



The Movement Toward the Non-Pharmacological Treatment of Pain: Implications for the Underserved

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Overview – *Alignment of Forces*

- Consider the context that is giving rise to *increased interest* in integrative health
- Highlight how the opioid crisis opens the door to *integrative approaches* to pain
- Present examples of integrative models of care for pain; *focus turns to FQHCs*
- Discuss potential challenges and opportunities to increase the *effectiveness* of integrative therapies for the underserved

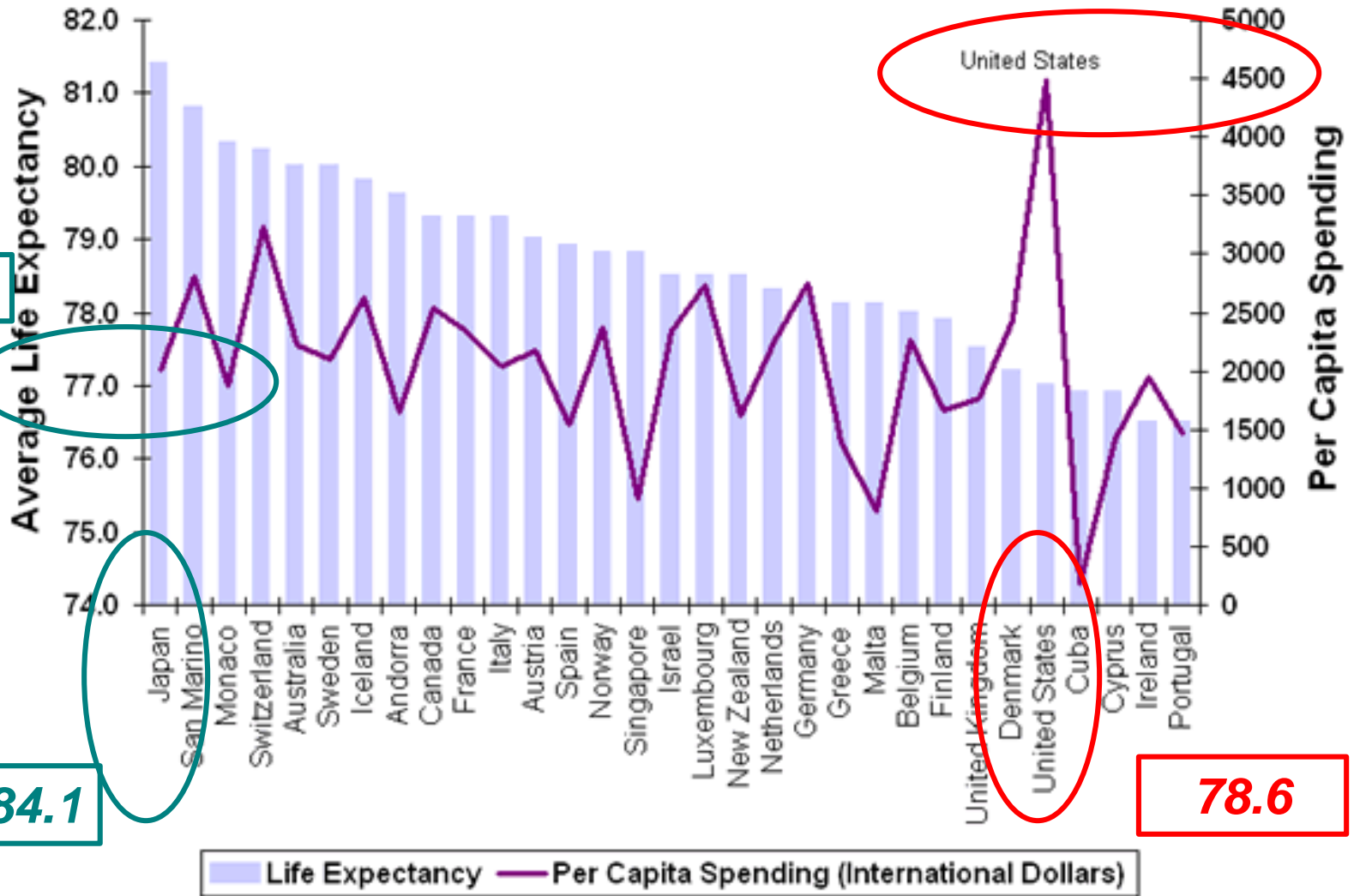
The Cost of a Long Life

\$10,224

\$4,717

84.1

78.6



2018 Data – Organization for Economic Cooperation and Development, 35 Countries
US Rank 27th of 35



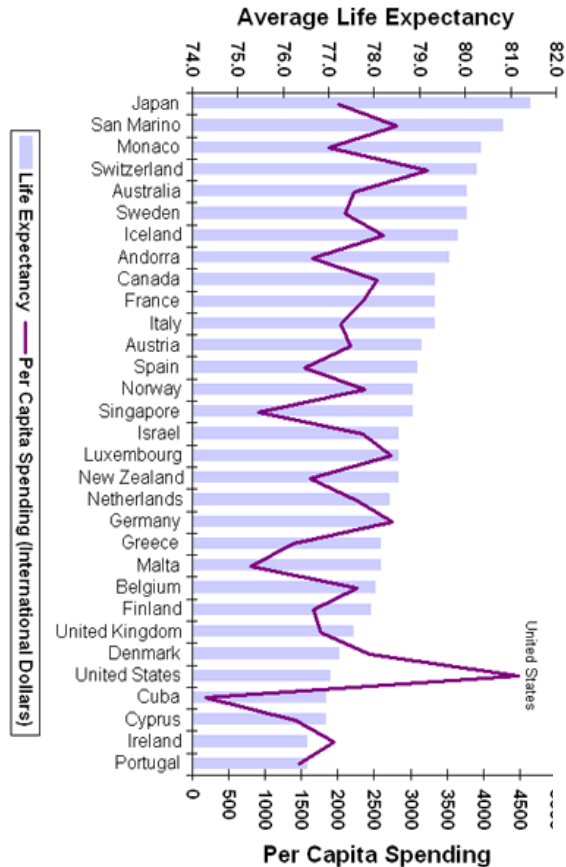
Healthcare Facts – 35 Countries

United States

- Ranks #1 on obesity
- Ranks #33/35 on prevalence of diabetes
- Ranks #1 in drug related deaths
- Ranks #1 in pharmaceutical spending



Look at this differently ...



The Cost of a Long Life

\$10,224 per capita

Do the math:

US Population =
329,484,310

\$3.36 Trillion





Top 8 US Companies

Rank	Company	Revenue (Billions)
1	Walmart	\$514
2	Exxon Mobil	\$290
3	Apple	\$266
4	Berkshire Hathaway	\$248
5	Amazon	\$233
6	United Health Group	\$226
7	McKesson	\$208
8	CVS Health	\$195

MCKESSON

**CVS**
Health®

UNITEDHEALTH GROUP®



Follow the Money

- There are major vested interests in driving up health care costs
- Health care has been a leading contributor to the increases in the U.S. GDP = 17.8% (2019)
- Companies, owners, and stock-holders are making money
- “Financial Gain” appears to be **more important than life-expectancy** to some policy makers

IOM SUMMIT ON
INTEGRATIVE MEDICINE
AND THE HEALTH
OF THE PUBLIC

February 25 - 27, 2009



“The disease-driven approach to care has resulted in

- *spiraling costs as well as*
- *a fragmented health system that is*
- *reactive and episodic as well as*
- *inefficient and impersonal.”*

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Disease-driven care

- a fragmented health system
- reactive and episodic
- inefficient and impersonal.”

Integrative Health

- ➔ an integrated patient-centered team
- ➔ focuses on whole person person, lifestyle, lifespan
- ➔ reaffirms the relationship between the patient and practitioners



Integrative Medicine



Complementary
Medicine*

Behavioral
Health

Conventional
Medicine*



Acupuncture

Stress Management

Surgery

Yoga Therapy

Physical Activity

Medication

Meditation/Breathing

Diet/Nutrition

Radiation

Massage

Cognit. Behav. Therapy

Immunotherapy

Social Support

* Examples



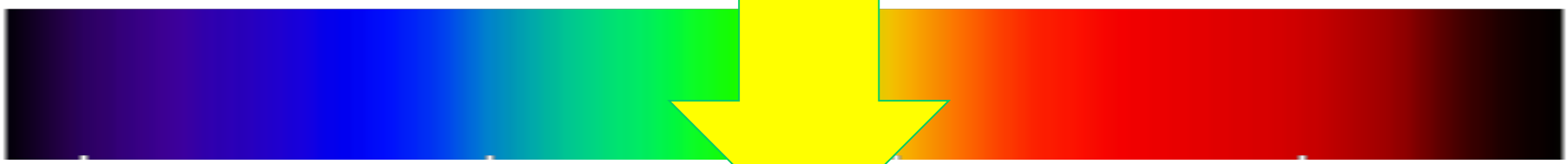
Integrative Medicine



Complementary
Medicine*

Underserved

Conventional
Medicine*



Acupuncture

Food & Water

Surgery

Yoga Therapy

Shelter

Medication

Meditation/Breathing

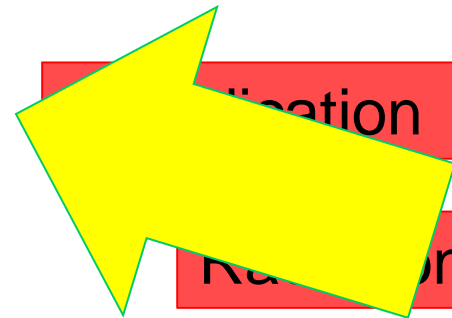
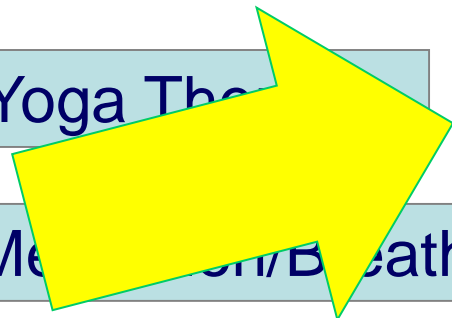
Sleep

Radiation

Massage

Belonging

Immunotherapy

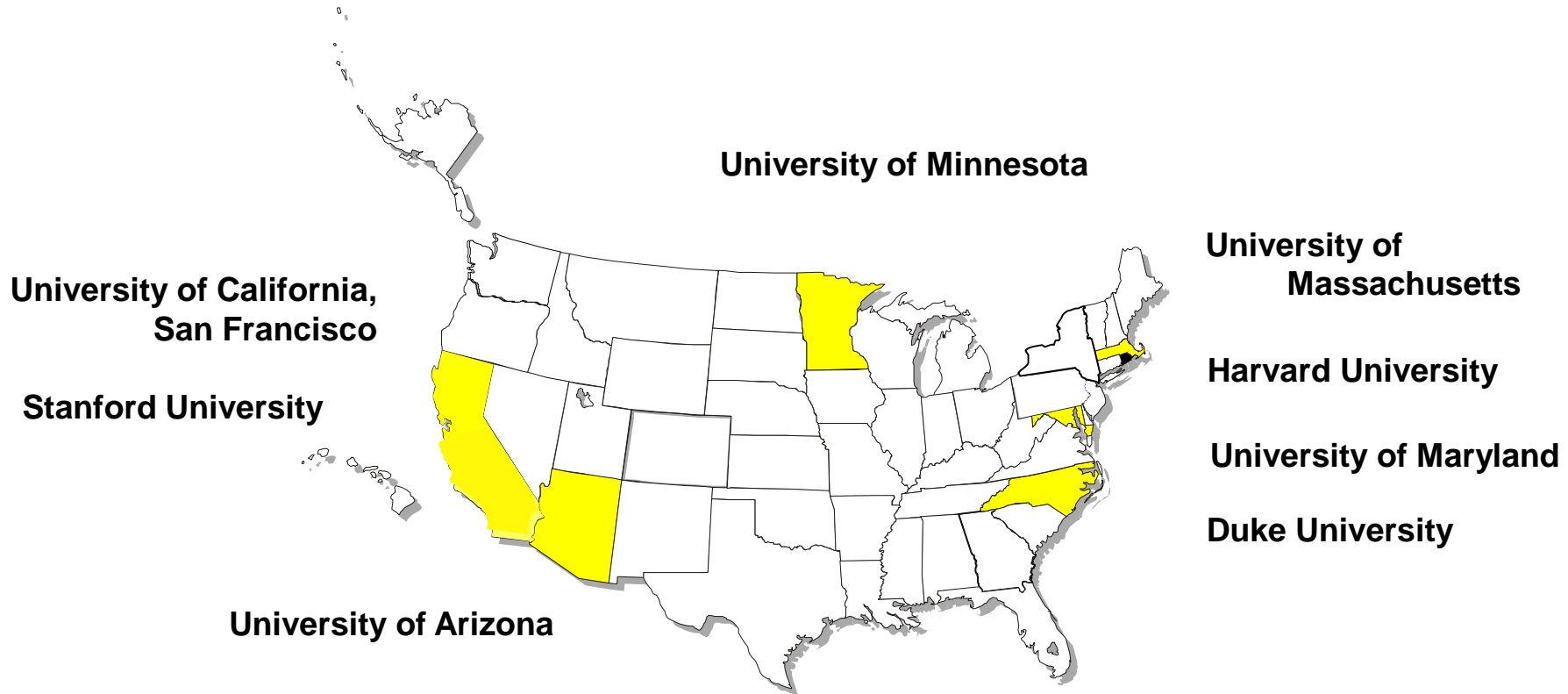


* Examples



ACADEMIC CONSORTIUM
FOR **INTEGRATIVE**
MEDICINE & HEALTH

1999: Consortium Formed - 8 Centers



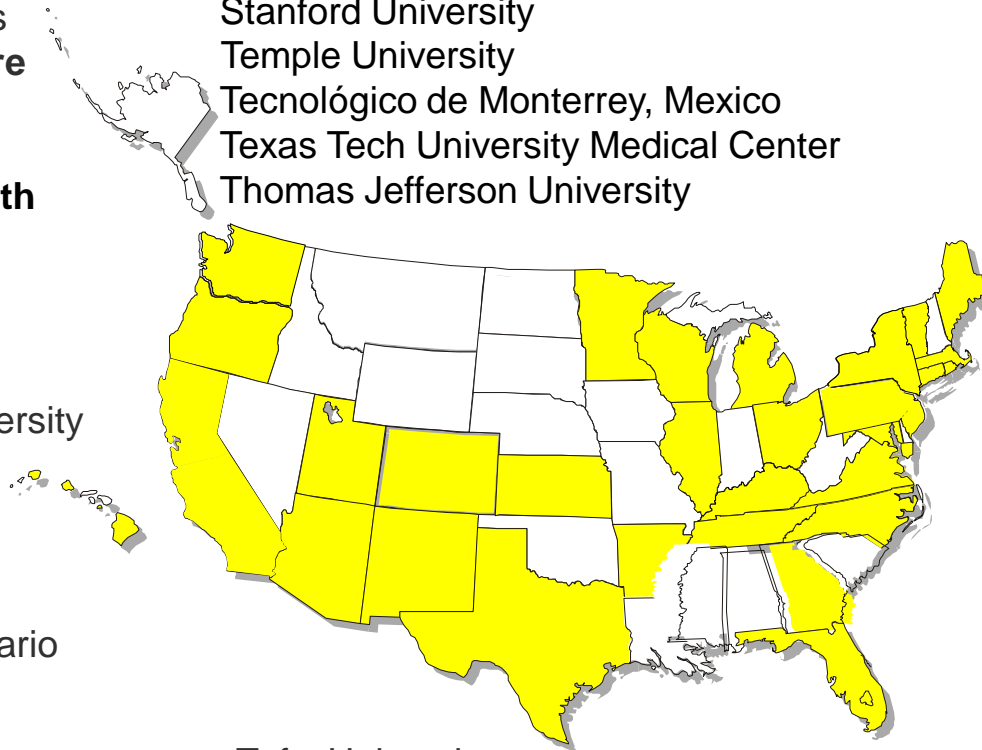
To apply Academic Health Centers need 2 of 3 Programs:
Clinical, Education, Research

2019 - 76 Members*

Albert Einstein/Yeshiva University
Allina Health Systems
Aurora Health Care
Beaumont Health System
 Boston University
 Cedars Sinai Los Angeles
Central Maine Healthcare
 Cleveland Clinic
 Columbia University
Connor Integrative Health
 Cornell University
 Duke University
 Emory University
 Georgetown University
 George Washington University
 Harvard Medical School
INOVA Health
 Johns Hopkins University
Mayo Clinic
 McMaster University, Ontario
 MD Anderson
Medstar Health
Memorial Sloan Kettering
Meridian Health
 Mount Sinai Medical Center
 New York University
 Northwestern University
 Ohio State University

Oregon Health & Science University
 Pennsylvania State Univ., Hershey
 Rutgers New Jersey Medical School
Scripps Health
Sutter Health
 Stanford University
 Temple University
 Tecnológico de Monterrey, Mexico
 Texas Tech University Medical Center
 Thomas Jefferson University

University of Chicago
 University of Cincinnati
 University of Colorado
 University of Connecticut
 Univ. of Florida
 University of Kansas
 University of Kentucky
 University of Maryland
 University of Massachusetts
 University of Miami
 University of Michigan
 University of Minnesota
 University of New Mexico
 University of North Carolina
 University of Pennsylvania
 University of Pittsburgh
 University of Saskatchewan
 University of Southern Ca.
 University of TN, Knoxville
 University of Texas, MB
 University of Utah
 University of Vermont
 University of Washington
 University of Wisconsin,
 Vanderbilt University
Veterans Administration
 Wake Forest University
 Yale University



Tufts University
 University of Alberta
 University of Arkansas
 University of Arizona
 University of Calgary
 University of California (UC)
 UCI, UCLA, UCSD, UCSF

* Apologies to
Canada & Mexico



Complementary / Integrative Medicine Use Increasing

- NCCIH / Nat'l Health Interview
in 2002, 2007, 2012 & 2017
- National random sample
 - 2002: 31,044 adults **36.6%**
 - 2007: 23,393 adults **38.3%**
9,417 children **11.8%**
 - 2012 & 17: 34,525 adults **Similar**
10,218 children **levels**





Primary Reason that Americans Turn to Integrative Medicine: Pain

- True for all surveys, 2002 – 2017

Today:

- 50 million adults in the United States have chronic daily pain
- 19.6 million experience high impact chronic pain that interferes with daily life or work activities
- Cost to the nation: \$560 – \$635 billion annually
- At the same time: Nation facing opioid crisis



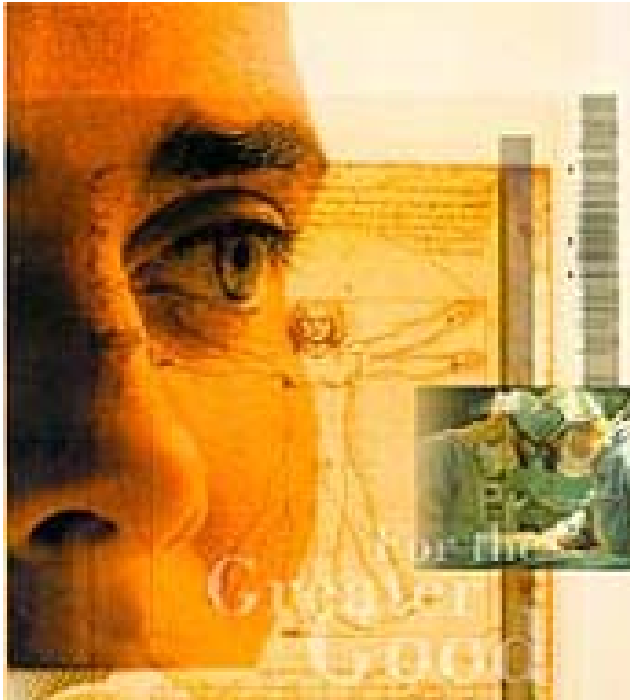
Pain is More Prevalent in Socio-Economically Vulnerable Groups

- **17.1%** of adults over 50 in the lowest wealth quartile have disabling chronic pain, **double** the overall rate of 8.2% *
- From a bio-psycho-social perspective, complex factors contribute to chronic pain in the underserved in settings characterized by:
 - stigma, discrimination, prejudice
 - poverty, challenges to meeting basic needs**
- In recent studies, underserved and older adults with chronic pain were less likely to receive nonpharmacologic treatments known to be effective for pain, such as cognitive-behavioral therapy***

*Janevic, et al., *J of Pain*, 18, 2017, 18, **Newman, et al., *Pain*, 158, 2017,

***Ehde, et al., *Cognitive behavior therapy for pain*, *Amer Psych*, 69, 2014..

Considerable research focused on integrative approaches for chronic pain




- Safety
- Efficacy
- Mechanisms
- *Evidence is essential...but not sufficient*



Yoga for Chronic Low Back Pain (cLBP) in the Underserved

Context

- Chronic LBP costs the US = \$200B annually
- Affects approximately 10% US adults
- Disproportionately affects racial and ethnic communities and lower SES groups 
- Physicians seeking a non-pharmacological therapy most frequently refer patients to individual **Physical Therapy (PT)** for individual stretching and strengthening exercises ~ *it is covered*



Yoga for Chronic Low Back Pain (cLBP) in the Underserved

Design of Saper et al.

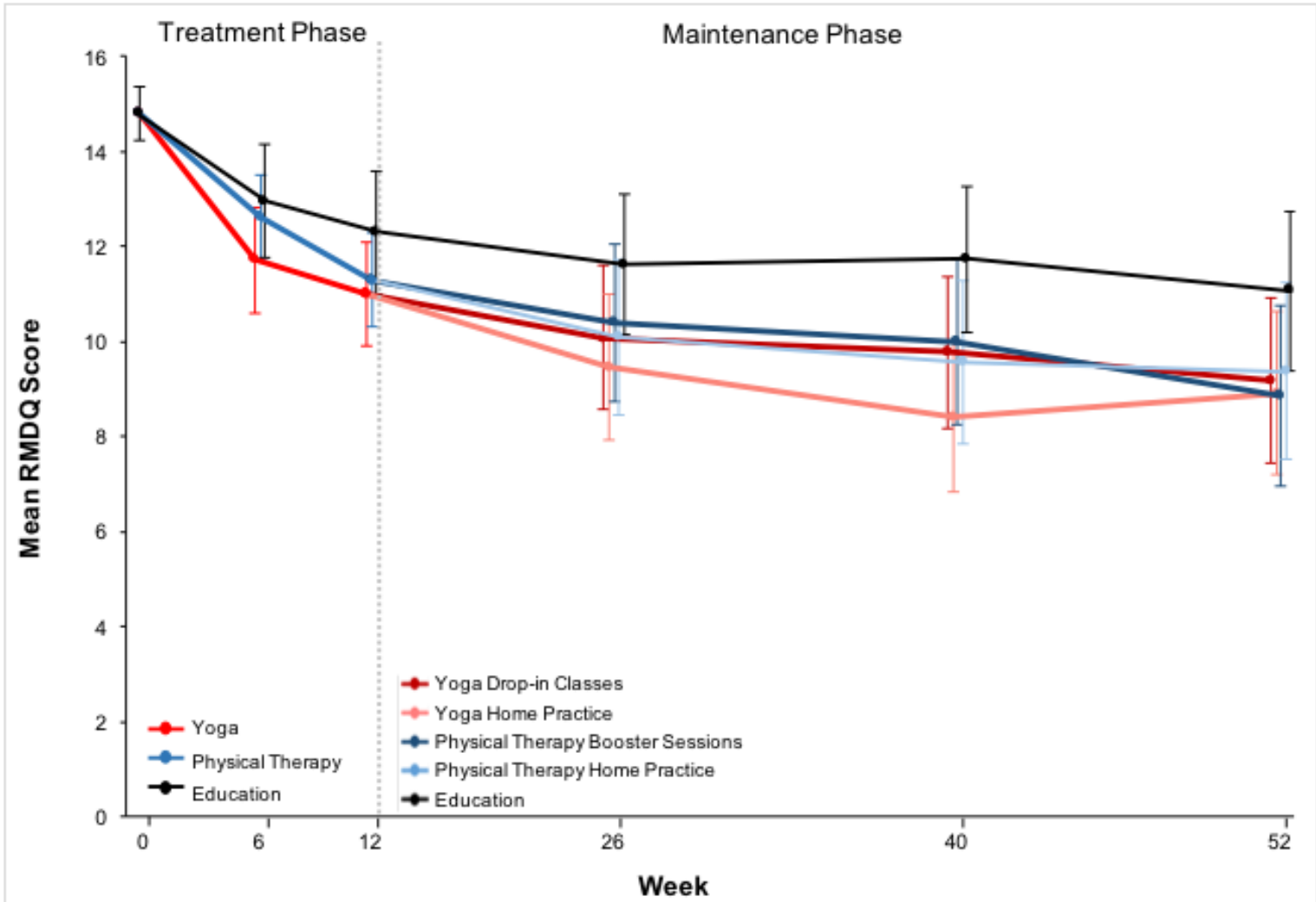
- 320 patients, cLBP randomized
 - Yoga - 12 weekly, 75-min group classes, 30-min home practice, followed to 1 year with classes (n = 127)
 - PT- 15, 60-min individual appts. over 12 weeks, followed to 1 year, half randomized to 5 boosters (n = 129)
 - Education – The *Back Pain Helpbook* with newsletter and support calls (n = 64)
- Outcomes – Roland Morris Disability Questionnaire (RMDQ)

Saper et al., *Annals of Internal Med*, 2017.



Yoga for Chronic Low Back Pain

Roland Morris Disability: Intention to Treat





Yoga for Chronic Low Back Pain (cLBP) in the Underserved

Results

- Primary Outcome:
Improvement in RMDQ by participants in Yoga was not inferior to improvement by those in PT
 - Yoga – Decrease in disability: -1.7
 - PT – Decrease in disability: -2.6
- Compared to Education:
 - Yoga and PT less likely to use medications
 - Yoga and PT more satisfied with the intervention

Chronic Low Back Pain

MBSR vs CBT vs Usual Care - *Design*



- 342 adults chronic low back pain
- Randomized to
 - MBSR (8 weekly, 2-hr classes)
 - CBT (8 weekly, 2-hr classes)
 - Usual care control
- Outcome:
 - Roland Disability Index
 - Bothersomeness

Chronic Low Back Pain MBSR vs CBT vs Usual Care - *Results*

Outcomes

<u>Group</u>	<u>MBSR</u>	<u>CBT</u>	<u>UC</u>
Roland RDQ	60.5%	57.7%	44.1%
Less Bothersome	43.6%	44.9%	26.6%



MBSR = CBT, both superior to UC

- These findings indicate that either MBSR or CBT are effective treatment options for chronic low back pain.

Key – was having the Usual Care Control group



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Opioid Epidemic Forcing Health Care to Reconsider Pain Management

- Each day, estimates range from 115-175 Americans die as a result of opioids, average deaths per day = 130
- The estimated number of deaths in 2015 was more than 33,000, which rose in 2017 to more than 72,000
- The CDC estimates that the total "economic burden" of prescription opioid misuse alone in the United States is \$78.5 billion a year

The Opioid Epidemic is providing a major opening for nonpharmacological approaches to pain



“Nonpharmacological Approaches” for Pain



In early 2017, the Joint Commission announced:
Beginning January 1, 2018, the commission would require that hospitals promote nonpharmacological approaches to pain management




*Public Comment Period:
Email campaign – given the evidence,
change “promote” to “provide...”*

1000s of emails were sent to **The Joint Commission**

“Nonpharmacological Approaches” for Pain



In *late* 2017, the Joint Commission announced:
Beginning January 1, 2018, the commission
would require that hospitals PROVIDE 
nonpharmacological approaches to pain management



Both recommend nonpharmacological modalities for pain



Evidence for Nonpharmacological Approaches for Pain

CLINICAL GUIDELINE



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*

“For patients with chronic low back pain, clinicians and patients **should initially select** nonpharmacologic treatments...acupuncture, mindfulness-based stress reduction, tai chi, yoga ...cognitive behavioral therapy...”



The Opioid Epidemic Led to Focus on Pain Management by...

- Pain Management Best Practices Inter-Agency Task Force
- Convened by the Dept. of Health and Human Services with: U.S. Dept. of Defense, Dept. of Veterans Affairs, and Office of National Drug Control Policy



- Chair, Vanila M. Singh, M.D.
Chief Medical Officer, Office of the Asst. Sec. Health
U.S Health and Human Services
 - Public members (12), Organizational
representatives (9) and Federal members (8)
- **Goal:** To address acute and chronic pain in light of
the ongoing opioid crisis



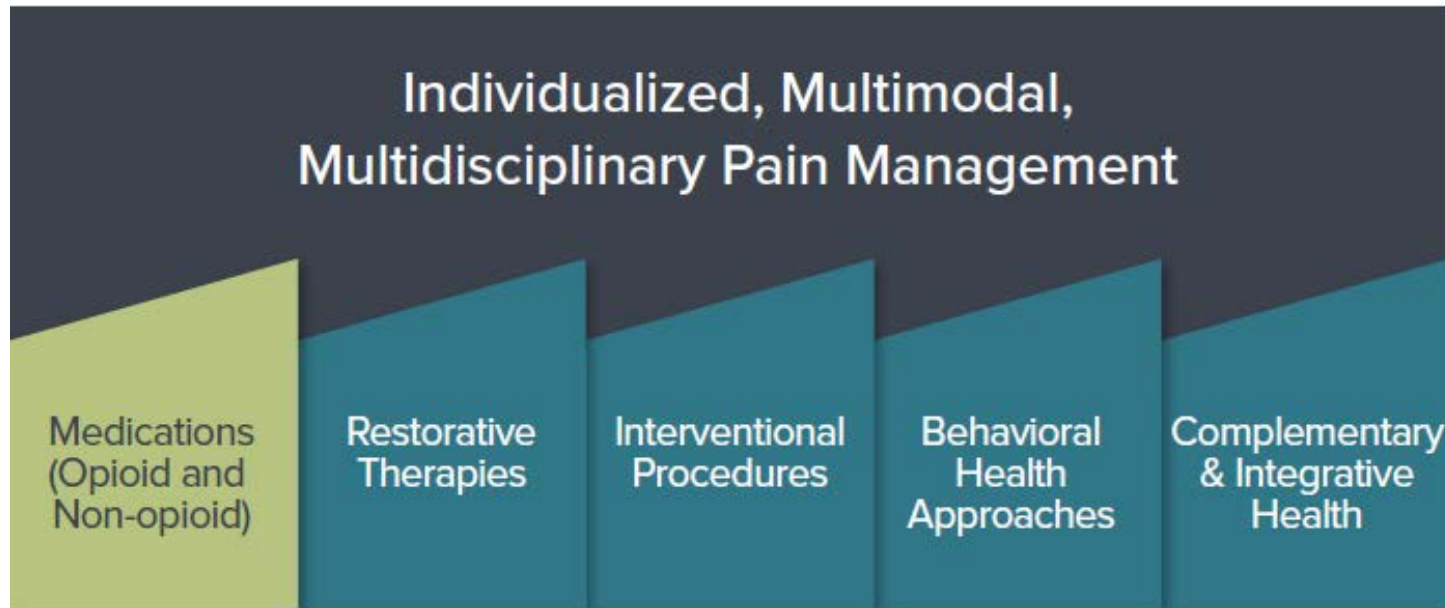
Interagency Task Force Mandate: Respond to the Opioid Epidemic

- To identify gaps, inconsistencies, and updates and to make recommendations for best practices for managing acute and chronic pain
- The report, “Pain Management Best Practices” calls for
 - An emphasis on an **individualized, patient-centered** approach ...
 - A **therapeutic alliance** between patient and clinicians
 - A **multidisciplinary approach** for chronic pain
 - Across **various disciplines**
 - Using one or more treatment modalities



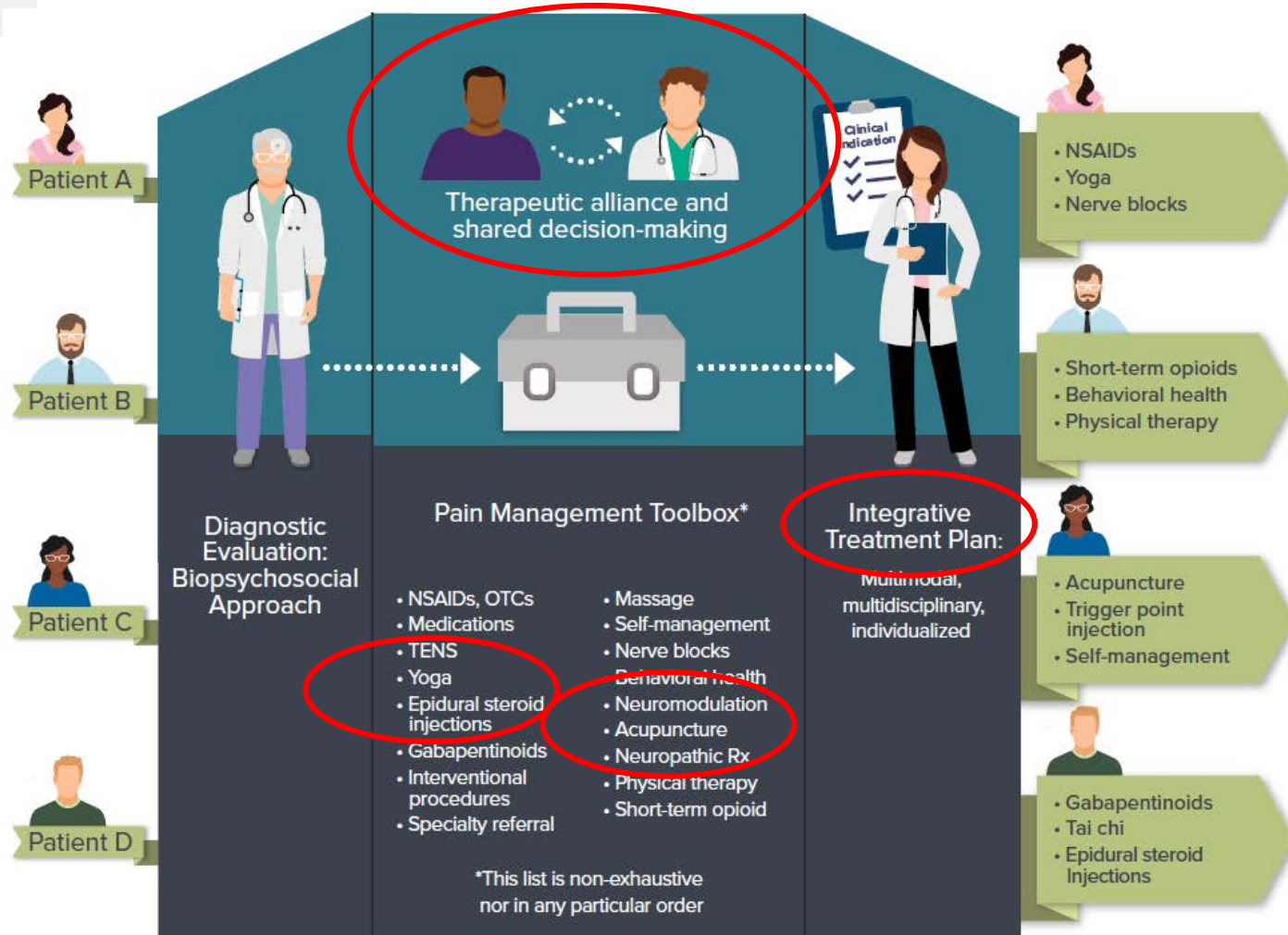
Interagency Task Force Pain Management Best Practices

Include the following five broad categories:





Interagency Task Force Pain Management Best Practices





Overview

- Consider the context that is giving rise to *increased interest* in integrative health
 - ✓ Research has provided an evidence-base for integrative approaches for pain
 - The opioid crisis opens the door to *integrative approaches* to pain
 - ✓ Joint Commission, Amer College of Physicians, and HHS have called for nonpharmacological approaches to pain ~ but these are not supported health benefits
- ➔ **Aligning forces are building pressure**

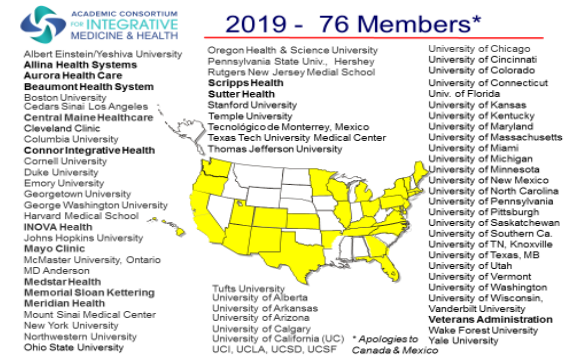


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Integrative Models of Care for Pain

- VA's Comprehensive Addiction and Recovery Act -2016*
 - Considers IM as standard medical benefits: acupuncture, biofeedback, massage, guided imagery, tai chi, hypnotherapy, yoga and meditation
 - Providing valuable experience and data
- However, the VA payment model is not generalizable
- Academic Health Centers have challenges in providing IM or nonpharmacological therapies to the general population and the underserved – *some have closed!*



* Taylor, Hoggatt and Kliger, Journal of General Internal Medicine, 2019



A Model of Care for the Underserved and Possibly for Many More

- FQHCs are community-based health care providers that receive funds from the HRSA Health Center Program provide primary (and preventive) care services in underserved areas
- “They must meet a stringent set of requirements, including providing care on a sliding fee scale based on ability to pay and operating under a governing board that includes patients”*

*Constance Earl, DO, Integrative Health Director, West County Health Centers

- Northern California FQHCs:
West County Health Centers, Petaluma Health Center

*Special thanks to Drs. Hameed, Earl, and Kohli
for sharing slides and thoughts*



A Model of Care for the Underserved: Petaluma Health Center

Fasih Hameed, MD, Medical Director,
Integrative Medicine & Wellness

- 7 Service Sites:
 - 2 Major clinics
 - 2 High schools
 - Santa Rosa Community College, Petaluma Campus
 - Mary Issac Homeless Shelter Clinic (COTS)
 - Rohnert Park Vision Center (Walmart)
- Patients Seen – 35,000
 - 22% of patients are uninsured
 - 48% of patients are Spanish speaking
 - 31% are children and young adults
 - 62% are adults (18-64 years)
 - 7% are older adults (65 years+)



A Model of Care for the Underserved: Petaluma Health Center Overview of Services

- Complementary Therapies and Integrative Medicine
Acupuncture, Osteopathic Manipulation
- Shared Medical Visits – Chronic Pain, Diabetes, Smoking, Fall Prevention for Seniors, Anxiety & Depression
- Community Fitness Classes
- Food Access, Nutrition and Culinary Medicine
- Community Garden





**Petaluma Health Center
Community Garden**



Community Health Centers: Unique Opportunities to Address Determinants of Health

- Team-based approach
- Case management & pati
- Multi...
-
-
-
-
- ...Classes
- Cooking Demos

Thank You
Drs. Fasih Hameed or Constance Earl
Please direct any questions to them





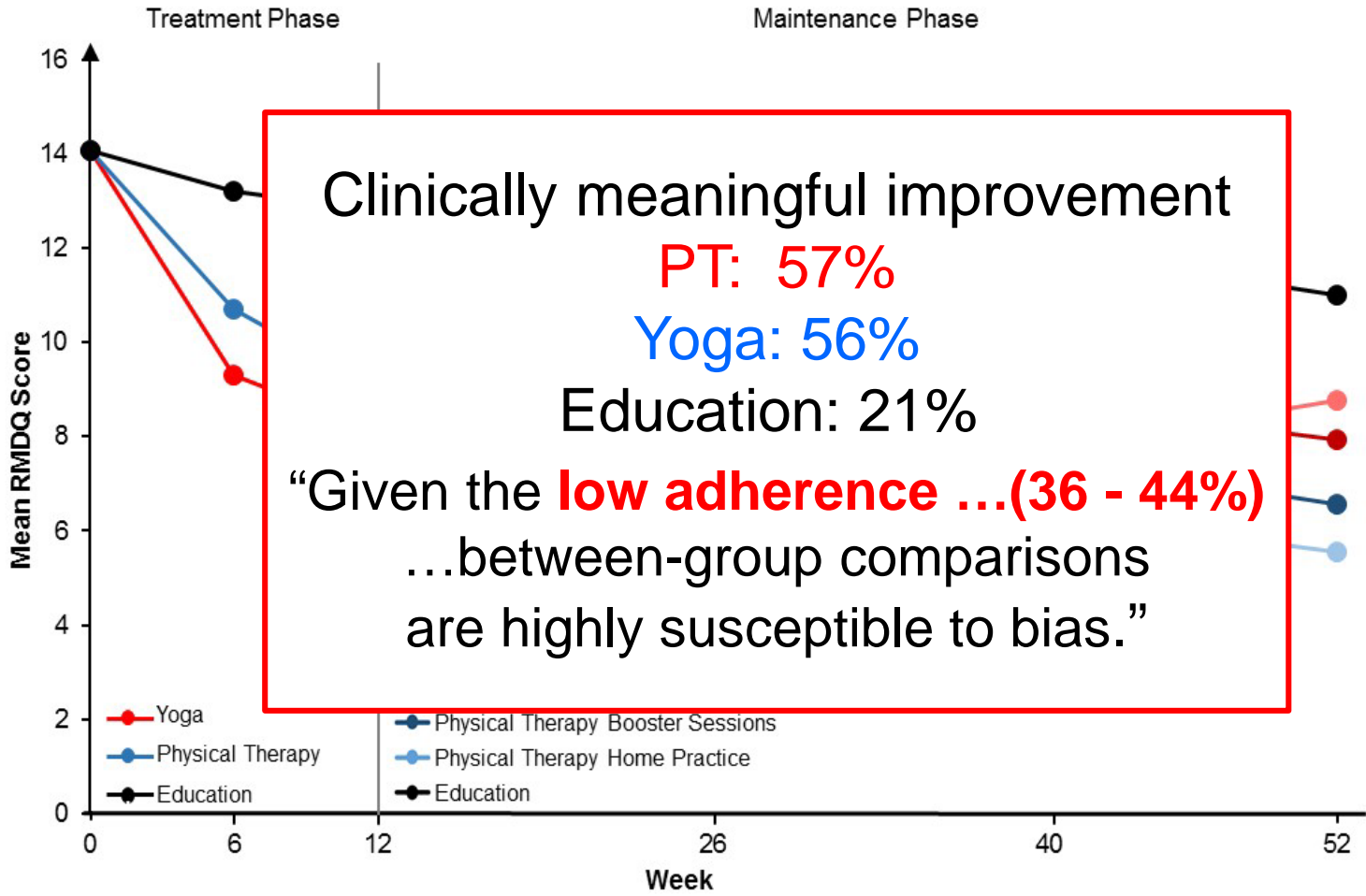
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Yoga for Chronic Low Back Pain

Roland Morris Disability – Per Protocol



Chronic Low Back Pain MBSR vs CBT vs Usual Care - *Adherence*

- Participants
 - Mean age 49.3
 - 65.7% female

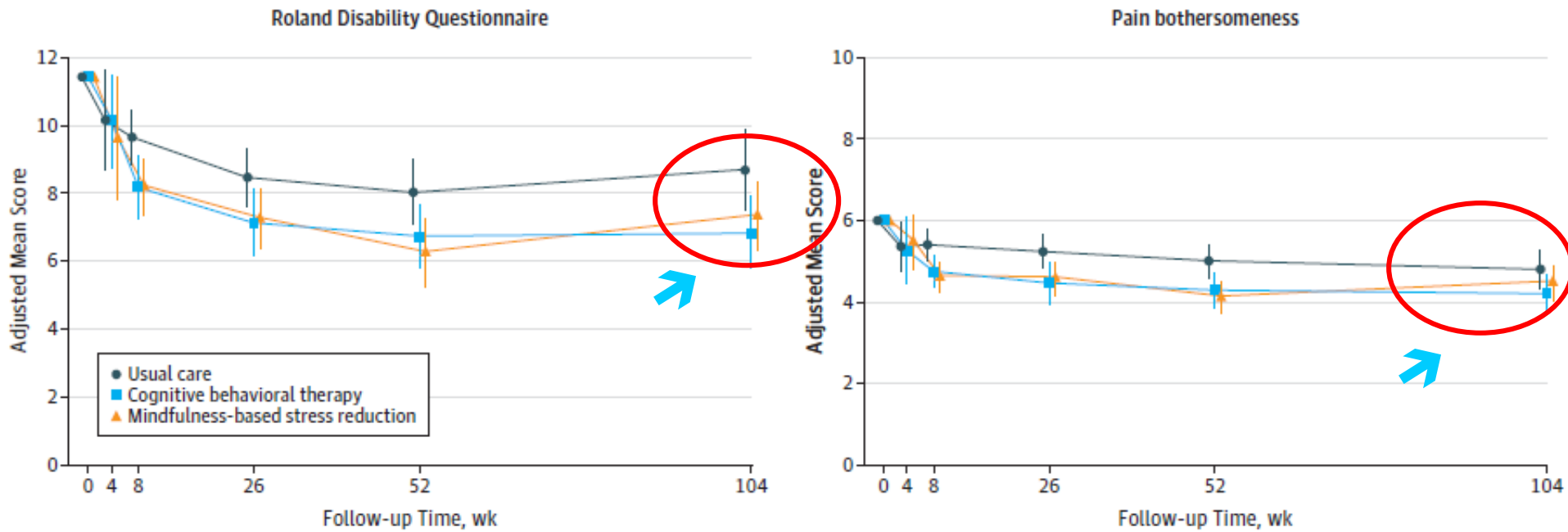


→ Adherence

- 53.7% attended 6 or more of the 8 weekly sessions
- 86% completed 26 wk follow-up
- 85% completed 52 wk follow-up

↖ Low Adherence?
...and only to sessions
What about home practice?

Chronic Low Back Pain – MBSR vs CBT vs Usual Care – *Two Year Follow-up*



→ Cognitive Behavior Therapy



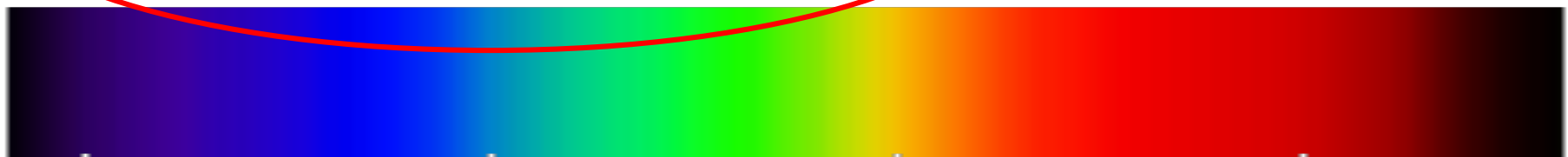
Integrative Medicine



Complementary
Medicine*

Behavioral
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Acupuncture

Stress Management

Surgery

Yoga Therapy

Physical Activity

Medication

Meditation/Breathing

Diet/Nutrition

Radiation

Massage

Cognit. Behav. Therapy

Immunotherapy

Social Support

* Examples



Overview

- Consider the context that is giving rise to *increased interest* in integrative health – *Public Interest*
- Highlight how the opioid crisis opens the door to *integrative approaches* to pain – *Unfunded mandate*
- Present examples of integrative models of care for pain; *focus turns to FQHCs – IM is an optimal fit for pain for the underserved and beyond*
- Discuss potential challenges – *Adherence ...* and opportunities to increase the *effectiveness* of integrative therapies for the underserved and beyond
 - *Indeed community clinics “4 the US” offer a potential model for delivering IM to the general population*



*When we think of
health care...*

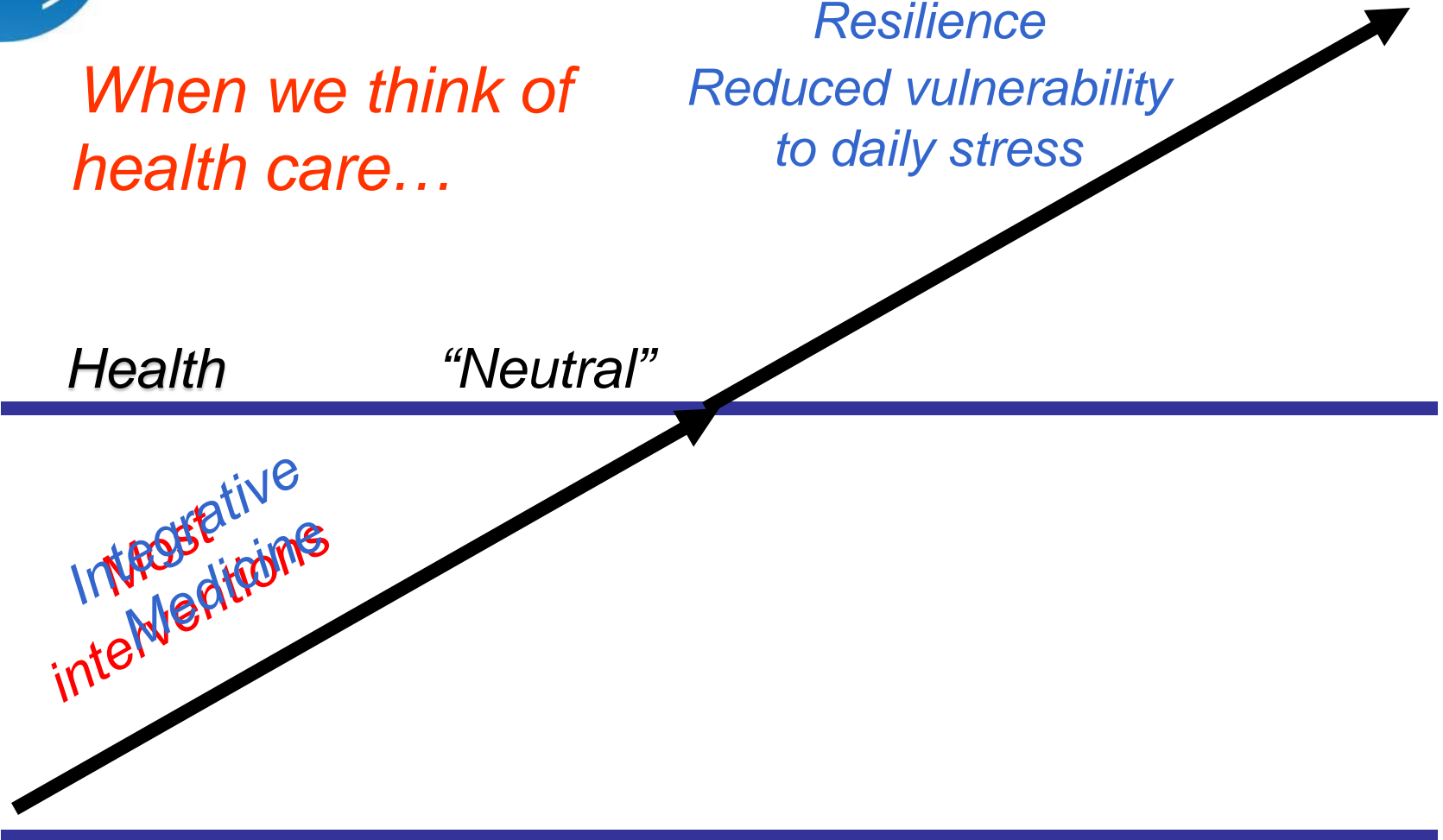
Optimal Health
Resilience
Reduced vulnerability
to daily stress

Health

“Neutral”

*Integrative
West
Medicine
interventions*

Ill-health

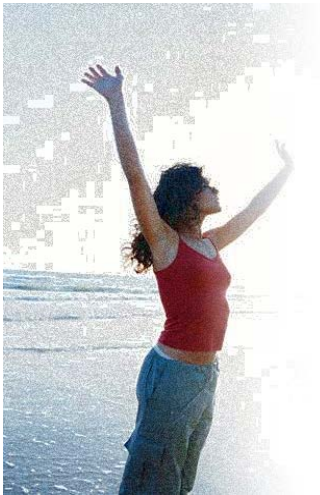


The Goal of Integrative Medicine

To create *healthier communities*

- Where individuals, families, and groups
 - Have access to healthy choices that enhance resilience
 - Prevent disease
 - And enhance the quality of their lives

... and, I believe IM4US is making this possible!



Thank you!

I wish to thank my many mentors and colleagues, including *Liza Goldblatt, Fasih Hameed, Constance Earl, Rob Saper, Katherine Gergen-Barnett, Steve Woolf, Andrew Weil, Victoria Maizes, Anne Marie Chiasson, George Kaplan, Penny George, Leonard Wisneski, Jude Bornstein-Chau, Sharad Kohli, Bob Twillman, Paula Gardner, and so many others*

As well as the Integrative Healthcare Policy Consortium, the National Academy of Medicine and NIH for helping me stretch my boundaries.

