

**Complementary and Integrative Health Evaluation Center (CIHEC)
QUERI Partnered Evaluation Initiative's**

**Compendium on Use of Complementary and Integrative Health Therapies
and Chiropractic Care at the VA
Volume 1:
Use and Characteristics of Users, Fiscal Years 2017-2019
October 2020**

Steve Zeliadt, PhD – CIHEC Co-Director, Assoc. Director, VA Puget Sound HSR&D COIN
Stephanie Taylor, PhD - CIHEC Director; Assoc. Director, VA Los Angeles HSR&D COIN
Hannah Gelman, PhD – Research Scientist, CIHEC; VA Puget Sound HSR&D COIN



Prepared by: The Complementary and Integrative Health Evaluation Center's (CIHEC's) Data Nexus

https://www.queri.research.va.gov/national_partnered_evaluations/cih.cfm

<https://www.hsrd.research.va.gov/centers/cshiip.cfm>

The Data Nexus Project Team support provided by:

Rian DeFaccio, MS

Hannah Gelman, PhD

Nate McGinty

Eva Thomas, MPH

Joy Toyama, DrPH

Steve Zeliadt, PhD, Data Nexus Project Lead and CIHEC Co-Director

Jamie Douglas, MA

Matt Hawrilenko, PhD

Adam Resnick, MPH

Nathan C. Tomlanovich, MSI

Stephanie L. Taylor, PhD, CIHEC Dir.



Funding: Office of Patient-Centered Care and Cultural Transformation and Quality Enhancement Research Initiative (grant #PEC 16-354).

Suggested citation: Taylor SL, Gelman H, DeFaccio R, Hawrilenko M, McGinty N, Resnick A, Thomas E, Tomlanovich NC, Toyama J, Kligler B, Jents M, Whitehead A, Zeliadt S. Compendium on Use of Complementary and Integrative Health Therapies and Chiropractic Care at the VA. Volume 1: Use and Characteristics of Users, 2017-2019. October, 2020. Available at: <https://www.va.gov/WHOLEHEALTH/professional-resources/clinician-tools/Evidence-Based-Research.asp>



The Compendium is 1 of 3 Types of CIHEC National Products

Complementary and Integrative Health Evaluation Center (CIHEC) QUERI PEI has conducted 3 types of national products:

- 1) 2017 National survey on Veterans' interest in and use of CIH therapies
 - Taylor SL, Hoggatt K, Kligler B. Complementary and Integrated Health Approaches: What Do Veterans Use and Want. *J Gen Intern Med* 2019 Jul;34(7):1192-1199
- 2) 2017-18 National survey of VAMCs on the details of their CIH programs
 - Farmer M M, McGowan M, Yuan A, Whitehead A, Osawe U, Taylor SL. The Organization of Complementary and Integrative Health Practices at the VA: A National Survey. *Journal Alternative and Complementary Medicine*. In press
- 3) This CIH Compendium, which reports on FY17-FY19 VA EHR data
 - With subsequent volumes released annually, expanding on the scope



5 Reasons Why So Much Attention Paid to CIH Therapies

- 1) CIH therapies have been part of several VA priorities past decade, as part of the national VA Whole Health transformation
- 2) The evidence for many CIH therapies is strong for several health conditions
- 3) CIH therapies are now part of US national pain mgmt. strategy and ACP treatment guidelines
- 4) Veterans want non-pharmacologic options to manage their health
- 5) Given all of this, 9 CIH therapies + chiropractic care are medical care in the VA



CIH Therapies Have Been a VA Priority for Decade

2010 Army Surg Gen. pain mgmt plan for VA/DoD

2014 VA's Blueprint for Excellence

2015 MyVA Integrated Plan (first strategy)

2016 Comprehensive Addiction and Recovery Act (CARA) - VA expand research on, delivery of, and education on CIH to veterans.

2016 VA USH declared 8 CIH practices as medical care (chiro was in 2005)

2017 VA Office of Research and Development-wide priority

2018-2024 VA Strategic Plan

2019 in VHA's Plan for Modernization (10 Lanes of Effort)

2020 Veteran Mental Health Care Improvement Act; Whole Veteran Act

Recent Incentives – VISN Performance plan, VERA reimbursement



NIH's Mind-Body Therapies (VA "Medical Care" as of 2017)

Hypnosis

Meditation

Biofeedback

Yoga

Tai chi/Qigong

Therapeutic massage

Acupuncture

Chiropractic* (earlier)

Art therapy

Music therapy

Relaxation training (guided imagery,
progressive muscle relaxation)

Healing touch

Movements (Feldenkrais, Alexander
tech., Pilates, Rolfing, etc.)



Purpose of the 2020 CIH Compendium

To examine Veterans':

- Use of 10 CIH therapies and chiropractic care
- Sociodemographic and health characteristics of those users
- Among a FY17-19 national cohort of VHA users

Using VA national data:

- In the VA electronic medical records and
- From community-based claims

10 therapies:

- Traditional acupuncture, Battlefield Acupuncture, biofeedback, clinical hypnosis, guided imagery, massage therapy, meditation, Tai Chi/Qigong, yoga, and chiropractic care



CIH Compendium Table of Contents

1. National trends in CIH therapy utilization
2. CIH therapy utilization patterns
 - Geographic trends
 - By sociodemographic characteristics
 - By health conditions
3. Community-based CIH therapies



Methods – Cohort Definition

User Cohort

- Users included if they had a primary care, mental health, or pain clinic visit in the FY (identified by stop code)
- Select the latest visit in the fiscal year to use as reference date and for facility assignment

User Demo

- Demographics calculated with respect to the reference visit facility and date
- Clinical diagnoses calculated with respect to the reference visit date (usually a 1 year look back window)

Utilization

- Outpatient therapy utilization uses data from all VHA facilities and PIT claims
- Use categories determined by utilization within the fiscal year



Methods – Defining Utilization

Coding Challenges

- Limited structured coding (e.g., CPT codes) established
- Alternative structured coding (VA accounting codes) take time to establish
 - New clinic set-ups
 - Multiple services provided in the same visit
- Unstructured coding (clinic notes, clinic names) vary across sites

Visit Type	CPT Code	Accounting Codes	Search Strings
Acupuncture	97810, 97811, 97813, 97814	BFA: IACT Trad: ACUP	Includes: 'acup' 'acpu' Excludes: 'acupressure'

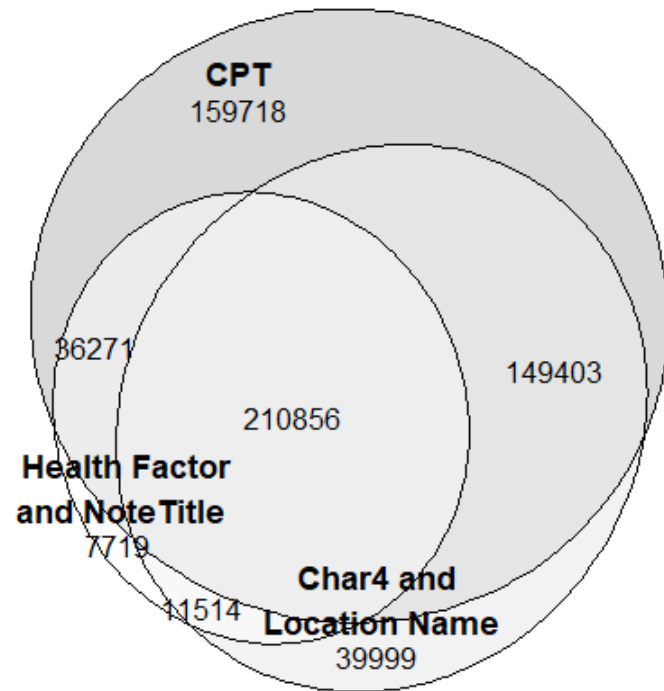


Methods – Defining Utilization (cont.)

Approach:

- Combine information from CPT codes, VA accounting codes (Char4, stop codes), clinic names, and clinic notes to find utilization
- Each therapy has a unique coding pattern

Acupuncture



Meditation

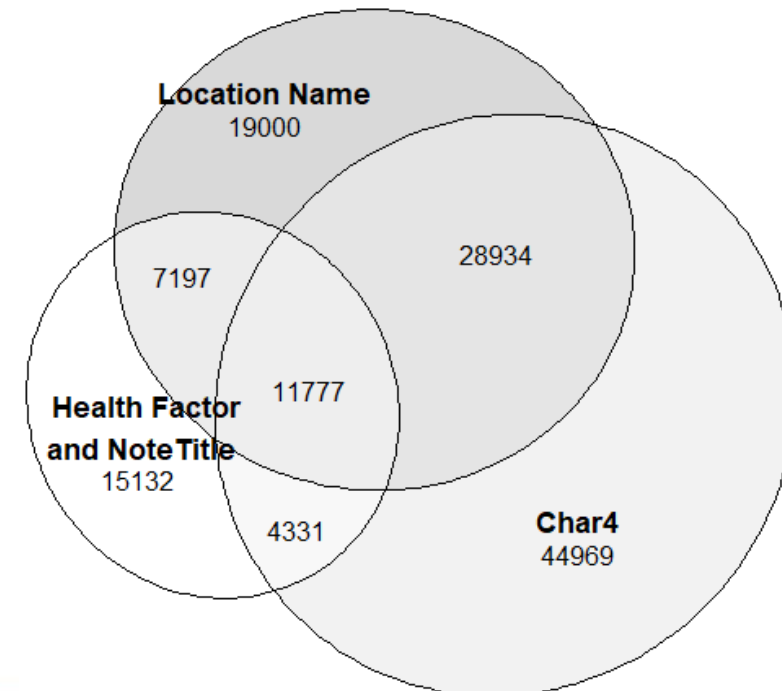




Table of Contents

- 1. National trends in CIH Utilization**
2. CIH utilization patterns
 - Geographic trends
 - By sociodemographic characteristics
 - By health conditions
3. Community-based CIH

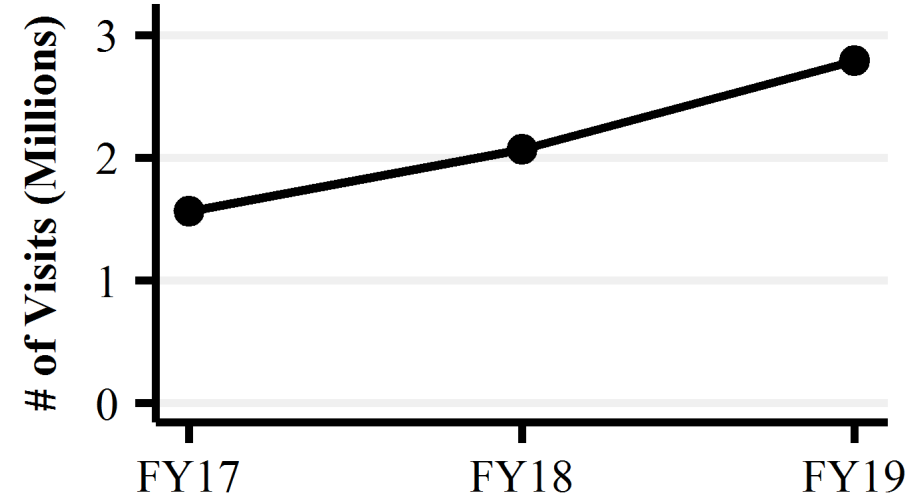
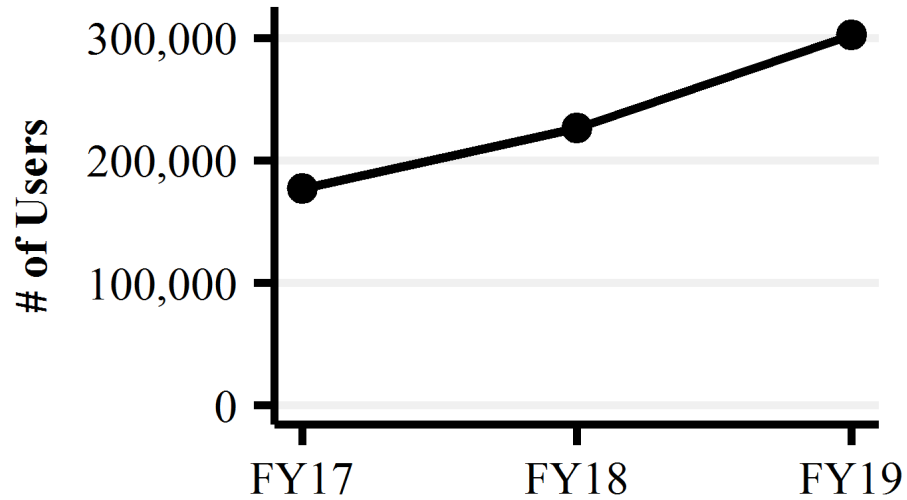


Use of CIH Therapies and Chiropractic, National, FY19

Therapy	# of Users	# of Visits
Any Therapy	302,296	2,792,653
Chiropractic Care	159,506	1,224,324
Acupuncture - Traditional	112,826	868,728
Acupuncture - BFA	27,990	79,911
Massage Therapy	38,582	386,828
Meditation	15,317	60,866
Yoga	14,424	92,163
Tai Chi/Qigong	9,806	62,038
Biofeedback	3,534	12,051
Guided Imagery	1,340	3,209
Clinical Hypnosis	1,138	2,535



Utilization is Increasing across VHA



Veterans' Use of CIH Therapies and Chiropractic Care, FY17-FY19				
	FY17	FY18	FY19	% Change FY17 to FY19
# VHA Users	5,032,129	5,158,300	5,260,941	5%
# of Therapy Users	177,253	226,539	302,296	70%
# of Therapy Visits	1,567,387	2,072,023	2,792,653	78%



Use of All CIH Therapies Increased in 3 Years

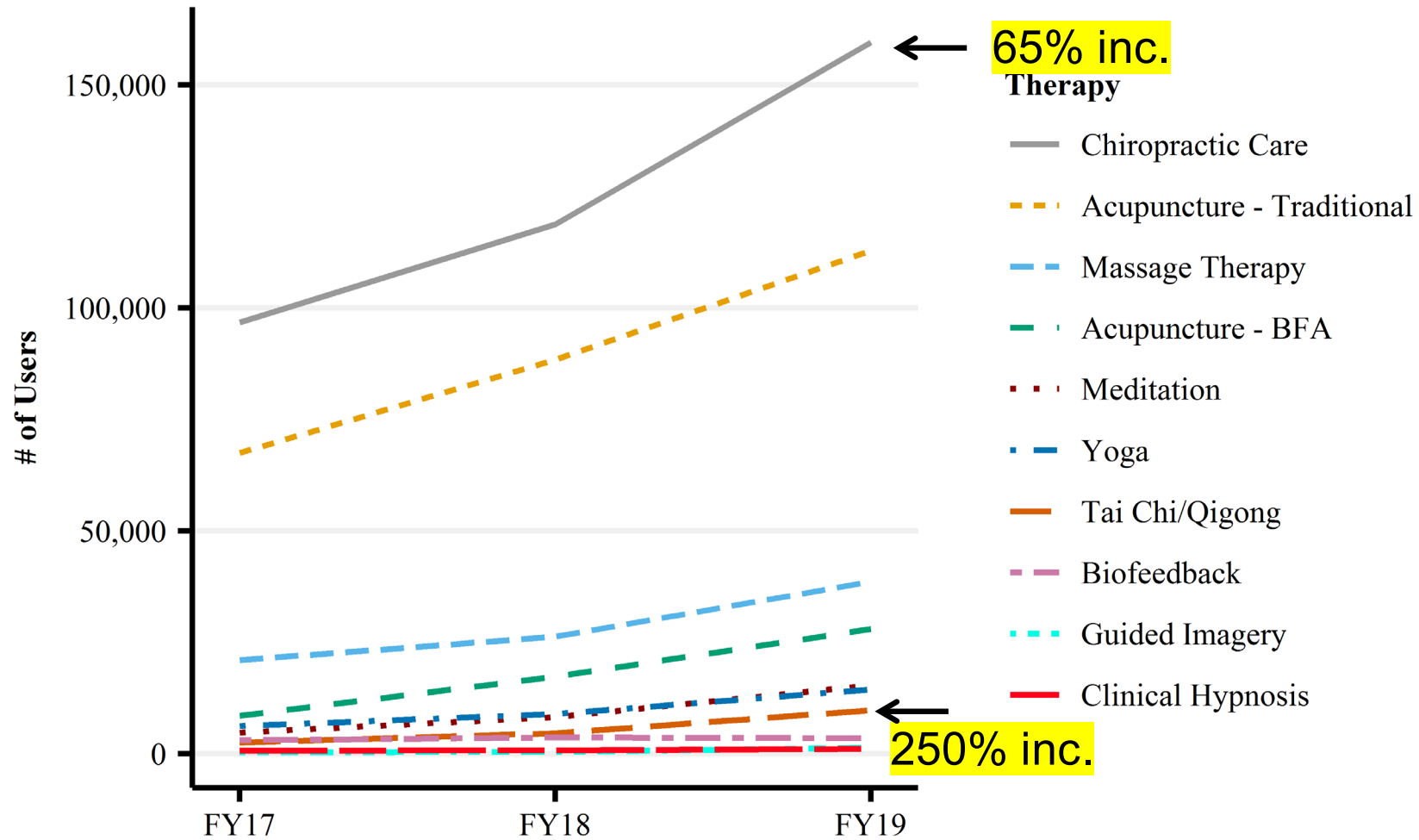




Table of Contents

1. National trends in CIH therapy utilization
2. **CIH therapy utilization patterns**
 - **Geographic trends**
 - **By sociodemographic characteristics**
 - **By health conditions**
3. Community-based CIH therapies



CIH Use Data by VISN

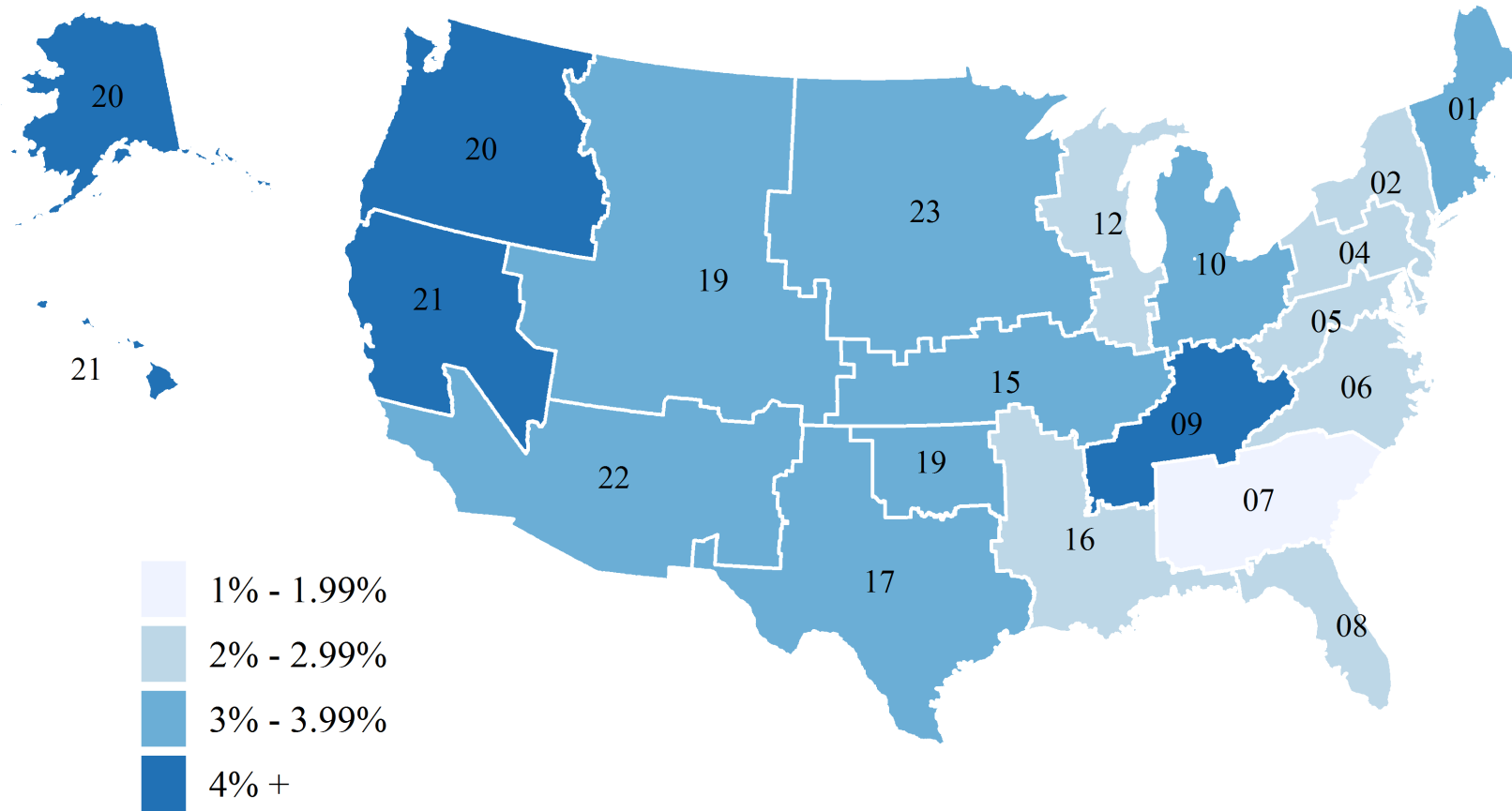
We report data on the use of CIH therapies and chiropractic care:

- By each VISN
- By each facility (*under development*)

VISN	# of VHA Patients in VISN	Any Therapy	Chiro-practic	Acup.-Trad.	Acup.-BFA	Massage Therapy	Medi-tation
1	210,415	13,006 (6.2%)	6,353 (3.0%)	6,134 (2.9%)	629 (0.3%)	1,533 (0.7%)	687 (0.3%)
2	232,383	14,966 (6.4%)	5,752 (2.5%)	6,533 (2.8%)	638 (0.3%)	4,182 (1.8%)	1,081 (0.5%)
4	245,460	12,162 (5.0%)	5,753 (2.3%)	5,400 (2.2%)	1,307 (0.5%)	705 (0.3%)	515 (0.2%)

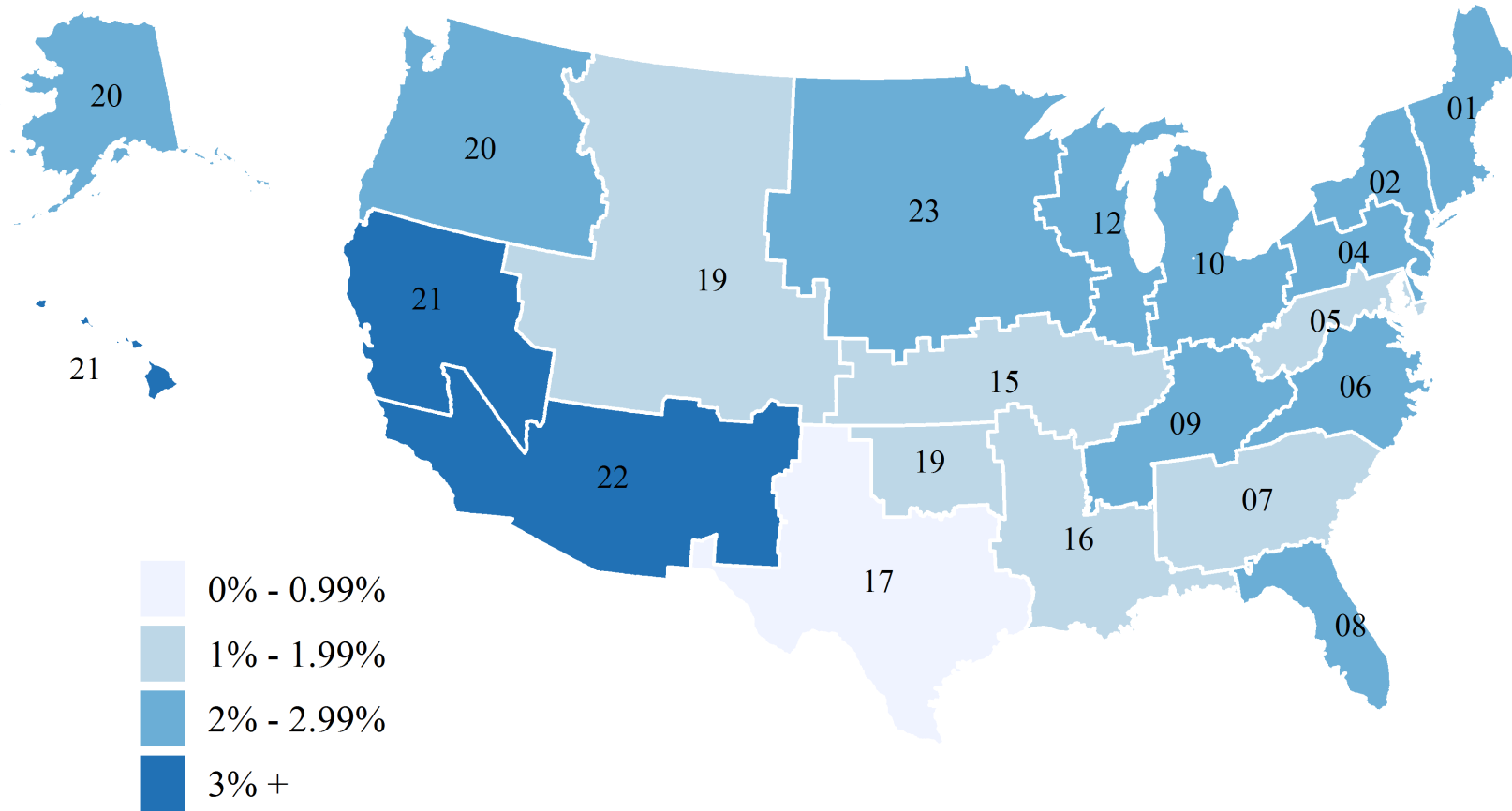


% of Vets in VHA Using Chiropractic Varied by VISN, FY19





% of Vets in VHA Using Acupuncture Varied by VISN, FY19





Who is More Likely to Use These Therapies

1) Sociodemographic factors

- Gender
- Age
- Urban/rural residence

2) Health conditions

- Mental health (anxiety, depression, PTSD)
- Chronic musculoskeletal pain
- Other chronic conditions (cardiovascular diseases, obesity, diabetes)



Women More Likely to Use Therapies than Men in FY19

Women were more likely than men to use CIH/chiropractic care

- Women were 9% of VHA users but 17% of CIH/chiropractic users
- Relatively, women were most likely to use yoga, making up 26% of yoga users
- Relatively, men were most likely to use chiropractic care, making up 83% of users

Therapy	% Men	% Women
Overall VHA pop.	91%	9%
Any CIH	83%	17%
Chiropractic	83%	17%
Yoga	74%	26%



Use Varied by Age, FY19

- Younger Veterans (ages 18-49):
 - Were more likely than Vets ages 70% to use CIH/chiropractic care
 - Relatively most likely to use chiropractic care; least likely to use Tai Chi/Qigong
- Veterans age 70+:
 - Represented 40% of VHA users but 21% of CIH/chiropractic users
 - Relatively most likely to use Tai Chi/Qigong

Therapy	% Age 18-49	% Age 70+
Overall VA pop.	23%	40%
Any CIH	37%	21%
Chiropractic	44%	17%
Tai Chi/Qigong	22%	27%
Biofeedback	42%	14%



Racial/Ethnic Patterns in Use, FY19

In FY19, African American Veterans were:

- least likely to use chiropractic care and massage
- most likely to use yoga, Tai Chi/Qigong, biofeedback, and guided imagery

In FY19, White Veterans were:

- least likely to use Tai Chi/Qigong
- most likely to use chiropractic care

In FY19, other racial/ethnic groups were just as likely as the overall VA user population to use CIH/chiropractic care



Racial/Ethnic Patterns in Use, FY19 (Cont.)

Therapy	African – American	White	Latino/a
Overall VA population	18%	72%	6%
Any CIH therapy	18%	70%	8%
Chiropractic care	15%	73%	7%
Tai Chi/Qigong	29%	63%	6%



Use by Veterans with Chronic MSK Pain, FY19

- Vets with chronic musculoskeletal pain were >2x more likely than all VHA users to use CIH/chiropractic care:
 - Most likely to use traditional and Battlefield Acupuncture
 - Least likely to use meditation and chiropractic care

CIH Use by Veterans with Chronic MSK Pain	
Therapy	% with Pain
Overall VA population	23%
Any CIH therapy	55%
Traditional Acupuncture	64%
Battlefield Acupuncture	67%
Meditation	52%
Chiropractic Care	51%



Use by Veterans with Selected Mental Health Conditions

- Vets with depression, anxiety, or PTSD were >1.5x more likely than all VHA users to use CIH/chiropractic care
 - >70% of users of 5 CIH therapies had one of these documented mental health conditions
 - Relatively most likely to use yoga, meditation, and biofeedback

CIH Use by Veterans with MH Conditions	
Therapy	% with MH Conditions
Overall VA population	33%
Any CIH therapy	54%
Yoga	72%
Meditation	76%
Biofeedback	81%



Use by Veterans with Other Chronic Health Conditions

- Vets with obesity were 2x more likely than the overall VHA patient population to use Tai Chi/Qigong, yoga, and guided imagery
- Vets with cardiovascular disease or diabetes were slightly *less likely* than the overall VHA patient population to use CIH therapies

Use by Veterans with Chronic Health Conditions			
Therapy	% with Obesity	% with CVD	% with Diabetes
Overall VA population	17%	60%	24%
Any CIH therapy	24%	51%	21%
Yoga	32%	54%	23%
Tai Chi/Qigong	29%	61%	29%
Guided Imagery	33%	60%	27%



Table of Contents

1. National trends in CIH therapy utilization
2. CIH therapy utilization patterns
 - Geographic trends
 - By sociodemographic characteristics
 - By health conditions
3. **Community-based CIH therapies**



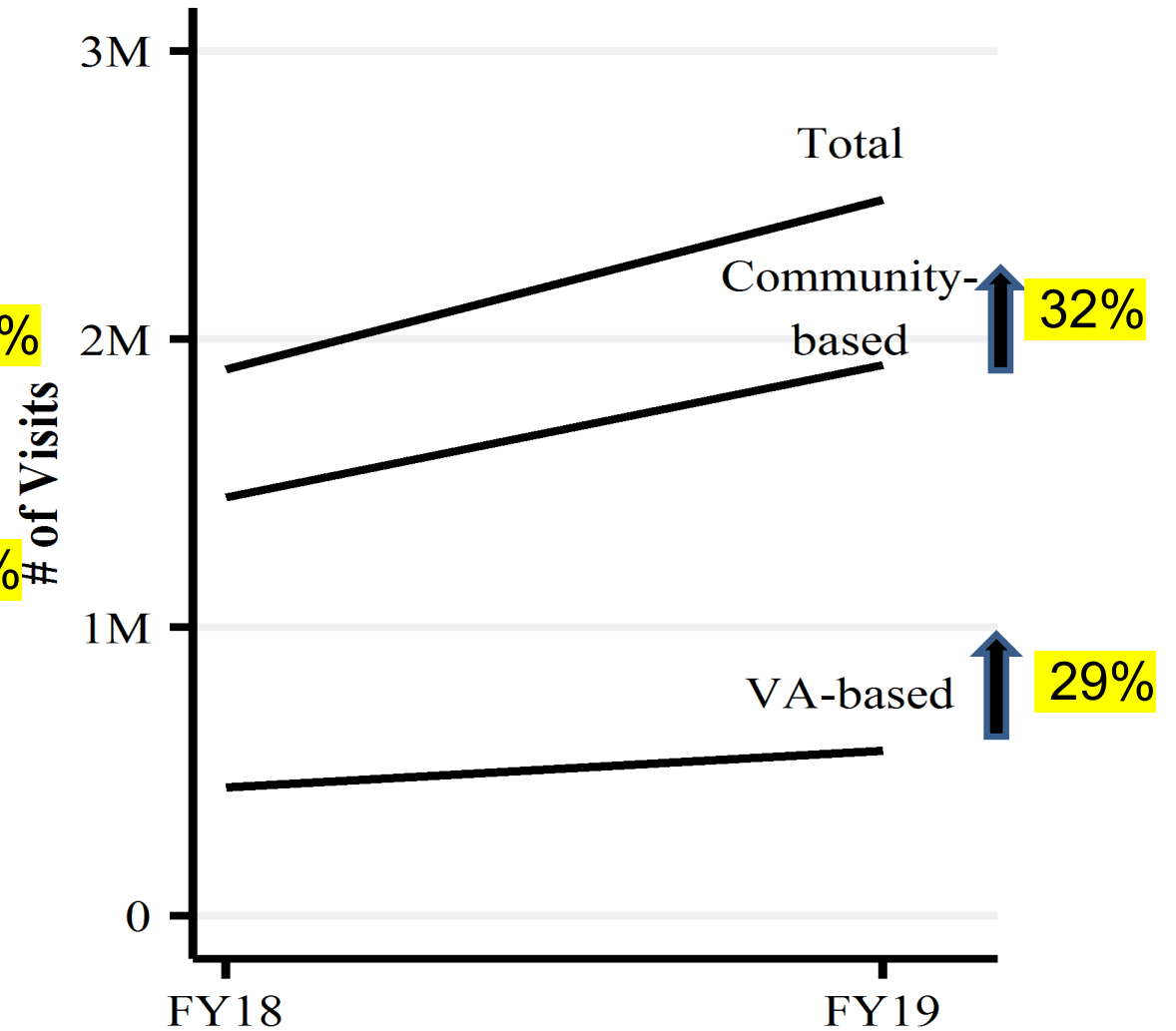
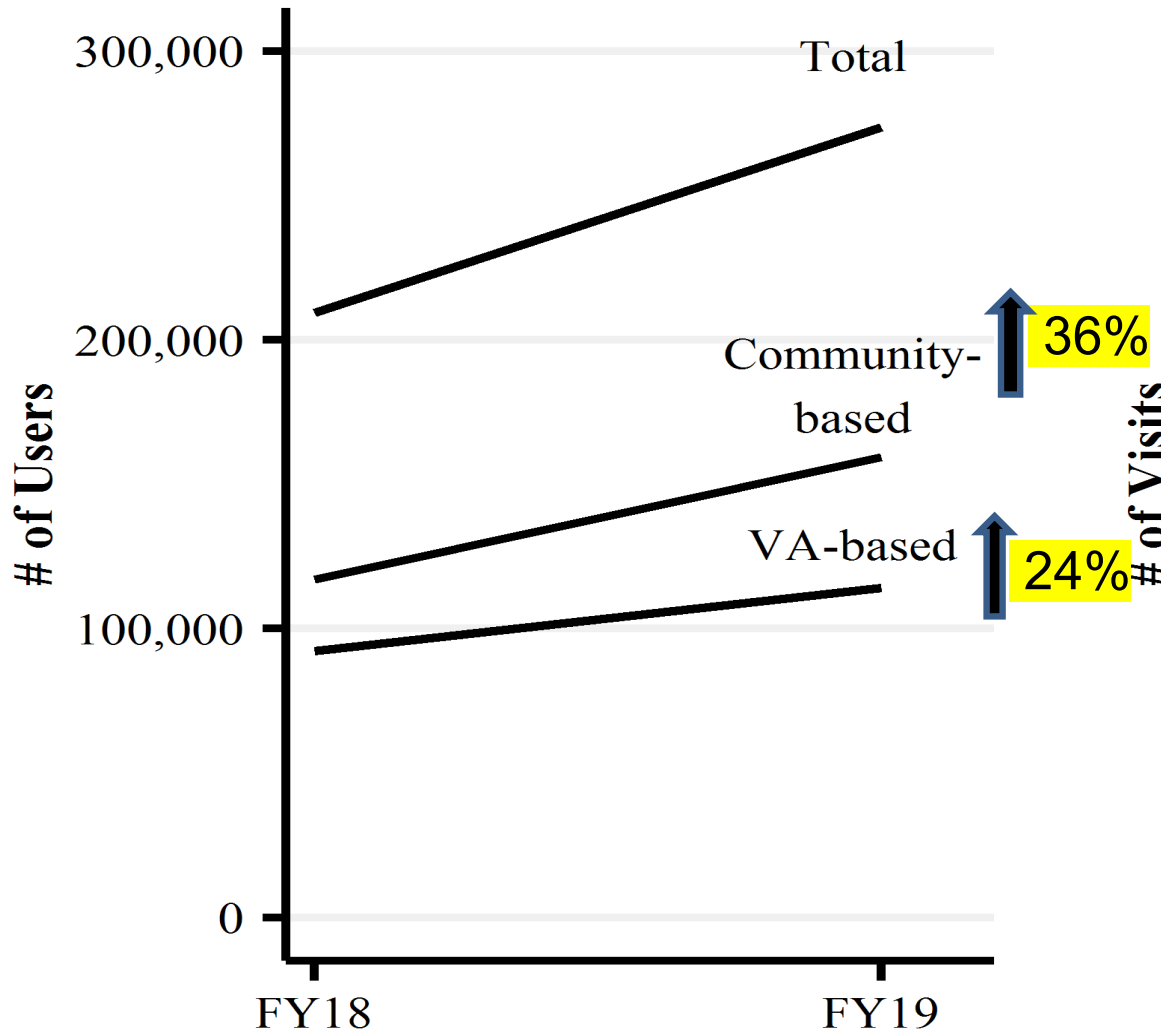
Community-Based Chiropractic, Acupuncture, and Massage in FY19

- Chiropractic care, acupuncture, and massage therapy are tracked through CPT codes in claims from community-based providers
- Relative to VA-based care, in FY19 community-based care:
 - Was provided to almost 50% more users
 - Was provided in >3x as many visits
 - Resulted in >2x visits/user

FY 19 Community- and VA-based Utilization		
	# of Users	# of Visits
VA-based	114,131	572,174
Community-based	159,386	1,907,706



Use of Community-Based Care is Increasing





Thank you!

For more information, please contact:

Steve Zeliadt, PhD (Steven.Zeliadt@va.gov), Lead: Data Nexus; Co-Dir. CIHEC

Hannah Gelman, PhD, (Hannah.Gelman@va.gov), Research Sci: Data Nexus

Stephanie L. Taylor, PhD (Stephanie.Taylor8@va.gov) Dir. CIHEC QUERI