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Non-pharmacologic Pain Relief via Group Medical Visits

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May 14, 2022

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Session Objectives

In this session, we will…

- Describe the group medical visit (GMV) model
- Explain advantages of GMVs in supporting healthy behavior change
- Discuss the Centering GMV program at UC Health
- Present improvements in patient outcomes from GMV participation

Centering Group Visits

Community Building

Health Assessment

Interactive Learning

Centering Group Visits at UC Health

Our Vision: "Centering group visits create a synergy of patient and care team expertise that improves health in individuals and communities"

Visit Types:

Centering Pregnancy
Centering Parenting
Centering Chronic Pain
Centering Healthy Lifestyles
Centering Diabetes
Centering Care and Recovery

Why choose Centering?

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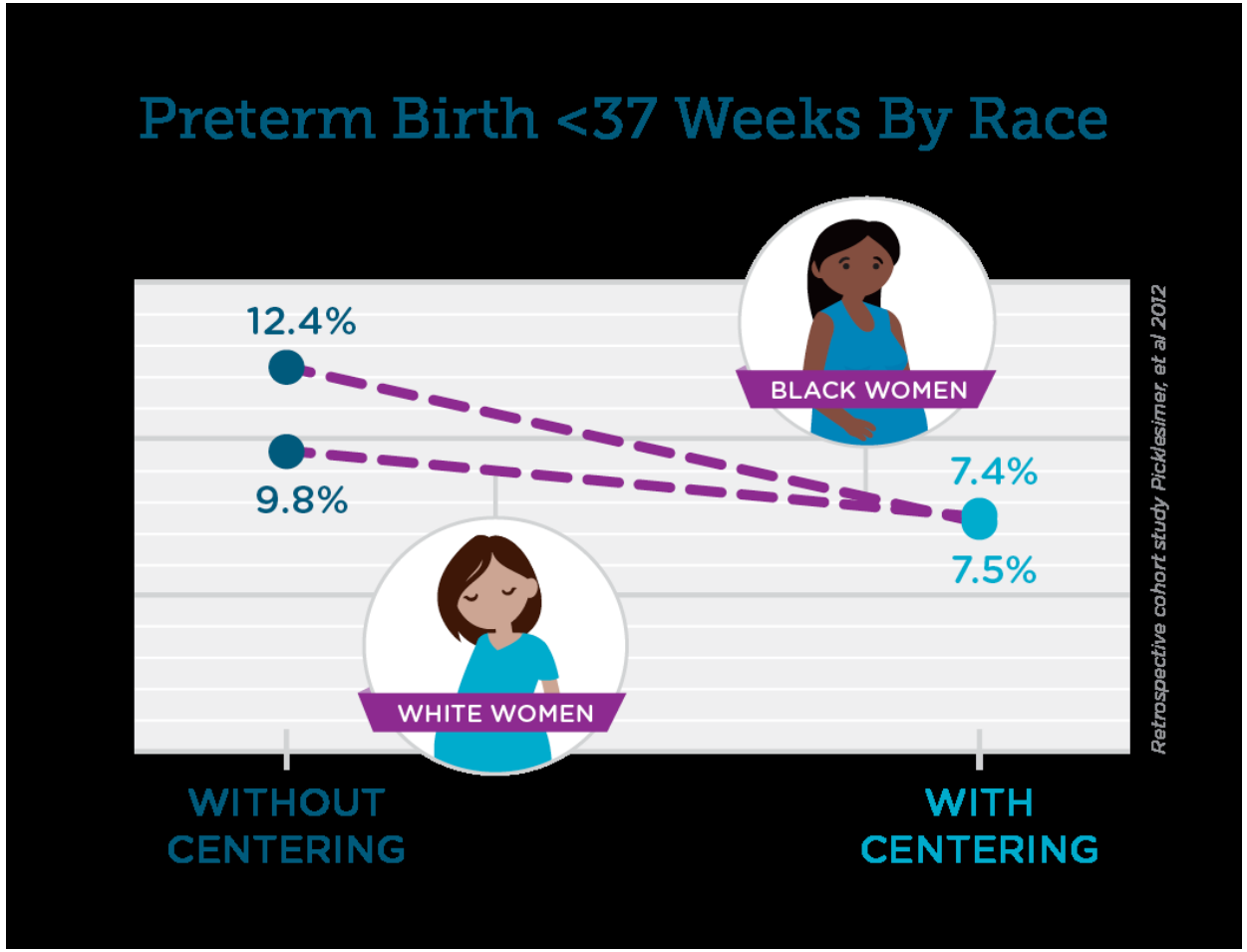
- **Better patient outcomes**
  - Local and national evidence, including racial equity
  - Time for self-care skill development
  - Peer learning and support
- **Valued by patients**
  - "Feel more like a partner in my care"
  - CenteringPregnancy prioritized by our local community
- **Aligns with system goals**
  - Value-based care, patient experience, D&I, integrative health



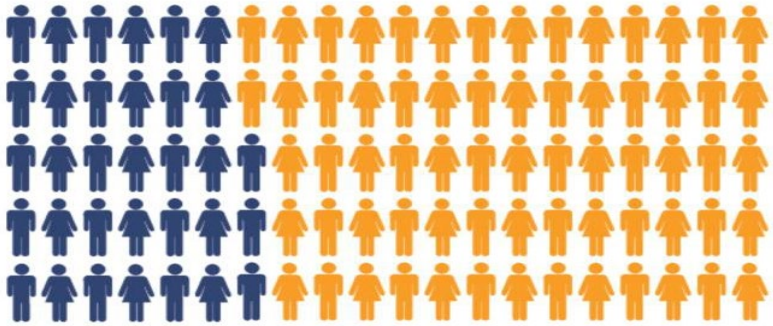
CRISIS OF CHRONIC DISEASE

Heart Disease

600,000 die year
#1 cause of death in U.S.

Reversible with diet

Cancer



1 in 3 cancer cases
are preventable with

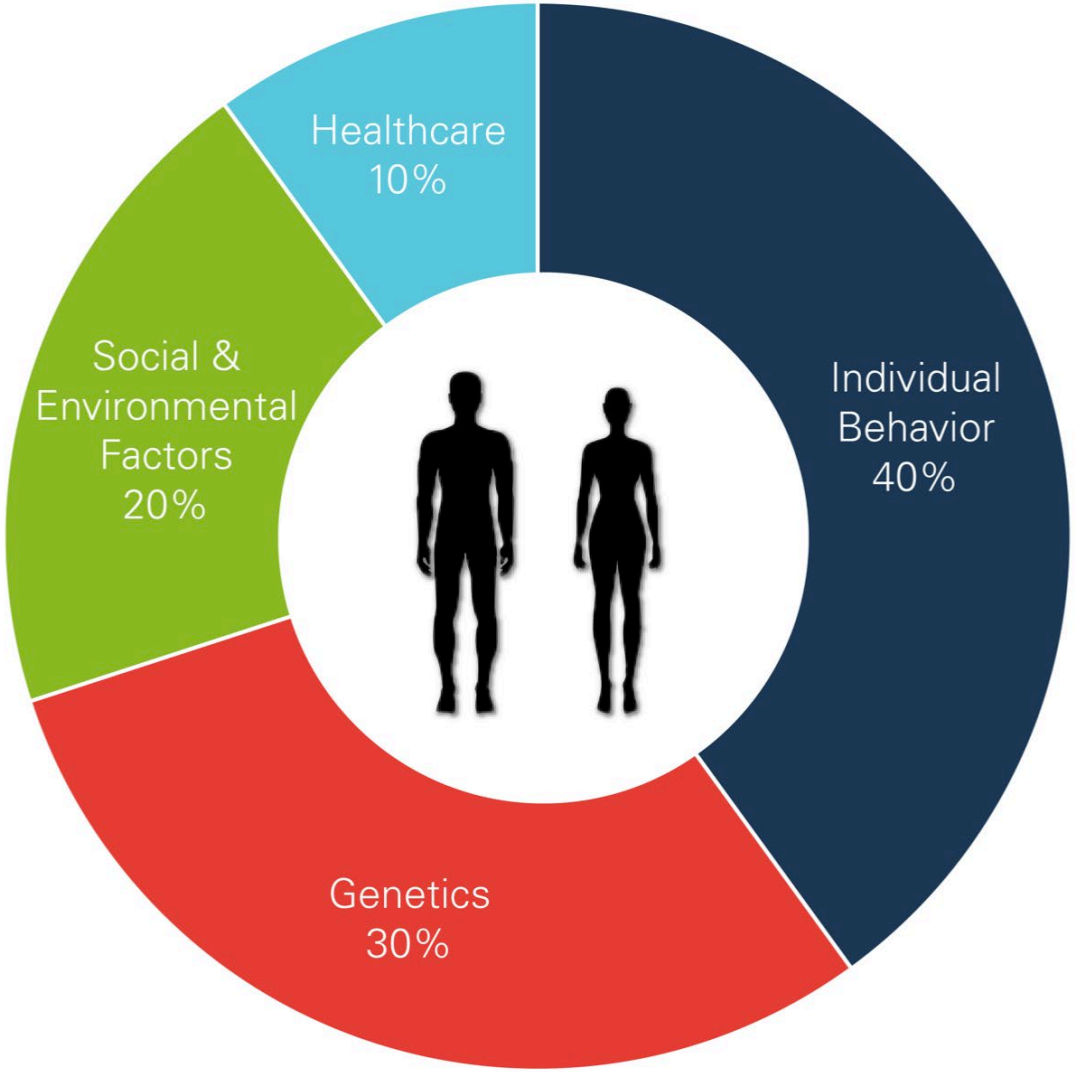
Lifestyle changes

Obesity

7 in 10 overweight
33% obese in Cincinnati

Lifestyle changes

Impact of Different Factors on Premature Death



Source: *McGinnis JM, Williams-Russo P, Knickman JR. The Case For More Active Policy Attention To Health Promotion. Health Aff (Millwood). 2002 Mar-Apr;21(2):78-93.*

Integrative Approach: Model

- Healing space
- Longitudinal relationships
- Longer contact time
- Peer learning
- Mind-body practice and goal setting in every visit
- Integrative practitioners as guest experts

"I decided to try what worked for other people so I tried the yoga we learned and sleeping with the body pillows. I have gone from taking one pain pill every day to only taking two pills since last [month's] visit."

Chronic Conditions Basic Curriculum

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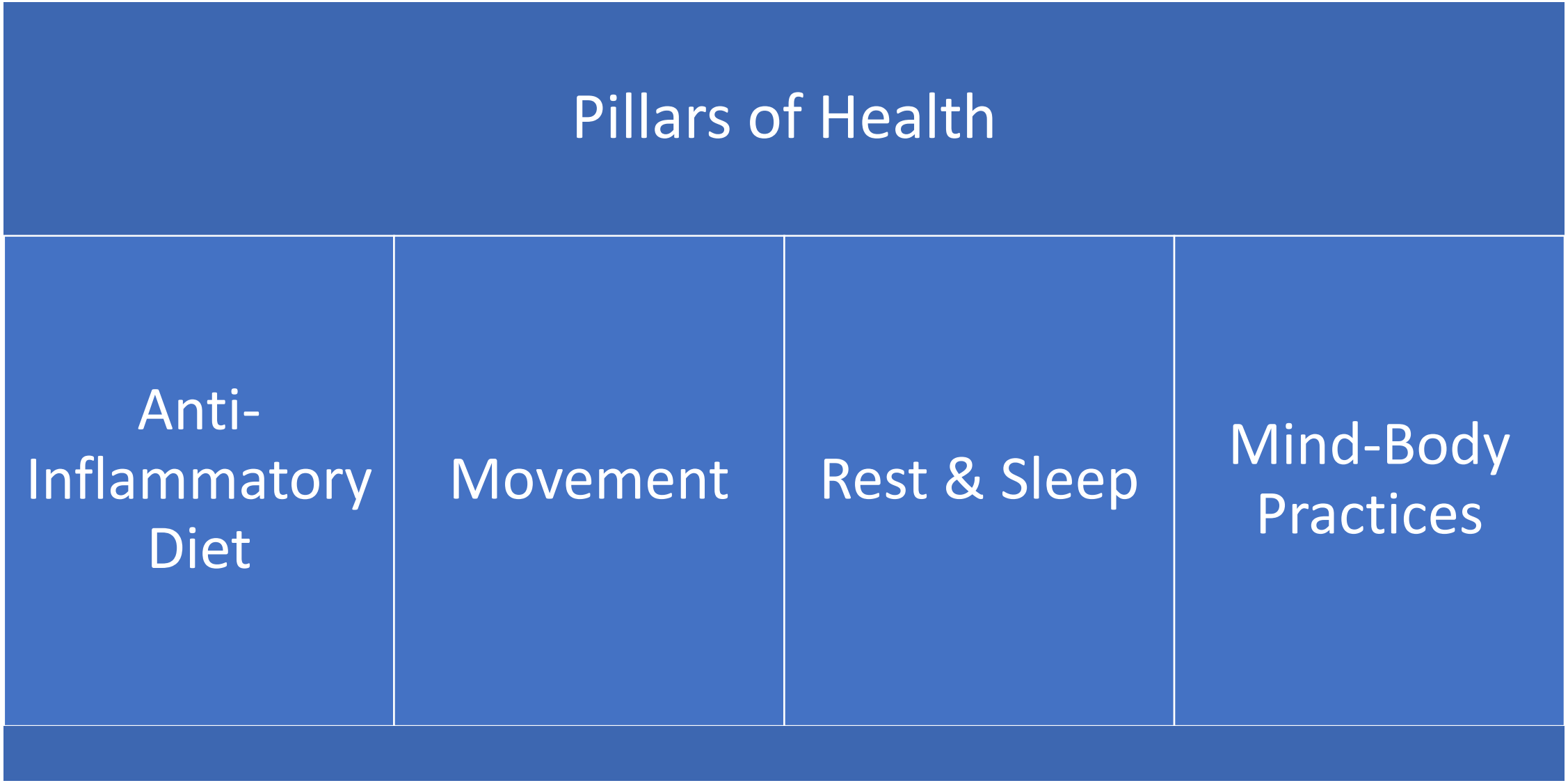

Integrative Approach – Anti-inflammatory Diet

(https://oldwayspt.org/, 2011)

Show and Tell
Guess the Carb
Food Models: Create your Plate

Chronic Conditions Advanced Curriculum

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Teaching Kitchen Collaboration

- Community partnership with La Soupe
- Brainchild of Diva Jonatan, Endocrine NP and new Centering facilitator
- Started virtual, moving to in-person

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Mini-Mock Group Visit

It’s time to experience some group activities!

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Table Circle Instructions

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- 3 Centering Breaths
- Opener – Going around your table circle, share your name and something you are grateful for this week
- Drawing activity - Draw a picture of what health looks like to you and then discuss your drawing with person next to you
- Goal Setting – Think of something you learned during the conference that you want to try, complete the goal sheet and discuss with person on your other side
- Closing Quote

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Group Medical Visit Outcomes

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Quick Safety Issue 44 | August 2018

Non-pharmacologic and non-opioid solutions for pain management

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Listed below are some evidence-based, non-opioid treatment options to consider for treating pain.

• Behavioral/Cognitive Interventions/Psychological

- ***Meditation techniques*** utilized with mindfulness-based stress reduction (MBSR) have been shown to be effective for pain reduction and strong continued patient compliance.[3]
- *Progressive muscle relaxation* can assist in regulating neurosystems found in muscle tension and situational stress commonly seen with pain.

• Environmental-based Interventions

- *Lighting* alterations can create an environment that supports muscle relaxation.
- *Music therapy* has been associated with statistically significant reduction in opioid and non-opioid analgesic use.[4]

• Physical Interventions

- ***Acupuncture*** was recommended as a first-line treatment in lower back pain by the American College of Physicians.[5]
- ***Massage therapy*** has shown to be effective in adult and pediatric populations with minimal risk of side effects.
- *Spinal manipulation* has shown improvement in pain for patients experiencing chronic lower back pain, shoulder pain and migraines.[6,7]

• Non-opioid pharmacologic interventions

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Pain Medicine, 22(1), 2021, 181–190
doi: 10.1093/pm/pnaa418
Original Research Article

OXFORD

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INTEGRATIVE MEDICINE SECTION

"Living Well with Chronic Pain": Integrative Pain Management via Shared Medical Appointments

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- **Each weekly SMA includes:**
  - Vitals/physical
  - Check-in
  - Lecture
  - Self-massage skills
  - Gentle chair yoga
  - Acupuncture
  - Hypnotherapy/Meditation

- **Weekly focused topics:**
  - **Week 1:** Acupressure for pain reduction
  - **Week 2:** Massage
  - **Week 3:** Reducing Pain (Inflammation) through Nutrition and Supplements
  - **Week 4:** Chiropractic Care for Pain Control
  - **Week 5:** Mechanism of Action of Pain
  - **Week 6:** Art Therapy/Guided Imagery for Emotional Wellness
  - **Week 7:** Goal setting and Healthy Community
  - **Week 8**: Chinese Herbal Medicine for Pain Control

- **Follow-up (group or individual) appointments** are offered monthly for current and former participants to promote healthy community.

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Table 3. Comparison of changes in PROMIS-57 scores before and after SMAs among all patients, those without use of opioid medications, and those with use of opioid medications

PROMIS-57 Domain Subscore (Post – Pre), Mean (95% CI)*	All (N = 178)	Unadjusted			Adjusted		
		No Opioids (N = 99)	Opioids (N = 79)	*P* Value§	No Opioids (N = 99)	Opioids (N = 79)	*P* Value¶
Physical Function	1.3 (0.79 to 1.9)‡	1.5 (0.74 to 2.2)	1.2 (0.35 to 2.0)	0.6	1.6 (0.86 to 2.3)	1.02 (0.19 to 1.9)	0.31
Anxiety	−2.5 (-3.5 to -1.4)‡	−2.8 (-4.2 to -1.4)	−2.0 (-3.6 to -0.40)	0.45	−2.8 (-4.0 to -1.6)	−2.0 (-3.4 to -0.66)	0.42
Depression	−2.1 (-3.01 to -1.3)‡	−2.1 (-3.3 to -0.91)	−2.2 (-3.5 to -0.88)	0.9	−2.2 (-3.3 to -1.08)	−2.1 (-3.3 to -0.82)	0.88
Fatigue	−3.1 (-4.2 to -2.01)‡	−4.0 (-5.5 to -2.6)	−2.0 (-3.6 to -0.32)	0.065	−4.3 (-5.6 to -2.9)	−1.6 (-3.2 to -0.12)	***0.012***
Sleep Disturbance	−2.2 (-3.4 to -0.94)‡	−2.6 (-4.3 to -0.95)	−1.6 (-3.5 to 0.24)	0.43	−2.9 (-4.4 to -1.3)	−1.3 (-3.0 to 0.42)	0.18
Ability to Participate in Social Roles and Activities†	2.9 (2.05 to 3.8)‡	3.6 (2.4 to 4.7)	2.1 (0.84 to 3.4)	0.11	3.8 (2.7 to 5.0)	1.8 (0.55 to 3.0)	***0.019***
Pain Interference†	−3.5 (-4.4 to -2.5)‡	−3.8 (-5.1 to -2.6)	−3.0 (-4.4 to -1.5)	0.36	−4.0 (-5.3 to -2.8)	−2.7 (-4.1 to -1.3)	0.16
Pain Intensity†	−1.0 (-1.3 to -0.73)‡	−0.94 (-1.3 to -0.57)	−1.08 (-1.5 to -0.66)	0.62	−0.95 (-1.3 to -0.59)	−1.06 (-1.5 to -0.65)	0.7

*All raw domain scores except Pain Intensity are standardized to a mean of 50 and an SD of 10.

†Data not available for all subjects.

‡Paired *t* test $P < 0.001$.

§Unadjusted-analysis *P* values correspond to ANOVA.

¶Adjusted-analysis *P* values correspond to ANCOVA and adjust for pre-SMA PROMIS-57 domain subscore.

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Table 4. Change in opioid dosage in MMEs before and after SMAs among opioid-use patients (N = 79)

Opioid Average Monthly Dosage Differences	Mean (95% CI)	*P* Value*
6 mo before first SMA to 6 mo after eighth/final SMA	−57.3 (-121.9 to 7.2)	0.08
6 mo before first SMA to 7–12 mo after eighth/final SMA	−41.3 (-112.2 to 29.6)	0.25
6 mo before first SMA to completion of eighth/final SMA	−49.8 (-115.09 to 15.4)	0.13
Completion of eighth/final SMA to 6 mo after eighth/final SMA	−7.5 (-38.4 to 23.4)	0.63
Completion of eighth/final SMA to 7–12 mo after eighth/final SMA	8.5 (-30.9 to 47.9)	0.67

*Paired *t* test.

Patients suffering from chronic pain who participated in a multidisciplinary, nonpharmacological treatment approach delivered via group medical visits experienced **reduced pain** and **improved measures of physical, mental, and social health** without increased use of opioid pain medications.

Centering Chronic Pain

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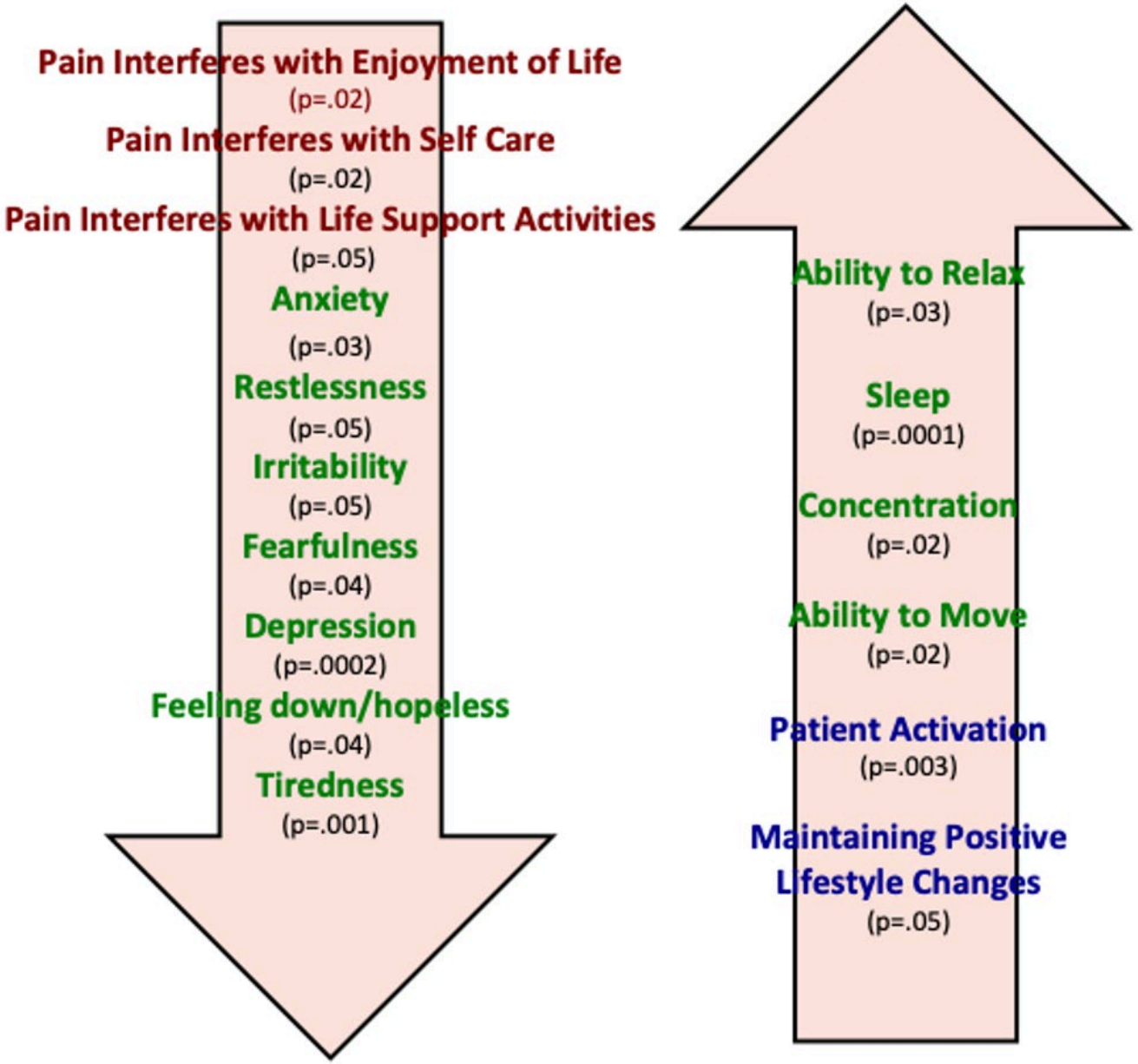
Hoxworth Patient Outcomes (2013-15)

- Decreased pain interference with enjoyment of life and self-care
- Increased patient activation
- Decreased depression and anxiety
- Feel more like “partners in care”
- Incorporated 5 of 6 IH modalities



Centering Diabetes and Lifestyles for Weight Management

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Hoxworth Patient Outcomes (2018-20)

Improvements in Cardiovascular (CV) Risk Factors

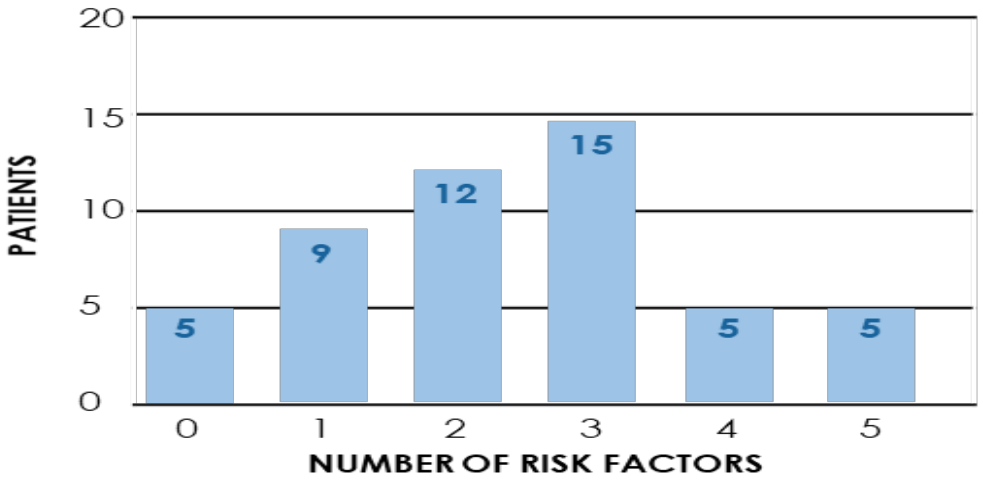
BASIC VISIT GROUP

- **74% in ≥ 2 risk factors and 20% in ≥ 4**
- Significant changes in:
  - weight (mean -4.6 lbs, p<0.002)
  - waist (mean -0.6 in, p<0.001)
  - neck circumference (mean -0.1 in, p<0.01)

BASIC + ADVANCED VISIT GROUP

- **92% improved in ≥2 risk factors and 46% in ≥4**
- Significant changes in:
  - weight (mean -9.9 lbs, p<0.02)
  - waist circumference (mean -1.9, p<0.004)
  - SBP (mean -11.6, p<0.04)

CV risk factors improved per patient - Basic Visit Group



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Lessons Learned

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- GMV are an excellent model for incorporating integrative practices
- Patients benefit from:
  - experiential learning
  - peer learning and support
  - increased contact time with providers
- Facilitation skill and model fidelity drive Centering outcomes
- Value-based care initiatives tying outcomes to reimbursement help sustainability
- Patients are amazing program partners!

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Thank you!

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