients need to promote their health and wellbeing and to address the enormous public health issues associated with addiction.
• New and evolving approaches to medical education at all levels are well suited to incorporating addiction education.

• These new models of education on addiction need to be integrated throughout the medical school and residency curriculum from the first day of orientation through graduation.

• This session focused on innovative approaches to enhancing physician education on addiction at the medical school and residency levels with a focus on physician competencies and patient outcomes.

• The presenters for this session included Dr. Robert Englander, a national expert on undergraduate medical education, Dr. Eric Holmboe, a national expert on graduate medical education, and respondents representing addiction medicine fellowship programs, Deans from medical schools from around the United States, and a representative from the American Medical Student Association.

Putting Addiction Medicine in the Context of Medical Education
Robert Englander, M.D., M.P.H., Associate Dean for Undergraduate Medical Education, University of Minnesota Medical School

Key Points of Presentation:
• Devoting additional time in the curriculum to addiction medicine may not be effective in moving the field forward.

• We have to move from a focus on curricula to a focus on outcomes. We need to identify the desired outcomes and then let schools be clever about how best to get their students there. The major paradigm shift in medical education is transitioning from fixed time/variable outcome to fixed outcome/variable time.

• There may be agreement on the outcomes for graduate medical education, but that has not been the case at the undergraduate level. However, we are finally arriving at a consensus on what it means to be a great physician in the 21st century. Physicians will spend their careers on a developmental trajectory building mastery in eight domains of competence:
  – patient care;
  – medical knowledge;
  – interprofessional collaboration;
  – personal and professional development;
  – systems-based practices;
  – practice-based learning and improvement;
  – professionalism; and
  – interpersonal communication and skills.

Learning to Care for Patients With Addiction
Eric Holmboe, M.D., FACP, FRCP, Senior Vice President for Milestone Development and Evaluation, Accreditation Council for Graduate Medical Education

Key Points of Presentation:
• If medical students do not experience delivery of care at a high level of quality and safety during their education, it is very unlikely that they will be able to provide care at the highest levels of quality and safety themselves. The usual approach to handling this problem has been to simply add curriculum without attention to the clinical environment.
Competencies learned and developed in other settings can be applied to patients with SUDs or addiction disorders.

Mastery is a life-long goal, and development is a nonlinear phenomenon.

Curriculum and assessment need to be integrated. Assessment drives learning, but learning should also drive the right kind of assessment. Faculty development needs to be accomplished in a coproduction model.

Educational and clinical care spaces must be brought closer together.

Given most of medical education and learning is experiential, how can we integrate addiction medicine into existing curricula?

Panel Responders:

Anna Lembke, M.D., Assistant Director, Psychiatry and Behavioral Sciences, Director, Stanford Addiction Medicine Fellowship Program; President, Addiction Medicine Fellowship Directors Association

- Adding additional time to the issue of addiction medicine in medical education probably would advance the field by emphasizing its importance, especially early on.
- It is important to integrate these concepts and apply competencies from other areas, but it also is important for students to see patients with addiction in order to know how to treat them.
- We have an opportunity not only to expand teaching addiction medicine to medical trainees from all disciplines, but also to actually provide a quality addiction medicine education.
- There are responsible ways to treat patients in pain who also have addiction problems as long as the prescriber has heightened education and awareness.

Clay Marsh, M.D., Vice President and Executive Dean, West Virginia University Health Sciences, West Virginia University School of Medicine

- To address the state’s opioid crisis, West Virginia University (WVU) School of Medicine has created a multidisciplinary task force focused on creating experiential and interprofessional learning opportunities.
- An addiction medicine fellowship is badly needed in the State. There are only six addiction psychiatrists in West Virginia.
- The best learning happens in the delivery of care.
- Prevention is more important than treatment. Isolation is the critical feature that may predispose people to the risk of addiction problems. The breakdown of communities, the economic base, and the educational base of parts of West Virginia are believed to be contributing factors to the state’s opioid problem. WVU has students working to rebuild communities and rebuild hope in a better future.

Paula Crone, D.O., Dean, College of Osteopathic Medicine of the Pacific, COMP-Northwest, Western University of Health Sciences, Oregon

- Addiction medicine should be integrated throughout the students’ education providing a foundation of knowledge and skills, incorporating screening, assessment, intervention, and referral skills.
- COMP-Northwest Western University of Health Sciences is currently implementing reforms to integrate addiction medicine throughout the 4 years of curricula.
• Fifty-six percent of osteopathic physicians go into primary care specialties and account for almost 18 percent of the primary care workforce. Addiction medicine diagnosis and treatment skills are required competencies in osteopathy. Osteopaths are well positioned in underserved communities to be a significant part of the solution to the issue of SUD.

Richard Belitsky, M.D., Deputy Dean for Education, Yale University School of Medicine, Connecticut
• As a first step in thinking about its curriculum, Yale created an addiction task force to take a deep, broad look at the current addiction medicine curriculum and make recommendations to the school’s curriculum committee. Yale hopes to implement the recommendations by next school year and would be happy to share its findings with other institutions.
• The importance of the notion of the most effective educational approach is teaching things early, often, and in the right context when it is developmentally appropriate for students. The fact that something was in the curriculum and taught does not mean that it was effectively learned.
• Think about the teaching of addiction as a blueprint or thread that connects and reinforces teaching from the beginning of the curriculum to the end, allowing it to be practiced in meaningful ways during the student’s clinical experience.

William Lawson, M.D., Ph.D., DFAPA, Associate Dean for Health Disparities, Dell Medical School, Texas
• Dell Medical School has found huge disparities in care in the Austin, Texas, area and is focusing on how to address its underserved population.
• Texas has been ahead of the curve in bringing together various parts of the public health sector. This will serve as the foundation for providing an educational experience that fits with the integrated academic system.
• Dell is concerned, but also optimistic about addiction treatments being implemented in the correctional system as well as in minority communities.

Elisa Crouse, M.D., Associate Dean for Graduate Medical Education, Assistant Professor of Obstetrics and Gynecology, University of Oklahoma School of Medicine, Oklahoma
• Since 1999, overdose rates in Oklahoma have increased five-fold. The State has the second highest incarceration rate in the country and the highest incarceration rate for women. Fifty percent of the prison population is incarcerated for felony convictions on alcohol or other drug-related charges. Nearly 75 percent of these inmates have been diagnosed with mental health disorders or SUDs, and they are not receiving the care they need.
• In the upcoming election, the State will have the option of reclassifying many low-level crimes responsible for this incarceration rate from felonies to misdemeanors. This is projected to save the State $500 million, and that money is intended to be reinvested in mental health and substance use treatment programs. Without competent addiction medicine professionals, however, the funding alone will not provide the needed impact.††

†† This was approved in the election on November 8, 2016.
Laurence Katzenelson, M.D., Associate Dean of Graduate Medical Education, Stanford University School of Medicine, California

- Stanford's addiction medicine fellowship is now in its fourth year, and it was recently expanded. The school will be applying for ACGME accreditation.
- Stanford Society of Physician Scholars provides funding for research grants for medical students to be mentored and taught by residents and fellows.
- Faculty need to be integrated into these conversations. When faculty are not engaged in their programming, the residents and medical students do not leave with inspired learning.
- In addition to finding ways to improve its curriculum, Stanford has a work group looking at developing better unconscious bias training. Addiction medicine is an ideal field to apply these new approaches.

Kelly Thibert, D.O., MPH, President, American Medical Student Association

- There is a need for more undergraduate medical education in addiction medicine.
- Physicians in training are not currently receiving adequate preparation for addiction medicine.
- We come nowhere close to being prepared enough to address addiction with our patients when we graduate from medical school.
- Students from a distinguished medical school have taken curriculum into their own hands by delivering lunch lectures, specifically discussing the opioid epidemic, as well as starting a campaign on how to buy and use naloxone.
- These students today will be the frontline physicians of tomorrow.
- We recognize this public health issue, we understand that addiction is a chronic illness and we want to be knowledgeable enough to care for our patients.
- It is rare today to graduate from medical school without having participated in the care for a patient with addiction, yet there is no standardized curriculum in place addressing addiction.
- Educational programs need to provide adequate information about licit and illicit substances and their effects, including harm reduction principles for patients unwilling to stop using entirely.
- We learn a multitude of guidelines in medical school; however, when medical institutions were asked to pledge to teach their students the new Federal guidelines for safe opioid prescribing before they graduate, less than 40% of the Nation’s medical schools took the pledge. This is unacceptable.
- Not only should addiction medicine be a required competency, it should be longitudinal in design.
- We must talk about stigma surrounding addiction.
- We must be trained and prepared to take on addiction, as we are the not so distant future of medicine.

Implementation – Part II: Critical Partners

Facilitators: Anna Lembke, M.D., Assistant Director, Psychiatry and Behavioral Sciences, Director, Stanford Addiction Medicine Fellowship Program; President, Addiction Medicine Fellowship Directors Association, and Joseph Lee, M.D., Medical Director, Hazelden Betty Ford Foundation Youth Continuum
The Role of Philanthropy
Joseph Lee, M.D.

Key Points of Presentation:

• The decades-long and consistent marginalization of mental health and substance-related issues across the country is a variable not often discussed. In many ways, we are now paying the price for years of neglecting the fiscal and educational investments required to confront the conditions facing the greatest prejudice.

• SUDs are a developmental disorder. They arise in adolescence and early adulthood. Under any other chronic disease model, we would deploy resources before people have problems, but SUDs are only addressed years and sometimes decades after people become addicted.

• As America is finally discussing addiction as a medical issue, there is a whole generation of young people and families in communities and schools not getting the early intervention they need. Many medical students enter education, and their biases and prejudices about addiction are only confirmed and reinforced and not alleviated. With the right education, students and trainees can learn to see these patients through the lens of humanism.

• Hazelden Betty Ford is the Nation’s largest nonprofit provider of addiction care and recovery resources, serving more than 16,000 patients a year in 17 sites across the country. It also educates over 600 professionals a year. Decades before addiction was accepted as a medical phenomenon, Hazelden Betty Ford held fast to its mission of education as one way to combat the prejudice related to SUDs.

• In the future, Hazelden Betty Ford hopes to become a clearinghouse with other partners, a collaborative bridge between the academic world and the clinical world.

• None of Hazelden Betty Ford’s social endeavors would be possible without the generosity of philanthropists and organizations that are involved in philanthropy. Philanthropy plays a role in addressing the large gap in funding, providing training for, and executing the ideas being discussed.

Don Matteson, M.A., Chief Program Officer, The Peter and Elizabeth C. Tower Foundation

Key Points of Presentation:

• Over the past four years, the Tower Foundation has made grants reflecting a variety of strategies for substance use prevention, treatment, and recovery.

• Addiction fellowships are a critical first step in bringing knowledge of addiction to physicians in communities that are clamoring for support. The Tower Foundation has made a modest contribution to developing this essential workforce asset by funding three addiction medicine fellows for just under $250,000.

• The Tower Foundation cannot devote large amounts of money to any one field. It makes modest targeted investments toward reducing the incidence and prevalence of SUDs in our communities. The Tower Foundation combines its resources with those of other foundations, government, and myriad partners to build some of the tools that our communities so desperately need to address SUDs.

• From the Tower Foundation’s point of view, one of the most important resources we can invest in to address SUDs is a workforce equipped to handle addiction and its complexities.
Leadership in Physician Credentialing and Certification
Mira Irons, M.D., Senior Vice President for Academic Affairs, American Board of Medical Specialties

Key Points of Presentation:
- The 24 ABMS member boards certify more than 840,000 physicians representing 37 specialties and 85 subspecialties in all 50 states. Addiction medicine is the newest ABMS subspecialty. The goal of ABMS is to assure the public that their doctors meet the highest specialty standards in this ever-changing era of modern health care.
- Board certification is an important component of physician self-regulation. Certification also provides a path for medical students and fellows to learn, train, and practice in a specialty or subspecialty. It provides a path for the dissemination of knowledge and practice guidelines across the specialties.
- Continuing certification provides a framework for physicians to stay current in their specialty. Continuing medical education (CME) by itself is not enough because it is self-selected. About half of the boards are piloting longitudinal assessment programs that may ultimately replace high-stakes exams.
- Board certification helps to improve medical practice through evaluation of non-knowledge-based competencies.

Carolyn Murray, M.D., M.P.H., Director, American Board of Preventive Medicine; Chair, ABPM Certification Examination Committee

Key Points of Presentation:
- Preventive medicine is a specialty medical practice that focuses on individuals, communities, and defined populations. The goal of specialists in preventive medicine is to promote and protect the health and well-being of individuals in defined populations as well as prevent disease, disability, and premature death.
- While attention is currently focused on the opioid crisis, SUDs overall remain the single largest preventable cause of premature mortality in the United States.
- While ABPM will serve as the administrating board, any diplomate from any of the 24 member boards who meets the requirements for education, training, and experience is eligible for certification. ABPM is working diligently to develop an appropriate administrative infrastructure.
- ABPM takes very seriously the responsibility for setting the standards for certification and tracking the new addiction medicine workforce.

Jeffrey Lyness, M.D., Psychiatry Director and Chair of the Clinical Psychiatry Certification Examination Committee, American Board of Psychiatry and Neurology

Key Point of Presentation:
- The American Board of Psychiatry and Neurology (ABPN) has long recognized that addictions are a core part of psychiatric practice training; at the same time, care for persons with addictions and their families/communities is not just about one specialty, but requires physicians from many specialties gaining the needed expertise.
• Therefore, in addition to continuing to support addiction psychiatry as a subspecialty of psychiatry, the ABPN will continue to support addiction medicine as a subspecialty, recognizing that it is open to other disciplines as well as its own diplomates.

Laurel Leslie, M.D., M.P.H., Vice President of Research, American Board of Pediatrics

Key Points of Presentation:
• Because of the role of the American Board of Pediatrics (ABP) in standard setting and certification, it is necessary to ensure that its standards align with the healthcare needs of children, adolescents, young adults, and their families.
• Addiction is a pediatric disease that impacts children from conception through to their transition into adulthood. It is estimated that one–in-five children grows up in a home where someone uses drugs or misuses alcohol.
• Not only are children the victims of substance use disorder, they may be in need of help themselves. Over 2.3 million adolescents aged 12–17 have been found to be current users of illicit drugs.
• ABP will continue to support efforts to improve the identification and treatment of individuals with risk factors for addiction or active SUDs, as well as efforts to address the impacts of addiction on children, adolescents, and young adults.

Jeanne Sheffield, M.D., Member, American Board of Obstetricians and Gynecology (ABOG), Division of Maternal-Fetal Medicine; Professor of Gynecology and Obstetrics, Director, Division of Maternal-Fetal Medicine, Johns Hopkins School of Medicine, Maryland

Key Points of Presentation:
• George Wendel, the new Executive Director of the American Board of Psychiatry and Neurology (ABOG), has spent over 30 years working on addiction and pregnancy and will bring his advocacy to ABOG.
• ABOG covers about 55,000 OB/GYNs in the United States coming from about 240 training programs. Its accreditation exams at both the general and subspecialty levels include addiction medicine and pain management questions. Its certification and modules also cover addiction medicine problems.
• The only time the highest risk populations of women in the United States access medical care is through their OB/GYN. ABOG will remain committed to responding to this huge percentage of the population to stress both education and certification in addiction medicine.

Michael L. Carius, M.D., President, American Board of Emergency Medicine

Key Points of Presentation:
• Emergency physicians are on the front line for encountering various healthcare concerns manifested by addiction. These situations include resuscitating and stabilizing intoxicated and overdosed victims; identifying and initiating treatment for patients undergoing alcohol and other drug withdrawal, caring for medical problems in patients with alcohol, prescription drug, and illicit drug use disorders; and helping manage acute and chronic pain in patients at risk for misuse of analgesics.
• The emergency department (ED) is a place where addiction medicine is practiced, and emergency medicine needs help in optimizing that practice. New and novel misused substances are often first encountered in EDs, which serve an important role as sentinel for new drug misuse and surveillance.
• Emergency medicine advocates passionately for improving community-based resources for addicted patients.
• Increasing numbers of emergency physicians have career interest in practicing addiction medicine. Forty-two percent of all ED visits are related to painful conditions, and emergency physicians prescribe about 5 percent of all opioids in the United States, most short-acting.
• Emergency medicine strongly advocates for primary prevention of nonmedical use of prescription medications through guidelines that suggest limits on the prescription of controlled medication. It also endorses state-based prescription drug monitoring programs. Through these efforts, emergency medicine has experienced the largest decrease of any medical specialty in opioid prescription rates between 2007 and 2012 (9 percent).
• The American Board of Emergency Medicine (ABEM) sees an opportunity to enhance the continuous professional development of emergency physicians regarding the care of addicted patients through the ABEM maintenance of certification program.

The Connection of Research to Clinical Practice
Randall T. Brown, M.D., Ph.D., FASAM, Associate Professor, Department of Family Medicine and Community Health; Director, University of Wisconsin Addiction Medicine Fellowship

Key Points of Presentation:
• In order to effectively meet the challenge of addiction, we must innovate and act on a variety of fronts, including building a workforce of addiction medicine physicians; driving and informing competencies across medical education, training, and practice; and changing public understanding and public policy. We must build on already robust research and very deliberately link it to medical education and training.
• Only 11 percent of those needing specialized care for an SUD access it, despite more than two-thirds of individuals who engaged in risky or problematic substance use having had contact with primary care or a general medical setting in the last year.
• In order to better understand this set of issues and translate that knowledge into effective practice, research must be a priority. We need to focus our efforts not only on treatment, but also on upstream issues.
• The traditional model for physician training is often a hierarchical one. In this educational milieu, addiction medicine fellows represent critical repositories of knowledge of the current research and how it can and should be applied in practice. They can also serve as appropriate role models for learners in a professional and compassionate interaction with patients.

The Health Science University’s Role in Advancing Addiction Medicine
Clinton E. Adams, D.O., FACHE, President and Chief Executive Officer, Rocky Vista University, Colorado
Key Points of Presentation:

- This is an opportune time for undergraduate health science universities across the country to address the many challenges facing the healthcare delivery system. Students are under tremendous pressure and concern about their preparedness to face the seemingly overwhelming task in the future.
- Soon-to-graduate healthcare professionals are subject to the same or greater potential for addiction as their patients.
- Universities can no longer operate in the historical silos of course-based, or even system-based, curricular design. Adding courses or lecture hours on addiction medicine only swells an already bloated curriculum. Using advanced curricular mapping and interjecting important learning objectives into a pedagogical approach will provide reinforcement in the skill of integrative problem-solving.

Community Experiences for Physicians in Training

Neil Calman, M.D., FAACP, President, American Association of Teaching Health Centers; President and CEO, Institute for Family Health, New York

Key Points of Presentation:

- Family medicine brings a special perspective to the identification and treatment of people with SUDs. Prevention is the key, focusing on early discussions with adolescents about substance use and making inquiries about substance use a part of every adult comprehensive examination.
- If organized well within a primary care medical home setting, every consult with the addiction medicine specialist improves the care of our generalist in taking care of our patients and educated provider, improving the provider's competency in treating addiction.
- Individuals with substance use disorder-related medical conditions who access primary care services are three times more likely to achieve remission over a 5-year period and up to 30 percent less likely to require hospitalization. Thus, integrated treatment is ideal for meeting the comprehensive needs of individuals with SUDs.
- When abstinence is not an option, techniques in harm reduction become critically needed skills. Education on naloxone, reduction of alcohol intake, designated driver programs, and interlock devices to reduce drunk driving are potential interventions that primary care providers can be trained to employ.
- Treatment sites and modalities that are developed need to be available to all patients, regardless of their ability to pay.

U.S. Department of Veterans Affairs

Anthony Albanese, M.D., FACP, DFASM, Physician Liaison for Graduate Medical Education, Veterans Affairs Office of Academic Affiliations; Clinical Professor of Medicine and Psychiatry, UC Davis School of Medicine

Key Points of Presentation:

- The Department of Veterans Affairs (VA) is the largest integrated healthcare system in the United States, serving 8.9 million veterans at 168 centers and about 1,000 more clinical outpatient centers. Between 60 and 70 percent of physicians who are U.S. graduates have had some training at VA facilities.
• VA’s specialty initiatives for improving health care for veterans include the Veterans Access, Choice, and Accountability Act of 2002 (which included increased funding for 1,500 additional trainees in primary care, mental health, and scarce specialties); interprofessional Patient Aligned Care Teams, Primary Care–Mental Health Integration that can meet patients wherever they intersect the system; and interdisciplinary training in addiction medicine.

• As addiction medicine becomes an ACGME-accredited specialty, VA funding for these positions will become more available along with increased local discretion. It will be important for academic affiliates to partner with local VAs in interprofessional addiction training.

American Board of Internal Medicine

Roger Bush, M.D., Director, American Board of Internal Medicine

Key Points of Presentation:
• The American Board of Internal Medicine (ABIM) is grateful for the formal structure to help primary care providers find an effective and efficient way to weave addiction medicine and pain management into their careers. ABIM will work in any way it can to support the goals of addiction medicine.

Concurrent Sessions: Moving into Action – Opportunities and Challenges

Small group sessions were conducted to allow participants to discuss specific actions that could be taken to further promote the integration of addiction medicine into the medical education system. Participants in each group addressed the question “How can we collaboratively ensure that addiction medicine competencies and content are fully integrated into medical education, training, testing, and licensing, and into medical practice and health systems operations?” The groups were instructed to address the question by identifying specific challenges, opportunities, and next steps for fully integrating addiction medicine into medical education, training, licensing, and practice.

Group 1:

Facilitators:

Hoover Adger, M.D., M.P.H., M.B.A.
Sheila Specker, M.D.

Challenges:
• Professional silos
  – Workforce
  – Educational efforts
• Reimbursement for both education and clinical care
• Funding often being piecemeal
• Regulations that may satisfy requirements but not address the intent

Next Steps:
• Getting addiction medicine into curriculum in a meaningful way
  – Flexibility to align with the mission, values, and resources of the institution
• Increasing funding for graduate medical education (GME) slots related to addiction
• Identifying funding mechanisms for medical education innovation and faculty development
• Securing loan forgiveness and scholarships
• Determining what needs to be included in curriculum
  – Prevention, risk profiles, tools, what comorbidities are reversible, how to intervene early
• Encouraging and developing interprofessional training
• Being open to substance misuse and risk factors among students and faculty
• Creating a national clearinghouse
• Permitting longer visits to allow for sufficient care
• Reducing regulatory barriers for access to addiction care
• Addressing college students and care

Group 2:

Facilitators:

Lon Hays, M.D., M.B.A.
Anna Lembke, M.D.

Challenges:

• Finances and reimbursement
• Negative attitudes and prejudice
  – Professional: not a real part of medicine
  – Patient: moral problem; association with crime and violence
• Integration of education across all levels
• Silos, insufficient communication between groups
• Lag between research and practice
• Need for faculty development

Opportunities:

• Board certification (reduces negative attitudes and prejudice)
• Development of new fellowships
• Reimbursement opportunities
• Treatment versus criminalization
• New International Classification of Disease, 11th Revision (ICD-11) codes
• Social consciousness

Next Steps:

• Continuation of this dialog through an annual meeting
• Development of more fellowships
  – Increase GME funding for fellowships
  – Pursue state funding (dedicated taxes on alcohol and tobacco sales)
• Philanthropy (including advocacy)
• Interface with AAMC on addiction medicine interest groups
Group 3:

Facilitators:

Sharon Levy, M.D., M.P.H.
Todd Korthuis, M.D., M.P.H.

Opportunities:

- Bidirectional exchanges between universities and communities (community–academic partnerships)
- Project ECHO (Extension for Community Healthcare Outcomes), telehealth
- Federally Qualified Health Centers (FQHCs)
- Integration of addiction fellows in a corrections environment
- Training for learners in a corrections environment
- Graduating fellows becoming community resources
- State innovation grants
- Certified Community Health Center grants
- “Communities of influence” to encourage best practices
- Provider treatment as model
  - Five-year monitoring and support
  - Random urine drug screening (UDS)
- MATx app
- Fellowships
  - Tiered approach
  - Begin with faculty and skill building
  - “Fusion models”

Next Steps:

- Revision of milestones (competencies)
  - How can addiction medicine inform competencies?
  - Identifying gaps through direct observation of addiction
- General practitioners used as academic detailers to disseminate best practices
- Integrated education (students and staff)
  - Interdisciplinary clinical training

Group 4:

Facilitators:

Alex Walley, M.D., M.Sc.
Paula Lum, M.D., M.P.H.

Challenges:

- Financing to fund training programs
- Institutional and faculty buy-in
- Federal threats to funding
• Relevant, accessible CME that is applicable to all specialties
• Biases
• Quality evidence-based treatments

Opportunities:
• Collaboration with pain management colleagues
• Addiction medicine fellowships
• Unconscious bias training
• Cost savings
• Law enforcement learning from public health and addiction medicine
• Interprofessional collaborations
• Undergraduate medical education curriculum
• Everyone’s involvement in the opioid epidemic

Next Steps:
• ABMS and ACGME accreditation, eventually leading to VA funds through affiliation partnerships
• Involving physicians-in-training immediately with good role models
• Utilizing expertise, such as MedEdPORTAL
• Changing our language
• Partnering with law enforcement
• Using fellowship programs to create Centers of Excellence
• Addiction medicine experts volunteering test question content

Closing Remarks

June Sivilli, M.A., Division Chief, Public Health & Public Safety, Office of Policy, Research & Budget, Office of National Drug Control Policy

Ms. Sivilli closed the meeting by thanking the Federal agencies and partners for participating. She encouraged all who have an opportunity to publish their work to do so, as it is a great way to learn from each other. Deans talking to people in their organizations, as well as coming together with other medical schools and State Directors, are great ways to find opportunities to meet local needs.

Summary of the Meeting

The Medicine Responds to Addiction Symposium, held on October 25, 2016, brought together the Nation’s leaders in medicine and provided a forum for collaboration on spurring the changes occurring within the field to address the prevention of risky substance use and the treatment and management of addiction. Champions from numerous medical boards, certifying bodies, medical associations, and philanthropic foundations voiced their commitment and contributions to the advancement of the addiction medicine field. As host, ONDCP—in partnership with NIDA, NIAAA, SAMHSA, HRSA, CDC, NCI and the VA—worked with other participants on identifying and planning next steps to integrate addiction medicine competencies into general medicine practice and graduate medical training, including creating Centers of Excellence in Addiction Medicine at academic medical centers. The symposium marked a significant advance in the development of
the addiction medicine field and formal fellowship training, and identified key next steps to address the prevention and treatment of America’s largest and most costly preventable health problem.
References


Appendix A: Participant List

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Appendix B: Agenda

9:00 - 9:15 AM  Opening & Introduction of Director Botticelli
_June Sivilli_, M.A., Division Chief, Public Health & Public Safety
Office of Policy, Research & Budget, Office of National Drug
Control Policy

Welcome & Meeting Purpose
_Michael Botticelli_, M.Ed., Director, National Drug Control Policy

9:15 – 10:00 AM  State of the Art of Addiction Science, Practice and Service
_George Koob_, Ph.D., Director, National Institute on Alcohol Abuse
and Alcoholism

_Nora Volkow_, M.D., Director, National Institute on Drug Abuse

_Kana Enomoto_, Principal Deputy Administrator, Substance Abuse and
Mental Health Services Administration

10:00 - 11:00 AM  A Model Approach to Addiction Medical Education: Key Components

Facilitators
_Kevin Kunz_, M.D., M.P.H., Executive Vice President, The Addiction Medicine Foundation

_David Stern_, M.D., Executive Dean and Vice-Chancellor for Clinical Affairs, University of Tennessee College of Medicine and the University of Tennessee Health Science Center

Overview and Addiction Medicine Fellowship Training Programs
_Kevin Kunz_, M.D., M.P.H.

Innovation Underway: Medical Education and Training
_George Thibault_, M.D., President, The Josiah Macy Jr. Foundation

Centers of Excellence in Addiction Medicine and Practice
_David Stern_, M.D.

Panel Responders:
_Sarah Wakeman_, M.D., FASM, Assistant Professor of Medicine and Medical Director, Substance Use Disorder Initiative, Massachusetts General Hospital, Harvard Medical School

_Alison Whelan_, M.D., Chief Medical Education Officer, Association of American Medical Colleges

_Mary Lieh-Lai_, M.D., Senior Vice President for Medical Accreditation, Accreditation Council for Graduate Medical Education
Facilitated Large Group Discussion

11:00 – 11:15 AM Break


Facilitator

Patrick G. O'Connor, M.D., M.P.H, FACP, Chief, General Internal Medicine, Yale School of Medicine, Director, The Addiction Medicine Foundation

Putting Addiction Medicine in the Context of Medical Education

Robert Englander, M.D., M.P.H., Associate Dean for Undergraduate Medical Education, University of Minnesota Medical School

Learning to Care for Patients With Addiction

Eric Holmboe, M.D., FACP, FRCP, Senior Vice President for Milestone Development and Evaluation, Accreditation Council for Graduate Medical Education

Panel Responders:

Anna Lembke, M.D., Assistant Director, Psychiatry and Behavioral Sciences, Director, Stanford Addiction Medicine Fellowship Program, and President, Addiction Medicine Fellowship Directors Association

Clay Marsh, M.D., Vice President and Executive Dean, West Virginia University Health Sciences, West Virginia University School of Medicine

Paula Crone, D.O., Dean, College of Osteopathic Medicine of the Pacific, COMP-Northwest, Western University of Health Sciences, OR

Richard Belitsky, M.D., Deputy Dean for Education, Yale University School of Medicine, CT
William Lawson, M.D., Ph.D., DFAPA, Associate Dean for Health Disparities, Dell Medical School, TX

Elisa Crouse, M.D., Associate Dean for Graduate Medical Education, Assistant Professor Obstetrics and Gynecology, University of Oklahoma School of Medicine, OK

Laurence Katznelson, M.D., Associate Dean of Graduate Medical Education, Stanford University School of Medicine, CA

Kelly Thibert, D.O., President, American Medical Student Association

Facilitated Large Group Discussion

12:15 – 12:30 PM  
Group Photo

12:30 – 1:00 PM  
Networking Lunch

1:00 – 1:45 PM  
Implementation–Part II: Critical Partners

Facilitators
Anna Lembke, M.D., Assistant Director, Psychiatry and Behavioral Sciences, Director, Stanford Addiction Medicine Fellowship Program, and President, Addiction Medicine Fellowship Directors Association

Joseph Lee, M.D., Medical Director, Hazelden Betty Ford Foundation Youth Continuum

The Role of Philanthropy
Joseph Lee, M.D.

Don Matteson, M.A., Chief Program Officer, The Peter and Elizabeth C. Tower Foundation

Leadership in Physician Credentialing and Certification
Mira Irons, M.D., Senior Vice President for Academic Affairs, American Board of Medical Specialties

Carolyn Murray, M.D., M.P.H., Director, American Board of Preventive Medicine and Chair, ABPM Certification Examination Committee

Jeffrey Lyness, M.D., Psychiatry Director and Chair of the Clinical Psychiatry Certification Examination Committee, American Board of Psychiatry and Neurology

Laurel Leslie, M.D., M.P.H, Vice President of Research, American Board of Pediatrics

Jeanne Sheffield, M.D., Member, American Board of Obstetrics and Gynecology, Division of Maternal-Fetal Medicine, Professor of Gynecology and Obstetrics, and Director, Division of Maternal-Fetal Medicine, Johns Hopkins School of Medicine, MD
Michael L. Carius, M.D., President, American Board of Emergency Medicine

The Connection of Research to Clinical Practice
Randall T. Brown, M.D., Ph.D., FASAM, Associate Professor, Department of Family Medicine and Community Health and Director, University of Wisconsin Addiction Medicine Fellowship

The Health Science University's Role in Advancing Addiction Medicine
Clinton E. Adams, D.O., FACHE, President and Chief Executive Officer, Rocky Vista University, CO

Community Experiences for Physicians in Training
Neil Calman, M.D., FAACP, President, American Association of Teaching Health Centers and President and CEO, Institute for Family Health, NY

U.S. Department of Veterans Affairs
Anthony Albanese, M.D., FACP, DFASM, Physician Liaison for Graduate Medical Education, VA Office of Academic Affiliations and Clinical Professor of Medicine and Psychiatry, UC Davis School of Medicine

Participant Questions and Comments

1:45 – 2:45 PM Moving Into Action: Opportunities and Challenges

Facilitators
Group 1: Hoover Adger, M.D., M.P.H., M.B.A., Sheila Specker, M.D.
Group 2: Lon Hays, M.D., M.B.A., Anna Lembke, M.D.
Group 3: Sharon Levy, M.D., M.P.H., Todd Korthuis, M.D., M.P.H
Group 4: Alex Walley, M.D., M.Sc., Paula Lum, M.D., M.P.H.
Breakout Session Question
How can we collaboratively ensure that addiction medicine competencies and content are fully integrated into medical education, training, testing and licensing, and into medical practice and health systems operations?

Identify key challenges, opportunities and next steps

2:45 – 3:30 PM  Workgroup Session Report Outs/Discussion/Next Steps
Facilitators: Alex Walley, M.D., M.Sc., Paula Lum, M.D., M.P.H.

3:30 – 3:40 PM  Closing Remarks
June Sivilli, M.A., Division Chief, Public Health & Public Safety Office of Policy, Research & Budget, Office of National Drug Control Policy

3:40 PM  Adjourn