

# Federal Pain Research Strategy

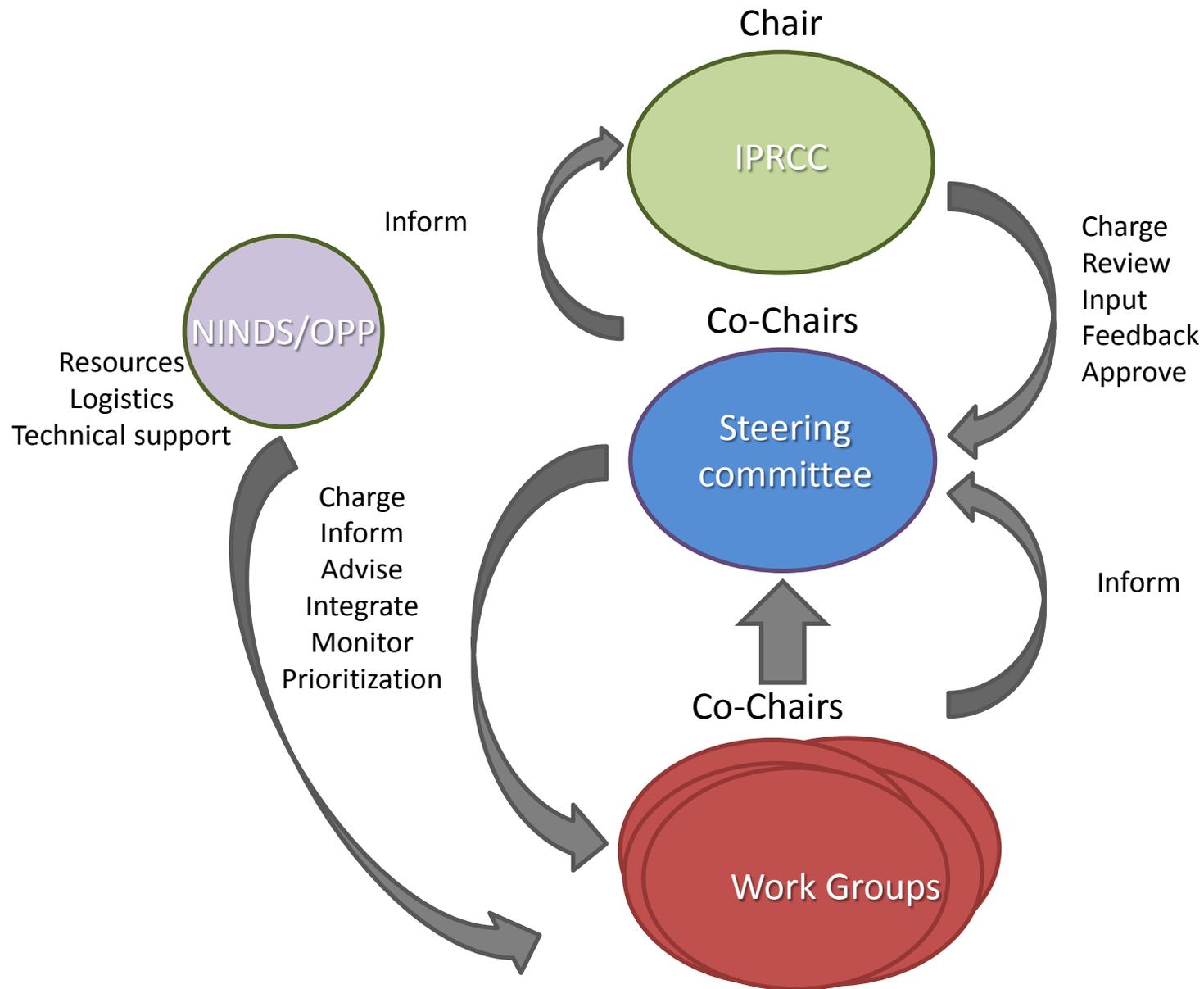
Planning Committee Proposal

# Federal Pain Research Strategy

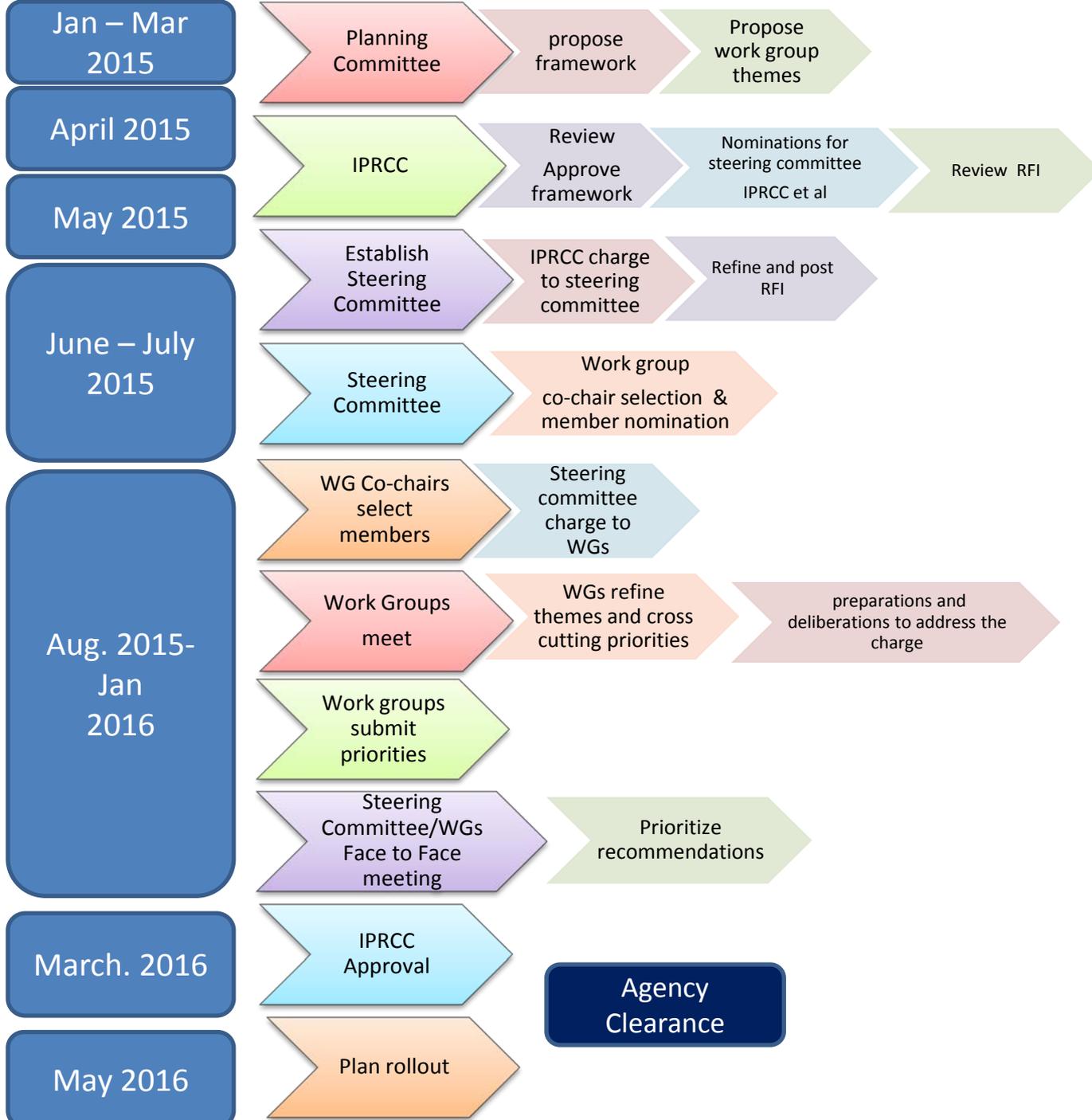
## Planning Committee

- Allan Basbaum, IPRCC
- Chris Veasley, IPRCC
- Trip Buckenmaier, DoD, IPRCC
- Audrey Kusiak VA, IPRCCJ
- John Kusiak, NIDCR, NIH, IPRCC (Dr. Somerman)
- Chad Helmick, CDC, IPRCC
- Sharon Hertz, FDA, IPRCC
- Rick Ricciardi, AHRQ, IPRCC
- Linda Porter, OPP/ NINDS
- Wen Chen, NCCIH, NIH
- Partap Khalsa, NCCIH, NIH
- Sue Marden, NINR, NIH
- Ann O'Mara, NCI, NIH
- Wendy Smith, OD, NIH
- David Thomas, NIDA, NIH

# Proposed Operational Structure



# Work Flow



# Proposed Organizational Structure

**IPRCC**

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graph TD; IPRCC[IPRCC] --> SC[Steering Committee]; SC --> TWG[Thematic Work Groups];
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The diagram illustrates a three-tier organizational structure. At the top is the IPRCC, represented by a light green rounded rectangle. A blue arrow points down from the IPRCC to the Steering Committee, which is a blue rounded rectangle. A red arrow points down from the Steering Committee to the Thematic Work Groups, which is a large dark blue rectangle with a red border.

**Steering Committee**

**Thematic Work Groups**

# Proposed Responsibilities

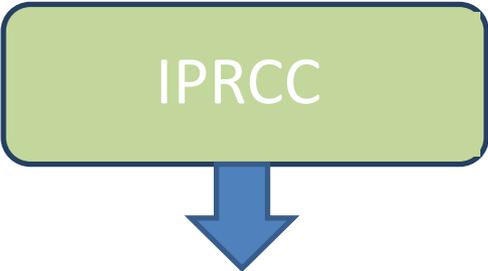
A green rounded rectangle with a dark blue border containing the text "IPRCC" in white, bold, uppercase letters.

## IPRCC

- Reviews and approves the organizational and operational structure for the strategy
- Provides input for an RFI to inform the work groups
- Sets charge to the steering committee
- Provides feedback throughout the process through the steering committee
- Final approval of the strategy

# Proposed Organizational Structure

IPRCC



## Steering Committee

- Co-chairs: 1 federal, 1 non-federal IPRCC scientist
- 8-12 members: most external
- Broad, balanced range of expertise
- Patient advocate, ethics, science: basic, translational, clinical, population, dissemination, implementation, non-pain

## Steering Committee

- Revises and completes the RFI
- Selects work group co-chairs
- Sets charge to the work groups with RFI feedback considered
- Co-chairs serves as liaison to the IPRCC and work groups
- Monitors work group progress through the work group co-chairs
- Coordinates and integrates work group discussions
- Oversees the prioritization of recommendations across the work groups (Delphi method\*)

# IDENTIFYING APPROPRIATE THEMES

- ◆ Currently there are **nine themes** around which the federal portfolio analysis is organized.
- ◆ Themes are **not sufficiently cross-cutting to develop a comprehensive and effective research strategy.**
- ◆ The **Autism** Interagency and **Muscular Dystrophy** Coordinating Committee **themes are not good models as they address needs of a single condition.**
- ◆ Pain research must address its **multidisciplinary nature** and the **continuum of pain from prevention to chronicity**

# Thematic Work Groups

## (Overarching principle)

### A CONTINUUM OF PAIN (NPS)

- ◆ *Pain is a temporal process*
- ◆ *Pain begins with an acute stage*
- ◆ *Acute pain may progress to a chronic state*
- ◆ *Mechanisms activated in acute pain setting influence chronic pain development*
- ◆ *Chronic pain has a variable onset and duration and may occur post injury or surgery*
- ◆ *Individual variation influences chronic pain susceptibility*

# Thematic Work Groups

PREVENTION  
OF ACUTE &  
CHRONIC PAIN

ACUTE PAIN &  
ACUTE PAIN  
MANAGEMENT

TRANSITION  
FROM ACUTE TO  
CHRONIC PAIN

CHRONIC PAIN  
& CHRONIC PAIN  
MANAGEMENT

DISPARITIES

QUESTIONS

WHAT HAPPENS AND  
TO WHOM?

WHY AND HOW DOES  
IT HAPPEN?

HOW TO MANAGE?

BASIC  
SCIENCE

CLINICAL  
SCIENCE

UNDERSTAND  
MECHANISMS

TRANSLATE  
MECHANISMS  
/  
TREAT

How did we get to these themes?

## THEME 1: PREVENTION OF ACUTE & CHRONIC PAIN

### Basis of Theme 1 (NPS)

- ◆ *Primary pain prevention*
  - *Focuses on efforts to reduce injuries or disease that may result in pain*
- ◆ *Secondary pain prevention*
  - *Focuses on reducing the likelihood that acute pain transitions into chronic pain.*
- ◆ *Tertiary pain prevention*
  - *Attempts to limit the development of disabilities and other complications of chronic pain.*

## THEME 2: ACUTE PAIN & ACUTE PAIN MANAGEMENT

### Basis of Theme 2 (NPS)

#### ◆ *Acute Pain*

- is time limited*
- is an expected physiologic consequence of trauma, disease, surgery or illness*
- may progress to a chronic pathological state*

#### ◆ *Acute Pain*

- may be treated through self-management, pharmacological or nonpharmacological approaches*

## THEME 3: TRANSITION FROM ACUTE TO CHRONIC PAIN

### Basis of Theme 3 (NPS)

#### ◆ *Contributors to the transition*

- nature of the initial insult*
- mechanisms activated in the acute pain setting*
- patient-related risk factors*

#### ◆ *Chronic Pain*

- may start early after injury or surgery*
- mechanisms that underlie the transition are complex and unclear*

## THEME 4: CHRONIC PAIN & CHRONIC PAIN MANAGEMENT

### Basis of Theme 4 (NPS)

#### ◆ *Chronic Pain*

- a complex biopsychosocial condition with distinct pathology --  
has biological, psychological, and cognitive correlates*
- may interfere with many aspects of a person's life  
-- (high impact chronic pain)*
- may require a biopsychosocial approach to multidisciplinary,  
multimodal and integrated care*

## THEME 5: DISPARITIES

### Basis of Theme 5 (NPS)

- ◆ *Health disparities affect vulnerable populations:*
  - *in occurrence of care*
  - *in assessment of pain*
  - *in access and quality of care*
  - *in outcomes of care*
- ◆ *Increased risk for disparities are associated with:*
  - *race or ethnicity, religion, sex, gender, age, mental health, cognitive factors, mental health*
  - *other factors linked to discrimination or exclusion*

# Proposed Organizational Structure

## Cross-Cutting Issues

# Cross-Cutting Issues

**PREVENTION  
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**CHRONIC PAIN  
& CHRONIC  
PAIN  
MANAGEMENT**

**DISPARITIES**

What  
happens and  
to whom?

**Epidemiology (prevalence, onset, course, impact, cost, access, categorization by condition, etc.)**

**Diagnosis & Assessment (patient-centered assessment, phenotyping, genotyping)**

Why and  
how does it  
happen?

**Susceptibility & Resilience (underlying environmental & biopsychosocial mechanisms)**

**Mechanisms (disease mechanisms, treatment response)**

How is it  
managed?

**Lifespan (disease progression, age relevance, palliative care, unique populations)**

**Treatment (biopsychosocial approach – pharmacological, non-pharmacological, self-management)**

**Dissemination & Implementation (individualized, patient-centered, integrated treatment)**

**Tools/Infrastructure for Basic & Clinical Research**

**Translation (bench-to-bedside & reverse)**

*Primary prevention focuses on reducing injuries or diseases that might result in pain.*

*Secondary prevention focuses on reducing the likelihood that acute pain transitions into chronic pain.*

*Tertiary prevention interventions attempt to limit the development of disabilities and other complications of chronic pain. (NPS)*

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**TRANSITION  
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**CHRONIC PAIN  
& CHRONIC PAIN  
MANAGEMENT**

**DISPARITIES**

Epidemiology

Diagnosis and assessment

Susceptibility and resilience

Mechanisms

Lifespan

Treatment

Dissemination and implementation

*Acute pain is a time limited and expected physiologic effect of trauma, disease, surgery or illness that may progress to a chronic pathological state. It may be treated through self-management, pharmacological or non-pharmacological approaches. (NPS)*

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**ACUTE PAIN &  
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Diagnosis and assessment

Susceptibility and resilience

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Lifespan

Treatment

Dissemination and implementation

\* Suggested after planning committee met

*Acute pain may progress into a persistent painful condition with the nature of the initial insult and various patient-related risk factors as contributing factors. Chronic pain may start early after injury, surgery, or other precipitating factors through mechanisms activated in the acute setting. The cause of this transition is often unclear and the mechanisms by which it occurs are complex. (NPS)*

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Epidemiology

Diagnosis and assessment

Susceptibility and resilience

Mechanisms

Lifespan

Treatment

Dissemination and implementation

**Chronic pain** is a complex biopsychosocial condition that has a distinct pathology with biological, psychological, and cognitive correlates, that may interfere with many aspects of a person's life (high impact chronic pain). Chronic pain may require a biopsychosocial approach to multidisciplinary, multimodal and integrated care. (NPS)

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Diagnosis and assessment

Susceptibility and resilience \*

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**Health disparities** in pain occurrence, assessment, access, quality, and outcomes of care adversely affect vulnerable populations. Increased risk for disparities is associated with race or ethnicity, religion, socioeconomic status, sex, gender, age, mental health, cognitive, disability, and other characteristics linked to discrimination or exclusion. (NPS)

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