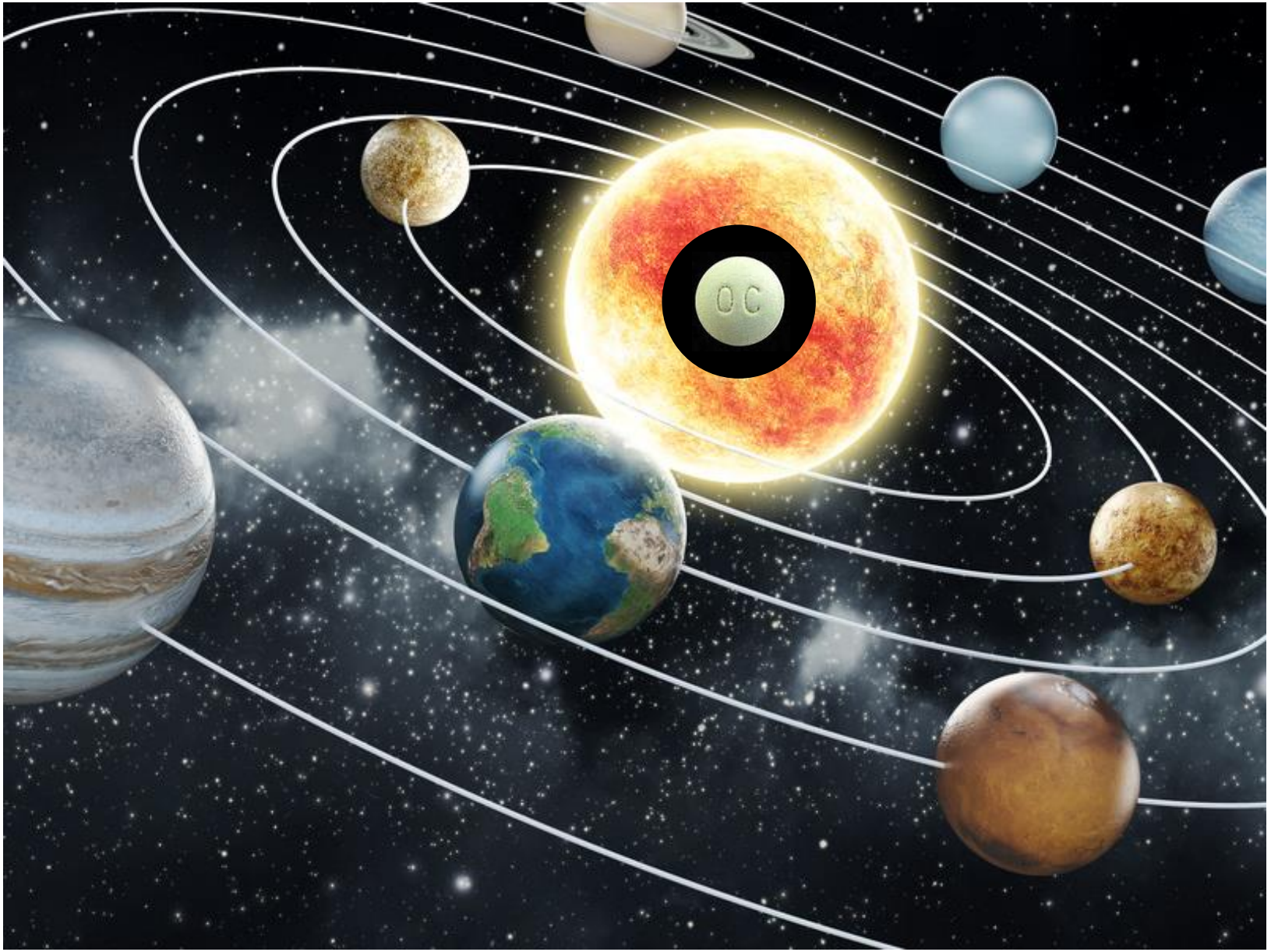
Improving community-based care for chronic pain: antidote to the opioid epidemic

Erin E. Krebs, MD, MPH
Minneapolis VA Health Care System
University of Minnesota

OUR MISSION YOUR HEALTH
MINNEAPOLIS VA HEALTH CARE SYSTEM


OC


II,
III.
IV,
VI,
VII,
VIII,
IX,
X,

2003

VA/DoD CLINICAL PRACTICE GUIDELINE FOR
THE MANAGEMENT OF **OPIOID THERAPY FOR CHRONIC PAIN**

Version 1.0

Recommendations	QE	Overall Quality	R
Opioid therapy is indicated for moderate to severe pain that has failed other therapeutic interventions	III	Poor	I
Consider the ethical imperative to relieve pain	III III	Poor	I

Opinion of respected authorities, case reports, and expert committees

Management of Opioid Therapy for Chronic Pain Working Group, March 2003

2017

VA/DoD CLINICAL PRACTICE GUIDELINE FOR OPIOID THERAPY FOR CHRONIC PAIN

#	Recommendation	Strength*	Category†
Initiation and Continuation of Opioids			
1.	a) We recommend against initiation of long-term opioid therapy for chronic pain. b) We recommend alternatives to opioid therapy such as self-management strategies and other non-pharmacological treatments. c) When pharmacologic therapies are used, we recommend non-opioids over opioids.	a) Strong against b) Strong for c) Strong for	Reviewed, New-replaced

- "Rapidly growing understanding of the significant harms of LOT"
- "...no studies evaluating the effectiveness of LOT for outcomes lasting longer than 16 weeks."

Opioid Therapy for Chronic Pain Work Group, February 2017

Annals of Internal Medicine REVIEW

The Effectiveness and Risks of Long-Term Opioid Therapy for Chronic Pain: A Systematic Review for a National Institutes of Health Pathways to Prevention Workshop

Roger Chou, MD; Judith A. Turner, PhD; Emily B. Devine, PharmD, PhD, MBA; Ryan N. Hansen, PharmD, PhD; Sean D. Sullivan, PhD; Ian Blazina, MPH; Tracy Dana, MLS; Christina Bougatsos, MPH; and Richard A. Deyo, MD, MPH

- "No study of opioid therapy versus placebo, no opioid therapy, or nonopioid therapy evaluated long-term (>1 year) outcomes related to pain, function, or quality of life."

Chou R, Turner JA, Devine EB, et al. Ann Intern Med 2015;162:276–86

Strategies for **P**rescribing **A**nalgesics **C**omparative **E**ffectiveness Trial

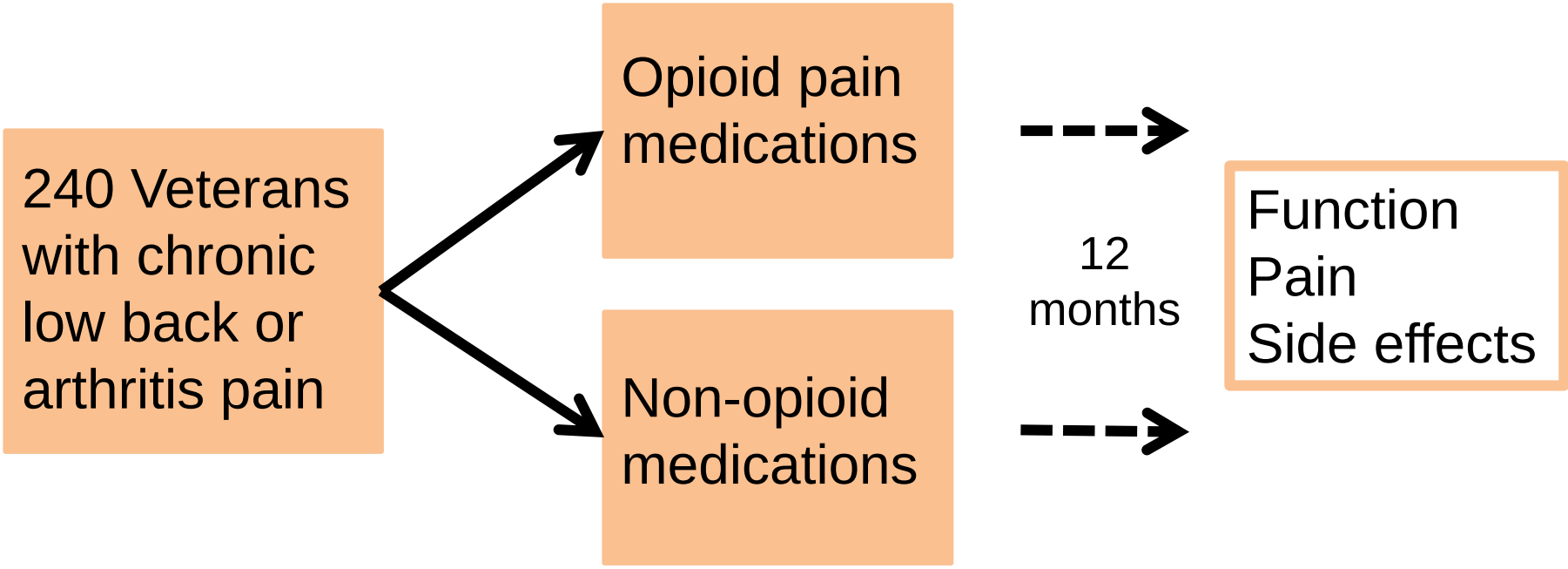
Objective: To compare benefits and harms of opioid therapy versus non-opioid medication therapy over 12 months among patients with chronic back or osteoarthritis (OA) pain

- H1: Opioids will improve pain-related function & pain intensity more than non-opioids
- H2: Opioids will cause more adverse medication-related symptoms and events than non-opioids

ClinicalTrials.gov: NCT01583985

SPACE

Strategies for Prescribing Analgesics Comparative Effectiveness



Funded by VA Health Services Research & Development IIR 11-125

Eligibility

- Inclusion criteria: Moderate-severe chronic back pain or hip/knee OA pain despite analgesic use
- Major exclusion criteria
  - Absolute contraindications to opioid therapy
  - Cognitive impairment or psychosis
  - Current long-term opioid therapy

Interventions

- Patients randomized to opioid or non-opioid arm
- All patients received individualized medication management within assigned arm
  - Follow-up visits monthly, then Q1-3 months
  - Treatment to target pain & individual functional goals
  - Telecare collaborative pain management

Kroenke E, Krebs EE, Wu J, et al. JAMA. 2014;312(3):240-248.

Original Investigation

Telecare Collaborative Management of Chronic Pain in Primary Care

A Randomized Clinical Trial

Kurt Kroenke, MD; Erin E. Krebs, MD; Jingwei Wu, MS; Zhangsheng Yu, PhD; Neale R. Chumbler, PhD; Matthew J. Bair, MD

- TCM intervention components
  - Symptom monitoring: PEG, PHQ-2, GAD-2
  - Medication optimization
- Pain improvement: 52% intervention vs. 27% usual care (NNT 4.1)

Kroenke K et al, Contemp Clin Trials 2013;34:270-281; Kroenke K et al, JAMA 2014;312(3):240-248

Medication arms

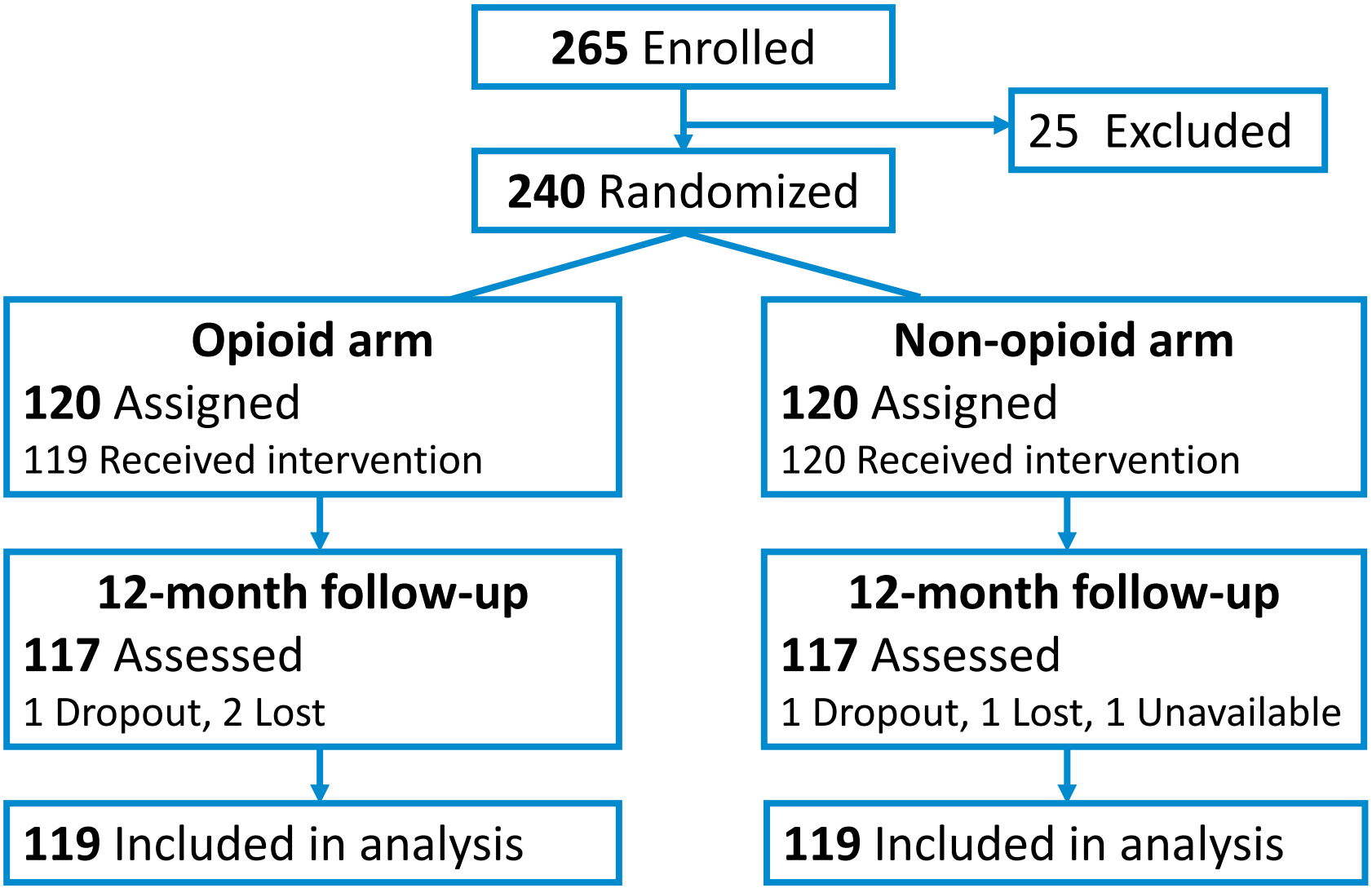
- All medications in both arms on VA formulary
- Each arm included 3 medication steps
- Opioid daily dose limited to 100 ME mg/day
  - (Initial plan was 200 ME mg/day)

Medication arms

Table: Medications within arms

	Opioid arm	Non-opioid arm
Step 1	Morphine IR*	Acetaminophen*
	Oxycodone IR	Oral NSAIDs
	Hydrocodone/APAP	Diclofenac topical
Step 2	Morphine SR	Nortriptyline, amitriptyline
	Oxycodone SA	Gabapentin
		Lidocaine topical
Step 3	Fentanyl transdermal	Pregabalin
	(Methadone)	Duloxetine
		Tramadol

* Preferred initial medication selection


265 Enrolled
25 Excluded
240 Randomized
Opioid arm
120 Assigned
119 Received intervention
Non-opioid arm
120 Assigned
120 Received intervention
12-month follow-up
117 Assessed
1 Dropout, 2 Lost
12-month follow-up
117 Assessed
1 Dropout, 1 Lost, 1 Unavailable
119 Included in analysis
119 Included in analysis

Response at 12 months: pain-related function and pain intensity

Number (%) with clinically significant improvement

	Opioid (n=117)	Non-opioid (n=117)	P-value
BPI interference	69 (59.0%)	71 (60.7%)	0.722
BPI severity	48 (41.0%)	63 (53.9%)	0.007

Intervention contacts

	Opioid (n=120)	Non-opioid (n=120)
Clinic visits, number	2.8 ± 2.0	2.8 ± 2.1
Phone visits, number	6.1 ± 2.9	6.2 ± 2.6
Visit duration, minutes	230 ± 95.5	216 ± 82.5

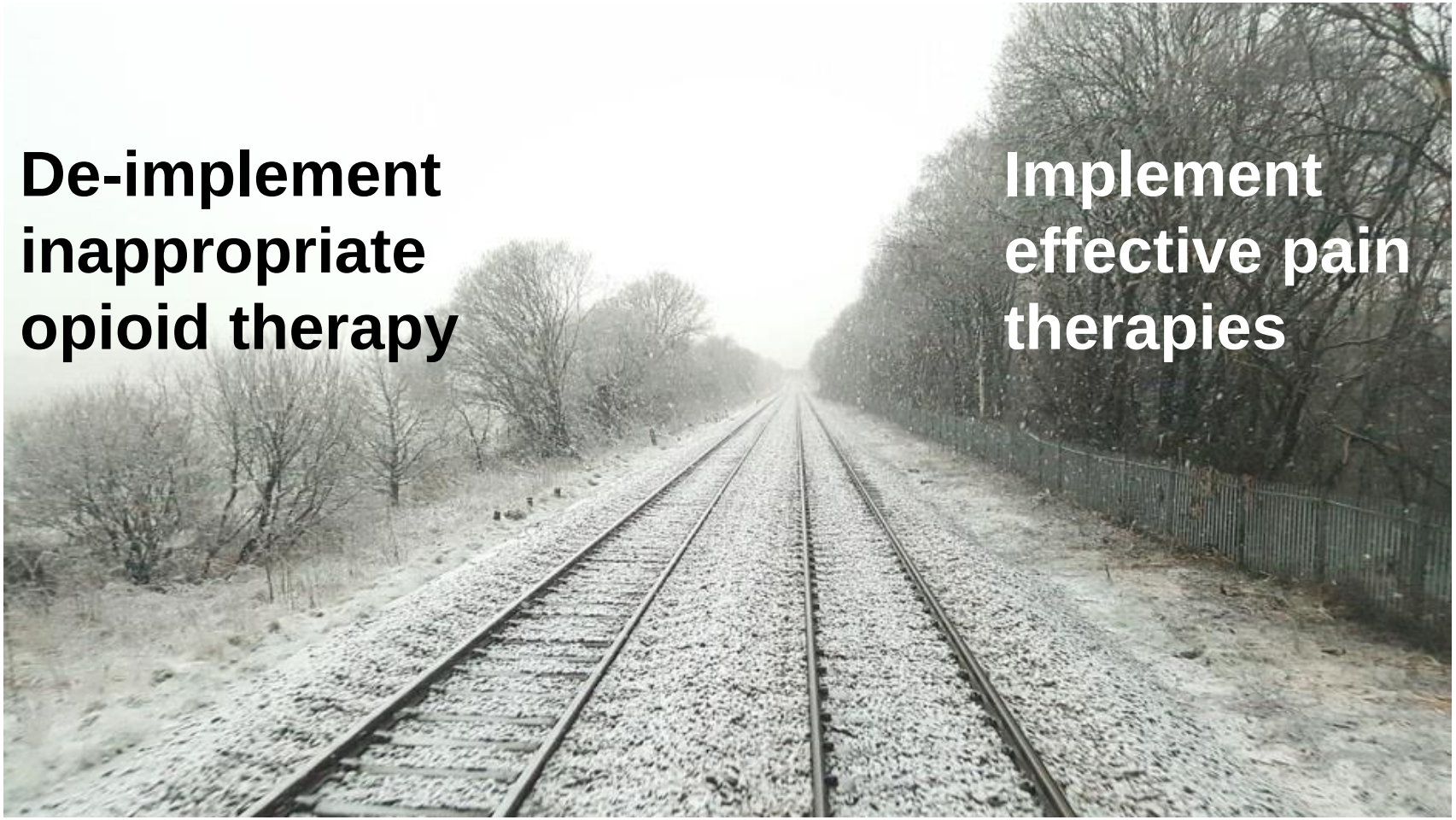
Summary

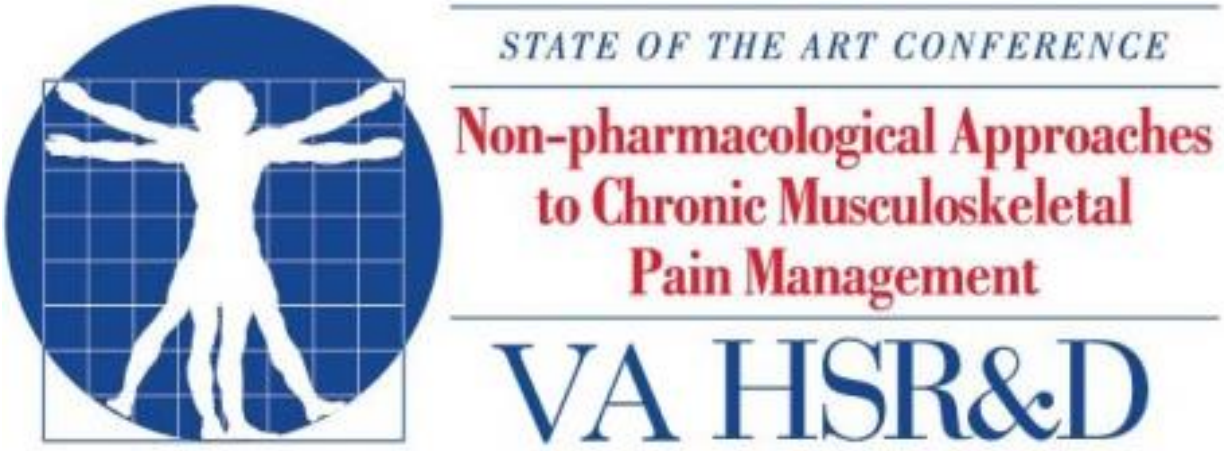
- Opioid therapy was not superior to non-opioid medication therapy over 12 months
  - Pain-related function: no difference
  - Pain intensity: small significant difference favoring non-opioids
- Opioid therapy caused significantly more medication-related adverse symptoms

Implications of study findings

- Results support CDC guideline recommendation that non-opioid medications are preferred for chronic pain
- Relatively high response rates in both arms, consistent with prior trial of similar TCM intervention

What next?


De-implement inappropriate opioid therapy
Implement effective pain therapies



- Prompted by White House summit on prescription opioid crisis
- Focus on alternatives to opioid therapy

Objectives

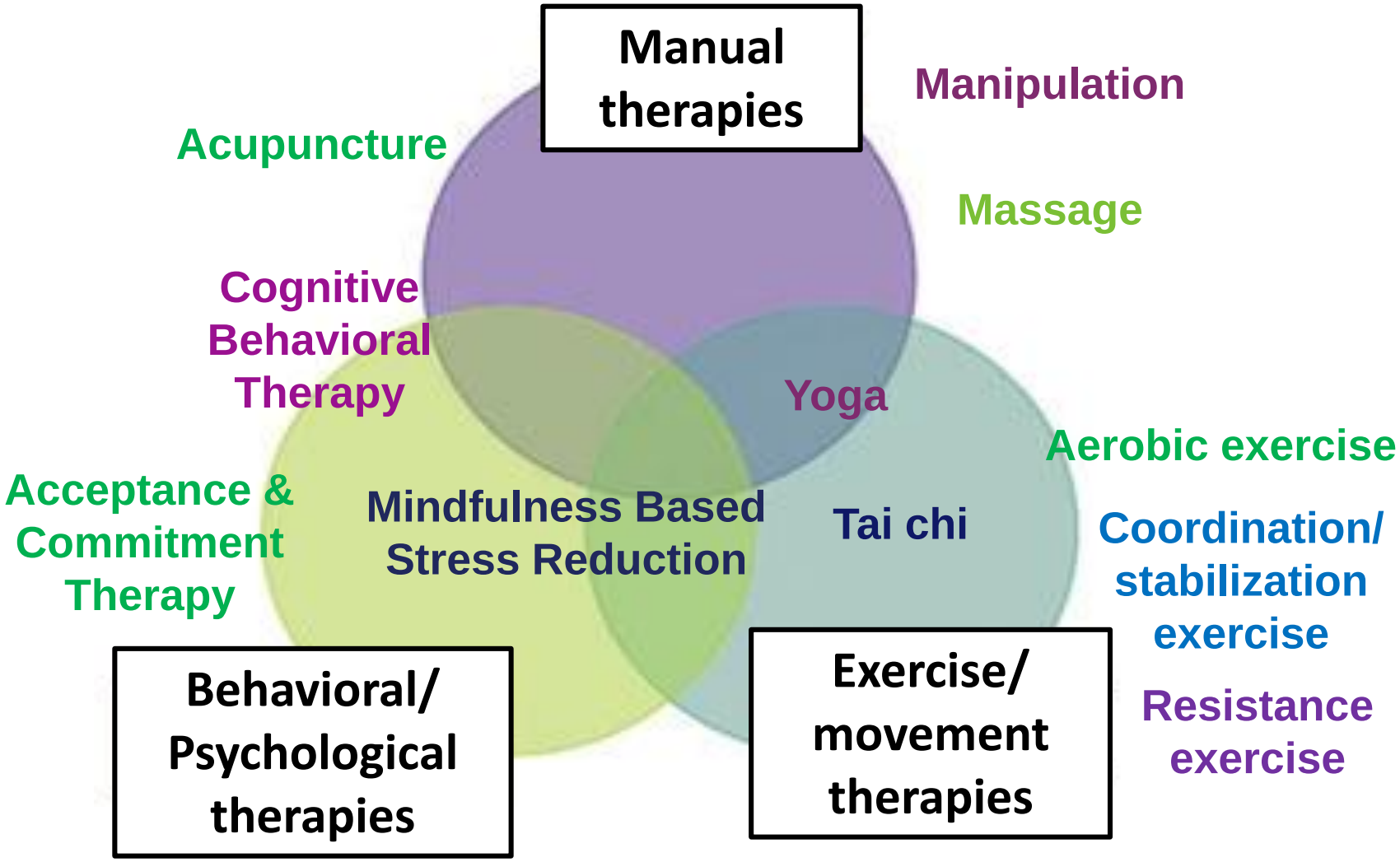
STATE OF THE ART CONFERENCE

Non-pharmacological Approaches to Chronic Musculoskeletal Pain Management

VA HSR&D

- To synthesize existing evidence and gaps related to non-pharmacological approaches for chronic musculoskeletal pain management
  - Psychological/behavioral therapies
  - Exercise/movement therapies
  - Manual therapies
  - Models for care delivery
- To identify approaches ready for implementation
- To identify a research agenda

Approaches ready for implementation (sufficient evidence)



Research agenda (evidence gaps)

STATE OF THE ART CONFERENCE

Non-pharmacological Approaches to Chronic Musculoskeletal Pain Management

VA HSR&D

- For most therapies, need further study of…
  - Delivery approaches
  - Dose (e.g., frequency, intensity, duration)
  - Strategies for improving adherence
  - Strategies for maintaining benefits
  - Effects of combining and sequencing therapies

Models for pain care delivery

STATE OF THE ART CONFERENCE

Non-pharmacological Approaches to Chronic Musculoskeletal Pain Management

VA HSR&D

- Unable to identify published systematic reviews
- Requested an evidence brief from the VA Evidence-Synthesis Program to include studies of…
  - Models using system-based mechanisms to increase uptake and organization of multimodal pain care
  - Adults with chronic musculoskeletal pain
  - Interventions integrated with primary care, excluding those conducted entirely within specialty settings

Models for pain care delivery

- 11 articles (10 studies) included
- Most RCTs of fair-good quality (3 poor)
- Most had 12 month follow-up (range 6-18)
- Most used usual care control
- Baseline mean pain on 11-point scale: 5.1-7.7
- 9 diverse models

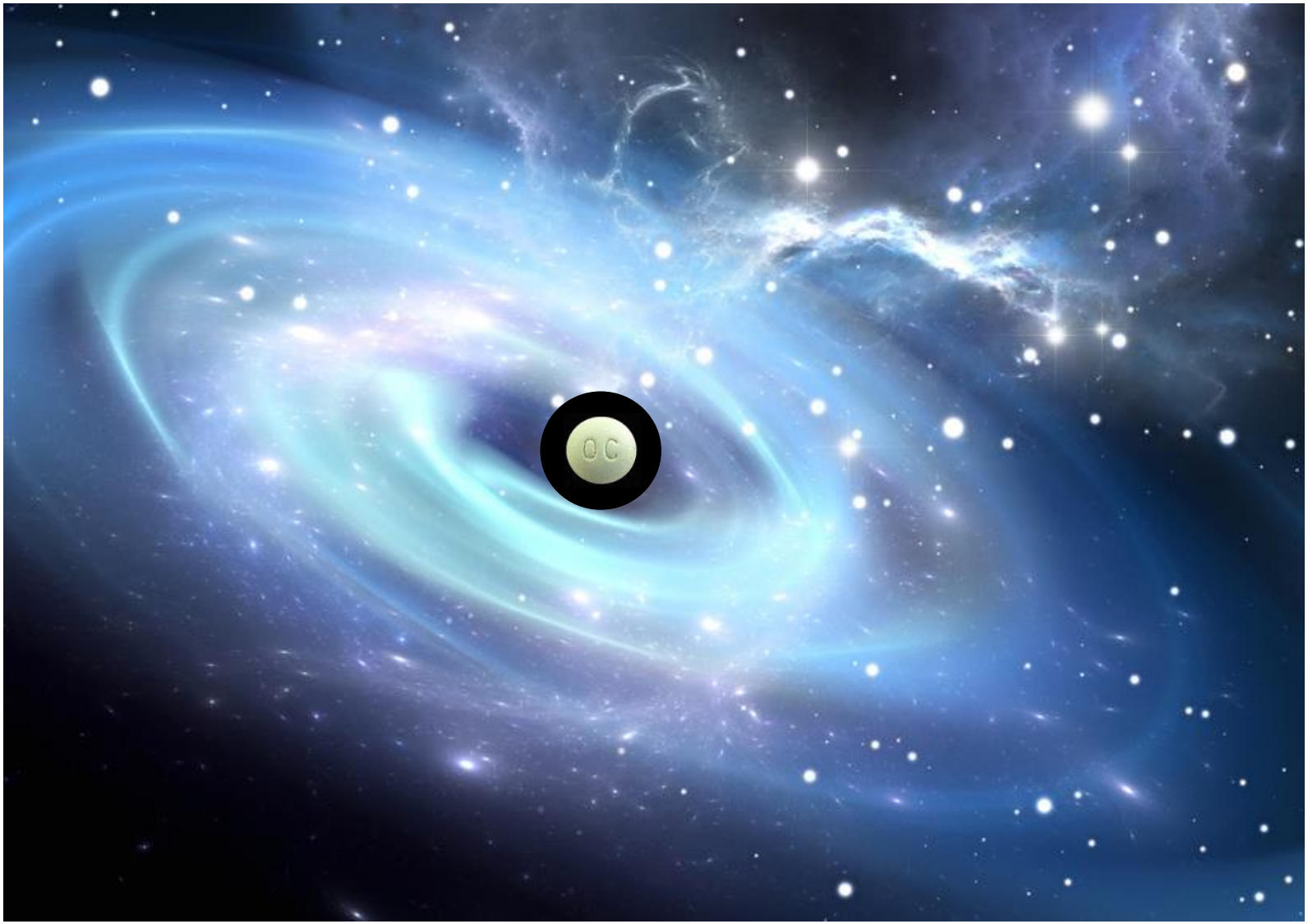
Peterson K, et al. Evidence Brief: Effectiveness of Models Used to Deliver Multimodal Care for Chronic Musculoskeletal Pain. VA ESP Project #09-199; 2017

Models for pain care delivery

- Best evidence for 5 models
  - 4 good-quality VA trials combined decision support with case management: ESCAPE, SEACAP, SCAMP, and SCOPE
  - 1 fair-quality British trial combined risk stratification with risk-matched treatment pathways: STarT Back
  - Clinically relevant improvement in pain intensity & pain-related function over 9-12 months (NNT range 4.1-12.70)
- Consider implementation of models across multiple VA facilities, with further evidence development

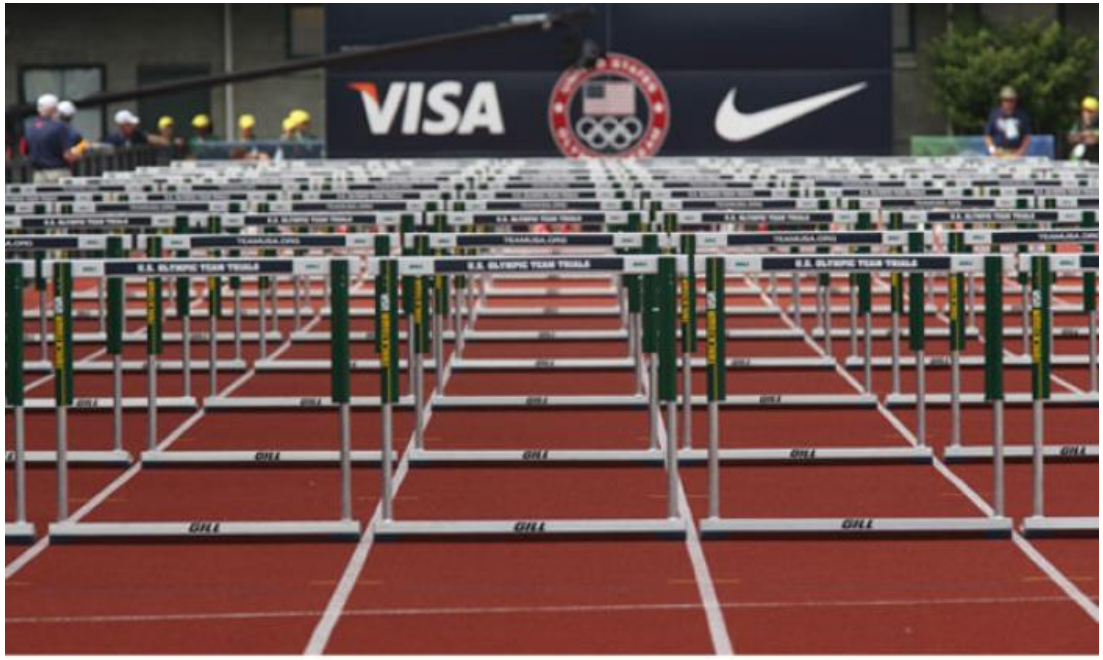
Peterson K, et al. Evidence Brief: Effectiveness of Models Used to Deliver Multimodal Care for Chronic Musculoskeletal Pain. VA ESP Project #09-199; 2017

Implementation challenges



Implementation challenges

Access to medications



Access to evidence-based non-pharmacological therapies

Thank you!

Erin.Krebs@va.gov