

**Food and Drug Administration  
Center for Drug Evaluation and Research**

**Final Summary Minutes of the Joint Meeting of the  
Anesthetic and Analgesic Drug Products and the  
Drug Safety and Risk Management Advisory Committee  
December 17-18, 2018**

Location: FDA White Oak Campus, Building 31 Conference Center, The Great Room (Rm. 1503), 10903 New Hampshire Ave, Silver Spring, Maryland.

Topic: The committees provided input and advice on strategies to increase the availability of naloxone products intended for use in the community. The committees were asked to consider various options for increasing access to naloxone, weighing logistical, economic, and harm reduction aspects and whether naloxone should be co-prescribed with all or some opioid prescriptions to reduce the risk of overdose death. Because of the potential, significant costs and burdens that may be associated with naloxone co-prescribing (e.g., economic costs to consumers and health systems, adjusting to manufacturing volume growth, drug shortages), the committees were also asked to consider the potential burdens that may be associated with naloxone co-prescribing for all or some prescription opioid patients.

These summary minutes for the December 17-18, 2018 joint meeting of the Anesthetic and Analgesic Drug Products Advisory Committee (AADPAC) and the Drug Safety and Risk Management (DSaRM) Advisory Committee of the Food and Drug Administration were approved on February 4, 2019.

I certify that I attended the December 17-18, 2018 joint meeting of the Anesthetic and Analgesic Drug Products Advisory Committee and the Drug Safety and Risk Management Advisory Committee of the Food and Drug Administration and that these minutes accurately reflect what transpired.

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/s/  
Jennifer Shepherd, RPh  
Acting Designated Federal Officer, AADPAC

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/s/  
Raeford E. Brown, Jr., MD, FAAP  
Chairperson, AADPAC

**Final Summary Minutes of the Joint Meeting of the  
Anesthetic and Analgesic Drug Products Advisory Committee and the  
Drug Safety and Risk Management Advisory Committee  
December 17-18, 2018**

The Anesthetic and Analgesic Drug Products Advisory Committee (AADPAC) and the Drug Safety and Risk Management Advisory Committee (DSaRM) of the Food and Drug Administration, Center for Drug Evaluation and Research, met on December 17-18, 2018, at the FDA White Oak Campus, Building 31 Conference Center, the Great Room (Rm. 1503), 10903 New Hampshire Avenue, Silver Spring, Maryland. Prior to the meeting, the members and temporary voting members were provided the briefing materials from the FDA and Industry participants. The meeting was called to order by Raeford Brown, MD (Chairperson). The conflict of interest statement was read into the record by Jennifer Shepherd, RPh (Acting Designated Federal Officer). There were approximately 150 people in attendance on December 17, 2018, and approximately 85 people in attendance on December 18, 2018. There were sixteen Open Public Hearing speaker presentations.

A verbatim transcript will be available, in most instances, at approximately ten to twelve weeks following the meeting date.

**Agenda:** The committees provided input and advice on strategies to increase the availability of naloxone products intended for use in the community. The committees were asked to consider various options for increasing access to naloxone, weighing logistical, economic, and harm reduction aspects and whether naloxone should be co-prescribed with all or some opioid prescriptions to reduce the risk of overdose death. Because of the potential, significant costs and burdens that may be associated with naloxone co-prescribing (e.g., economic costs to consumers and health systems, adjusting to manufacturing volume growth, drug shortages), the committees were also asked to consider the potential burdens that may be associated with naloxone co-prescribing for all or some prescription opioid patients.

**Attendance:**

**Anesthetic and Analgesic Drug Products Advisory Committee Members Present (Voting):**

Brian T. Bateman, MD, MSc; Raeford E. Brown, Jr., MD, FAAP (Chairperson); Basavana G. Goudra, MD, FRCA, FCARSCI; Mary Ellen McCann, MD, MPH; Abigail B. Shoben, PhD; Kevin L. Zacharoff, MD, FACIP, FACPE, FAAP

**Anesthetic and Analgesic Drug Products Advisory Committee Member Present (Non-Voting):** W. Joseph Herring, MD, PhD (Industry Representative)

**Anesthetic and Analgesic Drug Products Advisory Committee Members Not Present (Voting):** Ronald S. Litman, DO, ML; Lonnie Zeltzer, MD

**Drug Safety and Risk Management Advisory Committee Members Present (Voting):** Kelly Besco, PharmD, FISMP, CPPS; Denise M. Boudreau, PhD, RPh; Sonia Hernandez-Diaz, MD, MPH, DrPH; Steven B. Meisel, PharmD, CPPS; Suzanne B. Robotti (Consumer Representative)

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**Drug Safety and Risk Management Advisory Committee Members Not Present**

**(Voting):** Marie R. Griffin, MD, MPH; Laurel A. Habel, MPH, PhD; Martin Kulldorff, PhD; Anne-Michelle Ruha, MD, FACMT; Soko Setoguchi, MD, DrPH; Terri L. Warholak, PhD, RPh, CPHQ, FAPhA

**Drug Safety and Risk Management Advisory Committee Member Not Present (Non-Voting):** Linda Scarazzini, MD, RPh

**Temporary Members (Voting):** Maryann E. Amirshahi, MD, PharmD, MPH; Jordan Marie Ballou, PharmD, BCACP; Paul Brand, PharmD, AE-C; Daniel Ciccarone, MD, MPH; Nabarun Dasgupta, MPH, PhD; Mark D. Faul, PhD, MA; Martin Garcia-Bunuel, MD; Tobias Gerhard, BSPharm, PhD; Erin E. Krebs, MD, MPH; Jeffrey T. Macher, PhD; Sabrina Numann (Patient Representative); Paul Pisarik, MD, MPH

**FDA Participants (Non-Voting):** Joshua Lloyd, MD; Sharon Hertz, MD; Alex Secora, MPH; Judy Staffa, PhD, RPh; Douglas C. Throckmorton, MD

**Designated Federal Officer (Non-Voting):** Jennifer Shepherd, RPh

**Open Public Hearing Speakers:** Eliza Wheeler (Harm Reduction Coalition); Michael Hufford, PhD (Harm Reduction Therapies); James Lott, PharmD and Straker Carryer (Fiduscript); Erin Haas, MPH (Maryland Department of Health); Barbara Kochanowski, PhD (Consumer Healthcare Products Association); Megan McLemore, JD, LLM (Human Rights Watch); Jennifer Plumb, MD, MPH; Jeffrey Bratberg, PharmD (University of Rhode Island College of Pharmacy); Grant Smith (Drug Policy Alliance); Peter Maybarduk (Public Citizen); Mark Tripodi (Venebio); Traci Green, PhD; Fred Wells Brason II (Project Lazarus); Robert Twillman, PhD, FAPM (Academy of Integrative Pain Management); Karla Wagner, PhD; Alice Bell (Prevention Point Pittsburgh)

*The agenda was as follows:*

**Day 1: Monday, December 17, 2018**

Call to Order and Introduction of Committee

**Raeford E. Brown, Jr., MD, FAAP**  
Chairperson, AADPAC

Conflict of Interest Statement

**Jennifer Shepherd, RPh**  
Acting Designated Federal Officer, AADPAC

FDA Opening Remarks:  
Overview of the Issues in Question

**Sharon Hertz, MD**  
Director, Division of Anesthesia, Analgesia, and Addiction Products (DAAAP)  
Office of Drug Evaluation II (ODE-II)  
Office of New Drugs (OND), CDER, FDA

December 17-18, 2018

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### **INDUSTRY PRESENTATIONS**

Naloxone Co-prescribing

**Robert G. Kramer**  
President & Chief Operating Officer  
Adapt Pharma/Emergent Biosolutions

Co-prescribing of Naloxone

**Dean Mariano, DO**  
Senior Director, Clinical Development/Medical Affairs  
Insys Therapeutics, Inc.

Role of Naloxone in the Opioid  
Overdose Public Health Crisis

**Charles E. Argoff, MD**  
Professor of Neurology  
Albany Medical College

Role of Naloxone in the Opioid  
Overdose Public Health Crisis

**Omar Khalil**  
General Manager, Neurology & Addiction  
kaléo, Inc.

Clarifying Questions

### **FDA PRESENTATIONS**

Clinical and Regulatory Overview of  
Naloxone Products Intended for Use  
in the Community

**Timothy Jiang, MD, PhD**  
Medical Officer  
DAAAP, ODE-II, OND, CDER, FDA

Drug Utilization of Naloxone

**Shekhar Mehta, PharmD, MS**  
Drug Utilization Analyst, Division of Epidemiology II  
Office of Pharmacovigilance and Epidemiology  
Office of Surveillance and Epidemiology (OSE)  
CDER, FDA

Estimates of the Annual Health System  
Costs of Naloxone Co-Prescribing

**Matthew Rosenberg, MSPPM**  
Operations Research Analyst, Economics Staff  
Office of Program and Strategic Analysis  
Office of Strategic Programs, CDER, FDA

Clarifying Questions

### **BREAK**

### **SPEAKER PRESENTATION**

Candidates for Naloxone:  
What the Data Tell Us

**Christopher M. Jones, PharmD, MPH**  
CAPT, US Public Health Service  
Senior Advisor and Director of Strategy and Innovation  
National Center for Injury Prevention and Control  
U.S. Centers for Disease Control and Prevention (CDC)

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### **GUEST SPEAKER PRESENTATIONS**

Naloxone Dispensing via Retail Pharmacies

**Alexander Y. Walley, MD, MSc**  
Associate Professor of Medicine  
Boston University School of Medicine  
Director, Addiction Medicine Fellowship  
Boston Medical Center  
Medical Director  
Opioid Overdose Prevention Pilot Program  
Massachusetts Department of Public Health

Naloxone Co-prescribing

**Phillip O. Coffin, MD, MIA, FACP, FIDSA**  
Director of Substance Use Research  
San Francisco Department of Public Health  
Assistant Professor  
University of California San Francisco

Clarifying Questions

### **LUNCH**

### **SPEAKER PRESENTATION**

Opioid Overdose Education and Naloxone Distribution (OEND) Within the Veterans Health Administration

**Elizabeth M. Oliva, PhD**  
VA National OEND Coordinator  
VA Program Evaluation and Resource Center  
VA Office of Mental Health and Suicide Prevention  
U.S. Department of Veterans Affairs (VA)

### **GUEST SPEAKER PRESENTATIONS**

Take-Home Naloxone Use in New Mexico

**Joanna Girard Katzman, MD, MSPH**  
Senior Associate Director, ECHO (Extension for Community Healthcare Outcomes) Institute  
Project ECHO  
Professor, Neurology University of New Mexico  
School of Medicine, UNM Health Sciences Center

Development, Manufacturing, and Commercialization Costs for Naloxone and Other Nasal Sprays

**Daniel Wermeling, PharmD, FCCP, FASHP**  
Emeritus Professor  
University of Kentucky College of Pharmacy

Clarifying Questions

### **BREAK**

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**SPEAKER PRESENTATION**

Legal Regimes: Naloxone Access

**Joy E. Gamber, PharmD, BCPP**  
Clinical Pharmacy Specialist, Mental Health  
Veterans Affairs North Texas Health Care System

**GUEST SPEAKER PRESENTATIONS**

Narcan Distribution Collaborative:  
Expanding Access in Hamilton  
County, Ohio and the Impacts

**Tim Ingram, MS**  
Health Commissioner  
Hamilton County Public Health

Community Naloxone Programs

**Peter Davidson, PhD**  
Associate Professor  
Department of Medicine  
University of California at San Diego

Clarifying Questions

**FDA PRESENTATION**

Nonprescription Model Drug Facts  
Label Project

**Barbara R. Cohen, MPA**  
Social Science Analyst  
Division of Nonprescription Drug Products  
Office of Drug Evaluation IV, OND, CDER/FDA

Clarifying Questions

**ADJOURNMENT**

**Day 2: Tuesday, December 18, 2018**

Call to Order and Introduction of  
Committee

**Raeferd E. Brown, Jr., MD, FAAP**  
Chairperson, AADPAC

Conflict of Interest Statement

**Jennifer Shepherd, RPh**  
Acting Designated Federal Officer, AADPAC

FDA Opening Remarks:  
Overview of the Issues in Question

**Sharon Hertz, MD**  
Director, DAAAP  
ODE-II, OND, CDER, FDA

**OPEN PUBLIC HEARING**

**BREAK**

Charge to the Committee

**Sharon Hertz, MD**

Questions to the Committee/  
Committee Discussion

## LUNCH

Questions to the Committee/  
Committee Discussion

## BREAK

Questions to the Committee/  
Committee Discussion

## ADJOURNMENT

### *Questions to the Committee:*

1. **DISCUSSION:** Naloxone is currently available through individual prescriptions for patients from their healthcare providers (e.g., pain clinics and opioid treatment programs) and without individual prescriptions through community-based programs offering overdose education and naloxone distribution and by direct access from pharmacies under programs such as statewide naloxone standing orders or collaborative practice agreements. Discuss the comparative and collective effectiveness of these programs with regard to prevention of overdose death and their ability to get naloxone where it is most needed in communities to save lives.

*Committee Discussion:* The committees noted that the overwhelming majority of deaths occur in those using illicit opioids or prescription opioids without therapeutic purpose, and that this group, as well as patients prescribed opioids for therapeutic purpose, must be considered in order to provide the maximum public health benefit. The committees also commented that co-prescribing of naloxone with opioids could provide some benefit, but would be expensive with no model suggesting the extent of effectiveness that could be expected. One panel member discussed that education at the time of opioid prescribing may be as effective as providing a prescription for naloxone itself. Several committee members discussed that community-based programs have been very effective but lack the resources to expand their efforts. The committees expressed that, for the Agency to help maximize the impact of naloxone, assisting these community groups would seem to be the best use of scarce resources. Several committee members stated that FDA efforts should also include facilitating more rapid availability of over-the-counter (OTC) naloxone and generic naloxone products, and considering using Departmental authorities to enhance the distribution of naloxone by the federal government. Please see the transcript for details of the Committees' discussion.

2. **DISCUSSION:** Discuss potential burdens and barriers associated with co-prescribing naloxone concurrently with opioid prescriptions for all or some patients or with targeted prescribing for individuals considered at high risk for overdose. Discuss how these burdens or barriers may affect implementation of co-prescription or targeted prescribing and what steps could be taken to mitigate these impacts.

**Committee Discussion:** *The committees discussed that the major burden to co-prescribing is cost, which includes cost to the patient, the healthcare system, and secondary costs. It was noted that secondary burdens are also failure to address the larger public health issue of increasing illicit opioid deaths and the stigma of revealing a need for naloxone to a healthcare provider. The committees stated that targeting high-risk populations is a problem because it is difficult to define what constitutes a high-risk population; this approach may require a separate situational targeting model. Several committee members expressed that offering naloxone rather than co-prescribing naloxone may be more effective. The committees discussed that drug shortages may be a problem and that capacity will need to be expanded dramatically to meet the needs of any expansion in naloxone distribution; however, it was noted that this will likely not be something that industry will be able to keep up with and will require the intervention of the federal government, including FDA and other aspects of the Department of Health and Human Services (HHS). The committees also commented on the lack of parity between the branded and generic naloxone products in terms of community use and suggested updating generic labels to emphasize that they can also be used in community settings. Please see the transcript for details of the Committees' discussion.*

3. **DISCUSSION:** Because of the significant costs for patients and the health care system associated with increasing naloxone availability, prioritization of strategies will likely be needed. Discuss, in terms of available data on effectiveness and costs, which, if any, of the following approaches may be beneficial for public health:
  - a. Relying on alternate approaches for increasing naloxone availability (e.g., community-based distribution programs, statewide standing orders)
  - b. Limiting co-prescribing or targeted prescribing to certain populations that may potentially benefit the most from having naloxone available (i.e., those at highest risk for overdose or death due to overdose). If so, identify those populations, along with the evidence supporting this benefit.

**Committee Discussion:** *The committees discussed many approaches for increasing naloxone availability, including identifying high-risk populations as a possibility that would reduce the amount of naloxone that was required, using the Automated External Defibrillator (AED) model to distribute naloxone geographically rather than to individuals, use of voucher programs for persons without any fixed address, and bulk purchase of IV naloxone from major distributors mainly by the federal government. The committees also discussed the possibility of FDA using its authorities to expand capacity and make OTC naloxone available in the shortest possible time. The committees noted that if changes to the market were made, consideration should be given to ensure those who need naloxone, such as community-based programs, are still able to get the drug at a reasonable cost. Please see the transcript for details of the Committees' discussion.*

4. **DISCUSSION:** Discuss any potential unintended consequences that should be considered if naloxone is co-prescribed to all or some patients prescribed opioids, and what steps can be taken to mitigate them.



**Committee Discussion:** *The committees discussed several unintended consequences of co-prescribing naloxone for all patients including the overall cost to the healthcare system, the specific costs for doses of naloxone and other drugs as capacity is transferred to naloxone, and the effect that these impacts could have on availability and prescribing. The committees noted that by changing the labeling, there could be changes to the standard of care, including a possible increase in liability risk to clinicians. The committees commented that some may take the position that co-prescribing naloxone may extend the perceived risk of addiction to a larger population, creating unintended consequences such as the denial of life insurance policies recently reported in the news. It was also discussed that there is a need to educate the public about the acute effects of opioid withdrawal following the administration of naloxone. Please see the transcript for details of the Committees' discussion.*

5. **VOTE:** Would labeling language that recommends co-prescription of naloxone for all or some patients prescribed opioids, or more targeted prescribing for patients otherwise at high risk for death from opioid overdose be an effective method for expanding access to naloxone and improving public health?
- a. If so, which populations do you believe should be included in such labeling?

**Vote Result:**            Yes: 12            No: 11            Abstain: 0

**Committee Discussion:** *A slim majority of the committee voted "Yes" that labeling language that recommends co-prescription of naloxone for all or some patients prescribed opioids, or more targeted prescribing for patients otherwise at high risk for death from opioid overdose, would be an effective method for expanding access to naloxone and improving public health. Many committee members who voted "Yes" stated that while labeling may be an effective strategy to expand access to naloxone, it would not be the most effective strategy; some of these members suggested initially prioritizing efforts to expand availability of OTC and generic naloxone products. Many voting "Yes" also stated that their vote was contingent on identifying and targeting high-risk populations (e.g., high dose opioid use, concomitant benzodiazepines, history of substance use disorder, mental health disorder, or prior overdose) to maximize the public health benefit. Several committee members who voted "No" stated that changing labeling to include the recommendation of co-prescribing was not an effective or efficient way to provide naloxone to those patients who need it most. One member who voted "No" stated that not enough research has been done on the potential impacts of labeling recommendations for co-prescribing on harm reduction programs. Please see the transcript for details of the Committees' discussion.*

The meeting was adjourned at approximately 4:55 p.m. on December 17, 2018 and at approximately 3:50 p.m. on December 18, 2018.