National Institutes of Health: Helping to End Addiction Long-term℠ (HEAL) Initiative
Managing Chronic Pain in Individuals with Co-occurring Opioid Use Disorder and Other Psychiatric Conditions
June 1–2, 2020
Summary of Virtual Meeting

Overview

The National Institutes of Health (NIH) Helping to End Addiction Long-term℠ Initiative, or NIH HEAL Initiative℠, is an aggressive, NIH-wide effort to speed scientific solutions to stem the national opioid public health crisis. Researchers are taking a variety of approaches to tackle the opioid epidemic through:

- Understanding, managing, and treating pain; and
- Improving treatment for opioid misuse and addiction.

To address the intersection of these two broad areas of focus, on June 1–2, 2020, the NIH HEAL Initiative℠ convened a group of experts to provide input on the state of the science on addressing chronic noncancer pain (referred to here as chronic pain) and opioid use disorder (OUD), with and without other common comorbid psychiatric disorders. Based on the current state of the science, invited attendees were charged with identifying research and infrastructure needs, and were asked to address how these research priorities could enact meaningful and sustainable changes in treatment approaches in the next 5 years.

Workshop Goals and Structure

During the first day of the meeting, a plenary session (Session 1) with six presentations described foundational information on (1) OUD versus physical dependence and the cascade of care, (2) chronic pain as a biopsychosocial construct, (3) opioid deprescribing as a (de)implementation science challenge, (4) stigma and health disparities, (5) patient perspectives on chronic pain, and (6) patient perspectives on OUD. The three subsequent sessions each were composed of presentations and panel discussions that covered (1) opioid tapering, physical dependence, and multimodal care; (2) comorbid chronic pain and OUD; and (3) comorbid alcohol use disorder (AUD), anxiety, and depression. During the second day, participants worked in breakout sessions on those three focal areas. Participants in each breakout session identified a vision and three key research and infrastructure needs to transform delivery approaches in a 5-year time frame for their focal area (provided below). To view the workshop proceedings, see the archived video at https://heal.nih.gov/events/2020-06-interventions-workshop. The summary below reflects the discussions and recommendations held by the invited experts in the field.

Session 2: Opioid Tapering, Physical Dependence, and Multimodal Care

Vision and Priorities for Opioid Tapering, Physical Dependence, and Multimodal Care

Participants in the breakout session generated the following vision: multimodal care for engaged patients, providing the right treatment for the right person, which works for all equitably and will be paid for by society.

They called for research on a precision medicine approach built upon the following tenets:

1. Understanding the multifarious endophenotypes presenting as a spectrum of chronic pain and opioid misuse/mild OUD to severe OUD;
2. Attending to mechanisms of change; and
3. Developing novel multicomponent models of multidisciplinary stepped care based on research on the endotypes and mechanisms of change.

This research should consider holistic endpoints that integrate pain relief, well-being, and function, along with reduction of opioid use/misuse, and should pay explicit attention to stigma, disparities, and barriers, as well as organizational, regulatory, and payor influences on clinicians and patients.

Session 3: Comorbid Chronic Pain and OUD

Vision and Priorities for Comorbid Chronic Pain and OUD

Participants in the breakout session generated the following vision: a common transformative goal of breaking down silos to provide integrated care and improved patient outcomes.

Trials should embed telemedicine and other technologies, particularly for ongoing monitoring; use designs best suited for the research question (e.g., adaptive designs); and include safety research. Participants identified the following three research priorities:

1. Study stepped-medication management and nonpharmacologic approaches to transform care by preventing or managing OUD, particularly:
    - Buprenorphine as a first-line chronic pain treatment;
    - Buprenorphine for OUD and optimizing pain treatment with regard to efficacy and dosing studies; and
    - Methadone versus buprenorphine for chronic pain management.
2. Test integrated approaches with both nonpharmacologic and pharmacologic treatments that will transform care by offering patients and providers more and better options.
3. Distinguish groups (i.e., patients with uncontrolled pain) and develop tailored treatment to help each, which will transform care by personalizing therapy and maximizing the chance of success.

They identified the following two infrastructure priorities:

1. Liberalizing treatment policies to improve access to medications for opioid use disorder (MOUDs); and
2. Recognizing patients' economic challenges.

Session 4: Comorbid AUD, Anxiety, and Depression

Vision and Priorities for Comorbid AUD, Anxiety, and Depression

Participants in the breakout session generated the following vision: research that addresses gaps and cross-cutting issues of implementation science, stigma reduction, the need to improve the diversity of research teams, and harm reduction.

Participants identified the following priorities:

1. Create a research network to study pain, mental health, and SUDs in diverse populations, and implement pragmatic measures to study these issues;
2. Address disparities because they interact with stigma at a very complex level; and
3. Study multicomponent interventions over time that take into account changes in life and health, and how they can be implemented at a real-world level and delivered to patients with multiple, complex problems.

Overall Summary

The following major themes emerged from the discussion among participants, panelists, and presenters:

1. The overall approach should balance implementation or adaptation of existing evidence-based treatments with the development of new interventions for co-occurring chronic pain and OUD, with a range of studies that embed one or more of the following: (a) research on mechanisms, (b) adaptive design, (c) telehealth and technological delivery of interventions, and/or (d) safety profiles for high-risk patients.

- Start by engaging with key stakeholders—such as patients, providers, payors, managers of health systems, regulators, policymakers, and metrics partners—about the importance of effective treatment for co-occurring chronic pain and OUD.
- Effective treatments for singular disorders are known and available, but not implemented in practice or accessible to patients. However, the effectiveness of these therapies for co-occurring chronic pain and OUD is unclear.
- To improve treatment access, adapt treatment duration, format, and delivery methods to meet patients' needs.
- Studies should broaden the research settings to include prisons, schools, and workplaces as well as under-resourced, marginalized communities (be aware of

disparities in access to technology and consider the U.S. Department of Veterans Affairs [VA] model for community-based outpatient clinic).
- To enhance the generalizability of research findings to real-world settings, include patients with chronic pain/OUD who also have other co-occurring disorders (i.e., other SUDs, physical conditions, and mental health disorders).
- Incorporate common contextual factors that optimize all interventions (engagement, motivation, collaboration among providers) in the research.

2. The overall approach should balance patient-centered, personalized medicine with research that can be widely generalized as part of a multidisciplinary coordinated/collaborative model that integrates care for co-occurring disorders and builds sustainable treatment pathways.

- Apply a framework for models of care that can accommodate research and translation (perhaps examine the VA's model of coordinated care as an example).
- The approach should incorporate measurement-based care.
- Holistic treatments and preventive interventions should address the whole person with pain rather than the "pain patient" and all co-occurring conditions (i.e., OUD, other SUDs, psychiatric disorders, and physical health conditions) and enhance overall well-being and lifestyle while considering patients' economic and practical realities.
- Research to understand who benefits from what interventions should consider addiction severity, co-occurring SUDs, and pathway to OUD.
- Research should incorporate sustainable multicomponent, multimodal interventions that incorporate nonpharmacologic treatments (which need definitional standards outlining frequency, duration, etc.).

3. Include systems-level approaches.

- Work at the systems level is important because payment and reimbursement usually do not support nonpharmacologic treatments to the same extent as pharmacotherapies (look at the VA's Whole Health initiative as a model).
- To address the opioid crisis, health care systems need to understand better the complexity of patients with co-occurring chronic pain and OUD, and the importance of responding to them.

4. Broaden outcomes and bolster innovative measurements.

- Balance holistic measures (e.g., depression, coping, state/trait optimism, functioning, well-being, patient goals and values, care experience, and patients' environmental context)—perhaps a composite holistic outcome similar to the Adolescent Study of Quality of Life, Mobility and Exercise scale—with pragmatic goals and use in primary care by all team members.

- Overall quality of life, incorporating the patient perspective, is crucial to measure. However, there may not be sufficient evidence for quality of life as a primary outcome. Therefore, researchers might measure it as a secondary outcome to build the evidence base, then promote it as a primary outcome.
- Use some common data elements to measure across all domains regardless of the particular study focus and embed constructs that are useful for clinical care that can be examined for research purposes.
- Important outcomes to facilitate implementation research and change in health care systems include cost-effectiveness (and savings), revenue generation, patient and provider satisfaction, and improvement of pain care.
- Improve the measurement of (1) opioid craving—which is not well studied for people with co-occurring chronic pain and OUD—as a multidimensional construct and consider non-self-report measures; (2) alcohol use, AUD, and other SUDs; and (3) patients lost to follow-up.
- Develop a single tool for electronic health records (EHR) with measurements that can be aggregated across individuals and recognize that EHRs lack appropriate measures for OUD.

5. Address stigma among providers and the public.

- Eliminate stigmatizing language—such as "drug seeking," "misuse," "abuse," and "addict"—and use person-first language.
- Examine policies to reduce stigma.
- Research is needed on how to reduce stigma among all professionals (potentially adapt HIV stigma-reduction trainings) who require training on this.
- Apply the principles of behavioral design to standardize patient-provider interactions and limit opportunities that stigmatize patients.
- Develop population-based strategies to change public attitudes toward chronic pain, opioid use, and individuals with OUD to reduce stigma and change patient and provider perspectives on OUD and pain management.

6. Include activities that address workforce issues and support clinicians.

- A crucial activity is determining and disseminating best practices in opioid prescribing (e.g., drug testing, use of medical cannabis, and treatment agreements) and opioid tapering (e.g., who needs to taper, patient-centered risks and benefits, and transitions to buprenorphine).
- Unresolved questions are the following: Is a new workforce group needed to treat co-occurring chronic pain and OUD? Can primary care clinicians be trained to treat co-occurring chronic pain and OUD with a more nuanced approach?
- Providers need ongoing training on the biopsychosocial perspective on co-occurring chronic pain and OUD to help them (1) distinguish this population's primary concerns; (2) understand the constellation of co-occurring conditions and psychosocial challenges;

(3) recognize iatrogenic OUD and prescribers' contribution to this problem; (4) emphasize to patients the importance of adhering to MOUDs, staying in treatment, triggers, and relapse; (5) minimize the risks of co-prescribing and how to safely and effectively taper benzodiazepine use; (6) provide integrated treatment, including behavioral interventions, and understand related concepts (e.g., therapeutic alliance, patient expectancy effects); (7) communicate better with this population (set realistic expectations, develop a common narrative, build "allegiance factors"); and (8) weigh the benefits and possible harms of treatments.

- Systems-level support is needed to enhance patient-provider relationships and dialogues about chronic pain and risk for addiction (e.g., increasing allotted time with patients, improving EHRs, identifying and addressing problem behaviors, and facilitating cooperation among clinic staff).

7. Address research gaps to support implementation of evidence-based interventions.

- In the area of opioid tapering, specific research topics include (1) novel treatments (e.g., nonopioid medications and nonpharmacologic approaches); (2) the effectiveness of motivational interviewing and other interventions to arrive at a shared decision to taper; and (3) whether alcohol use increases during or after taper.
- Regarding factors associated with opioid misuse among chronic pain patients, study (1) the influence of emotional pain and inability to self-regulate it and problems with positive affect; (2) the distinction between the primary problem of OUD and opioid tolerance; (3) risk factors such as negative affect, insomnia, depression, anxiety, and initial euphoria in response to opioids and related treatment implications; and (4) pathways to OUD and whether they affect outcomes.
- What are the factors underlying the persistence of opioid and benzodiazepine co-prescribing?
- What are patient preferences and the best ways to enhance patient engagement?
- Who is at risk and how to intervene to prevent OUD among peri-operative patients and outpatients?
- What are the relationships among initiation of prescription opioids or deprescribing opioids and depression and suicide among patients with co-occurring chronic pain and OUD?
- In the area of optimizing buprenorphine for pain treatment, research is needed on formulations and dosing in primary care settings and among high-risk patient groups.

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