

The Role of Nonpharmacological Approaches to Pain Management: A Workshop

December 4–5, 2018
National Academy of Sciences Building
2101 Constitution Avenue, NW | Washington, DC

Background:

Pain is a leading cause of disability in the United States. Given the complexity and biobehavioral nature of pain, the 2011 Institute of Medicine report on *Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research* advocated for multifaceted approaches for pain management comprised of both pharmacological and nonpharmacological therapies. In 2017, the National Academies of Sciences, Engineering, and Medicine's report *Pain Management and the Opioid Epidemic: Balancing Societal and Individual Benefits and Risks of Prescription Opioid Use* reviewed the status of available evidence on nonpharmacological therapies for managing chronic pain. For example, CBT, a type of psychotherapy focused on restructuring negative thoughts and experiences with positive expectations, has been shown to be effective in reducing pain intensity and other psychological effects caused by pain (e.g., anxiety and depression) for low back pain, headaches, arthritis, orofacial pain, and fibromyalgia.

As a result of this national push toward the use of nonpharmacological therapies for chronic pain, increased health professionals' education and training will be needed to encourage the adoption and appropriate use of the evidence-based approaches. In addition, addressing policy barriers, such as those related to reimbursement for these treatments will be important to enable broader use and dissemination. Given the changing landscape for pain management, the Forum on Neuroscience and Nervous System Disorders and the Global Forum on Innovation in Health Professional Education will bring together key stakeholders to discuss these treatments and integrative health models for pain management.

Workshop Objectives:

- Review the current state of evidence on the effectiveness of nonpharmacological treatments and integrative health models for pain management, as well as available evidence on use patterns and patient interest. Examples may include acupuncture; manual therapies; physical therapy, occupational therapy, and exercise; cognitive behavioral therapy; tai chi; yoga; meditation; and neurostimulation.
- Explore the state of evidence on the effectiveness of emerging models of pain management.
- Consider multimodal approaches and potential synergies between and among pharmacological and nonpharmacological approaches to pain management.
- Consider multimodal approaches and potential synergies between and among devices and nonpharmacological approaches to pain management.
- Discuss research gaps and key questions for further research.
- Examine health professions' current approaches for educating students, trainees, and practicing clinicians on nonpharmacological pain management, and discuss potential next steps to improve training and education within and across health professions.
- Explore policies, such as those related to reimbursement that would enable broader dissemination and implementation of evidence-based nonpharmacological treatments when appropriate.



DAY ONE: December 4, 2018

8:00 a.m. Welcome and Overview of Workshop
 DANIEL CHERKIN, Kaiser Permanente Washington Health Research Institute (emeritus)
 (Co-Chair)
 ANTHONY DELITTO, University of Pittsburgh (Co-Chair)

8:15 a.m. Why This Workshop Matters - Lived Experience and Provider Perspective
 CHRISTIN VEASLEY, Chronic Pain Research Alliance
 MARK RYAN, Virginia Commonwealth University

Session I: Nonpharmacological Approaches to Pain Management - Evidence on Effectiveness and Safety, and Emerging Models of Care

Objectives:

- Describe the treatments used for pain problems covered by insurance and patient use of complementary and integrative health approaches often not covered by insurance.
- Review evidence for the effectiveness and cost-effectiveness of nonpharmacological treatments for pain management.
- Describe the impact of psychological and social factors on patient responses to pain and pain treatments.
- Explore the state of evidence on the effectiveness of emerging models of pain management.
- Consider multimodal approaches and potential synergies between and among 1) pharmacological and nonpharmacological approaches; and 2) devices and nonpharmacological approaches to pain management, and for whom.
- Discuss research gaps and priorities for further research.

8:35 a.m. Session Overview
 STEVEN GEORGE, Duke University, *Moderator*

8:45 a.m. What health care services are provided to persons with pain?
 • In large insured population
 • In indigent (Medicaid) population
 • In older adults (Medicare)
 • Use of complementary and integrative health approaches in US population
 DAVID ELTON, Optum

9:00 a.m. What do we know about the effectiveness and safety of nonpharmacological and nonsurgical treatments for chronic pain conditions?
 • Low back pain
 • Other common pain problems
 • In specific populations (indigent, elderly, ethnic groups)
 ROGER CHOU, Oregon Health & Science University

9:30 a.m. What is known about the cost-effectiveness of nonpharmacological and nonsurgical treatments?
 PATRICIA HERMAN, RAND Corporation

9:45 a.m. Discussion

- 10:15 a.m. BREAK
- 10:30 a.m. What are the effects of psychological and social factors on patient responses to pain and pain treatments?
DENNIS TURK, University of Washington
- 10:45 a.m. Emerging Models of Care
Overview (deficiencies of current models; principles guiding development of new models; evidence for effectiveness of major models; and challenges for implementing in diverse settings)
ROBERT KERNS, Yale University, *Moderator*
- 11:00 a.m. Major Models and Evidence for Effectiveness (*series of 10-minute presentations*)
- Stepped Care, Stratified Care and Matched Care
WILLIAM SHAW, University of Connecticut
- Care for patients with complex and high impact chronic pain
ROBERT EDWARDS, Brigham and Women's Hospital/Harvard Medical School
- Integrative Care
LYNN DEBAR, Kaiser Washington Health Research Institute
- First contact care
JULIE FRITZ, University of Utah
- Use of technology to support access, self-management and care processes
ALICIA HEAPY (*invited*), Yale School of Medicine
- 11:50 a.m. Discussion
- 12:30 p.m. LUNCH
- 1:30 p.m. Multimodal approaches to pain management and potential synergies
- Pharmacological and non-pharmacological approaches
KURT KROENKE, Indiana University
- Devices and non-pharmacological approaches
RICHARD WILSON, Case Western Reserve University
- 2:00 p.m. Discussion
- 2:15 p.m. Major Current Research Initiatives and Priorities
LINDA PORTER (*invited*), National Institute for Neurological Disorders and Stroke
DAVID SHURTLEFF, National Center for Complementary and Integrative Health
WENDY SMITH, NIH Office of Behavioral and Social Sciences Research
ALISON CERNICH, NICHD National Center for Medical Rehabilitation Research
CHRISTINE GOERTZ, PCORI
RACHEL RAMONI (*invited*), Department of Veterans Affairs
ERIC SCHOOMAKER (*invited*), Department of Defense, Uniformed Services University

3:05 p.m. Panel on Future Research Priorities
 ALICIA HEAPY (*invited*), Yale University/Veterans Affairs
 ROGER CHOU, Oregon Health & Science University
 PATRICIA HERMAN, RAND Corporation
 KAREN SHERMAN (*invited*), Kaiser Washington Health Research Institute
 BEVERLY THORN, University of Alabama

3:30 p.m. Discussion
 KIM DUNLEAVY, University of Florida, *Discussant*

4:00 p.m. BREAK

Session II: Education and Training of Health Professionals in Pain Management

Objective:

- Examine health professions' current approaches for educating students, trainees, and practicing clinicians on nonpharmacological pain management.

4:15 p.m. Session Overview
 ELIZABETH GOLDBLATT, Academic Collaborative for Integrative Health, *Moderator*

4:25 p.m. Current status of health professional education in pain management and the incorporation of nonpharmacological approaches
 SCOTT FISHMAN, University of California, Davis

4:40 p.m. Discussion
 SHELLY ADLER (*invited*), University of California, San Francisco, *Discussant*
 NANCY BAKER, Tufts University, *Discussant*
 DAVID THOMAS, National Institute on Drug Abuse, *Discussant*

5:30 p.m. Adjourn Day One
 DANIEL CHERKIN, Kaiser Permanente Washington Health Research Institute (emeritus)
 (Co-Chair)
 ANTHONY DELITTO, University of Pittsburgh (Co-Chair)

DAY TWO: December 5, 2018

- 8:00 a.m. Day Two Opening Remarks
 DANIEL CHERKIN, Kaiser Permanente Washington Health Research Institute (emeritus)
 (Co-Chair)
 ANTHONY DELITTO, University of Pittsburgh (Co-Chair)

Session II: Education and Training of Health Professionals (continued)

Objective:

- Discuss potential next steps to improve training and education for pain management within and across health professions.

- 8:10 a.m. Session Overview
 ELIZABETH GOLDBLATT, Academic Collaborative for Integrative Health, *Moderator*

- 8:20 a.m. Interprofessional care: How do we move from classroom to practice?
 MICHELE MAIERS (*invited*), Northwestern Health Sciences University, *Moderator*

Speakers TBD

- 8:50 a.m. Discussion
 BENJAMIN KLIGLER, Veterans Health Administration, *Discussant*

- 9:30 a.m. BREAK

- 9:45 a.m. Collaborative practice: Facilitating a team-based approach for pain management
 MARGARET CHESNEY, University of California, San Francisco, *Moderator*

Speakers:

SHELLEY ADLER (*invited*), University of California, San Francisco
 ANTHONY LISI, Veterans Health Administration; Yale School of Medicine

- 10:15 a.m. Discussion
 BELINDA “BEAU” ANDERSON, Albert Einstein College of Medicine, *Discussant*

- 11:00 a.m. LUNCH

Session III: Policies to Promote Evidence-based Nonpharmacological Approaches

Objective:

- Explore policies, such as those related to reimbursement that would enable broader dissemination and implementation of evidence-based nonpharmacological treatments when appropriate.
- Discuss potential policy barriers and opportunities for innovation.
- Consider the research and evidence needed to advance these policies.

- 12:00 p.m. Session Overview
 ROBERT SAPER, Boston University, *Moderator*

- 12:10 p.m. What policies would help reduce major barriers to change?
 Insurance Coverage and Reimbursement Perspective
 DAVID ELTON, Optum
 SHARI LING (*invited*), Centers for Medicare and Medicaid Services
 PATRICIA HERMAN, RAND Corporation
 CALEB ALEXANDER, Johns Hopkins University
- 12:40 p.m. Discussion
- 12:55 p.m. Patient, Clinician, Educator and Healthcare System Perspectives
 PENNEY COWAN, American Chronic Pain Association
 ROBERT BONAKDAR (*invited*), Scripps
 HARLEY GOLDBERG, Kaiser Permanente (retired)
 BETH DARNALL, Stanford University
 DANIEL CARR, Tufts University School of Medicine
- 1:25 p.m. Discussion

Session IV: Moving Forward

Objective: Synthesize and discuss key highlights from the workshop presentations and discussions and, most importantly, identify next steps and promising areas for future action and research.

- 1:40 p.m. Session Overview and Synthesis of Key Workshop Themes and Future Directions
 DANIEL CHERKIN, Kaiser Permanente Washington Health Research Institute (emeritus)
 (Co-Chair)
 ANTHONY DELITTO, University of Pittsburgh (Co-Chair)
- 1:50 p.m. Open Discussion
- 2:20 p.m. Closing Remarks from Workshop Co-Chairs
- 2:30 p.m. Adjourn Workshop

Workshop Planning Committee

Daniel Cherkin, Kaiser Permanente Washington Health Research Institute (emeritus), Co-Chair

Anthony Delitto, University of Pittsburgh, Co-Chair

Timothy Denison, Oxford University

Megan Driscoll, University of Pittsburgh Medical Center

Kim Dunleavy, University of Florida

John Chae, Case Western Reserve University

Steven George, Duke University

Elizabeth Goldblatt, Academic Collaborative for Integrative Health

Alan Jette, MGH Institute of Health Professions

Robert Kerns, Yale University

John Krystal, Yale University

Anne Marie McKenzie-Brown, Emory University

Vitaly Napadow, Massachusetts General Hospital; Harvard University

Robert Saper, Boston University

Dennis Turk, University of Washington

Christin Veasley, Chronic Pain Research Alliance