

# Applying Mind-Body Skills for Pain Using a Whole Health Telehealth Intervention (RAMP): Early Progress and Lessons Learned

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**RAMP**  
Rural Veterans Applying Mind Body Skills for Pain

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# Reaching rural veterans: Applying mind-body skills for pain using a whole health telehealth intervention: The RAMP pilot study

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# Background



# Rural Americans, especially Veterans, are disproportionately affected by chronic pain

- Higher rates of both chronic pain and high-impact chronic pain (Dahlhamer, 2016)
  - Urban: 19% (7% high impact)
  - Rural: 27% (11% high impact)
- Higher incidence of chronic joint and low back pain & physical limitations (Jones, 2009)
- More likely to be prescribed opioids & less likely to use non-opioid interventions (Garcia, 2019; Prunuske, 2014)
- VA serves 2.7 million rural Veterans
- Compared to non-Veterans, Veterans have increased risk of chronic pain and greater pain prevalence & severity (Nahin, 2017)
- Compared to urban Veterans, rural Veterans are
  - Less likely to receive comprehensive and specialty pain care (Hadlandsmyth, 2022; Arout, 2017)
  - Lower use of self-management for pain (Eaton, 2018)
  - More likely to be prescribed opioid medication (Lund, 2019)

# Chronic pain is a complex biopsychosocial (whole person) condition

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- Greater intersection of BPS factors in Veterans, overall, and rural Veterans
- Growing recognition that pain requires “management” versus “cure” ...movement towards adaptive or resilient pain behaviors
- Research supports multiple complementary and integrative health (CIH) self-management modalities for improving pain and other biopsychosocial outcomes
- Increased calls for interventions that integrate multiple modalities, cohesively, to address intersecting BPS (whole person) needs

# VA and Whole Health

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- VA -- national leader in CIH through Whole Health Model
- VA expanded the CIH services through 2016 Comprehensive Addiction and Recovery Act
- 1/3 of VA patients with pain engage in some Whole Health services.
- Veterans using Whole Health services
  - → reduction in opioid use (Bokhour, 2020), higher levels of perceived health & well being (Bokhour, 2019), and used fewer invasive pain treatments (Frochen, Zeliadt).
- Multi-level barriers to CIH in VA remain, especially for rural Veterans
  - Lack of awareness and knowledge among clinicians and patients
  - Support to successfully engage in CIH self-management
  - Demand for CIH providers often outstrips supply
  - Lack of availability of CIH/Whole Health pain care services outside of main VA medical centers
  - Access barriers

# RAMP UG3/UH3 Overview



## RAMP Objectives & Goals

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- **Objective of RAMP Project:** To improve pain management and reduce opioid use among rural patients in the VA healthcare system through a Type II Hybrid Effectiveness-Implementation PCT of RAMP intervention
- **Goal of RAMP Intervention:** Provide rural VA patients the opportunities and resources to enhance their capabilities and motivations to engage in helpful pain self-management behaviors

# SPECIFIC AIMS

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**UG3 (2 years): Stakeholder engagement activities**, including developing & working with multi-level advisory panels (n = 35-50) & pilot feasibility study (n = 40) ✓

**UH3 (3 years): Hybrid Type II Effectiveness Implementation Pragmatic Clinical Trial**

1. Assess **effectiveness** of cohesive mind-body intervention for improving pain and secondary outcomes among rural VA patients with chronic pain (n = 500)
2. **Implementation.** Work iteratively with multiple levels of advisors (; n = 35-50) to co-develop, evaluate and adapt intervention implementation strategies for VA healthcare system
  - a. **Mixed-methods assessment** of facilitators/barriers, RAMP use, etc.
  - b. **Co-creation** of plausible implementation strategies to scale up RAMP
  - c. **Budget impact analysis**

# Overview: Mixed Methods Project

## Phase I: UG3 Pilot Study

TRANSITION

## Phase II: UH3 Study

Aims

Aim 1: Stakeholder Engagement Activities\*\*

Aim 2: Pilot Study to Assess Feasibility, Areas for Refinement

Population

Patients, Community Partners, VA Healthcare System Leaders & Staff (N=35-50)

Rural VA Patients (N=40)

Design/Methods

1. Identified, developed community partnerships
2. Mixed methods assessment of needs, factors that could affect implementation

OPTIMIZE

Single arm, prospective study

REFINE

Randomized Hybrid Type 2 Effectiveness-Implementation Trial

Data Collection/Outcomes

Established Veteran Engagement Panel, Community Advisory Panel, Internal Advisors  
Stakeholder Views, Opinions

16-week Feasibility Measures  
Recruitment, intervention acceptability, fidelity, data collection rates, areas for refinement

Participant & Other Stakeholder Views, Opinions



# Models & Frameworks

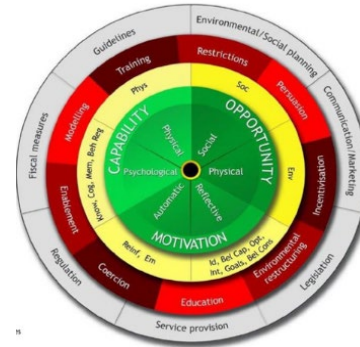


## RE-AIM/PRISM

Shapes assessment and analysis of stakeholder views

Informs optimization of entire study, with focus on reach and implementation

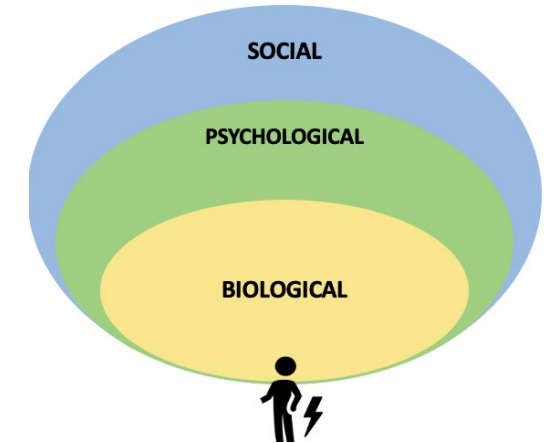
Glasgow, Estabrooks. Pragmatic Applications of RE-AIM for Healthcare Initiatives in Community and Clinical Settings. *Prev Chronic Dis.* 2018.



## COM-B Model + Biopsychosocial Model

Informs intervention development, optimization and choice of outcomes

Michie et al (2014). *The Behavior Change Wheel: A Guide to Designing Interventions*. Silverback Publishing.



Dynamic Biopsychosocial Model (Lehman, Engel, Bronfenbrenner)

# Stakeholder Input

## Community Advisors

- Local Veteran Service Organizations (VSOs)
- National VSOs serving diverse Veterans
- Veteran Leaders

## VA & Non-VA Patients

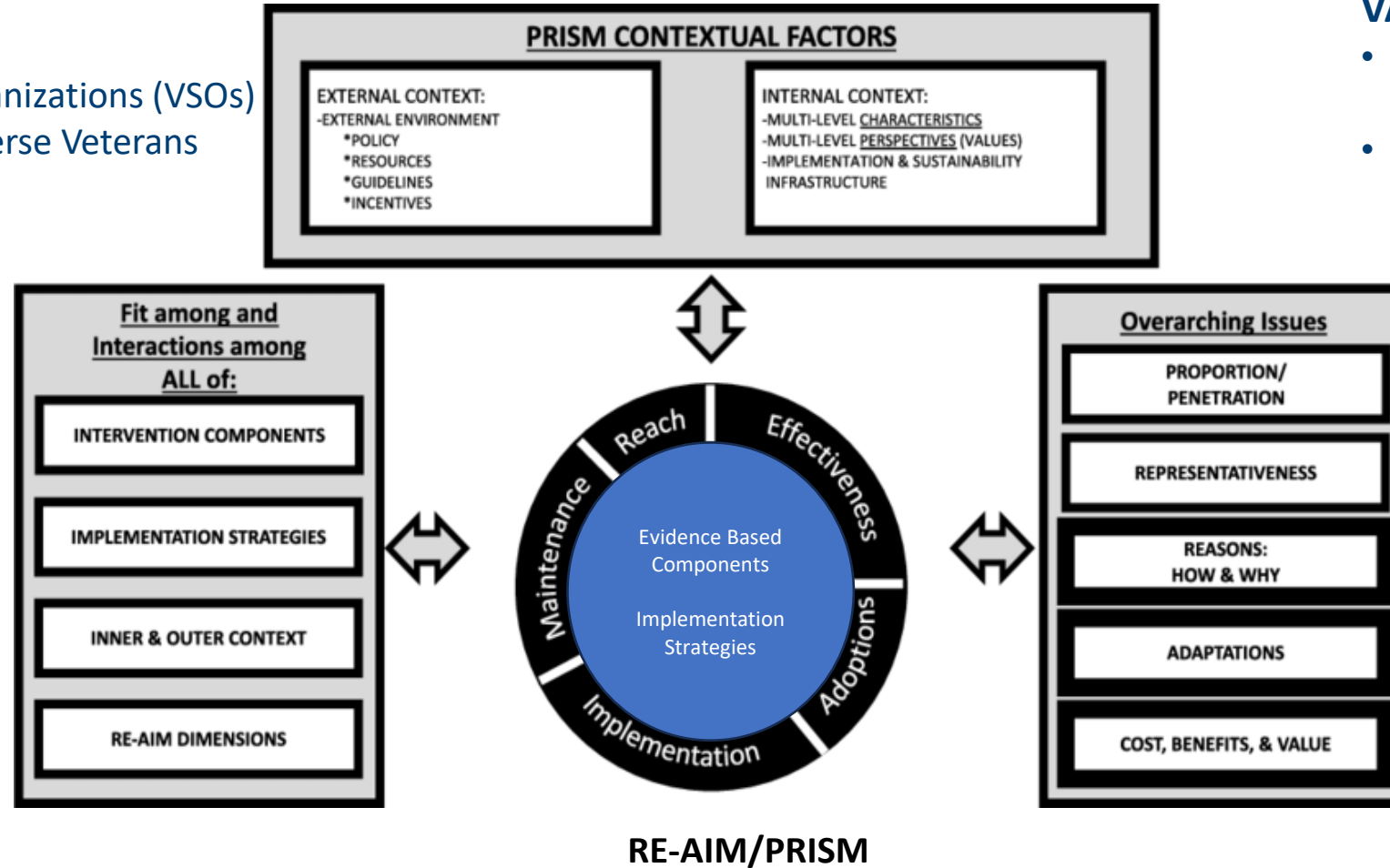
- Veteran engagement panels
- Community engagement panels
- Participants in previous trials

## VA Healthcare System

- National VA Program Office Leaders
- Leaders, Staff: VISN, VA Medical Centers, Community-Based Outpatient Clinics (CBOCs)

## VA & Non-VA Scientists

## VA & Non-VA Practitioners



RAMP Pilot  
Feasibility Study  
(UG3)



# Aim 1: Stakeholder Engagement Activities Methods & Milestones

- Identify and develop multi-level stakeholder relationships
- Meet with advisory panels, other stakeholders to solicit view of obstacles and facilitators (RE-AIM)



## Engagement Milestones

- Community Advisory Panel (CAP)
- Veteran Engagement Panel (VEP)
- Stakeholder feedback from 35-50 individuals



## Met engagement milestones

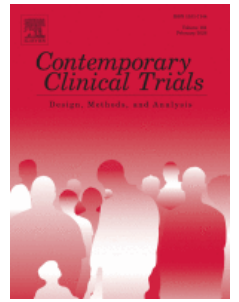
CAP (n=7, from 7 organizations)

VEP (n=12)

Other Veteran/Patient representatives (n=25)

VA Healthcare System Leaders, Staff (n=10)

# Aim 2: Pilot Feasibility Study Methods & Milestones



K Hadlandsmyth et al.

- Single Arm Feasibility Study
- Rural patients from VA healthcare system
- Moderate to severe chronic pain
- Southeast region of U.S. (VISN 7)
- 12-week CIH self-management intervention
- Data collection at baseline, 14 week (mixed methods analyses)



## Feasibility Milestones

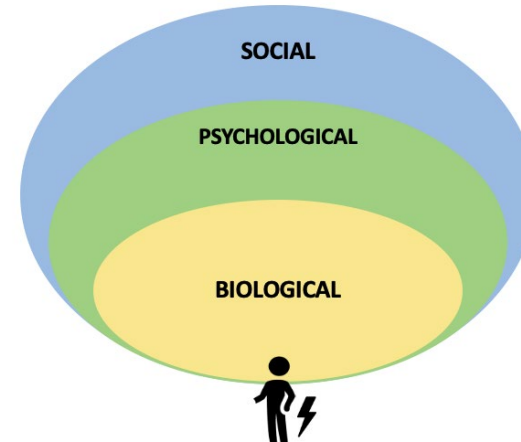
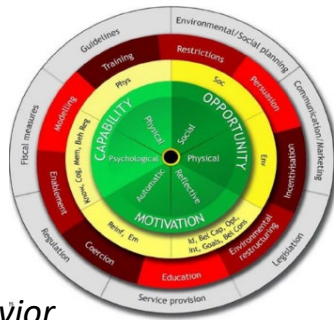
- Enrollment: n = 40, 35% women, 35% racial/ethnic minority)
- Intervention Engagement (75%  $\geq$ 7/12 sessions)
- Satisfaction (75% satisfied)
- Fidelity (90% of session activities delivered 90% of time)
- Data Collection Rates (80%)

# Pilot Feasibility Study: Intervention Target

## Biopsychosocial-Oriented (Whole Person) Pain Self-Management Behaviors

Engagement:

- Program sessions
- Non-drug self-management
- Stress, emotional regulation practices
- Physical activity
- Social interaction
- Productive communication



Dynamic Biopsychosocial Model  
(Lehman, Engel, Bronfenbrenner)

Michie et al (2014). *The Behavior Change Wheel: A Guide to Designing Interventions*. Silverback Publishing.

# Pilot Study: Intervention Development Process

## Multi-level Mixed Methods Stakeholder Assessment & Analyses

Pre-  
pilot/feasibility  
study

**What are the  
capability,  
opportunity and  
motivational needs  
to support target  
behaviors?**



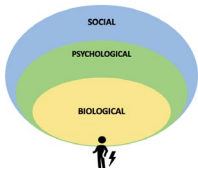
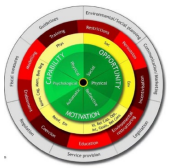
OPTIMIZED  
INTERVENTION  
-Match evidence  
based CIH  
modalities with  
behavioral change  
techniques



- Were Veterans satisfied with the program?  
Specific parts of the program?
- How do they feel they were treated?
- To what extent were capability, opportunity, motivational needs met?
- What did our other stakeholders think?

Post-  
pilot/feasibility  
study

REFINED  
INTERVENTION  
-Refine to  
better meet  
needs



# Pilot Feasibility Study: RAMP Intervention

## 12 Telehealth Sessions + Resources



### First Session:

- 1 x 60 min, 1:1 with Whole Health Coach
- Focus: Personal Health Inventory For Pain Self-Management

### Home Practice

- Website, Videos
- Workbook



### Group Sessions:

- 11 x 90 min
- Facilitated by Whole Health Coach
  - Group discussions
  - Viewing of pre-recorded expert led education videos
  - Practice, skill building (CIH strategies)



### Content Examples

#### Education Topics:

- About Pain
- Mind Body Connection
- Pain & Wellbeing
- Moving With Pain

#### CIH Strategy Skill Training

- Mindfulness meditation
- Relaxed breathing
- Guided imagery
- Stretching, strength exercises
- Pacing
- Cognitive Reframing
- Communication

# Pilot Feasibility Study Results



# Participants

- **40 participants**
- **52.5% Women**
- **62.5% from racial/ethnic minoritized groups**
- Mean **age**: 57 years
- 50% had a college degree
- 15% described **household financial situation** as “comfortable”
- 20% employed full-time
- 82.5% had **high impact chronic pain**
- Mean **pain-related** function: 7.0 (SD = 1.7)
- Mean **pain intensity**: 6.8 (SD = 1.7)
- 22.5% reported using an **opioid medication** for pain in the past year

Met  
**enrollment**  
milestones

# Other Milestones

## Engagement

- 68% of participants engaged in the intervention (in session or on own)
  - 63% of participants engaged in the intervention (in group)

Came close...  
to **engagement**  
(75%)  
and  
**data collection**  
(80%)  
milestones

## Data Collection

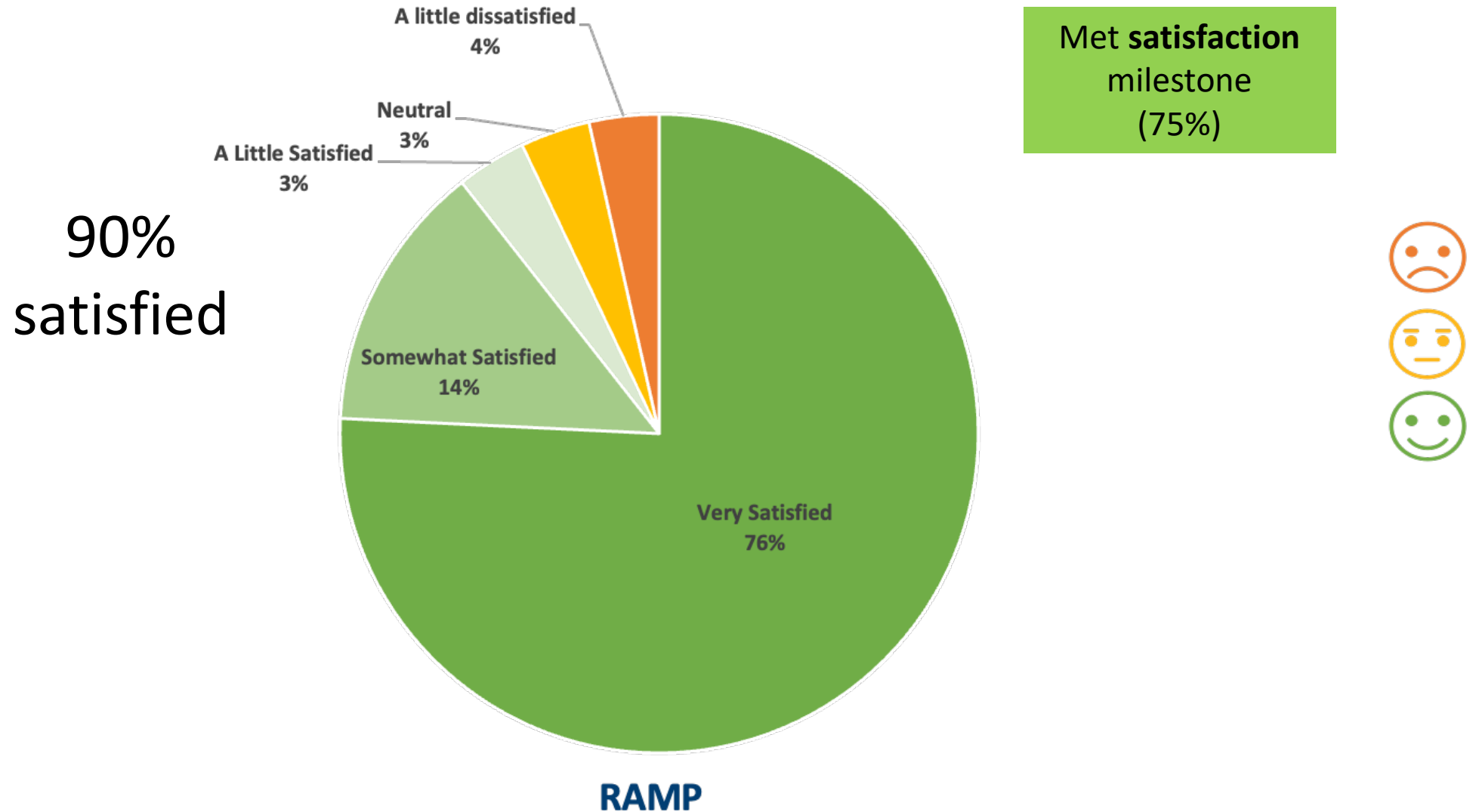
- 75% responded to post-intervention survey

## Fidelity

- Facilitators delivered 100% of session activities 100% of time

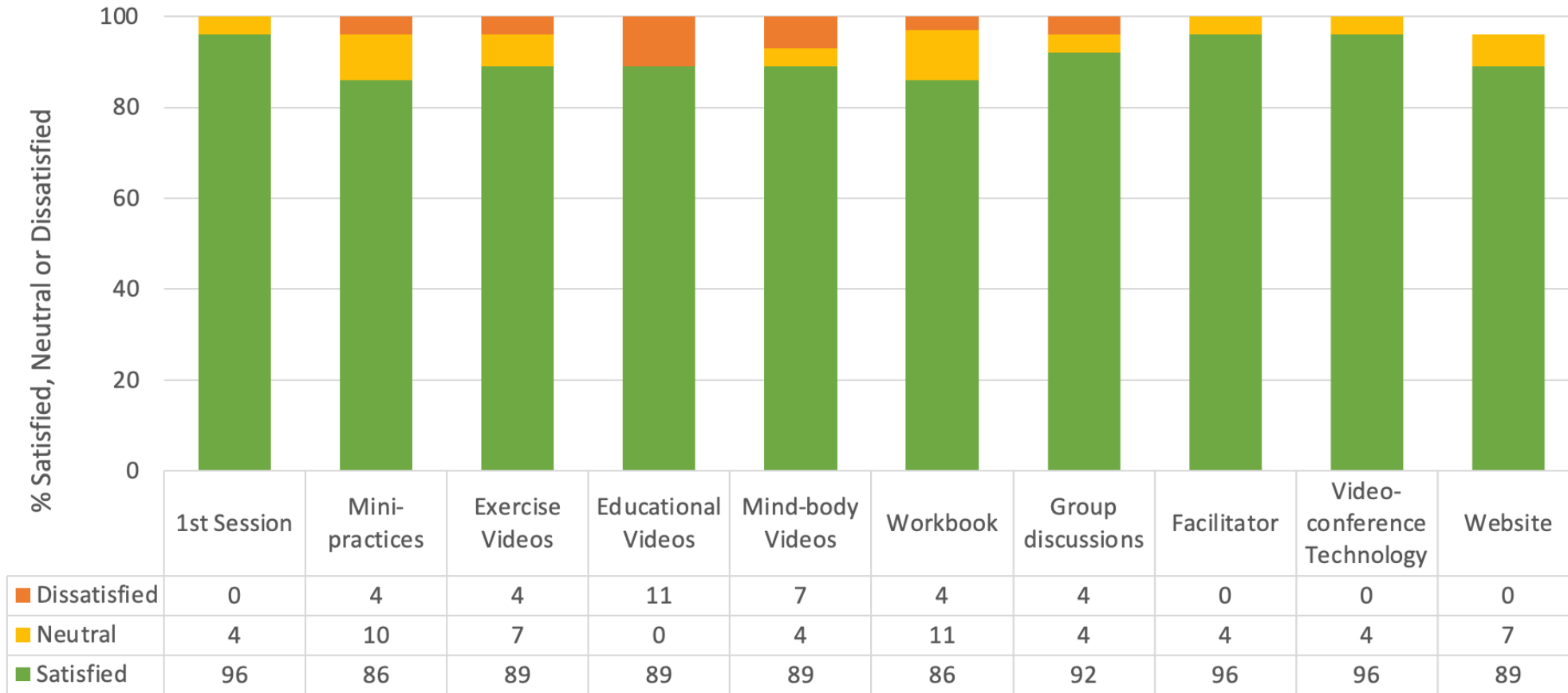
Met **fidelity**  
milestone

# Participants: Satisfaction with program overall...



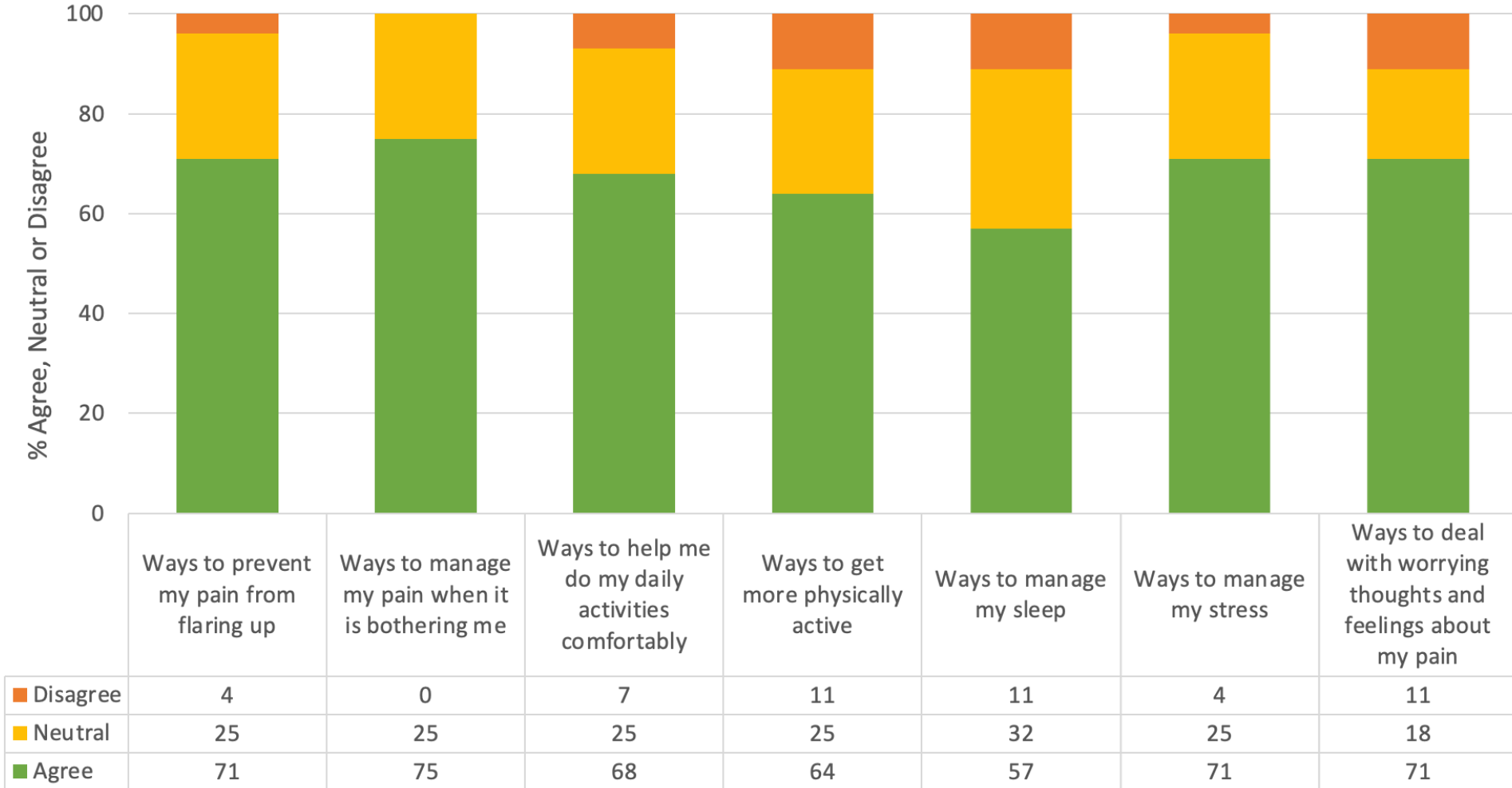
# Satisfaction with elements of program...

## RAMP



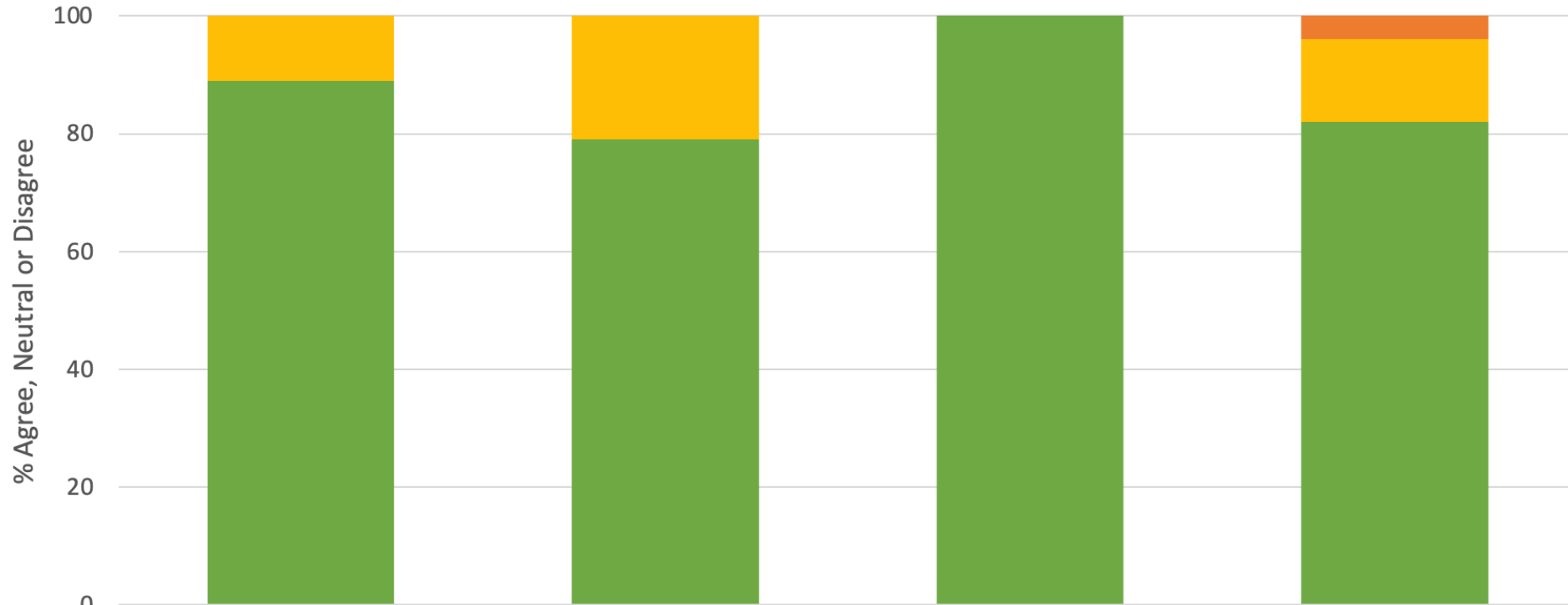
# Capabilities: Agreement they learned....

## RAMP



# Opportunities: Agreement that....

## RAMP

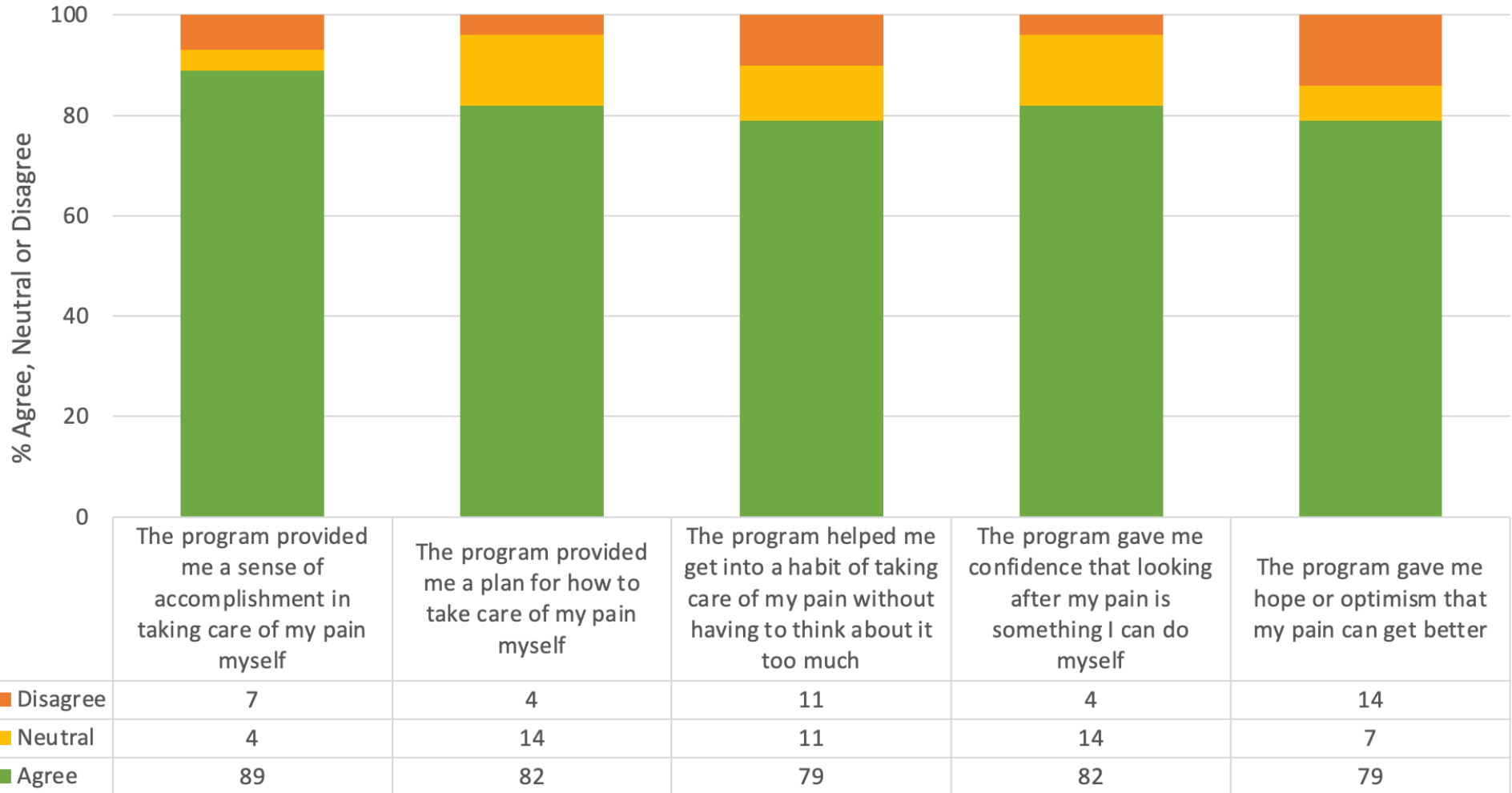


	The program was set up in a way that made it easy for me to participate	The program took a reasonable amount of time	The program staff provided helpful reminders	The program was helpful for connecting me with other people who have pain
Disagree	0	0	0	4
Neutral	11	21	0	14
Agree	89	79	100	82



# Motivations: Agreement that....

## RAMP



# Additional Stakeholder Feedback

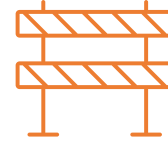
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## Worked well...



- Content, format, facilitators, resources
- Flexible engagement options

## Challenges



- Scheduling, # of sessions
- Bad timing, natural disasters
- High staff burden
- Content redundancy
- Changes, uncertainties with VA Health System

## Key Findings

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**A full-scale randomized trial for CIH telehealth program for rural VA patients with chronic pain is feasible and can meet pain self-management needs**

- Met most feasibility milestones (enrollment, satisfaction, fidelity)
- Intervention, study processes have been refined to increase engagement and data collection

# Optimization for UH3

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## Intervention

- Shorten ( 9 vs 12 weeks); remove 1-1 session
- Use range of facilitators (not just Whole Health Coaches)
- Additional engagement “touchpoints” (e.g. reminder texts and/or emails) throughout the program
- More rural Veteran examples, testimonials (recruitment, intervention)

## Screening

- Decrease time between enrollment and 1<sup>st</sup> session
- Additional screening procedures, messaging to ensure participants better understand program requirements
- More emphasis on different options for engagement (e.g., self-paced, check-in calls) earlier and more frequently

# Transition Challenges

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- Administrative challenges (loss of lead facilitator, VA hiring challenges with new national HR process, government shutdown)
- **Solutions** – Alternative ways to hire (University of Minnesota employees to bypass VA hiring, for positions that don't need access to VA data)
- Massive cut in VA workforce projected; likely won't affect trial but may affect future implementation
- **Solutions-** address in upcoming interviews with stakeholders (VA leadership and staff)

## Where we are, lessons learned

**Current phase:** Type II randomized hybrid effectiveness-implementation trial

- **Optimizations**: Aug 1 2025-Feb 2026
- **Enrollment**: Starting in March 2026 (2 months behind)

### Lessons learned:

- Application of theoretical models help keep the focus
- Structured methods for collecting, analyzing stakeholder feedback can make sure all voices are considered
- Agility is critical...you never know what lays ahead
  - there are multiple ways to get the job done

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# Questions/Comments?

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