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# National Institutes of Health (NIH) Helping to End Addiction Long-term Initiative Virtual Stakeholder Briefing

November 8, 2022



**NIH** National Institutes of Health  
HEAL Initiative

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**Rebecca G. Baker, Ph.D.**  
*Director, NIH HEAL Initiative*

# Many Institutes— One Mission



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# **A Trans-NIH Approach to Address the Opioid Crisis**

*Lawrence A. Tabak, D.D.S., Ph.D., Performing the Duties of the NIH Director*

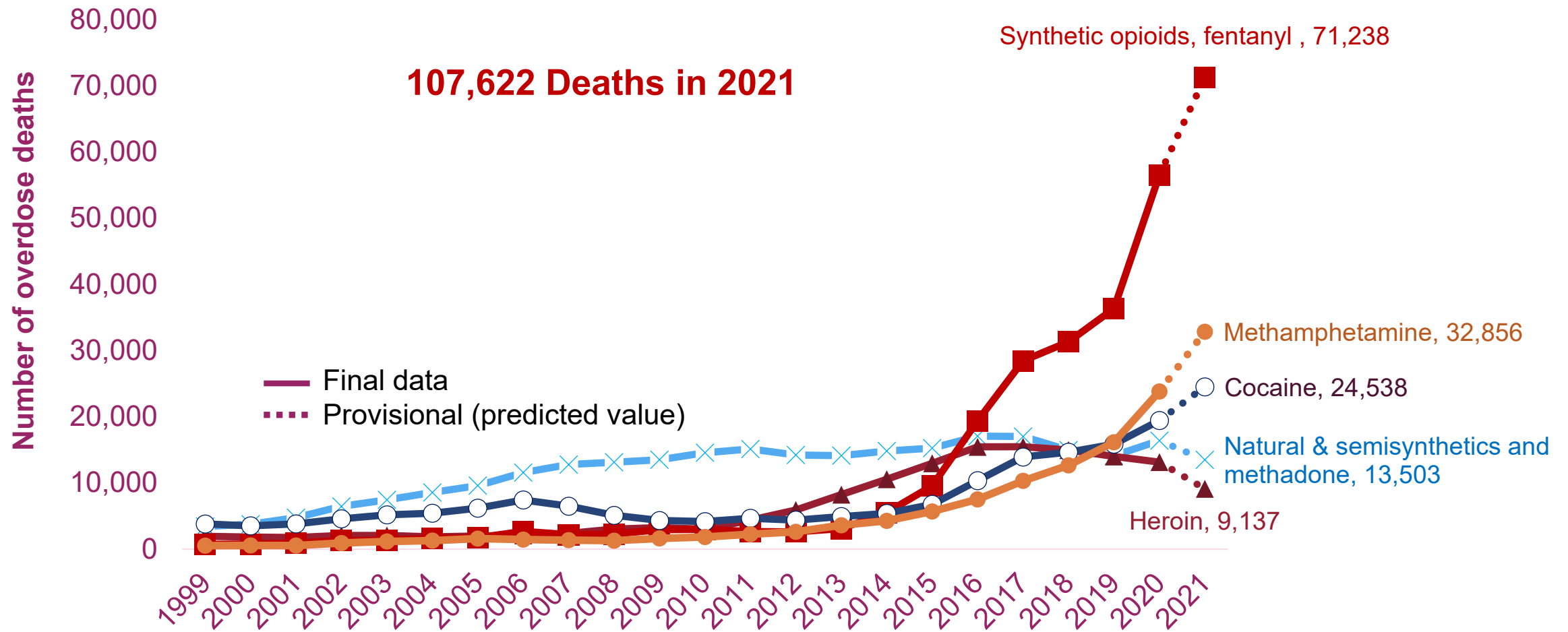
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# The Evolving Opioid and Overdose Crisis

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

# Evolution of Drivers of Overdose Deaths, All Ages

Analgesics → Heroin → Fentanyl → Stimulants



Source: The Multiple Cause of Death data are produced by the Division of Vital Statistics, National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC), United States Department of Health and Human Services (US DHHS).

# What Makes Fentanyl So Dangerous?

- Fentanyl is a **synthetic opioid drug** that is **50 to 100 times more potent than morphine** and **highly addictive**.
- The **high potency of fentanyl and its fast entry into the brain** greatly increases risk of overdose
- Illicitly manufactured fentanyl and analogues are **the most common drugs involved in overdose deaths**.

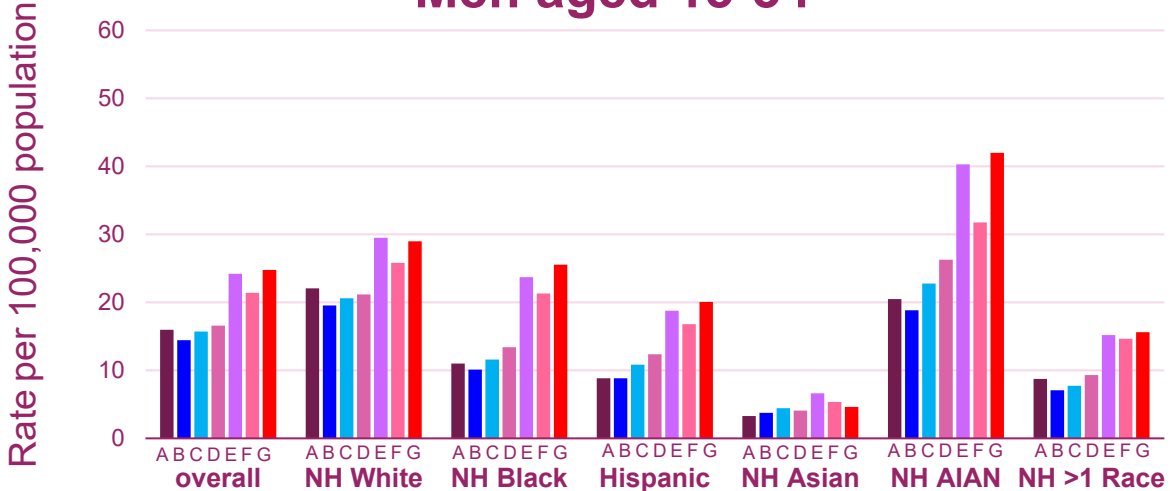
# What Makes Fentanyl So Dangerous?

- Fentanyl is cheap to manufacture offering big profits to drug dealers. Thus, its **being mixed with other drugs** (cocaine, heroin, methamphetamine) to maximize profits. This is especially dangerous because **people are often unaware** of this and have no tolerance to opioids.
- **Naloxone** is effective in **reversing fentanyl overdose**. Multiple naloxone doses might be necessary.

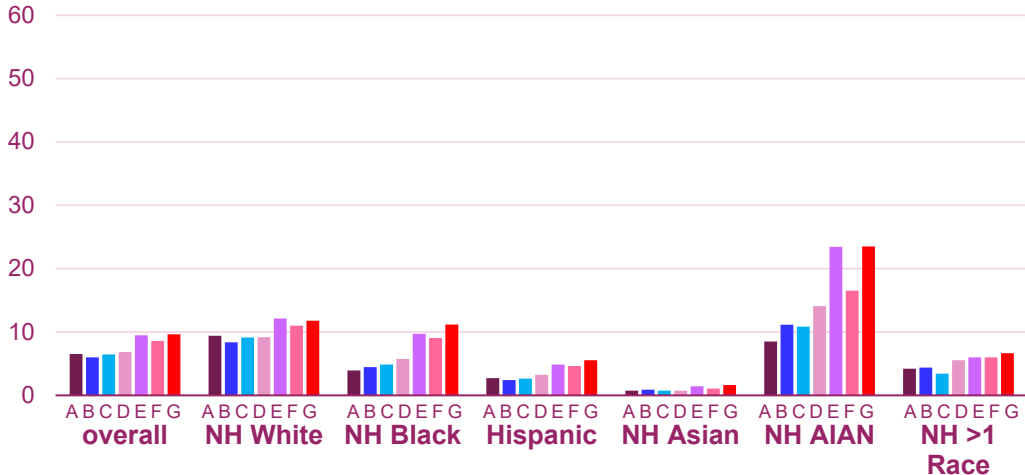


# Overdoses Before and During the COVID-19 Pandemic

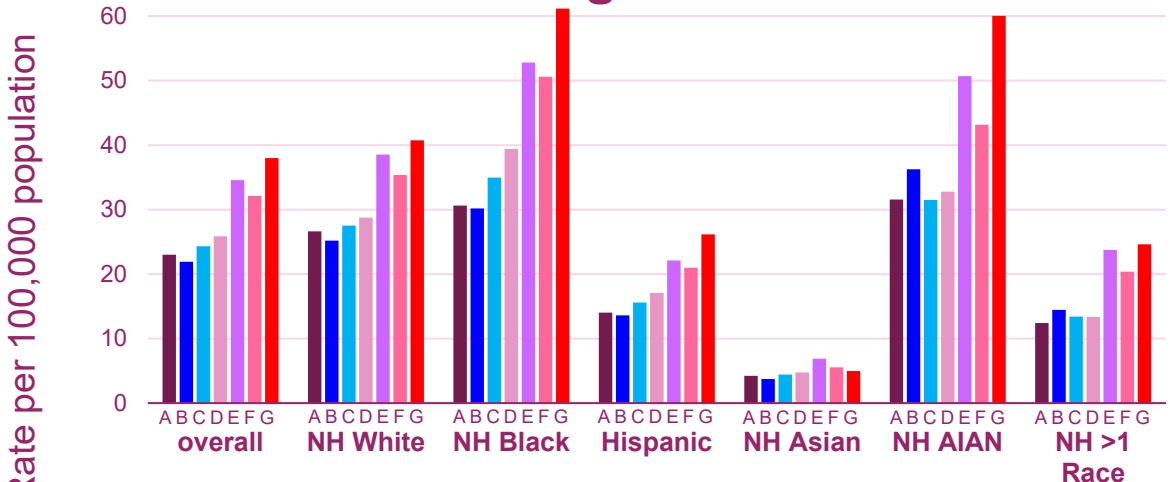
## Men aged 15-34



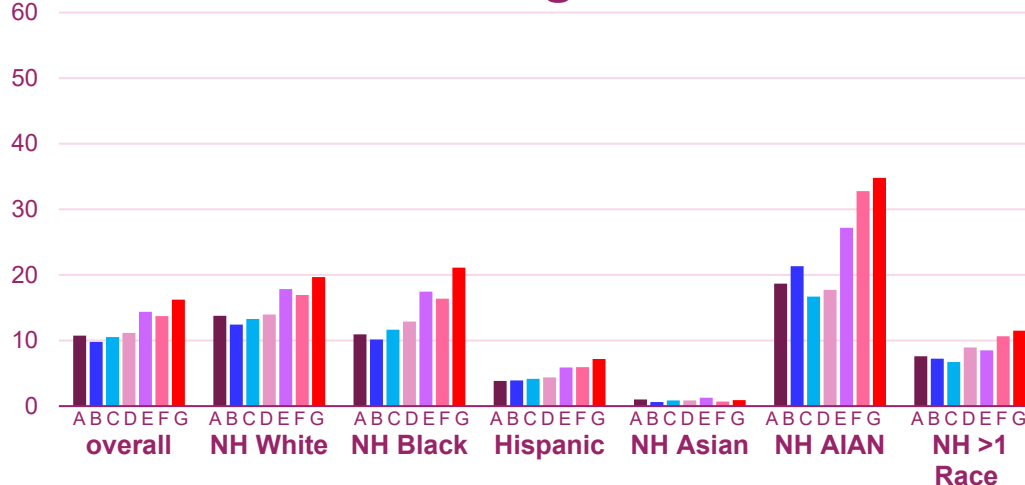
## Women aged 15-34



## Men aged 35-64

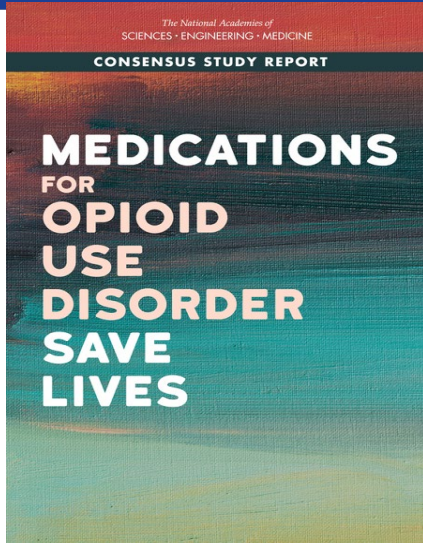


## Women aged 35-64

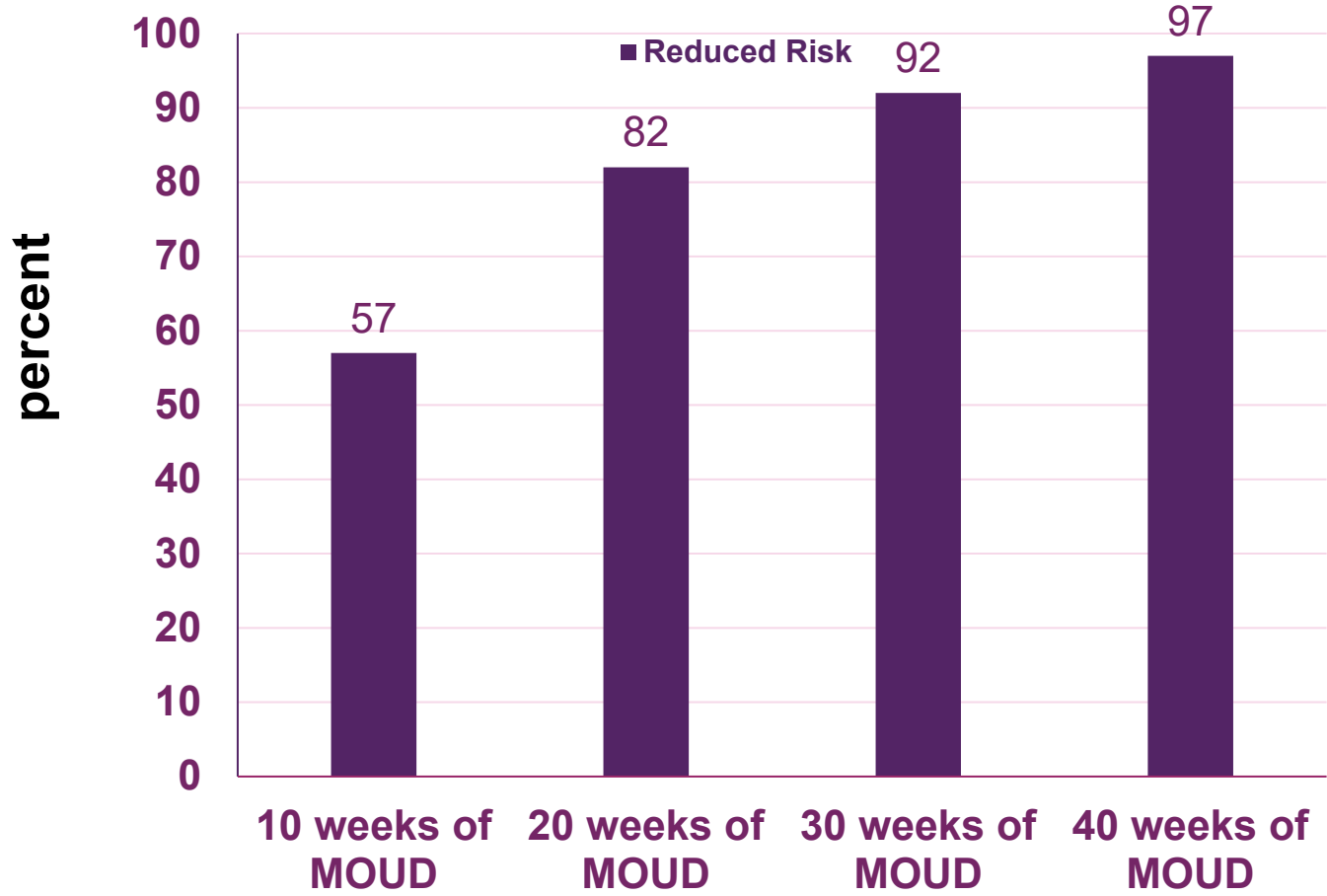


**A** ■ Mar-Aug 2018      **B** ■ Sep 2018-Feb 2019      **C** ■ Mar-Aug 2019  
**D** ■ Sep 2019-Feb 2020      **E** ■ Mar-Aug 2020      **F** ■ Sep 2020-Feb 2021  
**G** ■ Mar-Aug 2021

NH: non-Hispanic. AIAN: American Indian/Alaska Native. March-August 2020: COVID-19 pandemic.



# Reduced Risk Overdose in Pregnant Women Given Medications for OUD

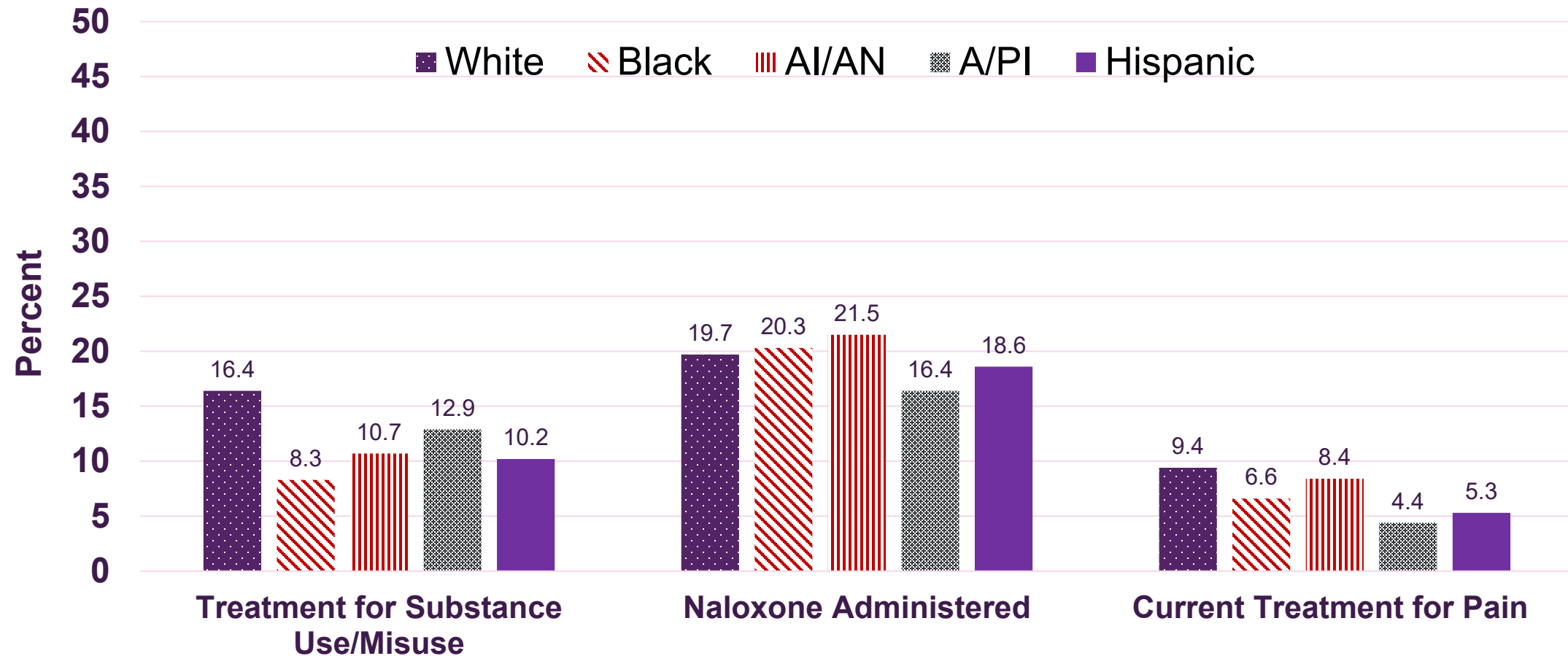


### FDA-Approved Medications

<p><b>Methodone</b></p> <p>In use since the 1960s, the slow-acting synthetic opioid agonist effectively treats moderate to severe heroin addiction. It is only available in heavily regulated clinics.</p>	<p><b>Buprenorphine/Suboxone</b></p> <p>Approved in 2002, the long-acting opioid agonist relieves drug cravings with fewer side effects than other opioids and is available by prescription from certain doctors. Suboxone is designed to deter illicit use.</p>
<p><b>Naltrexone/Vivitrol</b></p> <p>Approved in pill form in 1984, it has been available since 2010 as a 30-day time-release injectable medication called Vivitrol. Patients must be completely off all opioids for seven to 10 days. Both block the effect of opioids, do not activate the opioid receptor system, and do not cause physical dependence.</p>	<p><b>Naloxone</b></p> <p>Approved in 1971, the short-acting medication, also known as Narcan and Evzio, reverses opioid overdoses but does not treat opioid addiction.</p>

Jarlenski M et al., JAMA Network Open. 2022;5(4):e227964.

# Characteristics Of Drug Overdose Deaths, Overall and By Race and Hispanic Origin\*,† — 25 States and The District Of Columbia,§ 2019–2020



# Implementation Science: CTN, JCOIN, HCS, Prevention



## Enhancing the National Drug Abuse Treatment Clinical Trials Network to Address Opioids

Expand research conducted by NIDA CTN to address emergent needs presented by the opioid crisis.



Justice Community Opioid Innovation Network Study quality care for OUD in justice populations. Help create partnerships between local and state justice systems and community-based treatment providers.



HEALing Communities Study is investigating coordinated approaches for deploying evidence-based strategies to prevent and treat OUD in 67 communities in 4 states.

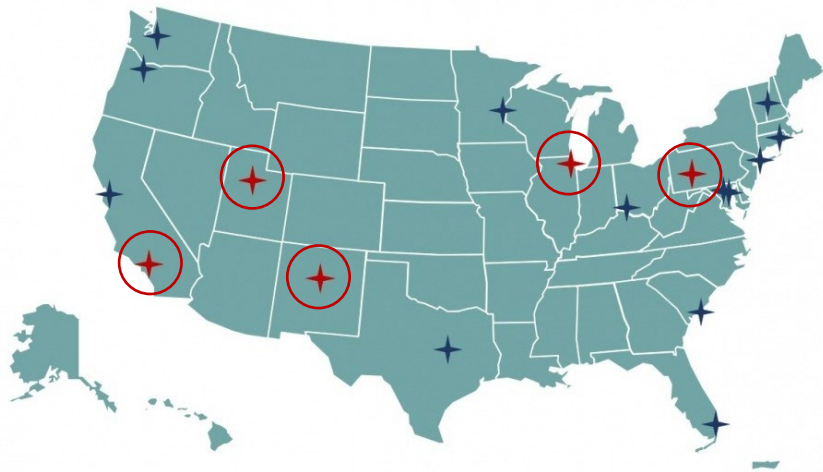
# NIDA's Clinical Trials Network

*Conducts rigorous, multisite clinical trials to determine effectiveness of treatment strategies in diverse clinical settings and populations*



*Select NIDA CTN studies being funded through HEAL:*

- **Optimizing Retention, Duration and Discontinuation for OUD Medication (RDD):** pharmacologic and behavioral strategies to **optimize OUD treatment retention and outcomes**, including stable patients who want to discontinue medication
- **Subthreshold OUD Trial (STOP):** testing interventions in **primary care settings to prevent OUD**
- **ED-INNOVATION:** testing effectiveness of **buprenorphine initiation in the ED** on the engagement in addiction treatment
- **Monthly Injectable Buprenorphine for Methamphetamine Use Disorder (MURB):** testing long-acting buprenorphine for treatment of **methamphetamine use disorder**

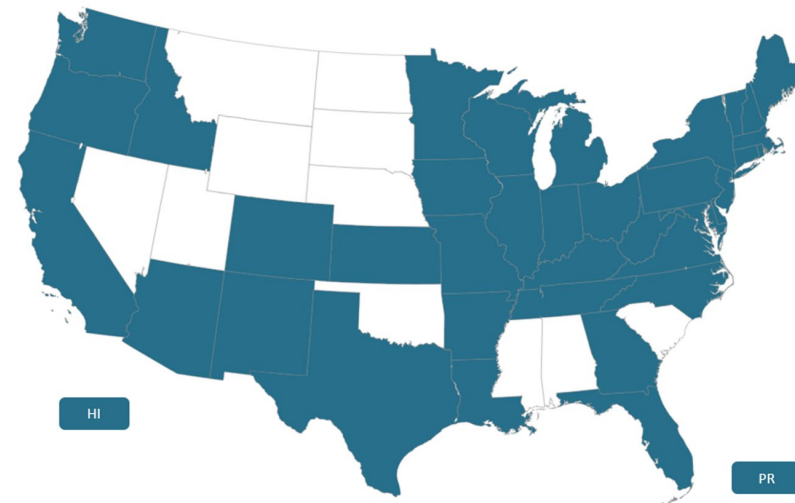


## **HEAL funds have enabled:**

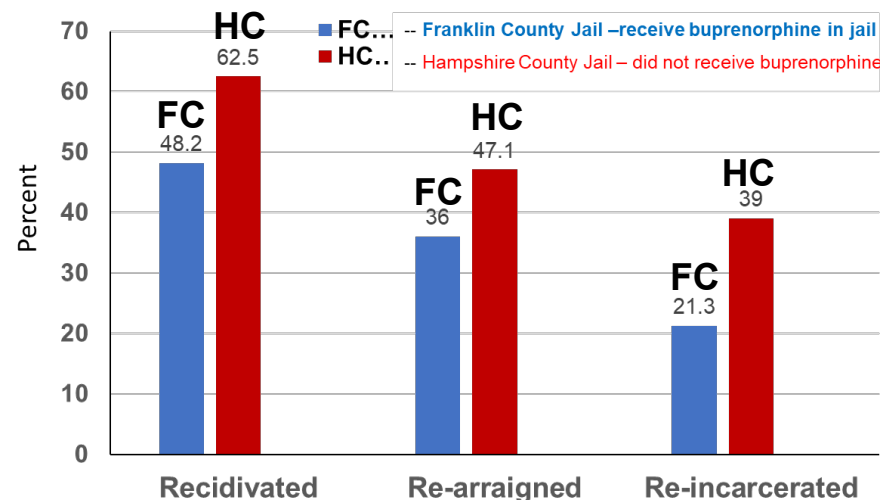
- 5 new research nodes (circled)
- 26 new protocols

## *Building evidence for OUD treatment in justice populations*

- Stakeholder/community-engaged research
- 66 approved research protocols
  - 12 multisite clinical trials
    - *MOUD trials; peer navigation; state policy rollouts*
  - National surveys: opioids/stigma, SUD services, state/local policies
  - Simulation, predictive & geospatial modeling
  - Pilot studies on emerging service delivery
  - Diversity supplements



*Research activity in 141 counties and 39 states*



Evans EA et al., 2022

XR-Bup prior to release from jail **increased adherence and reduced recidivism**, without increasing diversion or SAEs

# Integrative Management of Chronic Pain and OUD for Whole Recovery

*Goal: Generate evidence-based, **patient-centered solutions** for integrated management of co-occurring chronic pain and OUD and rapidly disseminate knowledge to impact population health*

- Four research centers and a coordinating center, launched in 2021
- 9 effectiveness/implementation studies - Pharmacological, Models of Care, MOUD & integrated behavioral treatments
- Diverse health care settings and populations - Primary Care, Hospital, OTPs
- Partner engagement on every study

## Understanding Polysubstance Use and Improving Service Delivery

*Goal: Understand **dynamics of polysubstance use** and improve **personalized prevention and treatment***

- Projects will examine opioid, stimulant, or tobacco co-use in a range of settings and populations, such as **homeless** populations and peer-delivered interventions in **rural** populations

## Recovery Research Networks

*Goal: Expand **research capacity** to build evidence on recovery service approaches*

- Multi-stakeholder networks (researchers, payors, providers, people in recovery) to train researchers and build infrastructure, tools, methods, and relationships to support research
- Projects involve peer recovery support interventions, recovery community centers, active recovery communities, and continuing care, in a range of populations across the country

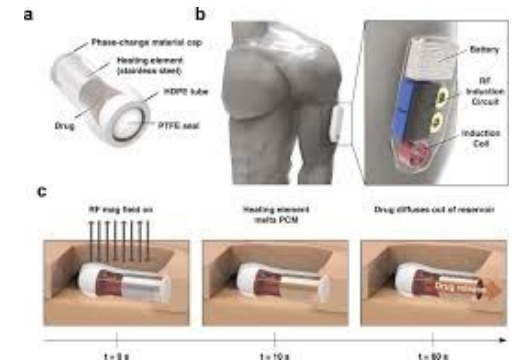
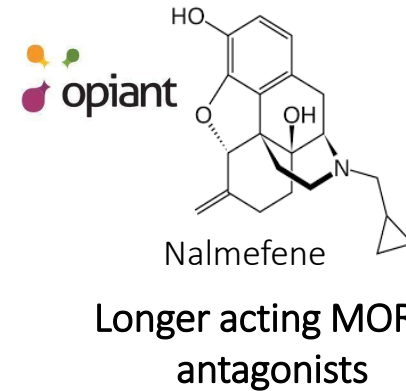


# Novel Therapeutic Options for Opioid/Stimulant Use Disorder and Overdose

- New formulations of existing medications to treat OUD to facilitate retention
- Longer-duration opioid antagonist formulations to counteract overdoses from fentanyl
- Interventions for respiratory depression
- Novel medications to treat withdrawal, craving, insomnia to prevent relapse
- Immunotherapeutics for opioid addiction

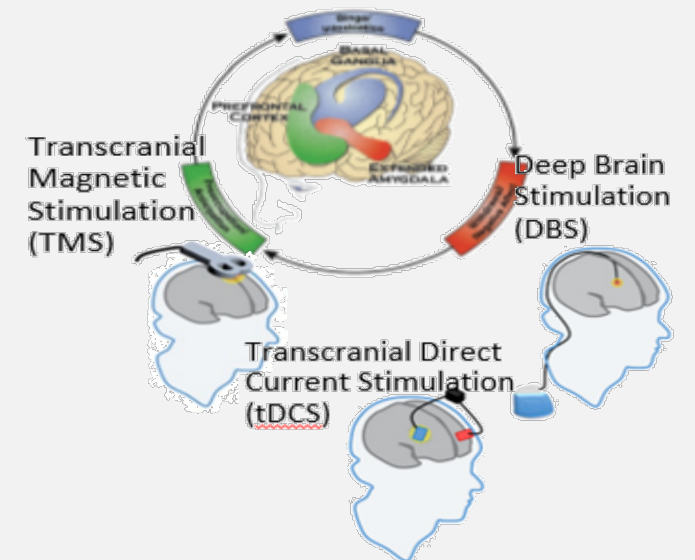
## Progress:

- 70 compounds and 9 new targets being evaluated
- 31 Investigational New Drug applications filed with FDA
- 44 New Molecular Entities (NME) being evaluated



Automatic naloxone autoinjector

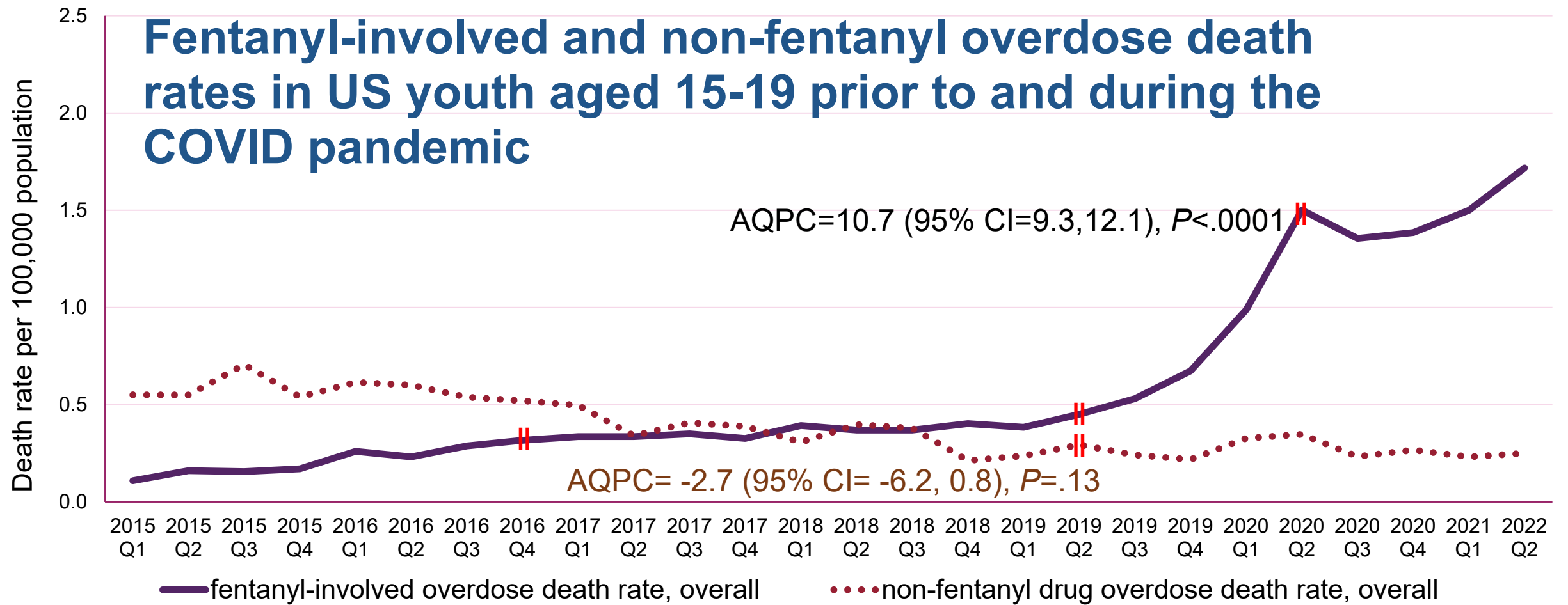
## Neuromodulation Techniques



Monoclonal antibodies and vaccines



# Fentanyl-involved and non-fentanyl overdose death rates in US youth aged 15-19 prior to and during the COVID pandemic



National Vital Statistics System multiple-cause-of-death 2015-2020 final and 2021 provisional data U.S. census monthly data. ||: Joinpoints indicate significant changes in nonlinear trends using Bayesian Information Criterion. AQPC=average quarter percentage change during 2015 Q1-2022 Q2. ICD-10 cause of death code: synthetic opioids other than methadone (T40.4, primarily fentanyl and analogs).

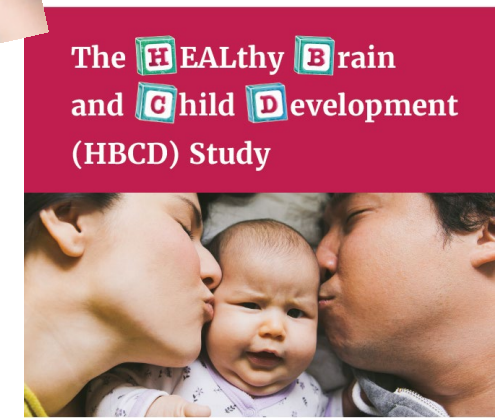
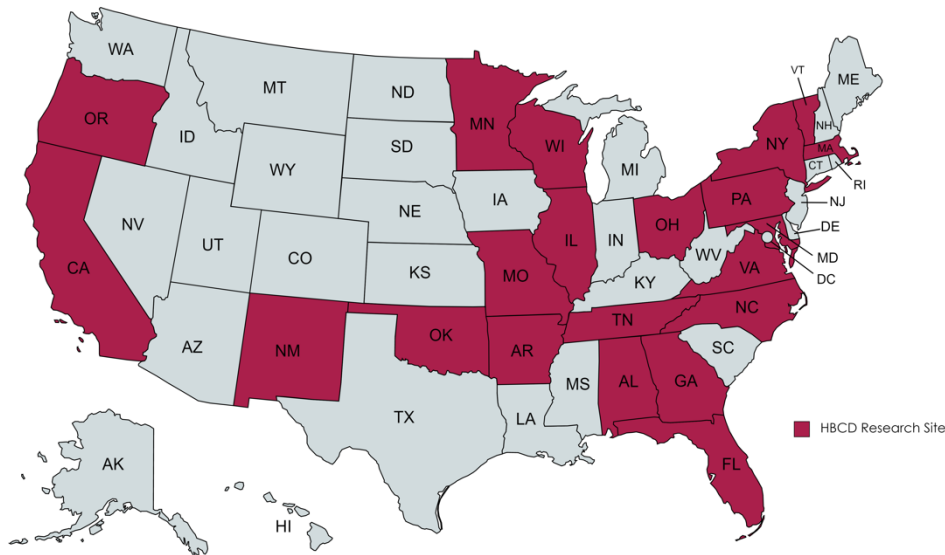
# Addressing Overdose Deaths in 2022

- Providing effective treatment to pain patients including the appropriate use of opioids when needed is necessary but not sufficient
- Treatment of Opioid Use Disorders is CRUCIAL but not sufficient
- Treatment of Substance Use Disorders in addition to OUD is now necessary to prevent overdose deaths
- Prevention of drug use including illicit prescription drug use is necessary to prevent overdoses

# HEALthy Brain and Child Development Study



- Funded through a partnership of Institutes, Centers, and Offices across NIH, including the **HEAL Initiative**
- Longitudinal study to understand normative neurodevelopment **from birth to 9-10 years** and assess **impact of *in utero* exposures to drugs and harmful environments**
- Will enroll approximately **7,500 families from 25 research sites** across the country
- Currently enrolling pilot participants



## What is the HBCD Study?

The HBCD Study will enroll a large cohort of participating families from across the U.S. and follow them and their children through early

<http://hbcdstudy.org>

# HEAL Preventing OUD Research Program

*Goal: Establish evidence-based interventions to prevent initiation of opioid misuse and OUD in at-risk older adolescents and young adults*

- Impacts of existing interventions and development and implementation of **novel interventions** in diverse settings (*justice, homeless shelters, child welfare, ED, community health centers, etc.*) with focus on community/systems-engaged research



## HEAL Prevention Cooperative (HPC)

*Evidence-based interventions for immediate implementation*

10 research projects

1 coordinating center

Administrative supplements, development research, and pilot studies supporting the Preventing OUD vision (21 awards)

**Thank you**

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# Forging a New Path in Pain Management

*Walter J. Koroshetz, M.D., Director, National Institute of  
Neurological Disorders and Stroke*

# Pain – Public Health Crisis and Individual Burden

## Nationwide prevalence of pain is high

50 million adults with chronic pain

25 million report severe pain daily

20 million with high impact chronic pain\*



## More adult women than men have pain

22% of women & 19% of men with chronic pain

8.5% of women & 6.3% of men with high impact chronic pain

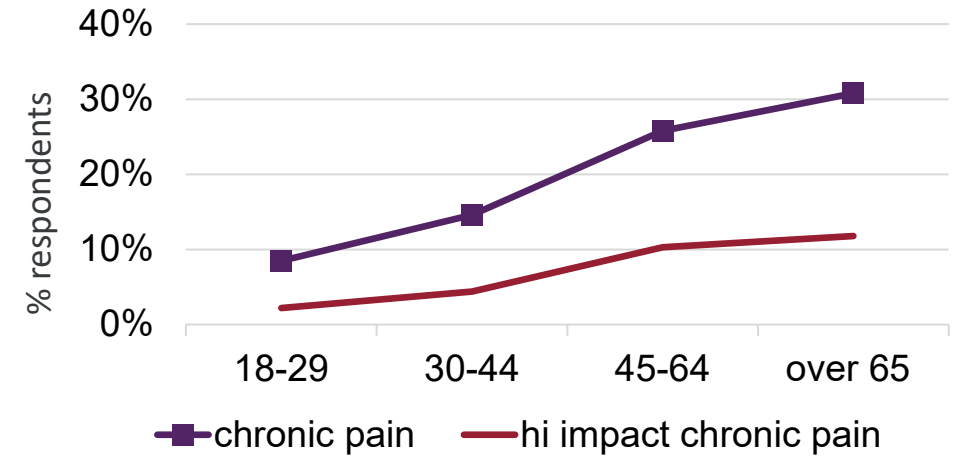
## More rural than urban dwellers report pain

28% of rural & 16% of urban residents with chronic pain

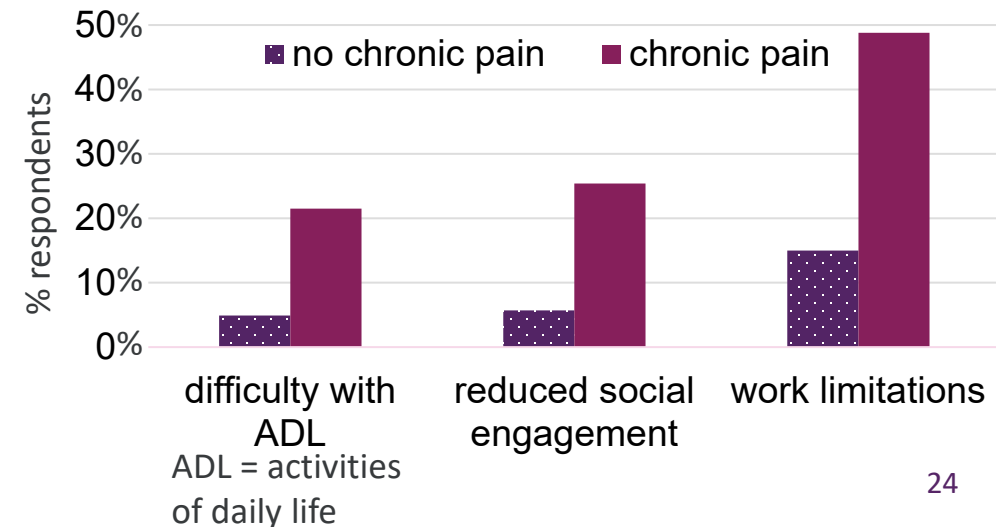
11% of rural & 6% of urban residents with hi impact chronic pain

\*high impact chronic pain = pain lasting more than 3 months that interferes with life (school, work, social life, etc.)

## Pain prevalence increases with age



## Chronic pain interferes with life





# The Opioid Crisis Highlights Need for Safe, Effective Pain Care

## HHS 5-Point Opioid Strategy



## HHS Overdose Prevention Strategy



NIH: develop and promote evidence-based treatments to effectively manage pain

# Why is Pain Management so Challenging?



## Reimbursement

- Not insured
- Not covered



## Access

- Geographic
- Demographic



## Disparities

- Bias
- Stigma
- Population differences



## Training

- Limited education
- Poor cross discipline integration disciplines



## Work Force

- No protected time to mentor
- Mentors retiring



## Complexity

- Overlapping pain conditions
- Other chronic conditions
- Different pain mechanisms



## Lifespan

- Age related risks
- Age related changes

Research is aimed to develop treatments and inform evidence-based pain care

# HEAL Pain Research Priorities

## Enhance Pain Management

- Understand the biological underpinnings of chronic pain
- Accelerate the discovery and pre-clinical development of non-addictive pain treatments
- Advance new non-addictive pain treatments through the clinical pipeline
- Inform best practices for effective pain management while minimizing risk of addiction



# Clinical Trials to Embed Evidence-based Pain Treatments Into the Clinic

## Pragmatic and Implementation Studies for the Management of Pain to Reduce Opioid Prescribing (PRISM)

*“Pragmatic” study design emphasizes efficacy in real-world clinical settings*

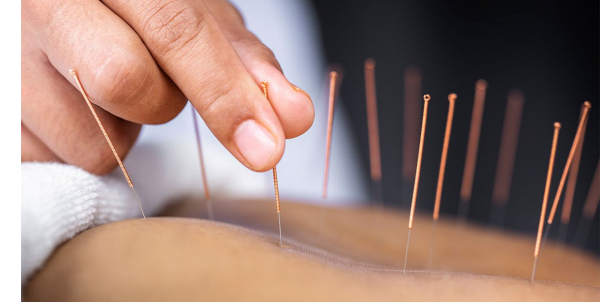
- Non-pharmacological treatments
- Set in large health care systems
- Variety of populations

### Conditions studied

- Fibromyalgia
- Sickle Cell Disease
- Low back pain
- Post operative pain

### Approaches

- Electrical stimulation
- Physical therapy
- Acupuncture
- Relaxation
- Mindfulness
- Shared clinical decision making



# Clinical Trials to Test Efficacy of Interventions for Acute and Chronic Pain

## Comparative Effectiveness Research Network for Pain Management (ERN)

- Pharmacological & Non-pharmacological treatments
- Many settings: primary care, hospital, telehealth, etc.
- Variety of populations



### Pain conditions studied

- Knee Osteoarthritis
- Post caesarian acute pain
- Post mastectomy chronic pain
- Chronic musculoskeletal pain
- Chronic pain
- Chronic pain and OUD
- Cancer pain
- Perioperative pain

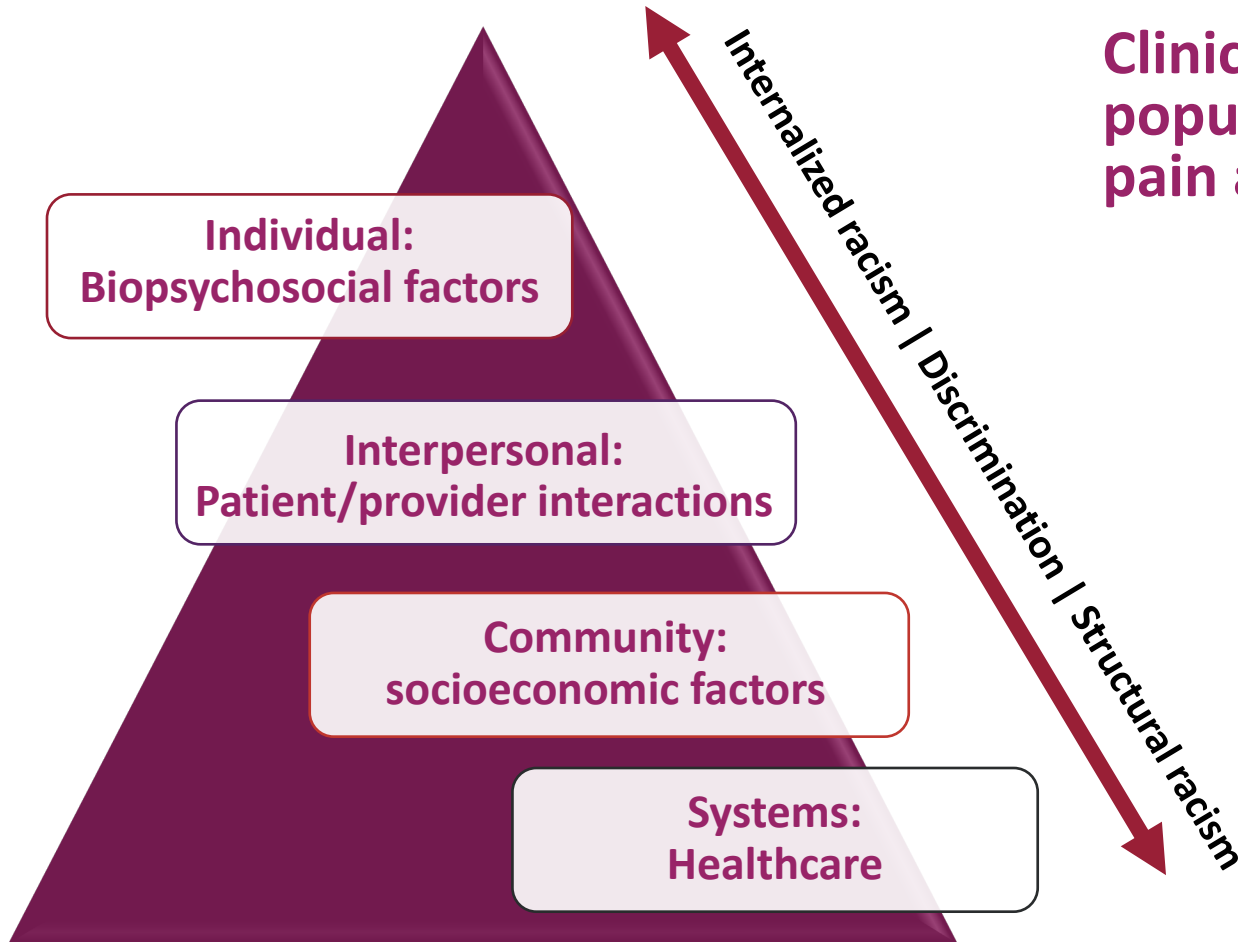
### Interventions studied

- Shared clinical decision making
- Opioid reduction
- Non-opioid Medications
- Behavioral therapies
- Self-management programs



# Health Equities in Pain Care

Clinical trials to improve health equity populations with health disparities who have pain and other chronic conditions



## Populations

- African-Americans
- Hispanic Americans
- Asian Americans
- Low socioeconomic status
- Children to older adults

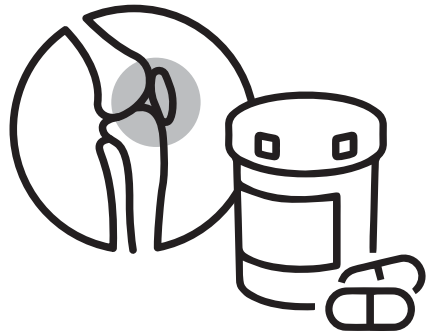
## Interventions

- Behavioral therapies
- Mindfulness
- Self-management
- Electric brain stimulation
- Provider training



# Clinical Trials for Care of Those with OUD and Chronic Pain

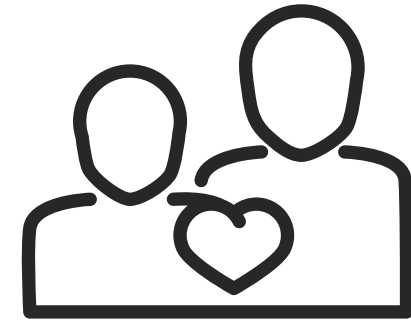
## Integrative Management of Chronic Pain and OUD (opioid use disorder) for Whole Recovery (IMPOWR)



- Chronic pain (CP) - 50 million
- Opioid misuse - 10 million
- OUD - 2 million
- 40-60% adults with OUD also have chronic pain



- Health care for CP & OUD is fragmented
- Need evidence-based integrated treatments
- Limited resources, expertise, & communication



- Develop integrated interventions
- Facilitate integrated care beyond referrals
- Focus on the whole person
  - Co-occurring conditions
  - Stigma
  - Health Disparities



# Treating Pain in Hemodialysis Patients

**Hemodialysis Opioid Prescription Effort (HOPE): Multicenter, randomized, controlled trial to evaluate cognitive behavioral therapy to enhance pain coping skills and buprenorphine vs full agonist opioids, for patients with kidney failure on hemodialysis**



**Risk:** Opioid use in people on dialysis are 3 times higher than the general population.

**Need:** Safer and more effective personalized treatments.

**Objective:** Evaluation and implementation of non-pharmacological approaches with conversion to buprenorphine in dialysis patients.





# Personalizing Back Pain Treatment

**Back Pain Research Consortium (BACPAC): Studies to probe mechanisms of back pain to develop and test integrated precision care**

**Link structural, dynamic, cellular, molecular abnormalities to patient-reported symptoms and function**

Research Program Technology Research Sites

**Clinical trials for non-addictive drugs, biologics, devices, complementary approaches**

Phase 2 Clinical Trials

**Develop patient-centered algorithms to predict optimal treatment**

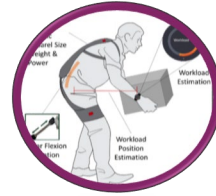
Research Program Data Integration, Algorithm Development and Operations

Management Center Research Program: Mechanistic Research Centers



# HEAL Accomplishments: Back Pain Consortium Research Program

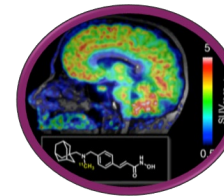
Development, Evaluation and Translation of Robotic Apparel for Alleviating Low Back Pain



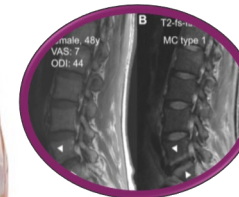
The Spine Phenome Project: Enabling Technology for Personalized Medicine



Wearable nanocomposite sensor system for diagnosing mechanical sources of low back pain and guiding rehabilitation



Imaging Epigenetic Dysregulation in Patients with Low Back Pain



Novel imaging of endplate biomarkers in chronic low back pain



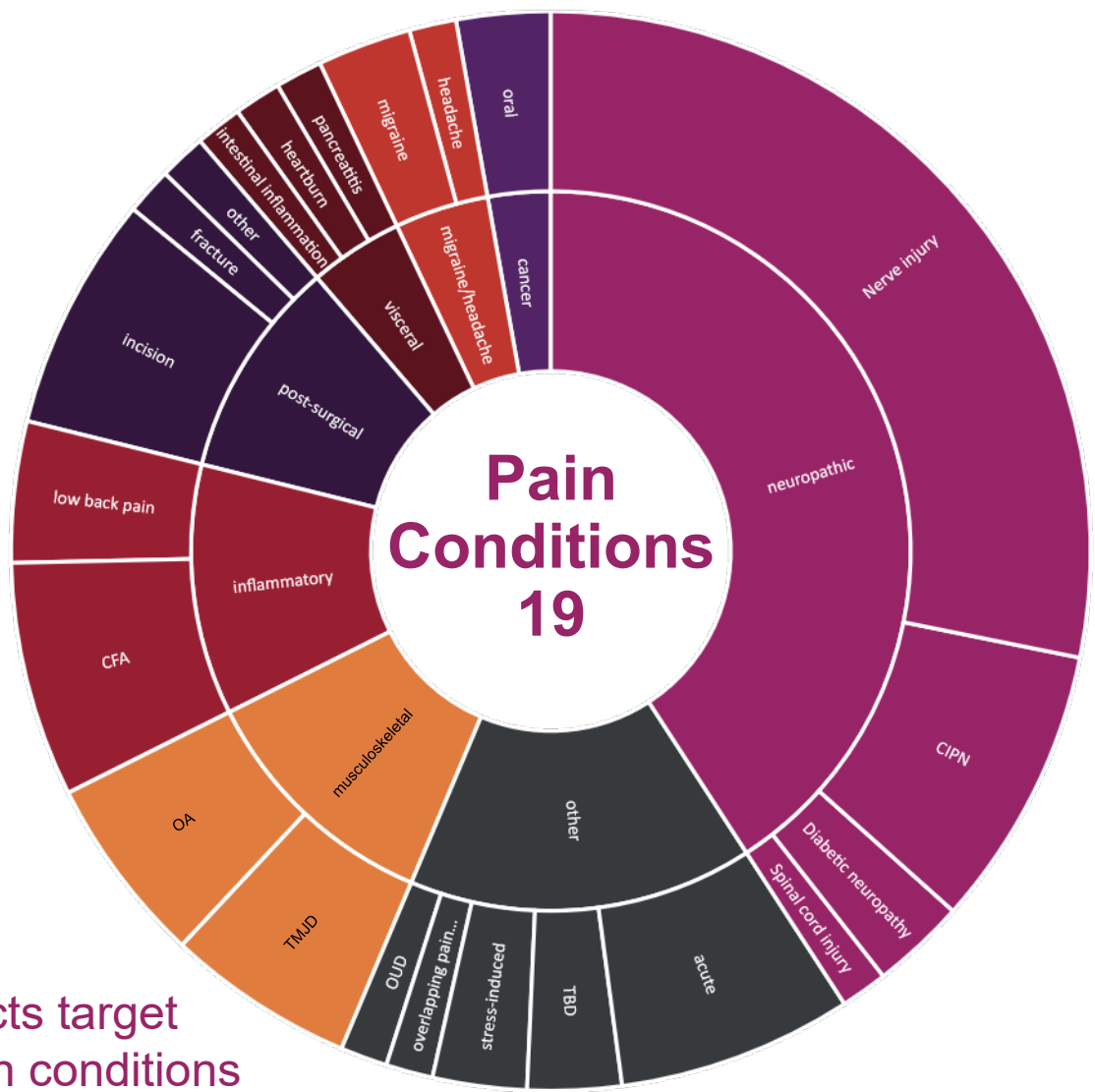
# Preclinical and Translational Research in Pain Management

*Non-addictive therapeutic development programs*

- Expanded analgesic therapeutics development program-planning studies and phased awards
- Novel targets and devices for pain relief, including small business grants
- Team-based research frameworks
- Screening and testing platforms, tissue chips and optimization research
- Studying pain in human genes & cells
- Expands workforce with expertise in overlap of pain and opioid use disorder



# Overview of the HEAL Preclinical Target Discovery and Validation Program

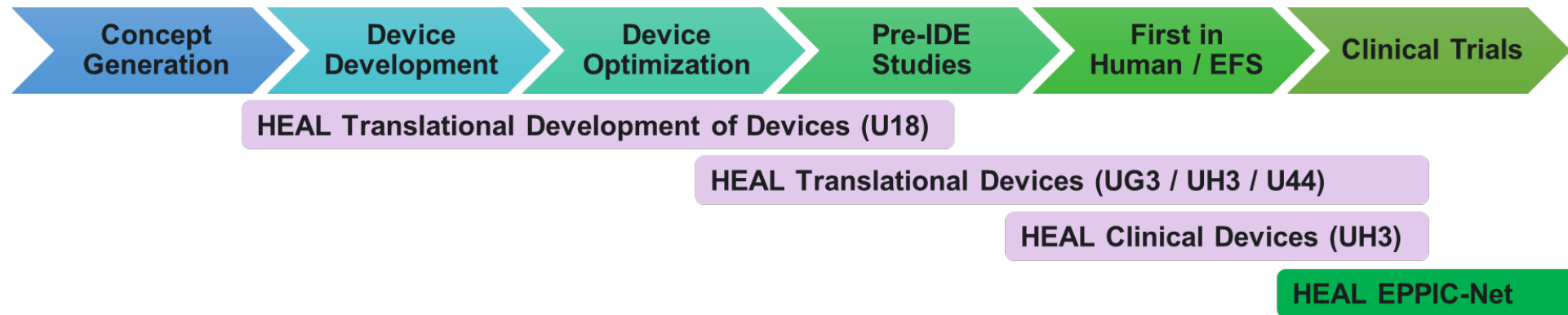


Many projects target multiple pain conditions

# Translating Discoveries into Effective Devices to Treat Pain

## Goal

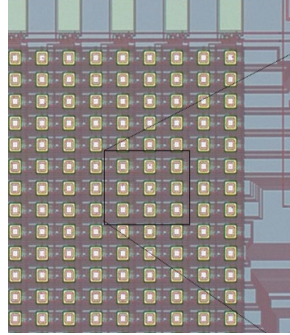
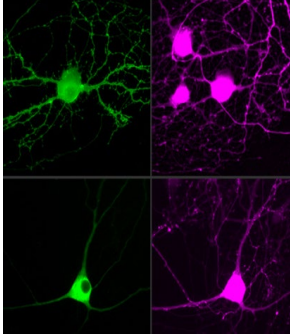
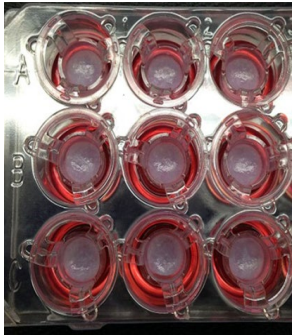
To foster the development of next-generation medical devices to diagnose and treat pain by supporting preclinical development and demonstration of safe, effective, and non-addictive device-based technologies and approaches. It will also support the translation of promising devices into clinical trials that will inform function, final design, safety, and/or efficacy.



*Translational device programs can tee up therapeutic candidates for larger EPPIC-Net trials.*

# Human Cell-based Research Resources

The National Center for Advancing Translational Sciences (NCATS) is lead in bioengineered devices for predictability of efficacy and safety of drugs



- Screening library
- Tissue chips
- Induced pluripotent stem cells

## PRECISION Human Pain Network

Datasets of molecular signatures, cell types, and cellular function phenotypes that underlie human pain signal transduction, transmission, and processing

### Tissue sources

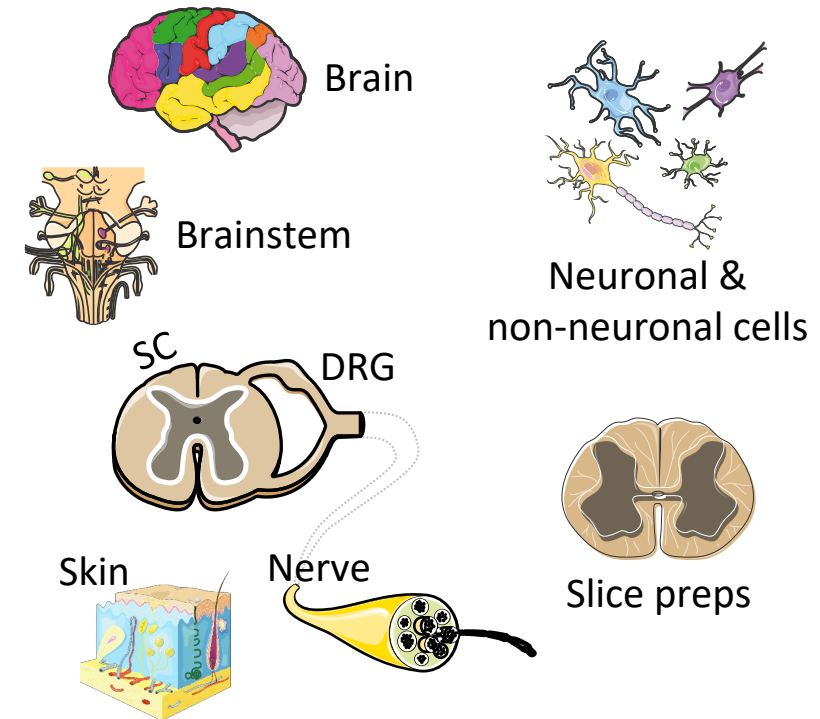
- Transplant centers
- National repositories

### Tissue demographics

- Lifespan
- Sex

### Associated Disorder

- Specific pain conditions
- Substance use/disorder



# Research to Identify Biomarker Signatures of Pain Conditions

## Biomarker Program

- Facilitate Phase 2 clinical trials
- Targeted pain conditions
- Type of biomarker: response prediction/monitoring signature
- Phased
  - Biological signature with strong detection method credibility
  - Biological signature with scientific and regulatory consensus credibility
- Clinical validation to follow



## Developing Quantitative Imaging & Other Biomarkers of Myofascial Tissues

### Myofascial Pain

- Muscles, fascia, other soft tissues
- Interaction with neural & immune systems
- Low back, TMD, neck, shoulder pain, headache

### Biomarkers

- Predictive and prognostic
- Quantitative, non-invasive: Imaging, electrophysiology
- Integration: immune, genomic, physiological factors
- Multiscale modeling or machine learning analysis

### Outcome

- Evidence base for clinical decisions & coverage



# Clinical Trials to Test Safety of Promising New Drugs and Devices

## Early Phase Preclinical Investigation Network: EPPIC Net

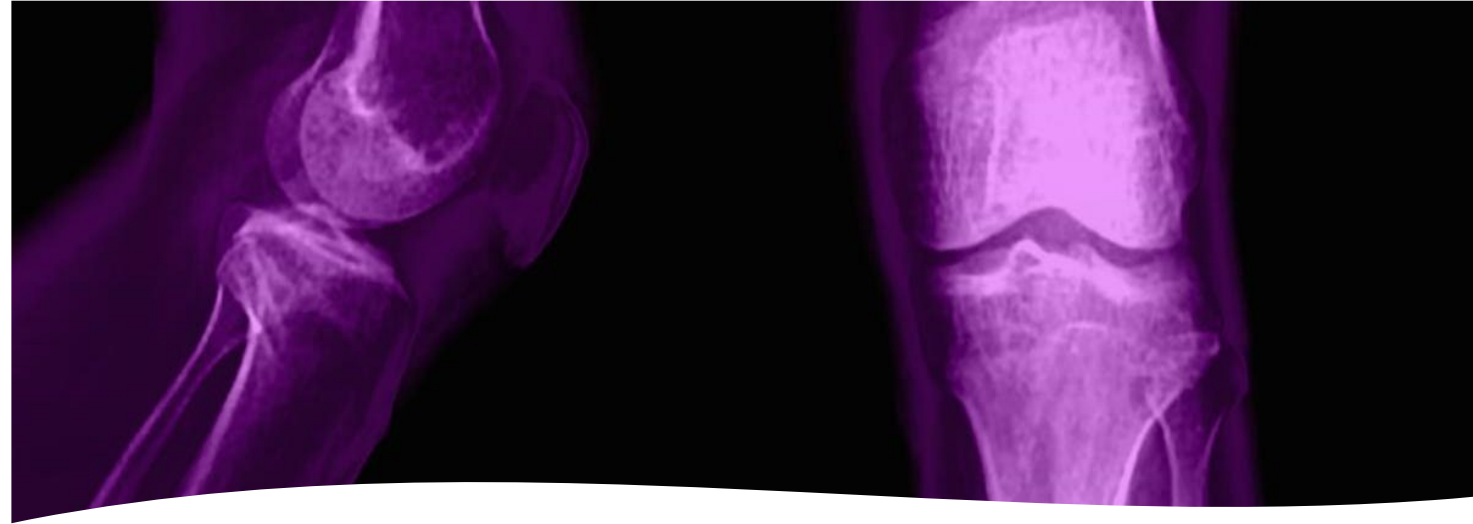
- Non-opioid treatments
- Multiple study sites nationwide
- Specific pain conditions

### Conditions studied

- Knee Osteoarthritis
- Diabetic nerve pain

### Approaches

- Test for safety
- Collect patient characteristics



**22% of adults over age  
40 have knee  
Osteoarthritis (OA)**





# Enhancing the Pain Research Workforce

## The Opioid Crisis: All Hands On Deck

**A formidable and rapidly evolving crisis demands a uniquely powerful response.** We must ensure an expanded, enduring, and diverse pool of highly trained scientists to perform high quality pain research in the face of a diminishing community and expanding research opportunities.



# Thank You!

Walter J. Koroshetz, M.D.

Director

National Institute of Neurological Disorders and Stroke

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Website: <http://www.ninds.nih.gov/>



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# **HEAL Research: Making Scientific Advances to Stem the Opioid Crisis**

*Rebecca G. Baker, Ph.D., Director, NIH HEAL Initiative*

# NIH HEAL Initiative

## NIH HEAL INITIATIVE RESEARCH OVERVIEW

- Over \$2.5 billion in research
- More than 1,000 research projects
- 42 research programs
- Projects underway in all 50 states
- Crisis-focused research across the investigational spectrum



*In partnership with federal agencies, industry, academia, and communities*

# HEAL Funding Allocation

- Congressionally appropriated funds currently for this year: \$616 million
- President's budget request ~ 30% increase (\$811 million)
- Additional funding pending Congress passing a budget

# HEAL Research Guiding Principles



**Focus on the whole person**



**Address systemic challenges and inequities**



**Work with communities to bring research to life**



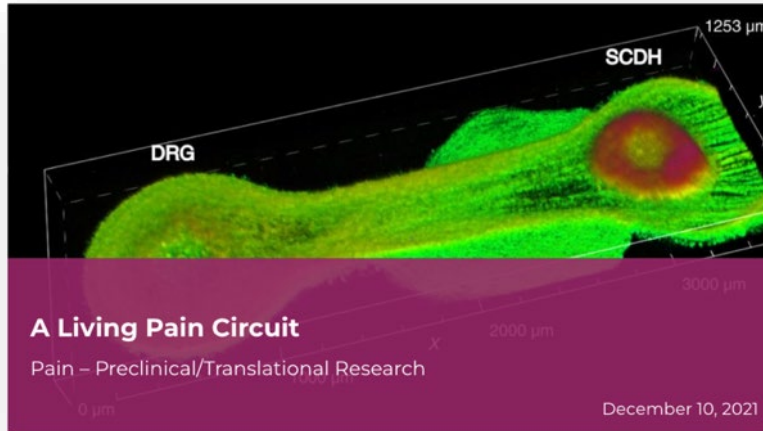
**Understand biology of pain and addiction**



**Share findings rapidly and usefully**

# HEAL Pain Research: Selected Examples

Tissue chips  
screen pain  
medications



Phase 2  
clinical trials

Person-  
centric  
treatments  
for back  
pain



Pragmatic  
clinical trials  
in health  
settings

# HEAL Opioid Research: Selected Examples

Targeting social determinants of health for prevention



Starting buprenorphine in the emergency department

Implantable naloxone to reverse overdose



Standardizing care for infants with NOWS



# HEAL Cross-Cutting Research: Selected Examples

Stigma interventions



Patients and communities as research partners

Co-occurring mental illness and addiction



Whole-person care for pain and opioid use disorder

# HEAL Small Business Programs: >100 Companies in 20 States

- Mobile apps: recovery, medications, behavioral health
- Novel pain medications: absorbable film, nasal spray, gene therapy, bone glue, virtual reality
- Human-on-a-chip for screening potential medications
- Low-cost urine drug test for clinicians
- Many more ...



# HEAL Research Guiding Principles



Use a whole-person research focus



Address system problems and inequities



Work with communities to bring research to life



Understand biology of pain and addiction



Share findings rapidly and usefully

Open science is a guiding principle for HEAL research

This urgent public health challenge requires that HEAL results be shared widely and rapidly

# HEAL Data Ecosystem

The screenshot shows the top navigation bar with the NIH HEAL INITIATIVE logo and the text 'HEAL Data Platform'. On the right, there are icons for 'Discovery', 'Workspace', 'Example Analysis', and 'Profile'. Below the navigation bar, the main content area features the heading 'HEAL Data Platform' and a paragraph describing the platform as a single web interface for discovering, accessing, and analyzing data. Two buttons, 'EXPLORE DATA' and 'REGISTER YOUR STUDY', are prominently displayed. Below these buttons is a paragraph about the NIH HEAL Initiative's mission. A 'LEARN MORE' button is also present. To the right of the text is a large graphic with the word 'HEAL' in large, outlined letters, with hands holding the letters, and the tagline 'NIH · Helping to End Addiction Long-term' below it. At the bottom of the screenshot, there is a row of five icons with corresponding text: a magnifying glass for 'Search HEAL studies and related datasets for download or analysis in a', a bar chart for 'Explore Tutorials and Example Analysis.', a question mark for 'View answers to frequently asked', a video camera for 'Watch tutorial videos to learn how to interact with', and a group of people for 'Explore helpful resources for Prevention, Treatment and Support related to'.

## Make HEAL data accessible

- HEAL-generated data indexed and searchable, with clear routes to access
- Data management and sharing support
- User-friendly search and interface

## Build the research community

- HEAL researcher engagement and consensus-building, foster cross-awareness of research projects and drive collaborations
- Broad researcher, community, stakeholder, and user engagement

[healdata.org](https://healdata.org)

# Progress: HEAL-Generated Data

- Opioid use disorder treatment improved health, reduced re-arrest
- Four diverse urban, academic medical centers successfully implemented unique buprenorphine in emergency departments
- Standardizing safe and effective treatment for infants with NOWS
- Insomnia drug relieves craving and withdrawal symptoms



# Progress: HEAL-Generated Data

**Publications are necessary but not sufficient to address the opioid crisis**

**HEAL data analysis, re-use, and dissemination is key for durable scientific solutions**

**We need stakeholders to help guide implementation of research findings**

# Making Research Results Useful for Communities

- Help HEAL researchers work with communities
  - Understand community needs
  - Make findings user-friendly
- Build partnerships with communities that can benefit from HEAL research findings
  - HEAL Community Partner Committee



# Voices of Lived Experience HEAL Community Partner Committee



Philip Rutherford



Bianca Landaeta



Dawn Edwards



Kristen (Kri) Korte



Jonathon Valdez



Jessica Hulseley  
Nickel



Kevin Charles



Christin Veasley



Stephanie G. Smith



Tom Norris

- Input on key issues faced by individuals affected by pain and addiction
- Identify, refine, and prioritize engagement activities and links to HEAL science



# Adapting to the Crisis: New Directions for HEAL Research

- Patterns of drug use are shifting
- Difficult to target treatment and services
- Pain management remains uncoordinated and fragmented
- Health inequities in pain and addiction persist

COVID-19

Stimulants

Mental Illness

Polysubstance

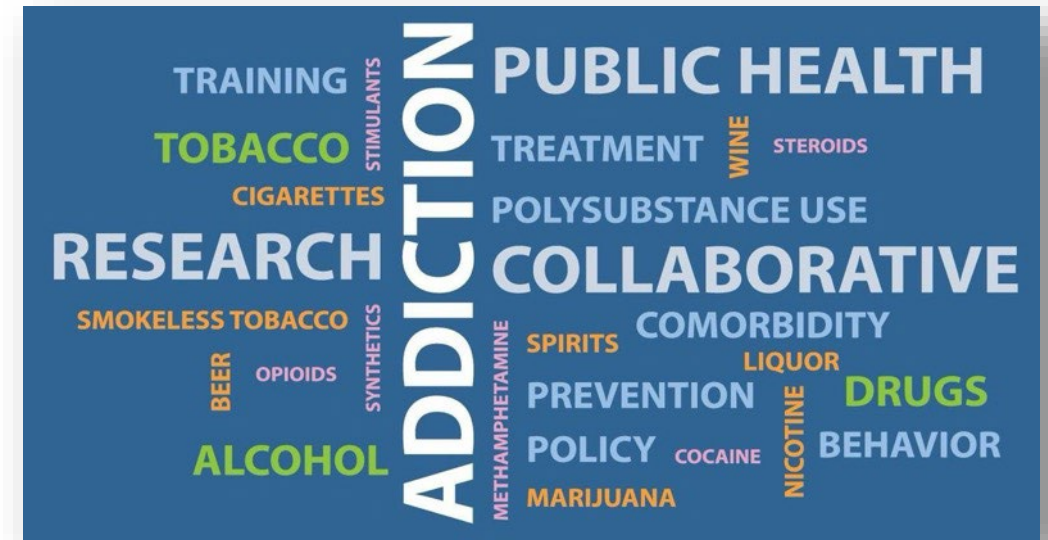
Inequity

Burnout

Stigma

# *New Research: Adapting to Emerging Opioid Threats and Shifting Drug Use*

- Addressing polysubstance use in primary care
- Healthcare service delivery for polysubstance use
- Buprenorphine for reducing methamphetamine use
- Opioid use disorder and infectious complications of drug use



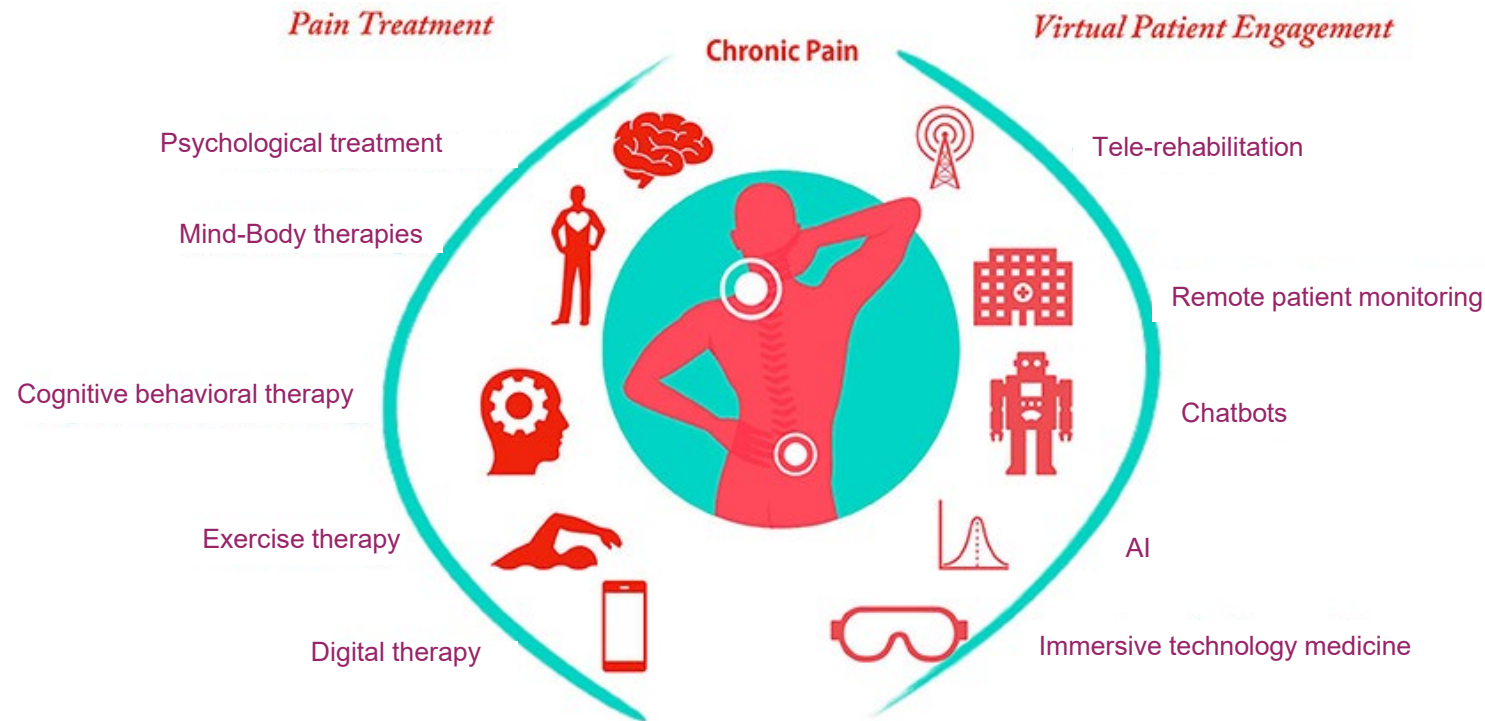
# *New Research:* Harness Real-Time and Existing Data to Tailor Services and Care

- Data dashboards (overdose, services)
- Data mining to identify patients at risk for harmful opioid use
  - Clinical trials, social media, CMS, electronic health records
- Compare long-term outcomes of pain management



# Future Research: Coordinate Pain Management

- Coordinated care in healthcare systems
- Chronic pain treatment in rural populations
- Improve quality of life for patients on long-term opioid therapy
- New sickle cell treatments



# *Future Research: Optimizing Pain and Addiction Care and Prevention*

- Improve addiction care and quality
- Target social determinants (e.g., housing, employment, exposure to violence and trauma)
- Opioid exposure in post-surgical adolescents
- Enhance pain and addiction workforce
- Oral complications of buprenorphine



# Connect With HEAL



October 12, 2022


**Research Spotlight**



**Lessons From the Field: Patient and Community Engagement**


HEAL values patient engagement as an essential research component. Learn how HEAL scientists are soliciting and incorporating input from patients and communities.

**Funding Opportunities**



July 27, 2022

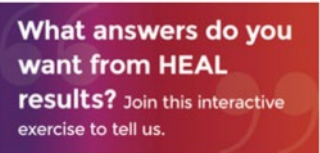
**Making HEAL Data Speak: Finding Scientific Solutions for People and Communities**



Dear HEAL Community,

HEAL research is addressing the urgent public health crisis of opioid misuse, addiction, and overdose that demands teamwork, maximum transparency, and speed. We have a responsibility to deliver as quickly as possible the results of HEAL research so people can make evidence-based decisions about treatment, and so we can continue to find more scientific solutions for people and communities in need.

HEAL has worked hard over the past 2 years to build a [comprehensive data ecosystem](#) that will help people and communities affected by the opioid crisis through maximal data sharing and re-use. Achieving this goal means making sure all [HEAL data are](#)



Monthly information about progress, funding opportunities

Subscribe at [heal.nih.gov](https://heal.nih.gov)

[HEALquestion@od.nih.gov](mailto:HEALquestion@od.nih.gov)

# Imagine a Future ...

- Clinical decision-making tools allow safe, personalized pain treatment and addiction screening
- Communities adopt evidence-based treatments for people in jails and prisons
- Babies exposed to opioids live healthy lives
- Immunotherapies treat addiction and reverse overdose
- Telehealth opens access to pain and addiction treatment
- People in long-term recovery are community leaders

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INITIATIVE**

## **Discussion**

*Moderator: Diana Morales, Communications Director, NIH  
HEAL Initiative*



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INITIATIVE**

**Rebecca G. Baker, Ph.D.**  
*Director, NIH HEAL Initiative*

**Thank You**