Evaluating the Impact of Whole Health on Pain, Quality of Life and Opioid Utilization

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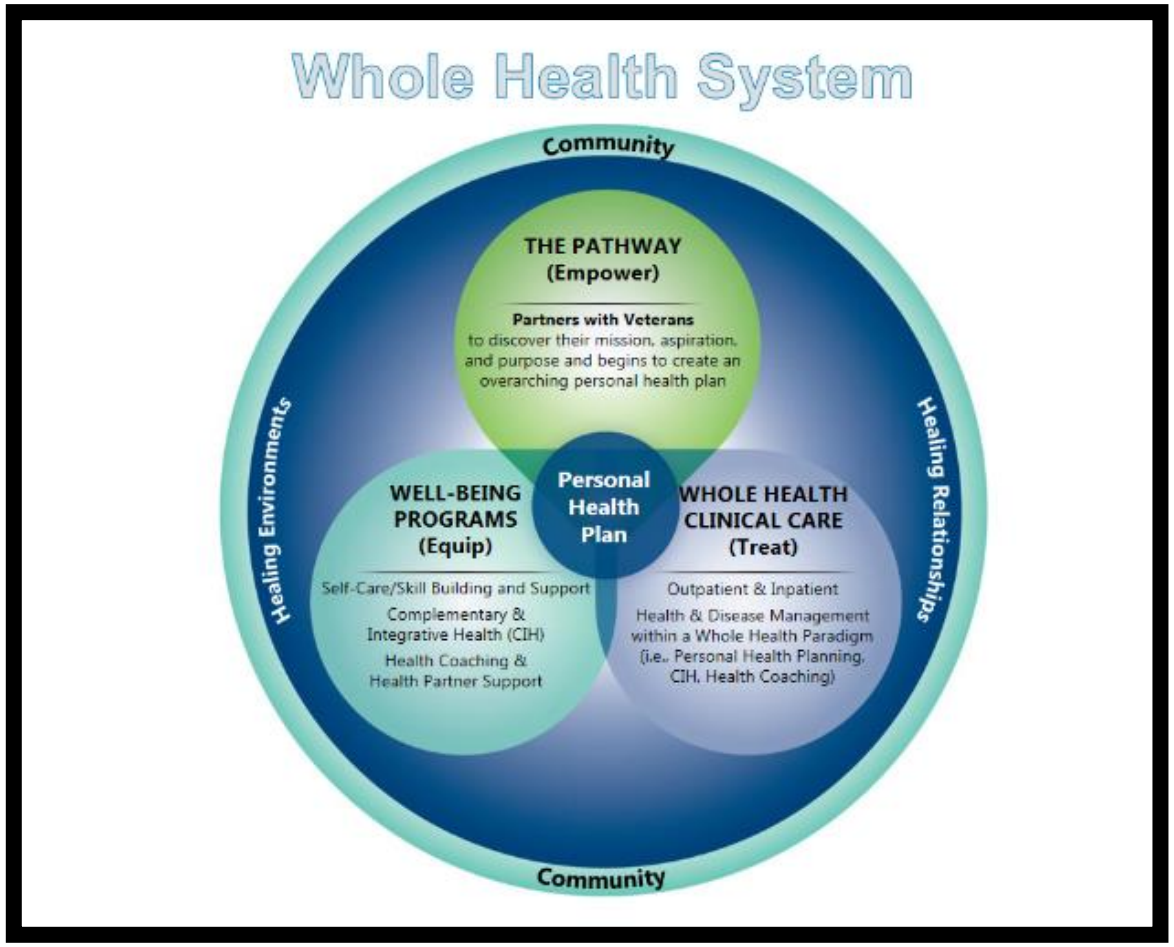
OFFICE OF PATIENT CENTERED CARE & CULTURAL TRANSFORMATION



Whole Health
is an approach
to health care that
empowers and **equips**
people to take charge
of their health and well-being,
and live their life to the fullest.

Moving from "What's the Matter with You?" to "What Matters to You?"

Whole Health = Health Care Transformation

The Whole Health Model is a balance of 3 pillars which when combined will help drive the continued success of the transition to personalized, pro-active, patient-driven care

- ✓ Encourage self-care
- ✓ Decrease reliance on provider delivered care
- ✓ Complementary and Integrative Health Approaches

- ✓ Engage Veterans in their Mission Aspiration Purpose (MAP)
- ✓ Veteran Partners, Whole Health Coaches

- ✓ Cultural transformation of how clinical health care is delivered

Whole Health System of Care Evaluation

Whole Health System of Care Evaluation – A Progress Report on Outcomes of the WHS Pilot at 18 Flagship Sites

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EPCC Center for Evaluating Patient Centered Care in VA
QUERI Partnered Evaluation Initiative

Live Whole Health.

VA HEALTH CARE Defining EXCELLENCE in the 21st Century

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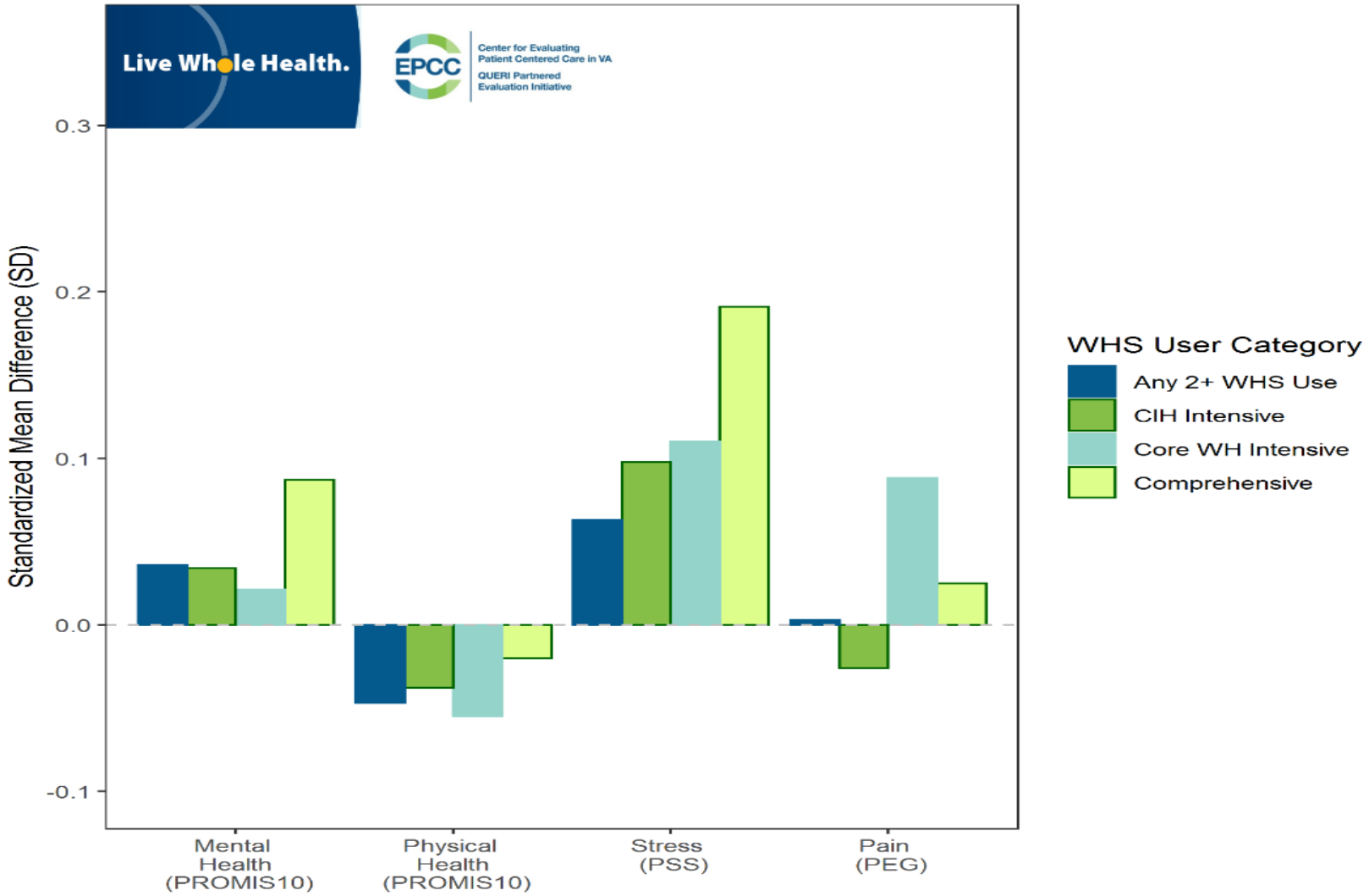
PRELIMINARY FLAGSHIP OUTCOMES: METHODOLOGY

Whole Health Service Category	Services included
Complementary and Integrative Health (List 1) Chiropractic care	Chiropractic care Massage Whole body acupuncture & Battlefield acupuncture Yoga Tai Chi Meditation Biofeedback Guided Imagery Hypnosis
Core Whole Health	Personal Health Planning Peer-led Whole Health Groups Whole Health Pathway services Whole Health Coaching Whole Health Educational Groups

WHS User Category	Use Criteria
Comprehensive WHS Use	>= 8 total WH touches (>= 2 Core Whole Health touches + >= 2 CIH touches)
CORE Whole Health Intensive Use	>= 4 Core WH, any CIH
CIH Intensive Use	>= 4 CIH, any Core WH
Any 2+ WHS use	>= 2 of any WHS service or self-reported use
No WHS Use	All Veterans with 0 or 1 WHS visits

PRELIMINARY FLAGSHIP OUTCOMES: VETERAN IMPACT

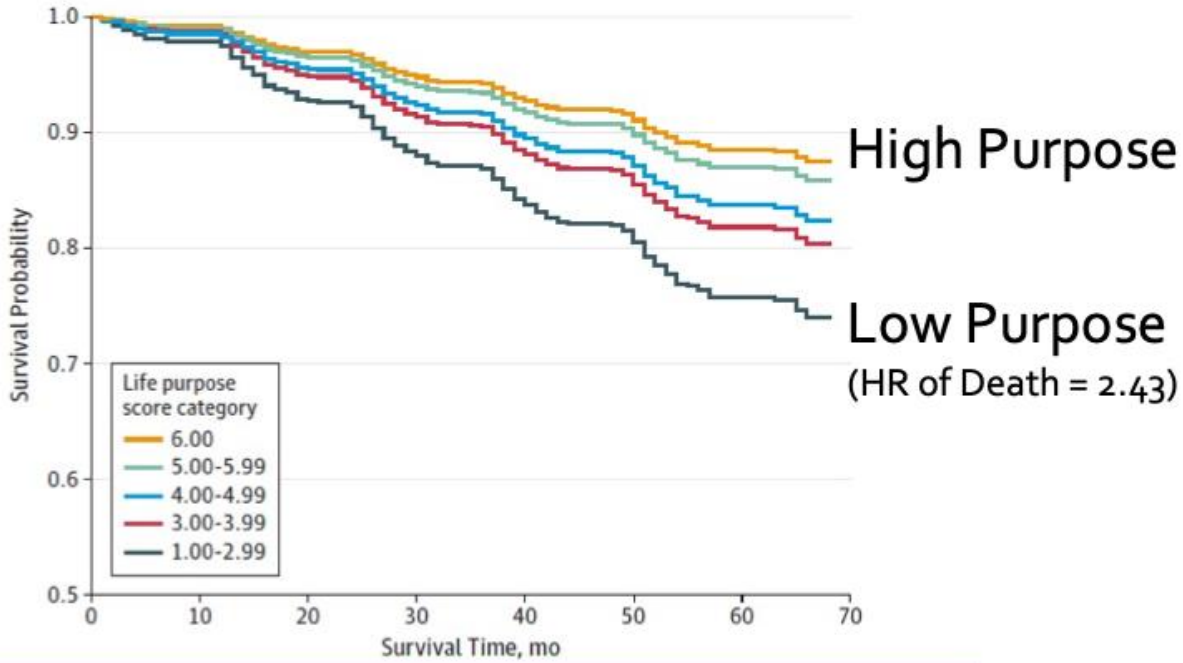
- Impact on Veterans
  - Whole Health had a positive impact on reducing opioid use among Veterans.
    - There was a threefold reduction in opioid use among Veterans with chronic pain who used WHS services compared to those who did not. Opioid use among comprehensive WH users decreased 38% compared with an 11% decrease among those with no WH use.
  - Findings on Veteran-reported outcomes from our Veterans Health and Life Survey are preliminary, however compared to Veterans who did not use any WHS services, Veterans who used WHS services demonstrate trends towards improvements in patient-reported health and well-being outcomes. These early findings show improvements over a 6-month period and are promising for the future.
  - Compared to Veterans who did not use WH services, Veterans who used WH services reported:
    - Greater improvements in perceptions of the care received as being more patient-centered.
    - Greater improvements in engagement in healthcare and self-care.
    - Greater improvements in engagement in life indicating improvements in mission, aspiration and purpose.
    - Greater improvements in perceived stress indicating improvements in overall well-being.



Association between changes in Veteran well-being and pain, and WHS service use compared to no use group (n=3266). *Note that any negative SD represents a relative change compared to the non-user group. All measures did improve across all groups.*

Meaning and Purpose

Figure. Survival Curves Illustrating the Association Between Life Purpose and Mortality



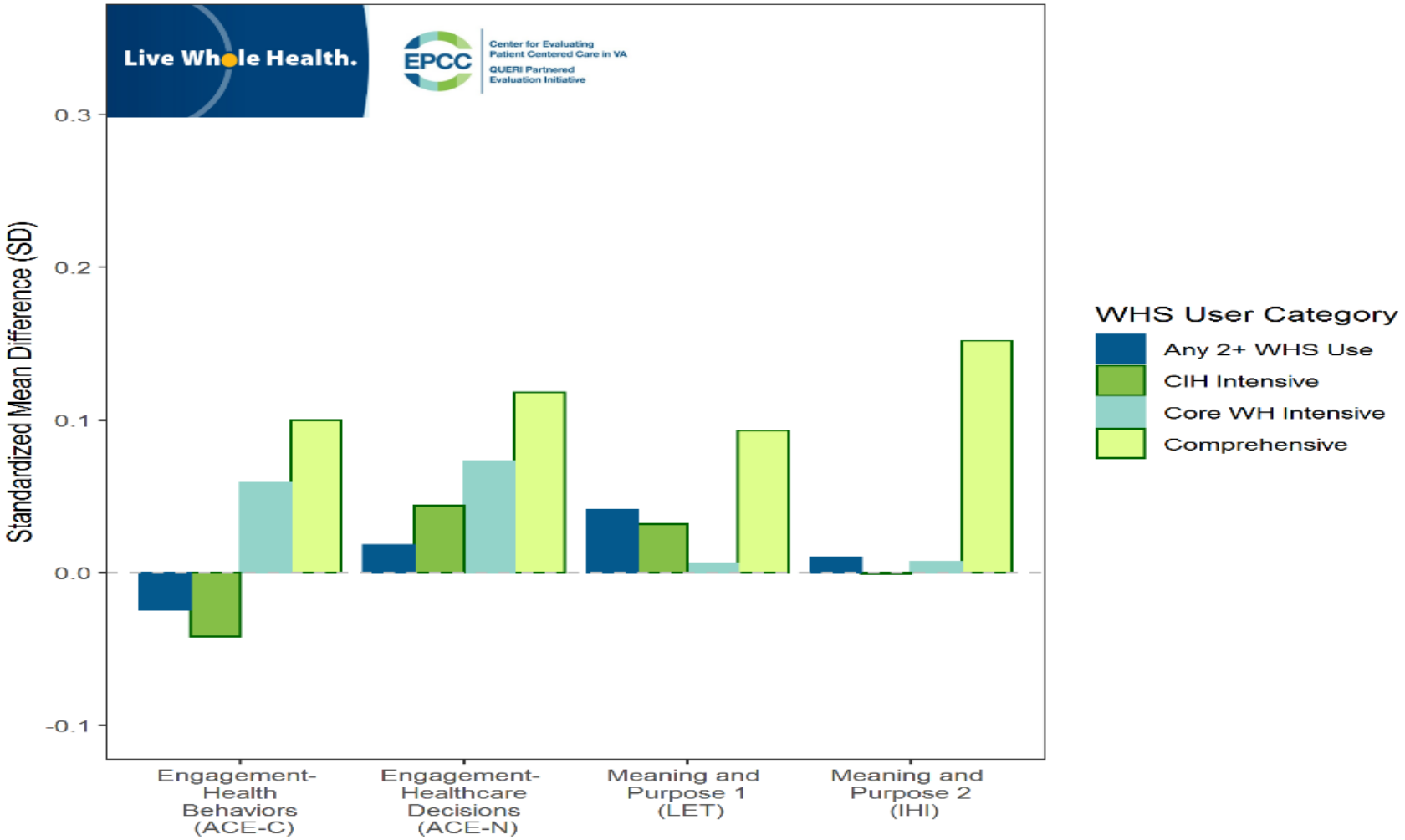
High Purpose

Low Purpose

(HR of Death = 2.43)

Alimujiang A, et al. Association Between Life Purpose and Mortality Among US Adults Older than 50 Years. JAMA Open. 2(5):2019

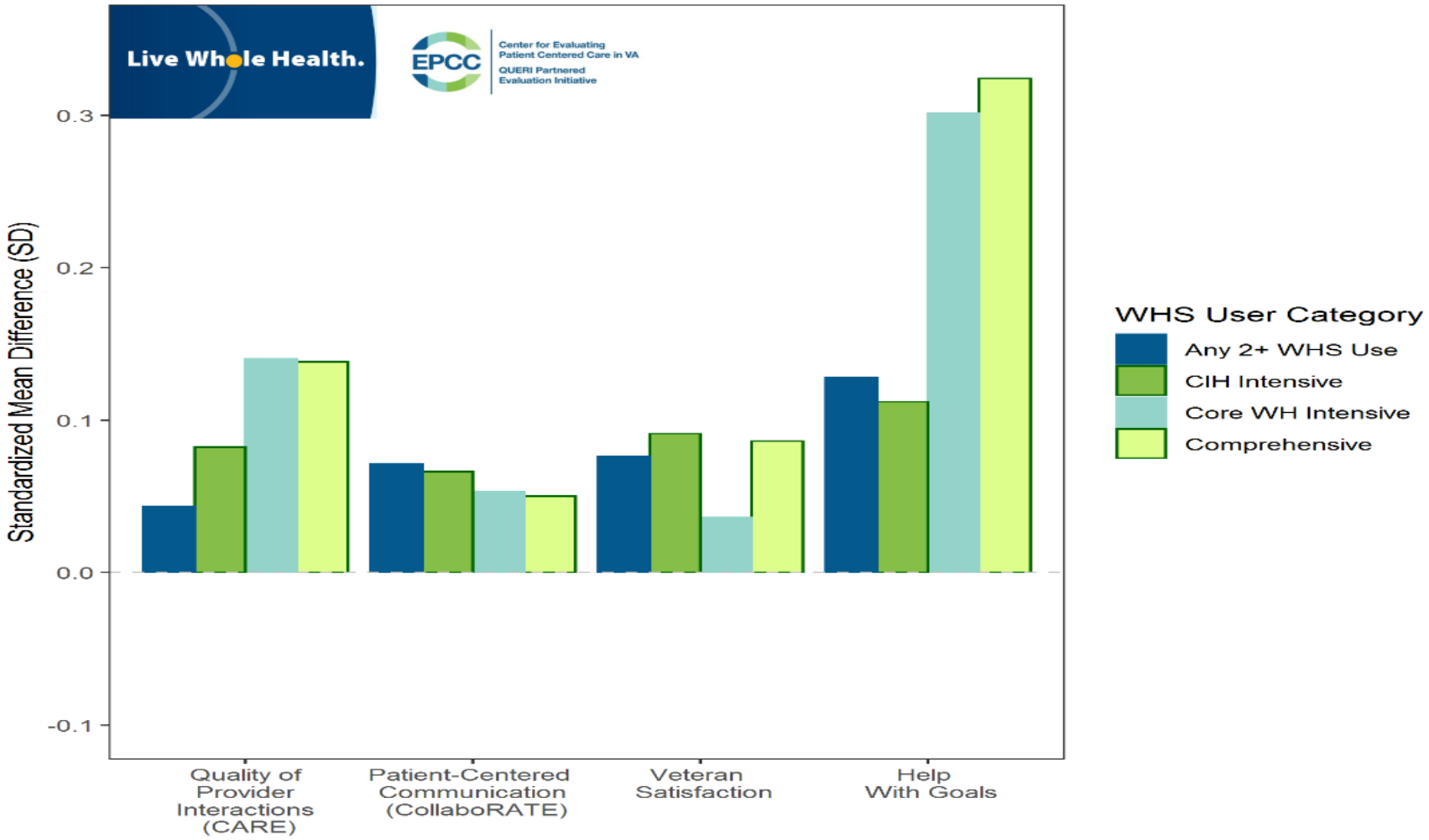
PRELIMINARY FLAGSHIP OUTCOMES: VETERAN ENGAGEMENT



Association between changes in Veteran engagement and meaning and purpose and WHS service use compared to no use group (n=3266).

PRELIMINARY FLAGSHIP OUTCOMES: VETERAN PERCEPTIONS OF CARE

- **Association between changes in perceptions of VA Care and levels of WHS service use compared to no use group (n=3266).**



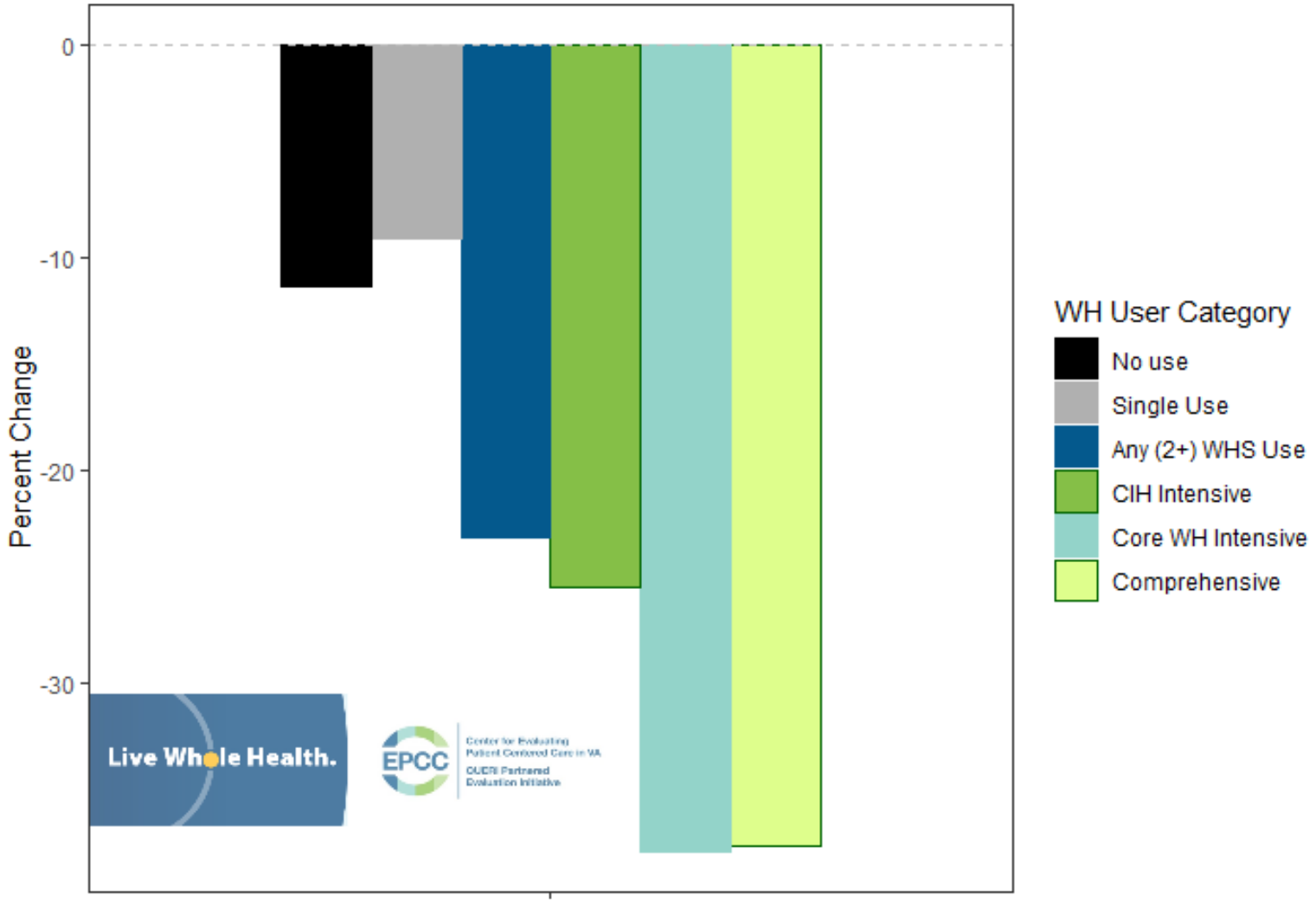
PRELIMINARY FLAGSHIP OUTCOMES: OPIOID UTILIZATION

- Among Veterans with chronic pain – identify those who started WH/CIH
  - 3640 CIH users
  - 739 Veterans used full Whole Health model of care

- Assessed opioid use in the 6-month period before WH/CIH utilization (Pre)
- Re-assessed opioid utilization 6-monthperiod after WH/CIH utilization

- Compared to 111,888 Veterans using only conventional care during same periods

PRELIMINARY FLAGSHIP OUTCOMES: OPIOID UTILIZATION



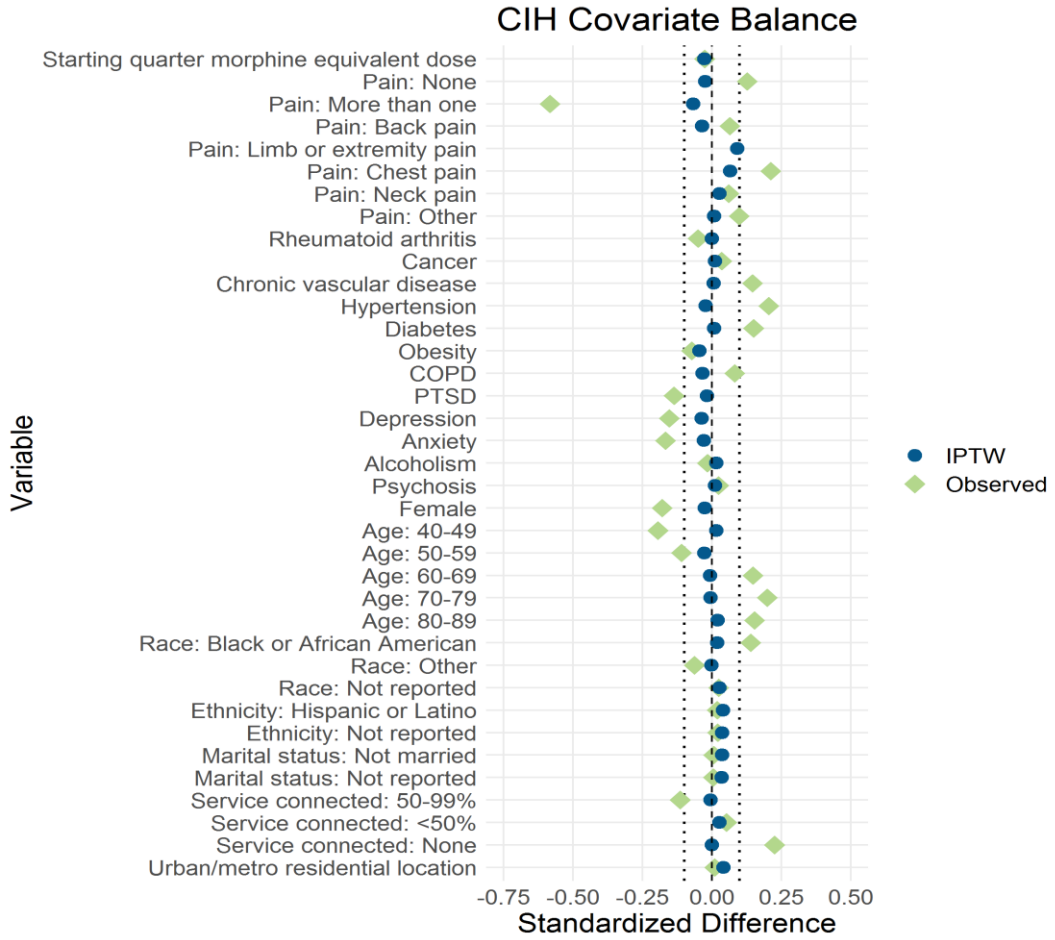
Change in opioid use by WH user category for Veterans with chronic pain (n=114357)

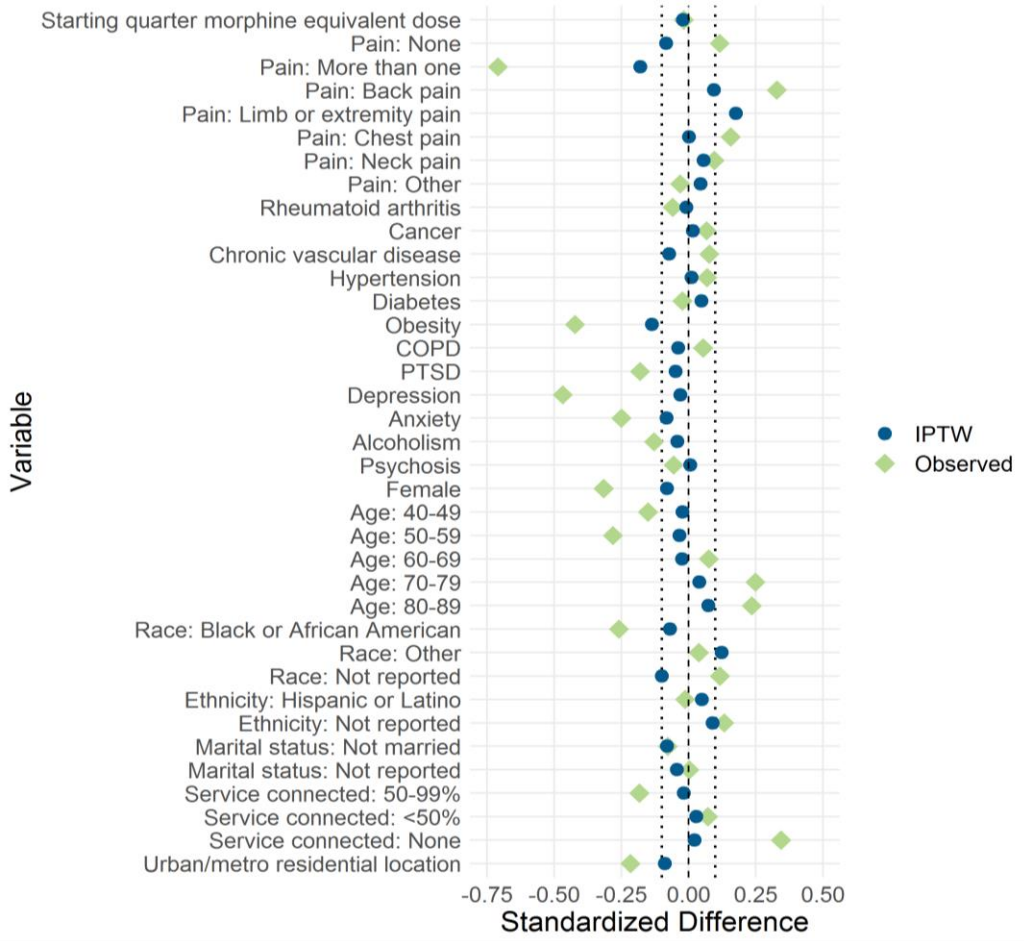
UNADJUSTED TRENDS

	Conventional Care N=111,888	CIH Only N=3,640	Whole Health N=739
MME Pre, Mg (SD)	628 (2287)	690 (2556)	671 (2337)
MME Post, Mg (SD)	550 (2116)	520 (1902)	420 (1903)
MME Difference, Mg (SD)	-78 (1117)	-170 (1327)	-251
% Change	**-12.5%**	**-24.6%**	**-37.4%**
p-value	<0.001	<0.001	<0.001

Adjusted Analysis – Make WH/CIH Users "Similar" to Conventional

- Propensity Score Analysis (Inverse Probability of Treatment Weighting)

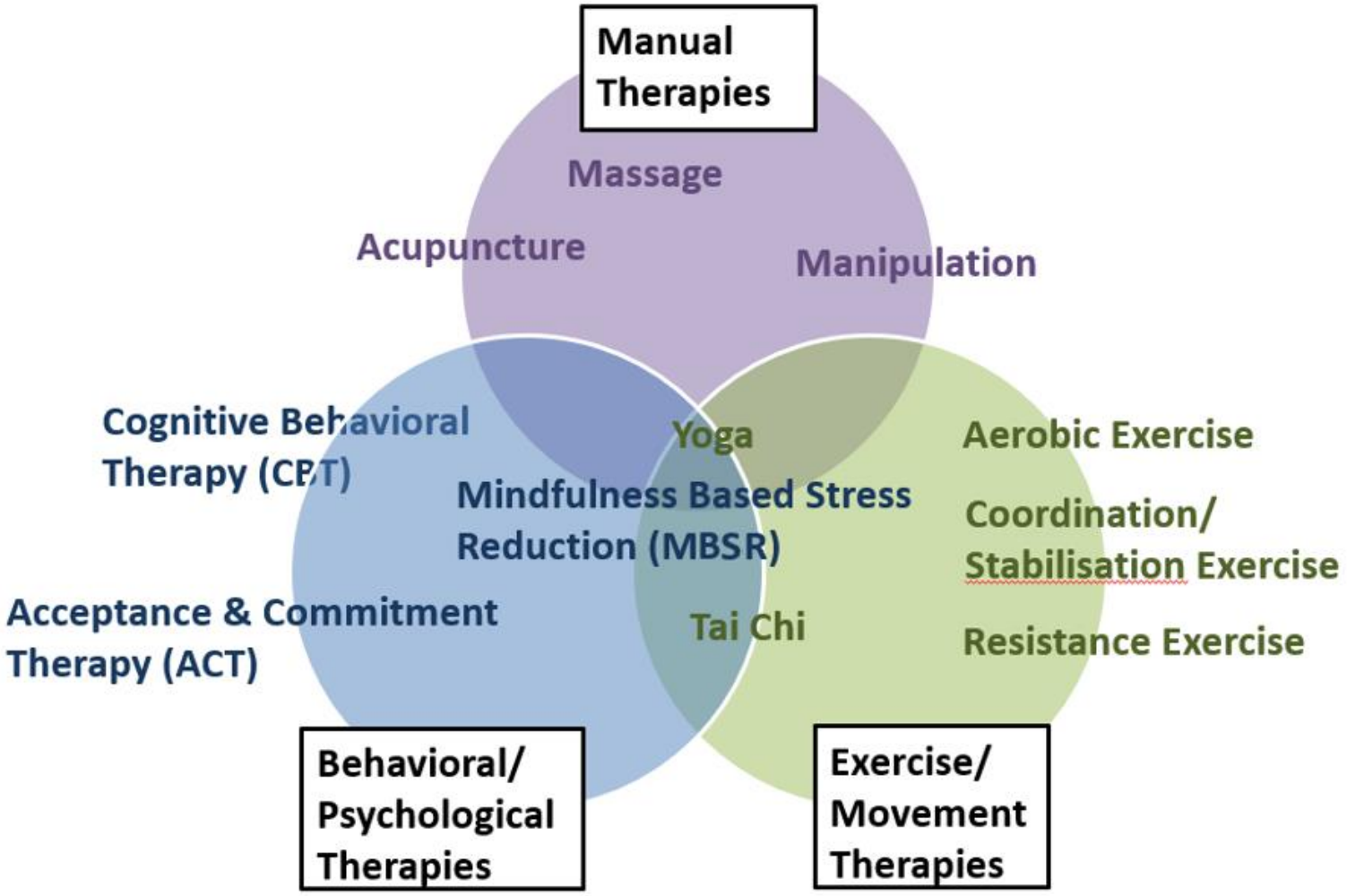




ADJUSTED TRENDS

	Conventional Care	CIH Only	Whole Health
MME Difference, Mg (SD)	Reference	-76 (-86.6 to -64.4)	-53 (-71.7 to -34.7)
% Change	Reference	**-12.0% (-13.8 to -10.2)**	**-8.5% (-11.4% to -5.5%)**
p-value		<0.001	<0.001
e-value (likelihood of unmeasured confounding)		1.29	1.17

Non-Pharmacological Pain Treatments in VHA



VA State of the Art Conference
Nov. 2016

Non-pharmacological approaches for musculoskeletal pain

Kligler et al. J Gen Intern Med. 2018 May;33(Suppl 1):16-23

Noninvasive Treatments for Acute, Subacute, and Chronic Low Back Pain: A Clinical Practice Guideline From the American College of Physicians

Amir Qaseem, MD, PhD, MHA; Timothy J. Wilt, MD, MPH; Robert M. McLean, MD; and Mary Ann Forciea, MD; for the Clinical Guidelines Committee of the American College of Physicians*

Description: The American College of Physicians (ACP) developed this guideline to present the evidence and provide clinical recommendations on noninvasive treatment of low back pain.

Methods: Using the ACP grading system, the committee based these recommendations on a systematic review of randomized, controlled trials and systematic reviews published through April 2015 on noninvasive pharmacologic and nonpharmacologic treatments for low back pain. Updated searches were performed through November 2016. Clinical outcomes evaluated included reduction or elimination of low back pain, improvement in back-specific and overall function, improvement in health-related quality of life, reduction in work disability and return to work, global improvement, number of back pain episodes or time between episodes, patient satisfaction, and adverse effects.

Target Audience and Patient Population: The target audience for this guideline includes all clinicians, and the target patient population includes adults with acute, subacute, or chronic low back pain.

Recommendation 1: *Given that most patients with acute or subacute low back pain improve over time regardless of treatment, clinicians and patients should select nonpharmacologic muscle relaxants (moderate-quality evidence). (Grade: strong recommendation)*

Recommendation 2: *For patients with chronic low back pain, clinicians and patients should initially select nonpharmacologic treatment with exercise, multidisciplinary rehabilitation, acupuncture, mindfulness-based stress reduction (moderate-quality evidence), tai chi, yoga, motor control exercise, progressive relaxation, electromyography biofeedback, low-level laser therapy, operant therapy, cognitive behavioral therapy, or spinal manipulation (low-quality evidence). (Grade: strong recommendation)*

Recommendation 3: *In patients with chronic low back pain who have had an inadequate response to nonpharmacologic therapy, clinicians and patients should consider pharmacologic treatment with nonsteroidal anti-inflammatory drugs as first-line therapy, or tramadol or duloxetine as second-line therapy. Clinicians should only consider opioids as an option in patients who have failed the aforementioned treatments and only if the potential benefits outweigh the risks for individual patients and after a discussion of known risks and realistic benefits with patients. (Grade: weak recommendation, moderate-quality evidence)*

ACP GUIDELINES

- **RECOMMENDATION 2:***For patients with **chronic low back pain**, clinicians and patients should initially select nonpharmacologic treatment with exercise, multidisciplinary rehabilitation, **acupuncture, mindfulness-based stress reduction** (moderate-quality evidence), **tai chi, yoga**, motor control exercise, **progressive relaxation, electromyography biofeedback**, low-level laser therapy, operant therapy, cognitive behavioral therapy, or **spinal manipulation** (low-quality evidence). (Grade: strong recommendation)*

VHA Policy Directive 1137:Complementary/Integrative Health

- CIH Directive – SIGNED BY USH 5/19/2017

  http://vaww.va.gov/vhapublications/ViewPublication.asp?pub_ID=5401

  - LIST I: evidence of promising or potential benefit
    - evidence of promising or potential benefit
    - vetted by IHCC Advisory Group
    - VA must provide a mechanism to offer these approaches either within VA facility or in the community

  - LIST II: generally considered safe
    - General recognition of safety requires common knowledge, throughout the expert scientific community (both internal and external to VHA) knowledgeable about the safety of CIH approaches and the impact on Veterans' physical and mental well-being, that there is a reasonable certainty that the approach is not harmful under the conditions of its intended use.
    - Optional for inclusion in VA facility, depending on capability (staff/space) at sites

List 1: Evidence-Based CIH Therapies

- Acupuncture
- Tai chi
- Yoga
- Meditation
- Massage therapy
- Guided imagery
- Hypnosis
- Biofeedback

Chiropractic included already by specific Congressional mandate

EFFECTIVENESS OF BATTLEFIELD ACUPUNCTURE

- Cross-sectional cohort study of 11,406 Veterans treated with BFA at 57 VHA medical centers between October 2016 and September 2018 and had effectiveness data recorded in their electronic medical record.
- More than 3 quarters experienced immediate decreases in pain, with nearly 60% reported experiencing a minimal clinically important difference in pain intensity.
- average decrease in pain intensity was −2.5 points (SD=2.2) at the initial BFA treatment, and −2.2 points (SD=2.0) at subsequent treatments.
- effective across a wide range of Veterans with many having preexisting chronic pain, or physical, or psychological comorbid conditions.
- Zeliadt, Steven et al Patient Feedback on the Effectiveness of Auricular Acupuncture on Pain in Routine Clinical Care, Medical Care: September 2020 - Volume 58 - Issue - p S101-S107doi: 10.1097/MLR.0000

WHOLE HEALTH AS A COMPONENT OF SUICIDE PREVENTION

- The Resilience and Wellness Center (RWC) at an urban VA Medical Center was created to provide multimodal CIH therapeutic interventions in a group setting for at-risk veterans currently receiving care at the VA, utilizing a variety of CIH life skills interventions, such as: physical activity, diet/nutrition, creative expression, acupuncture, sleep hygiene, and stress management.
- ***Design:*** This is a program evaluation study of an intensive multimodal CIH 4-week group outpatient intervention for suicide prevention at the RWC.
- ***Results:*** Using a pre=post design, the RWC evaluation showed high participant engagement, with an 84%–95% attendance engagement rate depending on suicide risk history. Data from 15 cohorts (*N* = 126) demonstrate a reduction in suicidal ideation, depression, and hopelessness, but not sleep quality and diet. In addition, in a subset of veterans with a history of suicidal ideation or attempt, significant improvements were noted in pain, PTSD/anxiety symptoms, and stress coping measures.
- Amanda Vitale, Lauren Byma, Shengnan Sun, et al.The Journal of Alternative and Complementary Medicine.Mar 2021.S-14-S-27.http://doi.org/10.1089/acm.2020.0245

PEER-LED PATHWAY EXPERIENCE OUTCOMES

- TCMLH is a 9-week peer-led group program that leverages the power of peer support to improve patient engagement, empowerment, health, and well-being among Veterans through Whole Health concepts, tools, and strategies. Programs were led by 1 of 12 trained Veteran peer facilitators.

- ***Results (N=48):*** significant decrease in perceived stress (PSS score), mental health and quality of life (PROMIS-10), participant accordance with the statement "I have a lot of reasons for living" (LET), and patient engagement (PAM score).
- Melissa H. Abadi, Anna M. Barker, Sowmya R. Rao, Michelle Orner, David Rychener, and Barbara G. Bokhour.The Journal of Alternative and Complementary Medicine.Mar 2021.S-37-S-44.http://doi.org/10.1089/acm.2020.0124

The APPROACH Study: Assessing Pain, Patient Reported Outcomes and Complementary and integrative Health (A VA National Demonstration Project)

VA HSR&D SDR 17-306

PIs: Stephanie Taylor (Los Angeles) and Steven Zeliadt (Seattle)
Stephanie.Taylor8@va.gov; Steven.Zeliadt@va.gov

- There is high demand from Veterans for non-pharmacological options to manage their chronic pain.
- Self-care therapies might be more powerful than treatments done to you, via activating a feeling of self-empowerment or control over health.
- IF so, not only would using self-care CIH be more effective, it might reduce provider-delivered care, so might be be less costly for the VA, potentially reducing community referrals.

- **Funding:** VA HSR&D ($4.6 million), the only VA-funded study in the highly publicized NIH-DoD-VA Pain Management Collaboratory
- **Sites**: 18 Whole Health Flagship sites
- **Population**: 18,000 new CIH users w chronic musculoskeletal pain
- **Sample size goal**: 6,440 by April 2023
- **Pragmatic trial design:** Randomization isn't feasible/desirable because it would mean withholding available treatments
- **Study results**: 2024

1) Is combining self-care complementary and integrative health (CIH) therapies with practitioner-delivered CIH is more effective at managing pain than either form of CIH alone?

- Self-care CIH: *Yoga, Tai Chi/Qigong, meditation/mindfulness*
- Practitioner-delivered CIH: *Acupuncture, chiropractic care, therapeutic massage*

2) How effective are the individual CIH therapies?

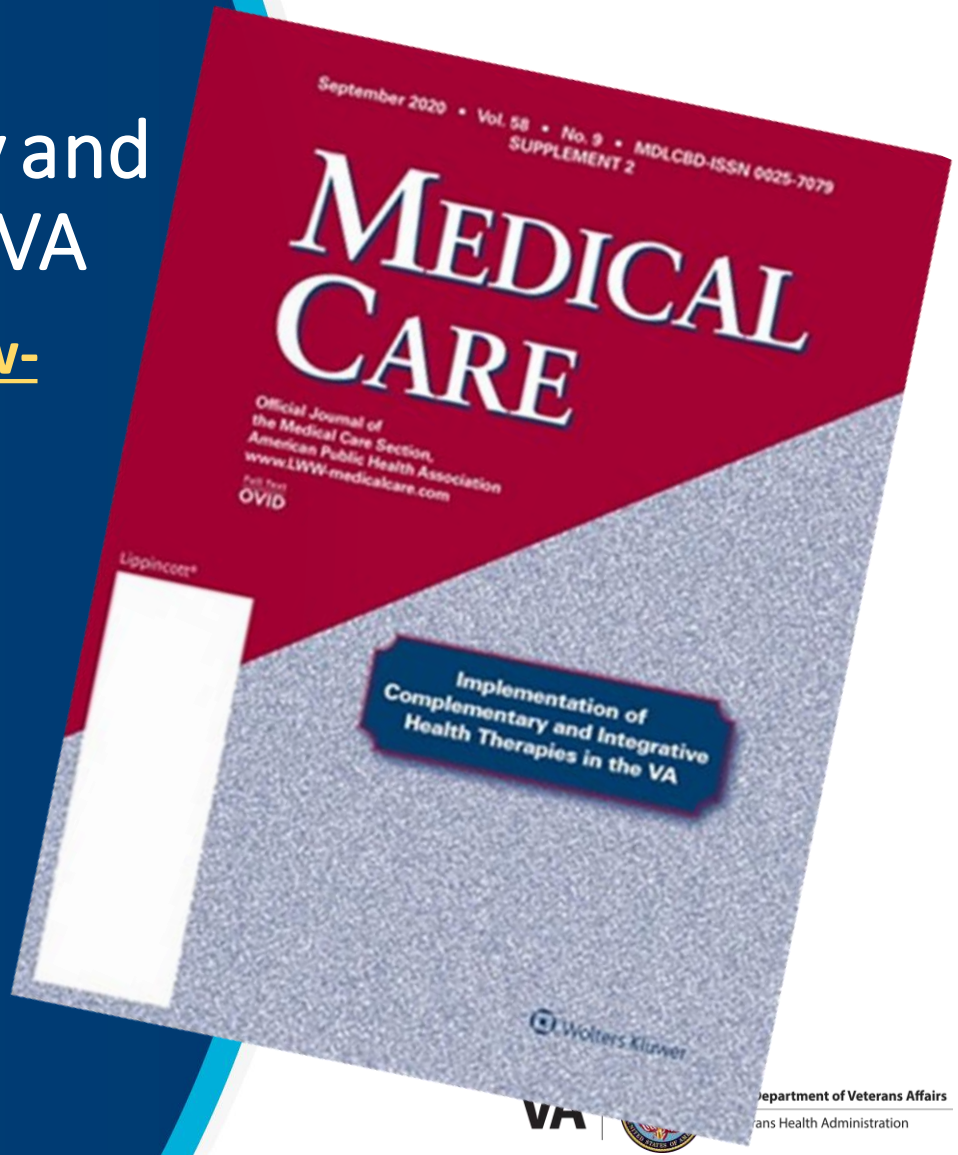
…… For pain, depression, stress, physical health, quality of life, well-being, fatigue

Live Whole Health.

U.S. Department of Veterans Affairs
Veterans Health Administration

Special Issue (Sep 2020): Implementation of Complementary and Integrative Health Therapies in the VA

https://journals.lww.com/lww-medicalcare/toc/2020/09001



LINK: Whole Health Evidence-Based Research

Office of Patient Centered Care & Cultural Transformation

Benjamin Kligler, MD, MPH, Executive Director

WELL-BEING SIGNS – CLINICAL TOOL

- Validated measure of “everyday life functioning” that offers snapshot of how individuals are doing with regard to most important things they wish to do, in daily lives (“what matters”)
- Developed for use in the clinical context
- Asks the veteran to consider the most important things they would like to do in their daily life--such as having a job, managing their health or finances, spending time with loved ones, or leisure-time activities--and report a percentage of time over the preceding three months from 0-100% when they were:

1. Satisfaction	2. Status/Role Involvement	3. Role Functioning
Fully satisfied with how things are going in key aspects of your life?	**Regularly involved** in all aspects of life that are important to you?	**Functioning your best** in aspects of life that you regularly participate in?

WHY THIS APPROACH?

Why?

1) Fulfills need for brief measure of "everyday life functioning"[1] for use in clinical care

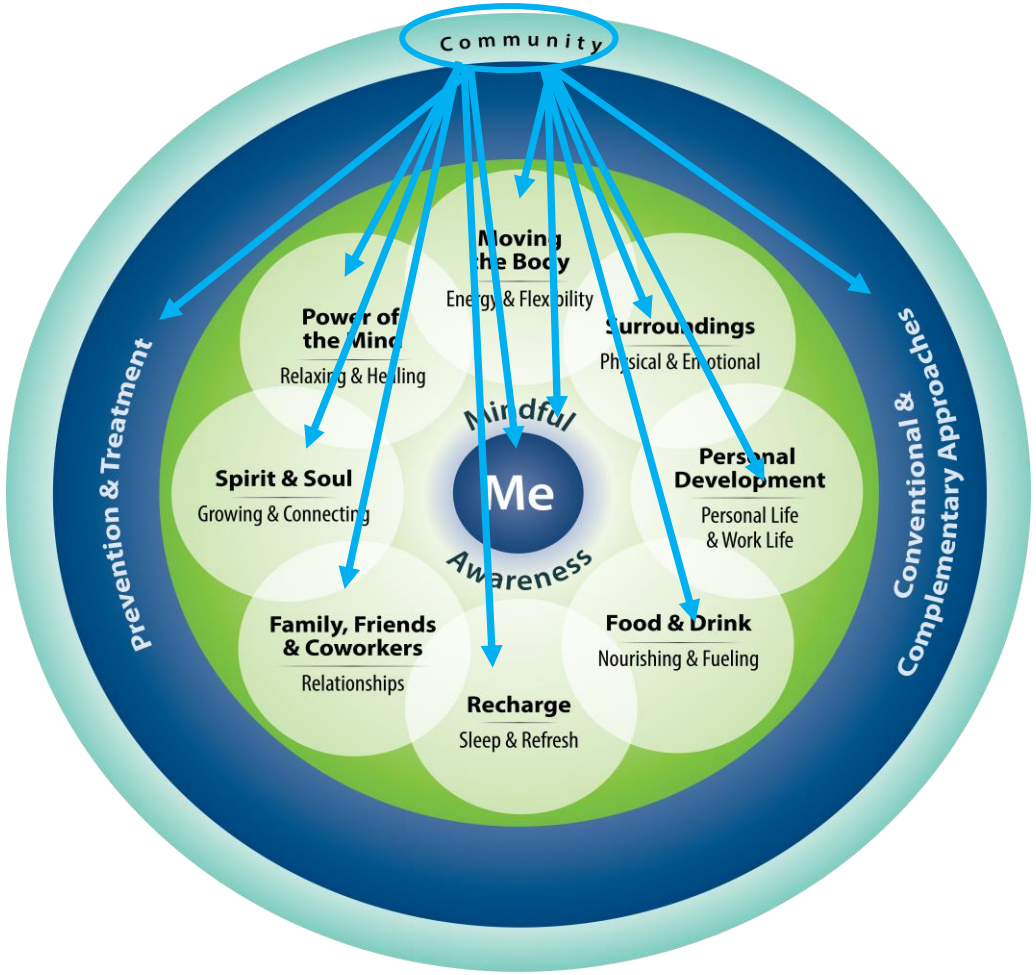
2) Well-aligned with goal to promote ability to "live life to the fullest," a key focus for whole health care[2]

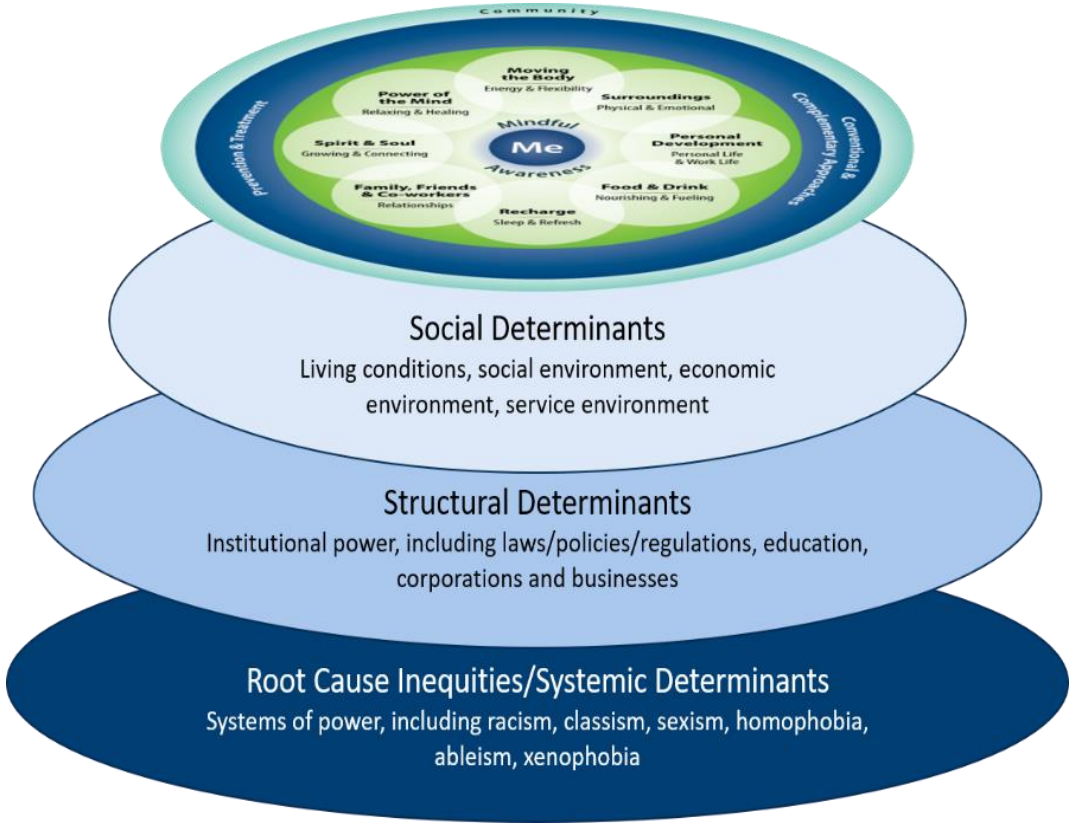
3) Has potential to better capture change in response to health care interventions than measures of more distal well-being concepts (e.g., positive emotions)

4) Potential to "change the conversation" between provider and patient

[1] Lilenfeld, 2019 (World Psychiatry) [2] Bokhour et al., 2020

WHOLE HEALTH AND STRUCTURAL DETERMINANTS OF HEALTH





THE NEXT BIG QUESTIONS

- Does Whole Health lead to cost avoidance?
- Is tele-Whole Health as effective as in person?
- What components of the Whole Health System are most critical? Are some parts more important for certain populations?
- How can we effectively measure well-being as part of routine clinical care?
- Evidence-Based Research - Whole Health (va.gov)
- Transforming the Veterans Affairs to a Whole Health System o... : Medical Care (lww.com)