

# Whole Person Back Pain Care – The Full Spectrum of Care

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**Christin Veasley, BS** | Co-Founder & Director, Chronic Pain Research Alliance

# Disclosures

## **Steve Stanos, DO**

Consulting

- BDSI
  - Emergent Biosolutions
  - Hisimatsu
  - Lilly
  - Pfizer
  - Vertex
- 

## **Aram Mardian, MD**

- Research funding
  - Site Director for the EMPOWER clinical trial at the Phoenix VA; Funded by PCORI, coordinated by Stanford University
  - Local Site Investigator for the Phoenix VA for the SCEPTER trial; Funded by VA
- Federal Employee
  - Views are my own and not those of the federal government or the Department of Veterans Affairs

## **Christin Veasley, BS**

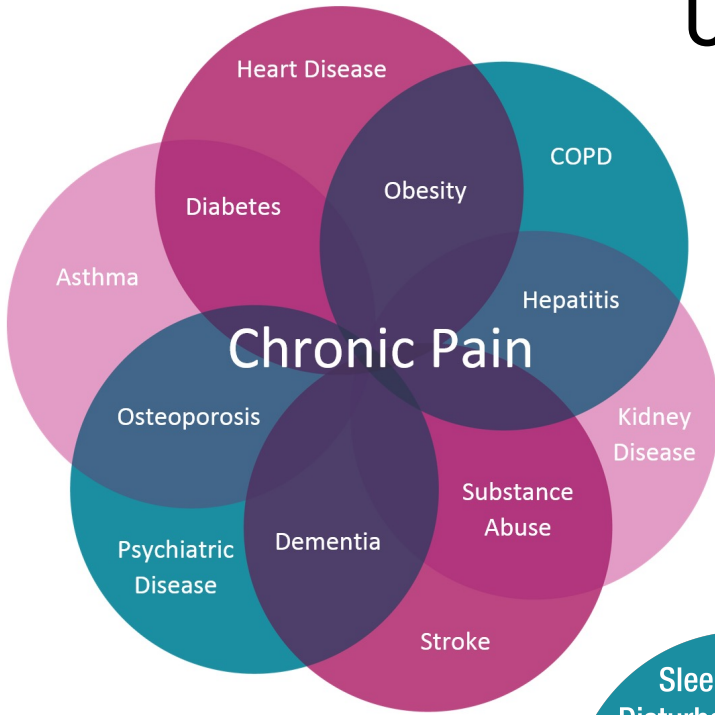
- No Disclosures

# Objectives

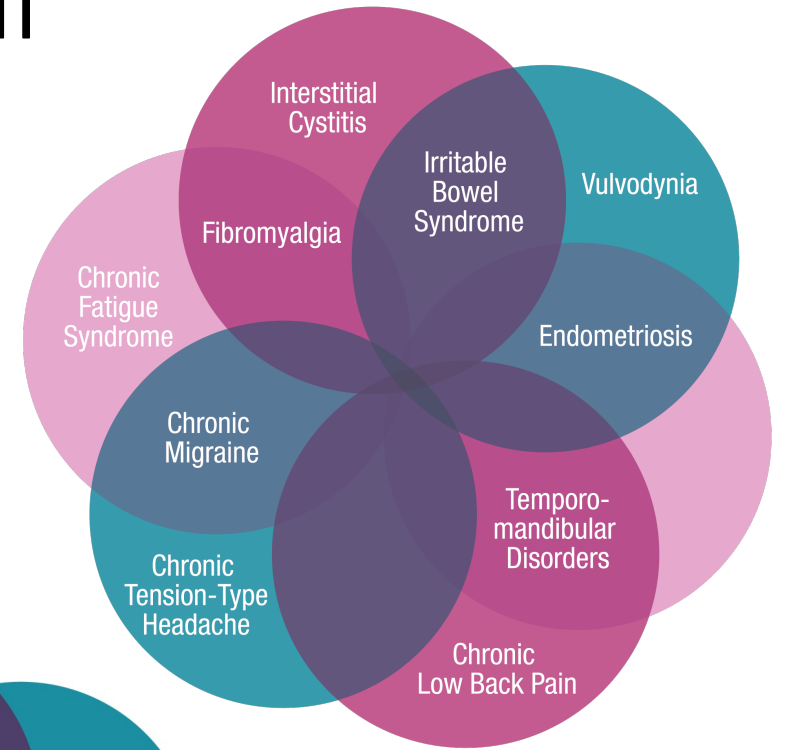
- Chris
  - Describe an example of a paradigm shift in NIH funded research to study chronic back pain using a biopsychosocial, patient-centered, whole-person approach with interdisciplinary methods and innovative technologies
- Aram
  - Contrast a disease-focused and health-focused approach to chronic low back pain
  - Describe the benefits of team-based care from the perspective of both healthcare providers and patients
- Steven
  - Understand specific team member disciplines and their goals in providing whole person care
  - Appreciate patient yellow flags as targets for care and change
  - Be familiar with a “brain retraining” approaches to augment standard physical therapy including Pain Neuroscience Education; the “Protectometer”, and Motor Visualization

# Complexity of Chronic Pain

*Experience is Highly Individual*

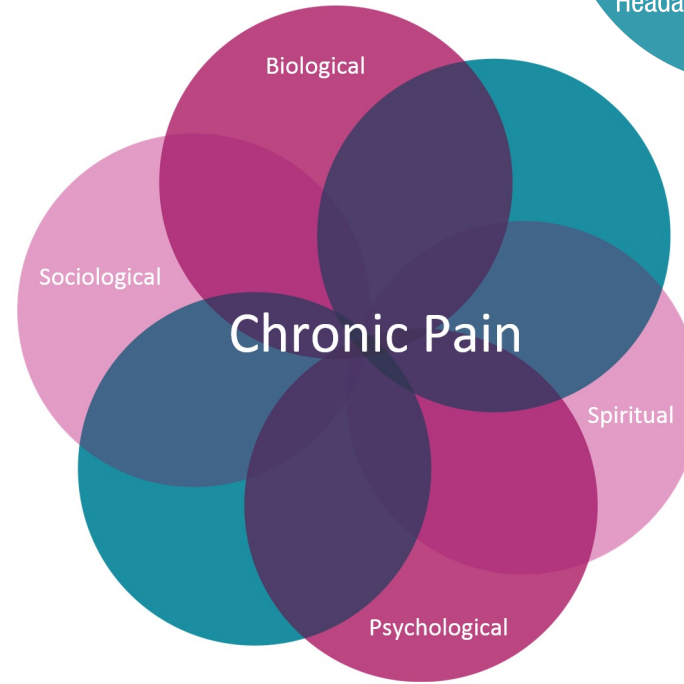
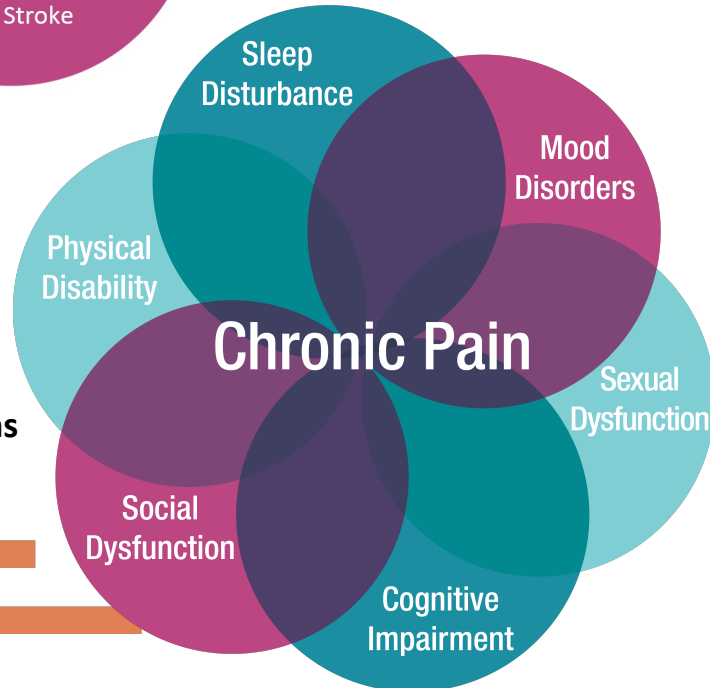


**Multiple Chronic Conditions**



**Multiple Pain Conditions**

**Multiple Pain-Related Conditions**



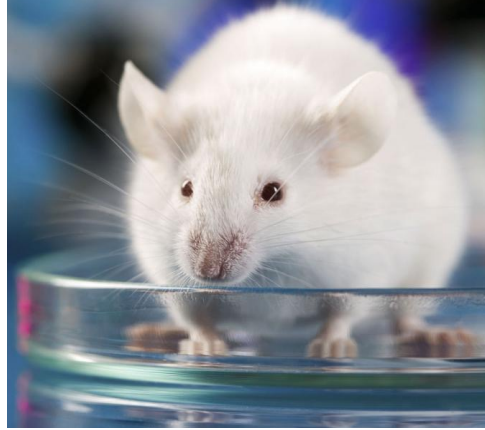
**Individualized Bio-Psycho-Social-Spiritual Experience/Impact**



# None of Our Systems are Designed to Address Complexity of Chronic Disease & Especially Multimorbidity (with few exceptions)

**ICD-11**

Disease Classification



Animal Models & Basic Research



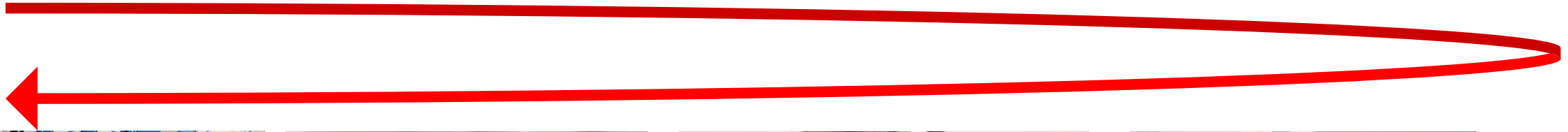
Pharma & Med Dev Industry



Clinical Trials



Regulatory System



Payors - Coverage & Reimbursement



Health Systems - Acute Care Model with Limited Time





# My Story

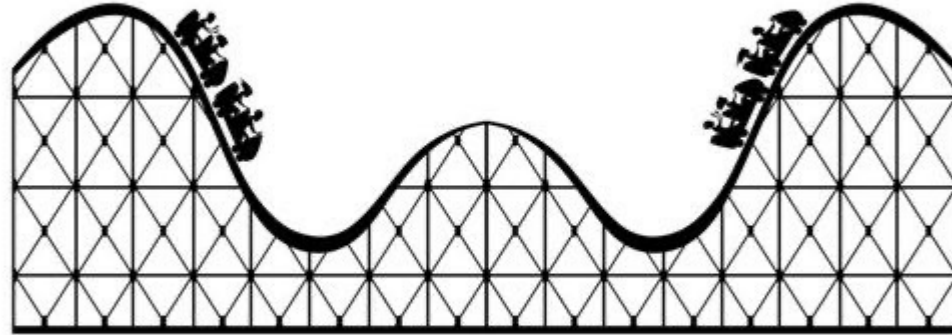






# How This Plays Out in Real Life

Vicodin    Neurontin    Pamelor    Flexeril    Cymbalta    Savella    Inderal    Pregabalin    Zanaflex



Self-care    Ice/Heat    Injections    Physical Therapy    Chiropractic    TENS    Yoga    Acupuncture    Massage





**The system  
is broken.**

**Either way, the  
system is not working  
for most patients!**

**THE SYSTEM IS NOT BROKEN.  
IT WAS BUILT THIS WAY.**

One's got to change the system, or  
one changes nothing.

— *George Orwell* —







HEALTH

CARE



"I tried PT, and it just made me worse."





“So, you want me to see a  
psychologist. You think it’s  
all in my head?”



# ***The Lancet* Series call to action to reduce low value care for low back pain: an update**

Rachelle Buchbinder<sup>a,b,\*</sup>, Martin Underwood<sup>c,d</sup>, Jan Hartvigsen<sup>e,f</sup>, Chris G. Maher<sup>g,h</sup>

## **1. Introduction**

The 2018 *Lancet* Low Back Pain Series, comprising 3 papers written by 31 authors from disparate disciplines and 12 different countries, raised unprecedented awareness of the rising global burden of low back pain partly attributable to poor quality health care.<sup>12,30,44</sup> Many

people with low back pain get the wrong care, causing harm to millions across the world and wasting valuable health care resources.

Based upon an up-to-date, evidence-based synthesis, the series described current guideline recommended care of low back pain, and new strategies that show promise, but require further testing, to reduce low value care. We also proposed a series of actions needed

coverage in at least 17 countries including wall-to-wall coverage in the United Kingdom, Australia, and Denmark. Furthermore, interest in *The Lancet* Low Back Pain Series has persisted as evident by continued attention from major media outlets. For example, *The Economist* published an article entitled “Back pain is a massive problem which is badly treated” on 18 Jan 2020,<sup>17</sup> accompanied by a “Leader” (editorial opinion) on the topic.

This review, invited to coincide with a plenary at the 2020 World Congress on Pain, outlines and discusses some of the main messages from *The Lancet* Low Back Pain Series, with a focus on pertinent positive and negative developments since it was published.

## Overtreating Chronic Back Pain: Time to Back Off?

*Richard A. Deyo, MD, MPH, Sohail K. Mirza, MD, MPH, Judith A. Turner, PhD, and Brook I. Martin, MPH*

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## Trends, Major Medical Complications, and Charges Associated With Surgery for Lumbar Spinal Stenosis in Older Adults

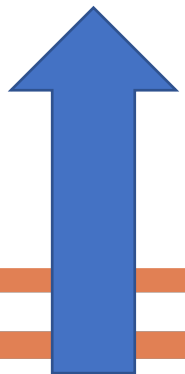
JAMA, April 7, 2010

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Richard A. Deyo, MD, MPH

Sohail K. Mirza, MD, MPH

**Context** In recent decades, the fastest growth in lumbar surgery occurred in older patients with spinal stenosis. Trials indicate that for selected patients, decompressive



- **629% increase** in Medicare expenditures for **ESI**
- **423% increase** in expenditures for **opioids for back pain**
- **307% increase** in the number of **lumbar MRI** among Medicare beneficiaries
- **220% increase** in **spinal fusion surgery rates**
- **15-fold increase** in **complex fusion** procedures from 2002-2007



March 3, 2020

Original Investigation | Orthopedics

# Expenditures and Health Care Utilization Among Adults With Newly Diagnosed Low Back and Lower Extremity Pain

Lily H. Kim, BA; Daniel Vail, BA; Tej D. Azad, MS; Jason P. Bentley, PhD; Yi Zhang, AB; Allen L. Ho, MD; Paras Fatemi, MD; Austin Feng, BA; Kunal Varshneya, BA; Manisha Desai, PhD; Anand Veeravagu, MD; John K. Ratliff, MD

**Conclusions and Relevance** The findings suggest that surgery is rare among patients with newly diagnosed LBP and LEP but remains a significant driver of spending. Early imaging in patients who do not undergo surgery was also a major driver of increased health care expenditures. Avoidable costs among patients with typically self-limited conditions result in considerable economic burden to the US health care system.

**“Only 1.2% of patients received surgery, but they accounted for 29.3 % of total 12-month costs (\$784 million).”**



Table 2. Health Care Estimated Spending in 2016 for the 100 Most Expensive Health Conditions of the 154 Health Conditions Analyzed

Health Care Spending Rank (High to Low)	Health Condition	Category Code	Health Care Spending, 2016 \$Billion (95% CI)	Estimate, % <sup>a</sup>			Type of Payer	Aggregated Age Group, y		
				<20	20-64	≥65		Public Insurance	Type of Payer	
									Private Insurance	Medicare
1	Low back and neck pain	A	134.5 (122.4-146.9)	1.9	67.9	30.3	33.7	44.2	6.0	27.1
2	Other musculoskeletal disorders <sup>c</sup>	A	129.8 (116.3-149.7)	3.9	60.7	35.4	36.2	42.4	3.5	23.8
3	Diabetes	B	111.2 (105.7-115.9)	2.5	57.4	40.1	49.8	39.7	13.6	27.7
4	Ischemic heart disease	C	89.3 (81.1-95.5)	0.4	42.7	56.9	54.0	45.1	5.7	52.0
5	Falls	F	87.4 (75-100.1)	5.2	38.4	56.4	46.7	58.0	7.0	54.1
6	Urinary diseases <sup>d</sup>	B	86.0 (76.3-95.9)	4.1	48.2	47.7	49.2	49.5	5.1	26.7
7	Skin and subcutaneous diseases <sup>e</sup>	E	85.0 (80.5-90.2)	15.2	55.3	29.5	35.0	19.2	24.6	2.2
8	Osteoarthritis	A	80.0 (72.2-86.1)	0	50.1	49.9	45.4	36.5	6.6	60.1
9	Dementias	H	79.2 (67.6-90.8)	0	3.1	96.9	56.1	45.0	40.0	1.4
10	Hypertension	M	79.0 (72.6-86.8)	0.7	48.1	51.2	56.9	74.0	5.1	42.0
11	Oral disorders <sup>f</sup>	E	76.4 (73.8-79.4)	16.3	58.1	25.6	15.1	37.7	8.9	53.1
12	Pregnancy and postpartum care <sup>g</sup>	I	71.3 (64.9-77.7)	2.7	97.3	0	20.9	41.8	11.9	74.4
13	Depressive disorders	G	67.5 (62.3-72.7)	10.0	75.5	14.5	53.4	54.4	34.9	0
14	Sense organ disorders <sup>h</sup>	E	64.1 (58.1-69.8)	7.9	35.5	56.7	46.3	58.9	4.9	11.8
15	Well dental	I	60.5 (57.3-63.2)	39.8	44.3	16.0	10.7	50.1	8.2	59.3
16	Road injuries	F	57.9 (46.7-71.6)	8.7	72.5	18.8	36.2	40.6	4.4	0
17	Other neurological diseases <sup>i</sup>	H	52.9 (47.1-58.7)	5.2	62.2	32.6	41.7	65.0	8.1	72.3
18	Septicemia	D	52.5 (42.0-62.9)	2.5	53.3	44.2	55.0	45.3	6.1	29.4
19	Other chronic respiratory diseases <sup>j</sup>	L	45.0 (39.4-50.1)	22.6	57.7	19.7	26.9	41.2	9.2	55.7
20	Other digestive diseases <sup>k</sup>	J	44.4 (40.6-49.5)	8.8	54.0	37.2	48.5	32.8	10.7	4.6
21	Anxiety disorders	G	42.4 (37.8-47.7)	9.7	75.3	15.0	49.6	73.5	8.0	51.7
22	Cerebrovascular disease	C	41.9 (37.7-47.1)	1.1	35.8	63.1	56.5	51.5	7.1	21.9
23	Gynecological diseases <sup>l</sup>	B	39.4 (35.3-43.3)	2.4	86.3	11.2	18.5	24.2	6.0	10.6
24	Asthma	L	35.5 (32.4-38.2)	22.1	56.8	21.1	41.4			
25	COPD	L	34.3 (31.5-37.3)	0.6	35.8	63.6	69.8			

JAMA | Original Investigation

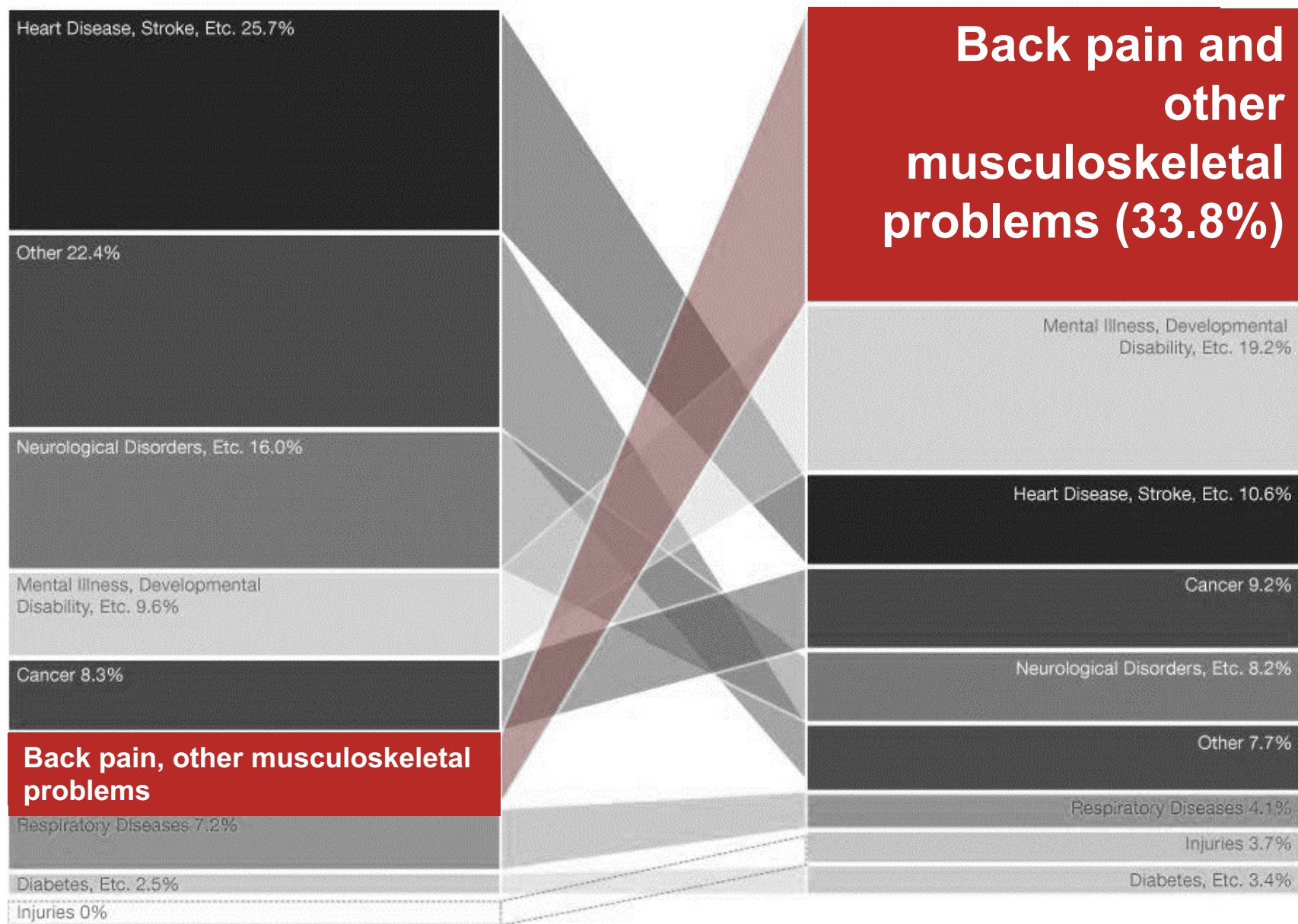
## US Health Care Spending by Payer and Health Condition, 1996-2016

Joseph L. Dieleman, PhD; Jackie Cao, MS; Abby Chapin, BA; Carina Chen, MA; Zhiyin Li, MS; Angela Liu, MPH; Cody Horst, MPH; Alexander Kaldjian, MS; Taylor Matyas, MS; Kirstin Woody Scott, MPhil, PhD; Anthony L. Bui, MD, MPH; Madeline Campbell, BS; Herbert C. Duber, MD, MPH; Abe C. Dunn, PhD; Abraham D. Flaxman, PhD; Christina Fitzmaurice, MD; Mohsen Naghavi, MD, MPH, PhD; Nafis Sadat, MA; Peter Shieh, MS; Ellen Squires, MPH; Kai Yeung, PharmD, PhD; Christopher J. L. Murray, MD, DPhil

Share Of Newly Disabled Workers, By Diagnosis

1961

2011



**“I have pain in my L5  
vertebrae.”**





**The Biomedical Approach focuses on the painful body part.**





**Instead of focusing on the body part, focus on the whole-system.**



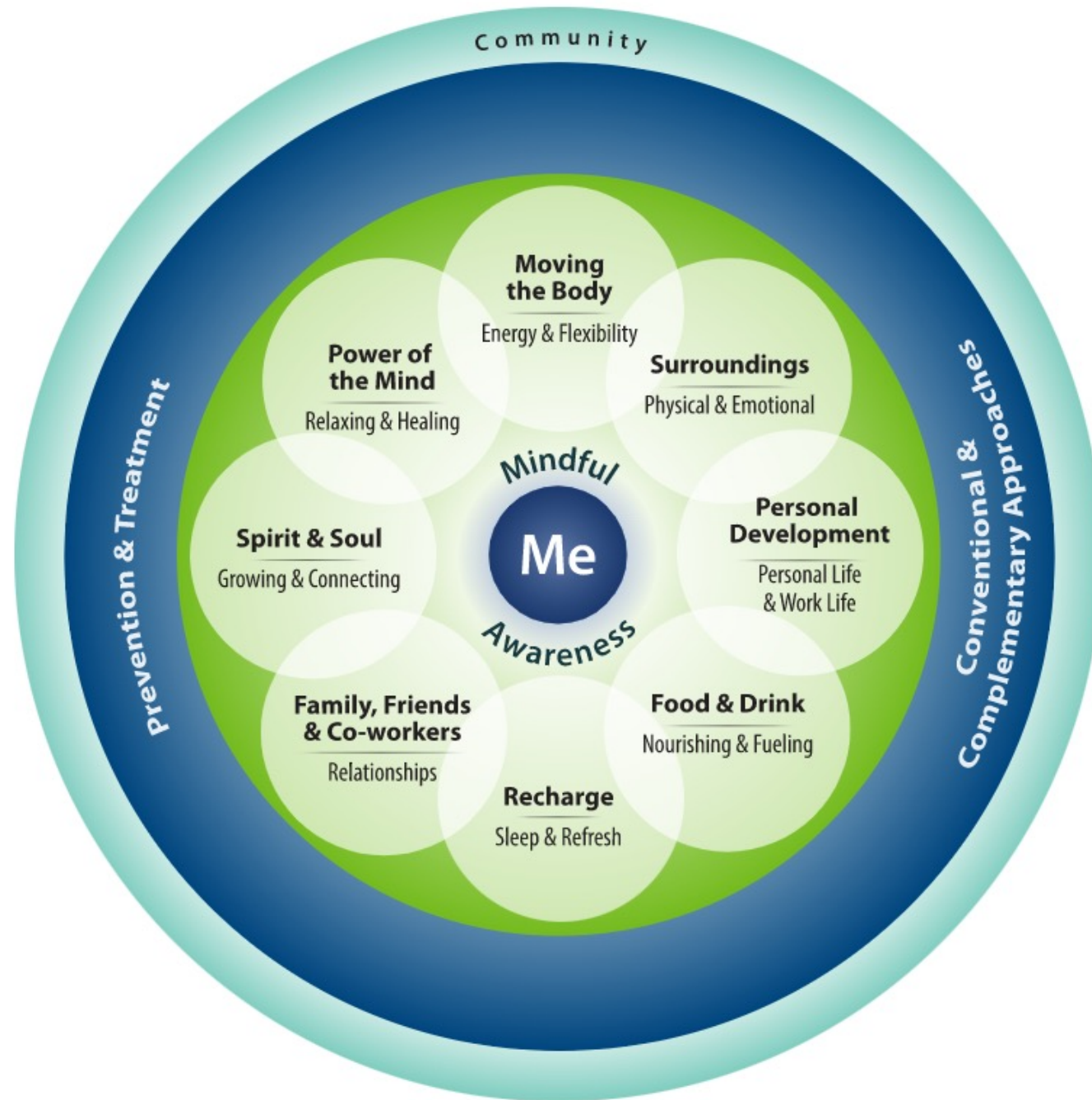
**SHIFT**

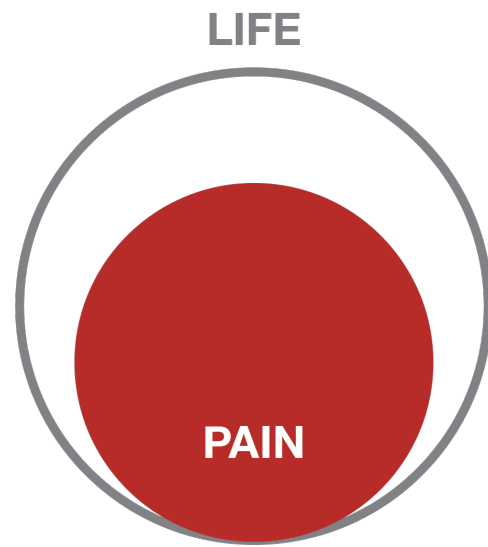
**FROM**

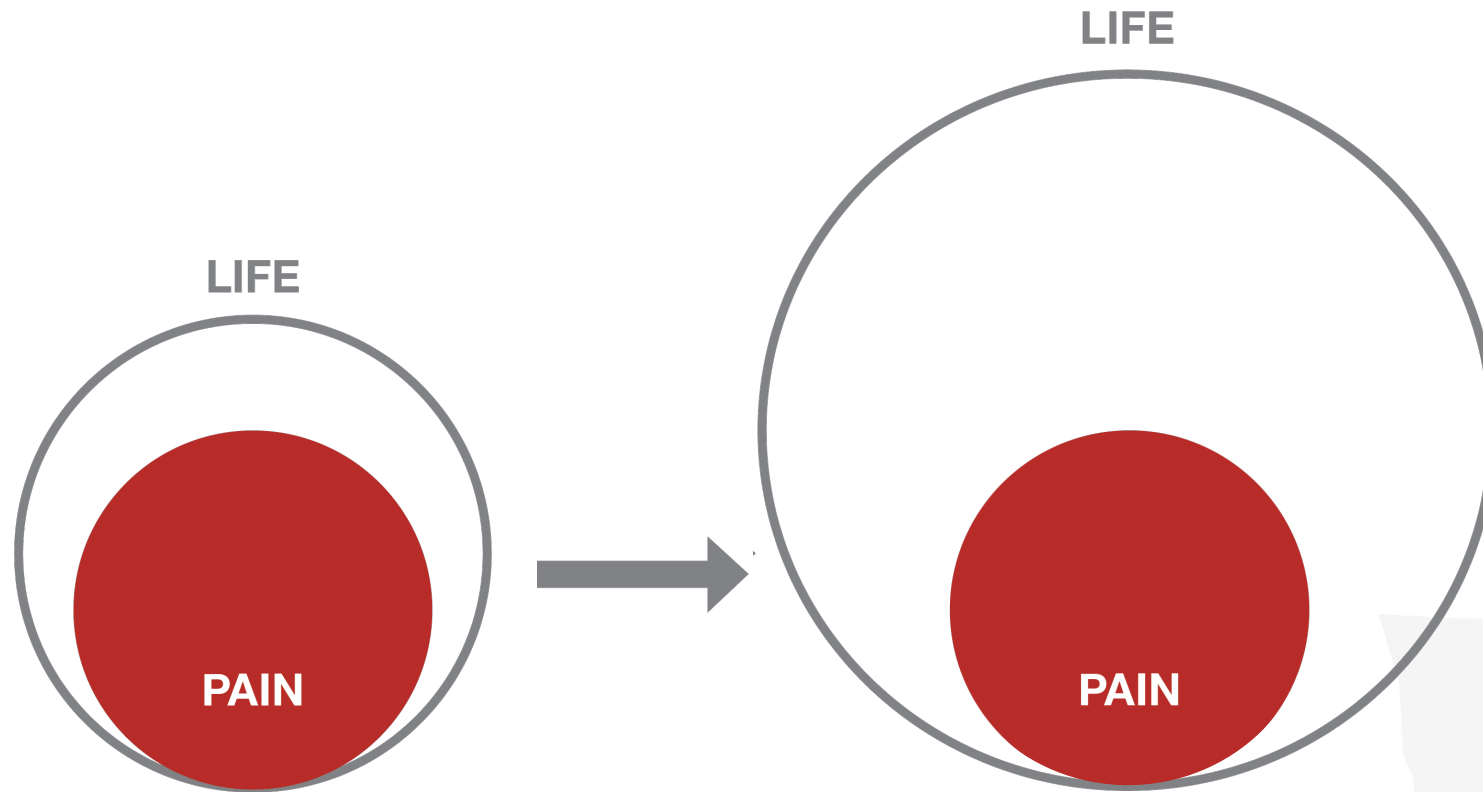
**Treatment of pain is episodic and narrowly focused on passive therapies that numb or remove pathology in a body part.**

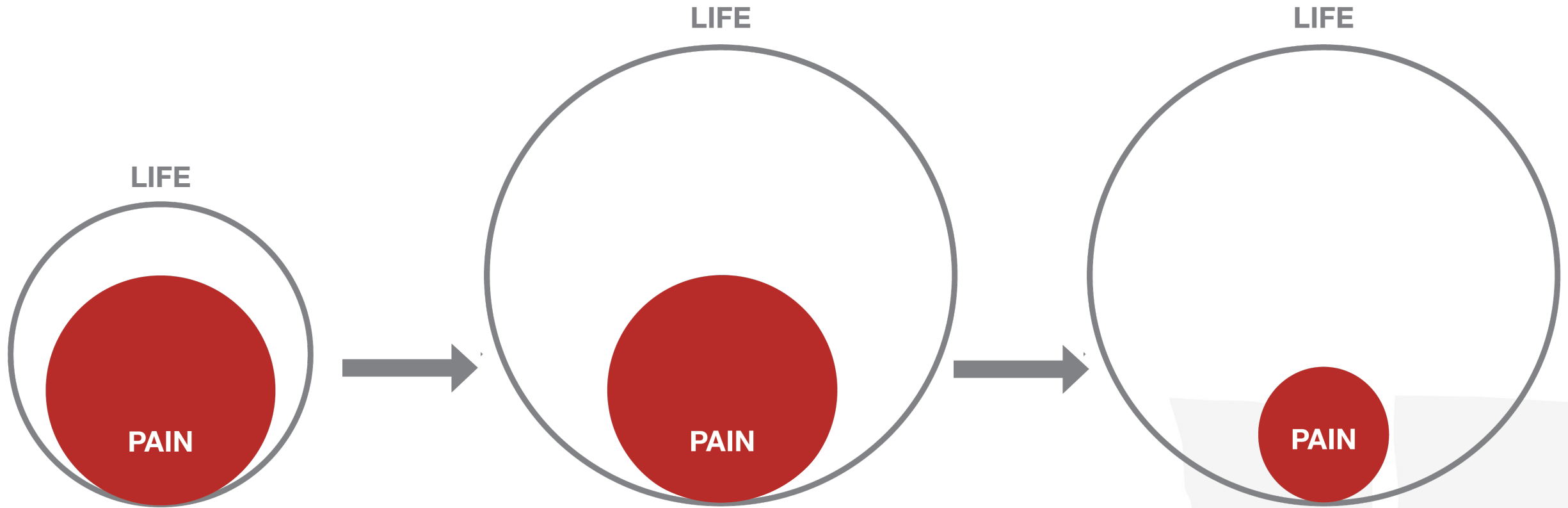
**TO**

**Treatment of pain is broadly focused on improving the longitudinal health, function and wellbeing of the whole person who has pain.**









Curiosity and Interest

Appreciation

Noticing Beauty

Compassion and Empathy

Helping

Friendship and Love

Creativity

Learning

Engagement

Relationships

Self Growth

Resilience

(Kent, *Frontiers in Psych*, 2021)



“Quick Fix”



## Whole Health System







# DISCOVER WHAT MATTERS TO YOU.

**Live Whole Health.**

**VA**



U.S. Department  
of Veterans Affairs

[va.gov/wholehealth](https://va.gov/wholehealth)

MEETING

# APPLY IT

- Use the PHI as PDF or an App



## PERSONAL HEALTH INVENTORY

Use this circle to help you think about your whole health.

- "Me" at the center of the circle: This represents what is important to you in your life, and may include your mission, aspirations, or purpose. Your care focuses on you as a unique person.
- Mindful awareness is about noticing what is happening when it happens.
- Your everyday actions make up the green circle. Your options and choices may be affected by many factors.
- The next ring is professional care (tests, medications, treatments, surgeries, and counseling). This section includes complementary approaches like acupuncture and yoga.
- The outer ring includes the people, places, and resources in your community. Your community has a powerful influence on your personal experience of health and well-being.



Rate where you feel you are on the scales below from 1-5, with 1 being not so good, and 5 being great.

Physical Well-Being  1  2  3  4  5

NOT SO GOOD GREAT

Mental/Emotional Well-Being  1  2  3  4  5

NOT SO GOOD GREAT

Life: How is it to live your day-to-day life?  1  2  3  4  5

NOT SO GOOD GREAT

What matters most to you in your life right now? Write a few words to capture your thoughts:

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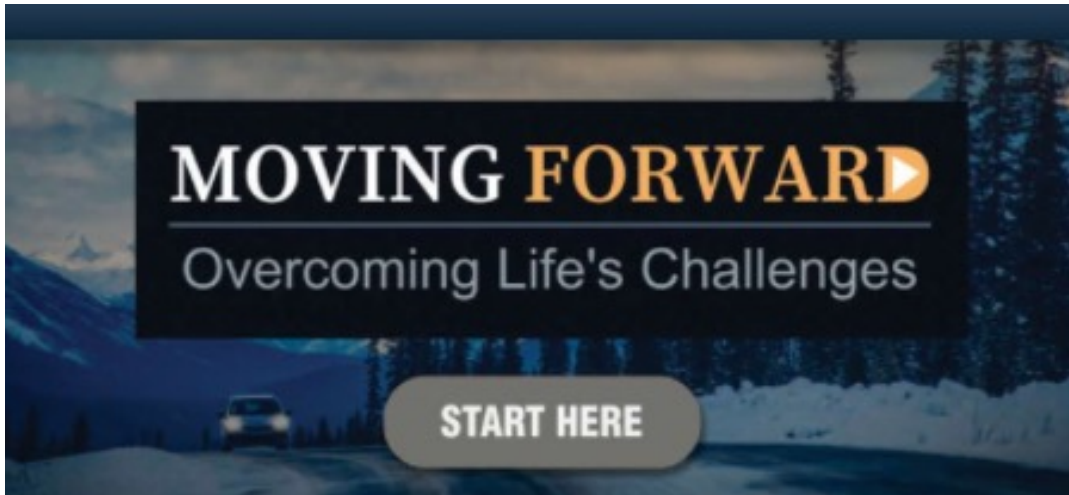
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[Personal Health Inventory \(va.gov\)](https://va.gov)



# Apps and Online Tools



[Moving Forward: Overcome Life's Challenges - Veteran Training \(va.gov\)](#)

- [VA Whole Health Library](#)
  - Coaching Apps for:
    - Smoking cessation
    - weight loss
    - PTSD
    - Mindfulness
  - Resources for:
    - Yoga
    - Tai Chi
    - Biofeedback
    - Meditation





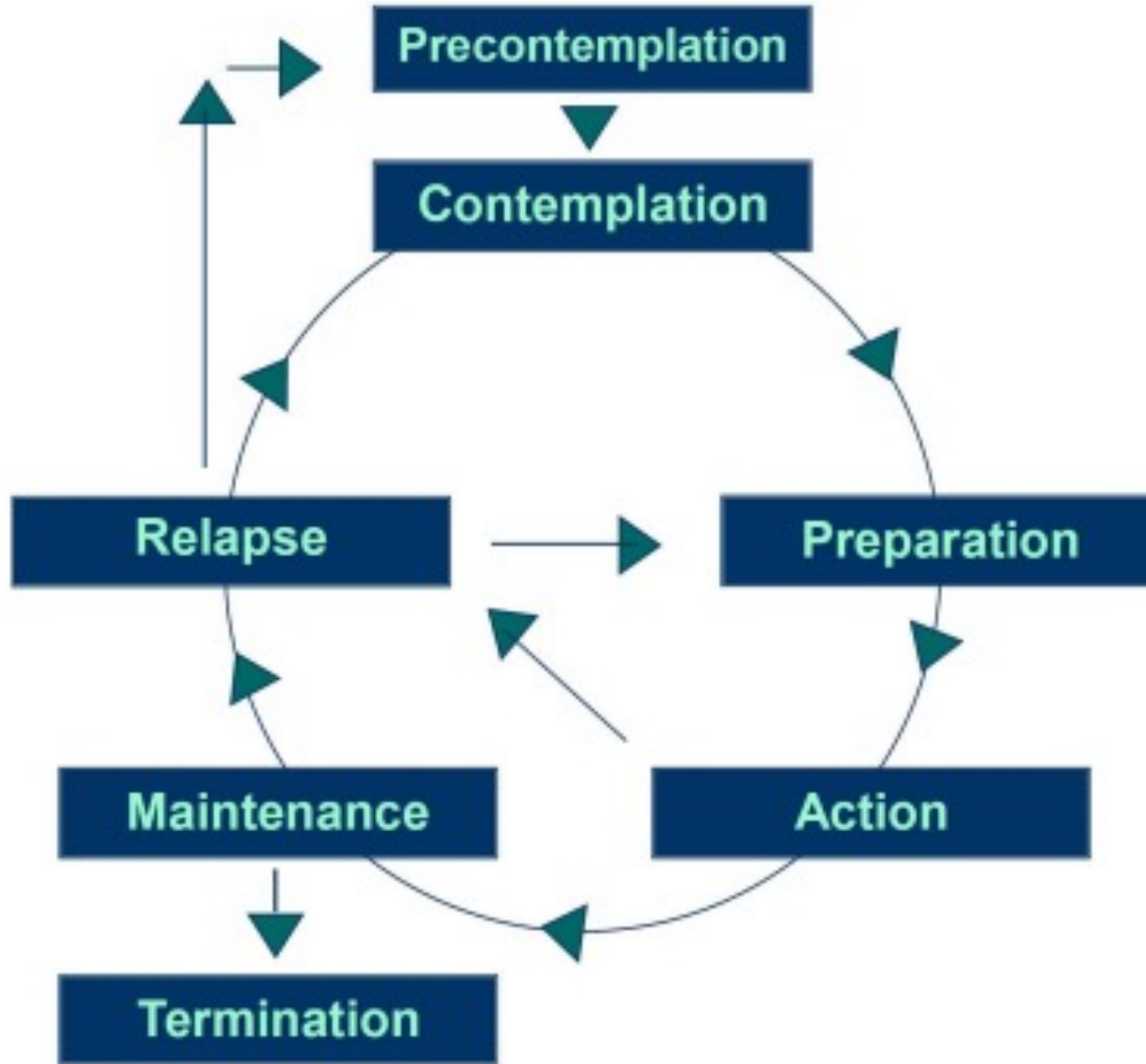
ARE YOU

READY?





# STAGES OF CHANGE MODEL



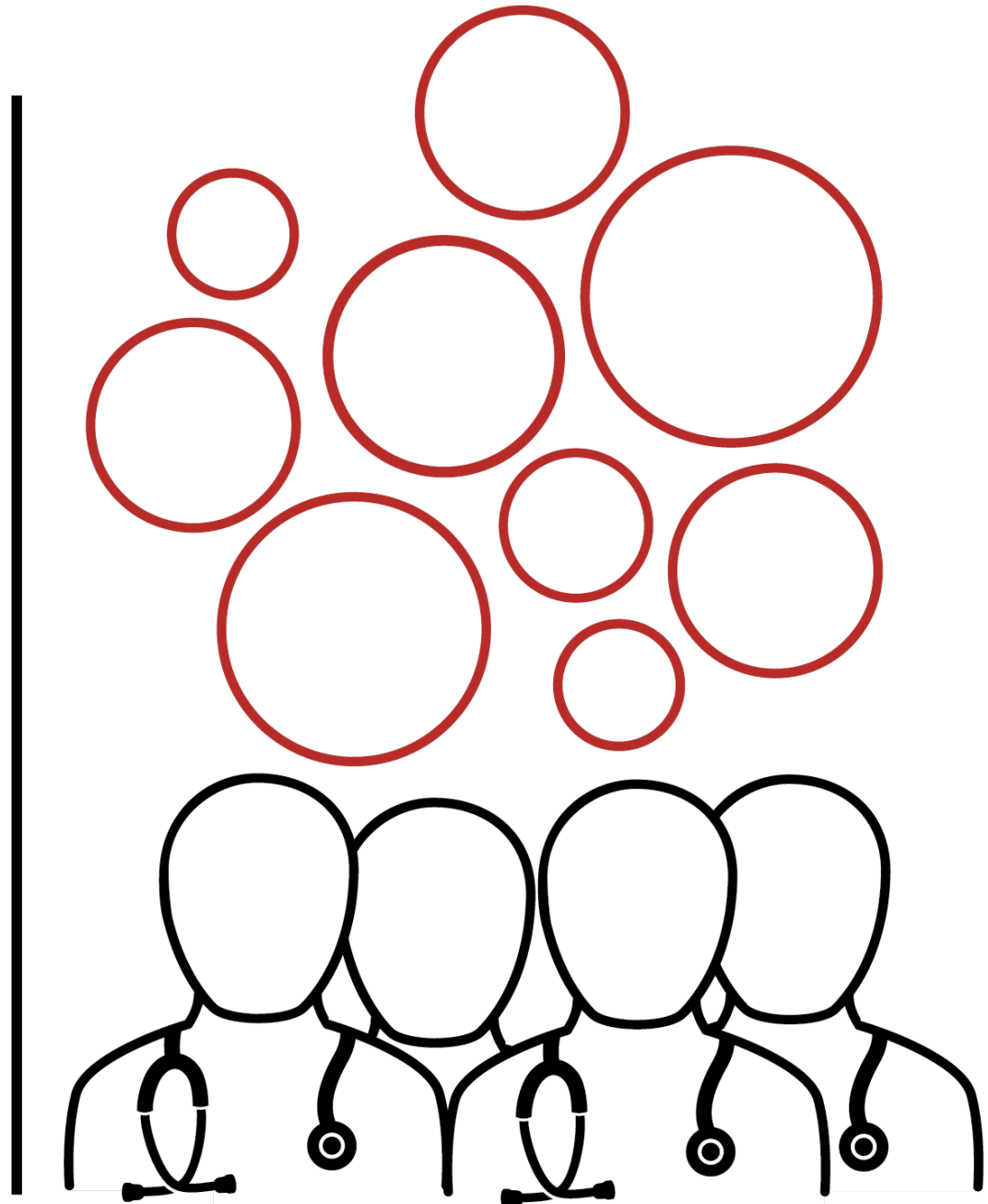
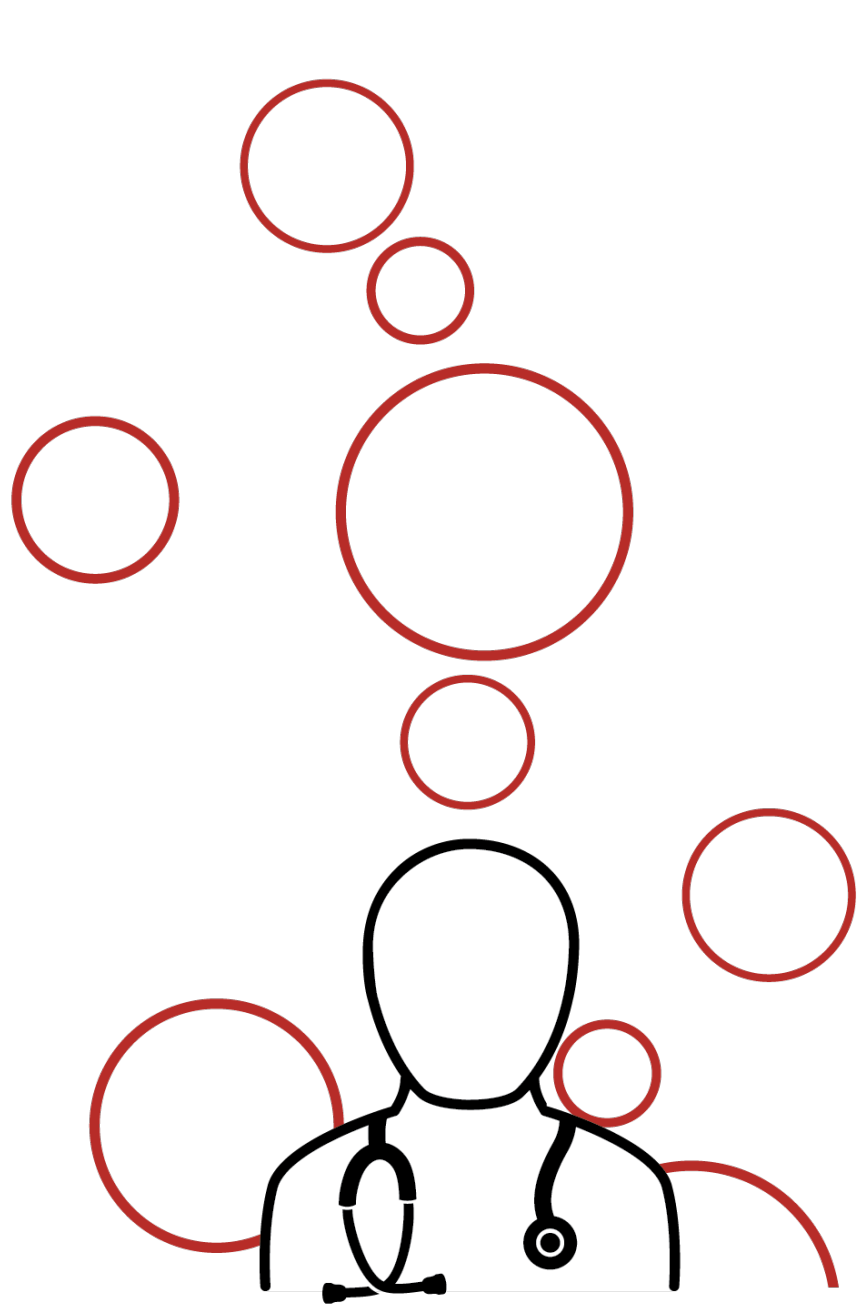
[Stages of Change: Key Features \(va.gov\)](http://va.gov)

# **SHIFT FROM**

Management of Chronic Pain and Addiction occurs within siloed disciplines.

# **TO**

Management of Chronic Pain and Addiction is provided in a collaborative, team-based approach.

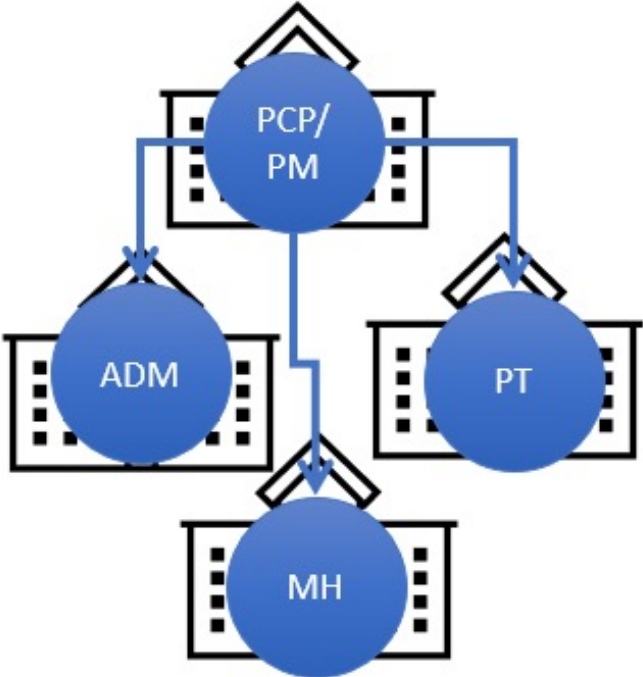




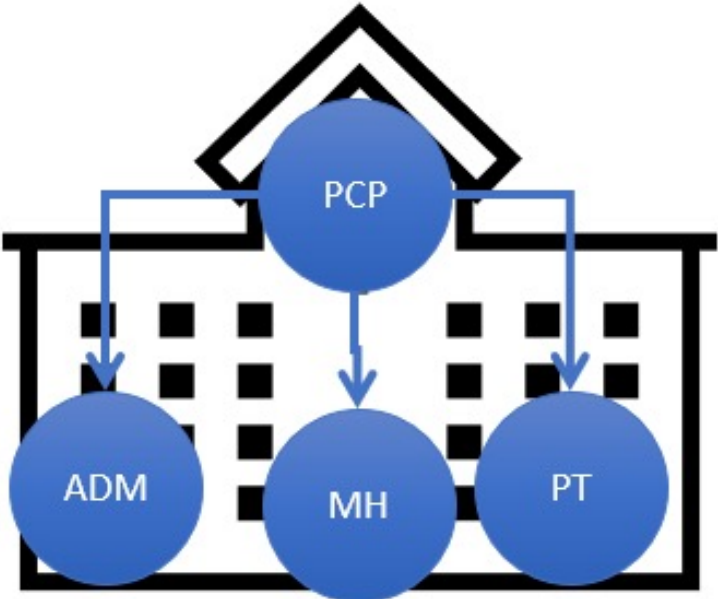
# Continuum of Team Integration



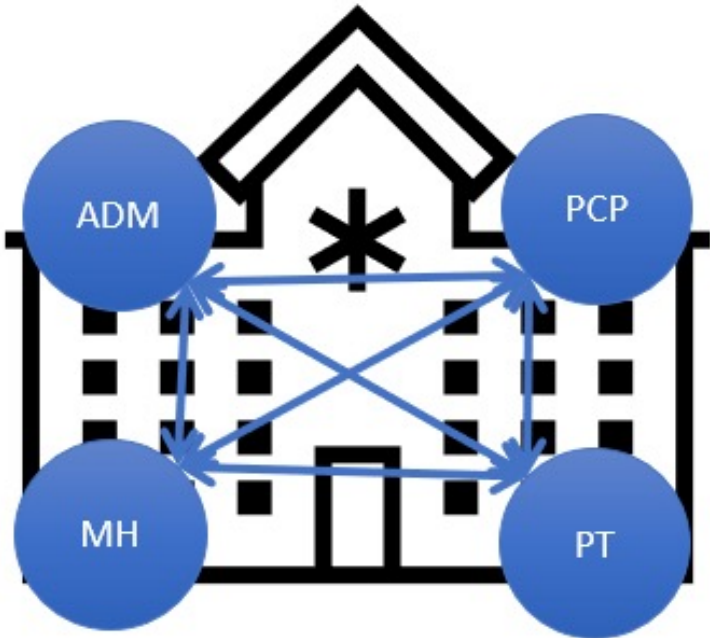
Single Discipline Practices



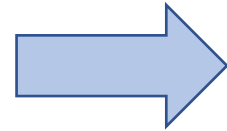
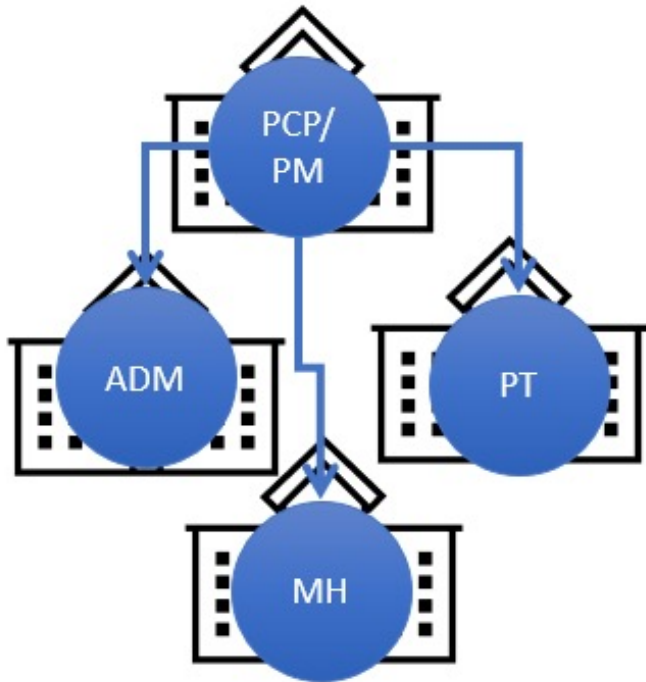
Multidisciplinary Team



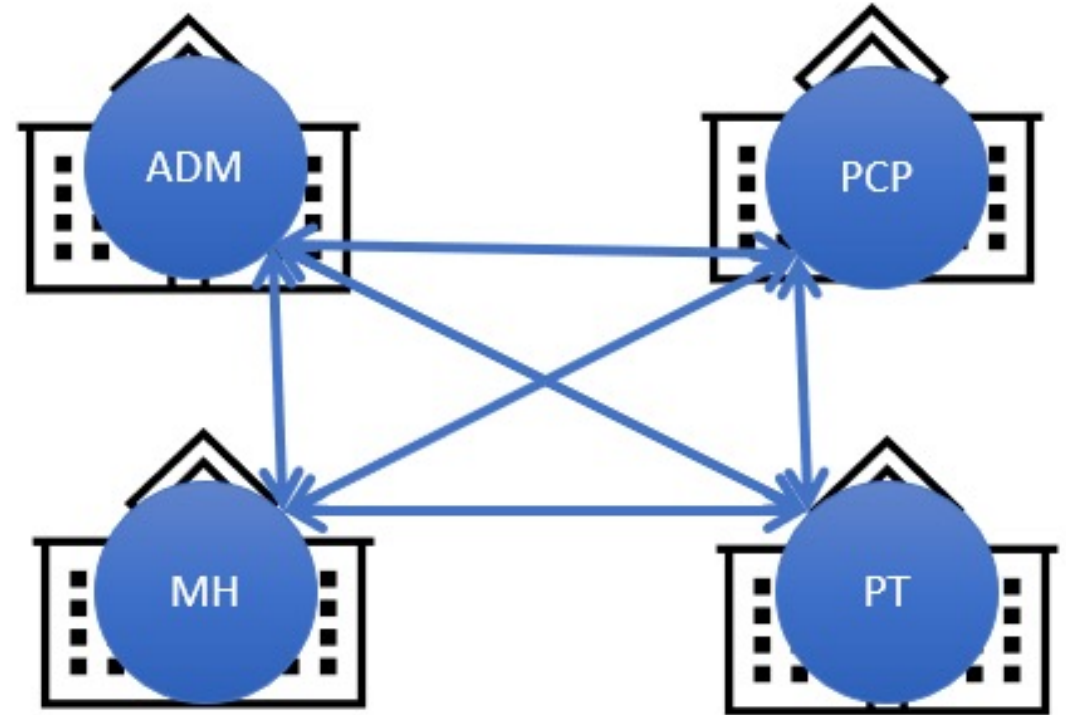
Interdisciplinary Team

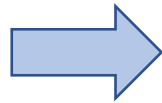


# Single Discipline Practices



# Building the best possible (virtual) interdisciplinary team







Who do I add to my team?



# Key Components of Whole Person Approach

- High Value Active Care
  - Movement therapies (PT, OT, Yoga, Tai Chi, anything else the patient enjoys)
  - Psychological Therapies
  - Interdisciplinary pain care
- Passive Care focus on safety
  - Acupuncture
  - Spinal Manipulation



**VA/DoD Clinical Practice Guideline**

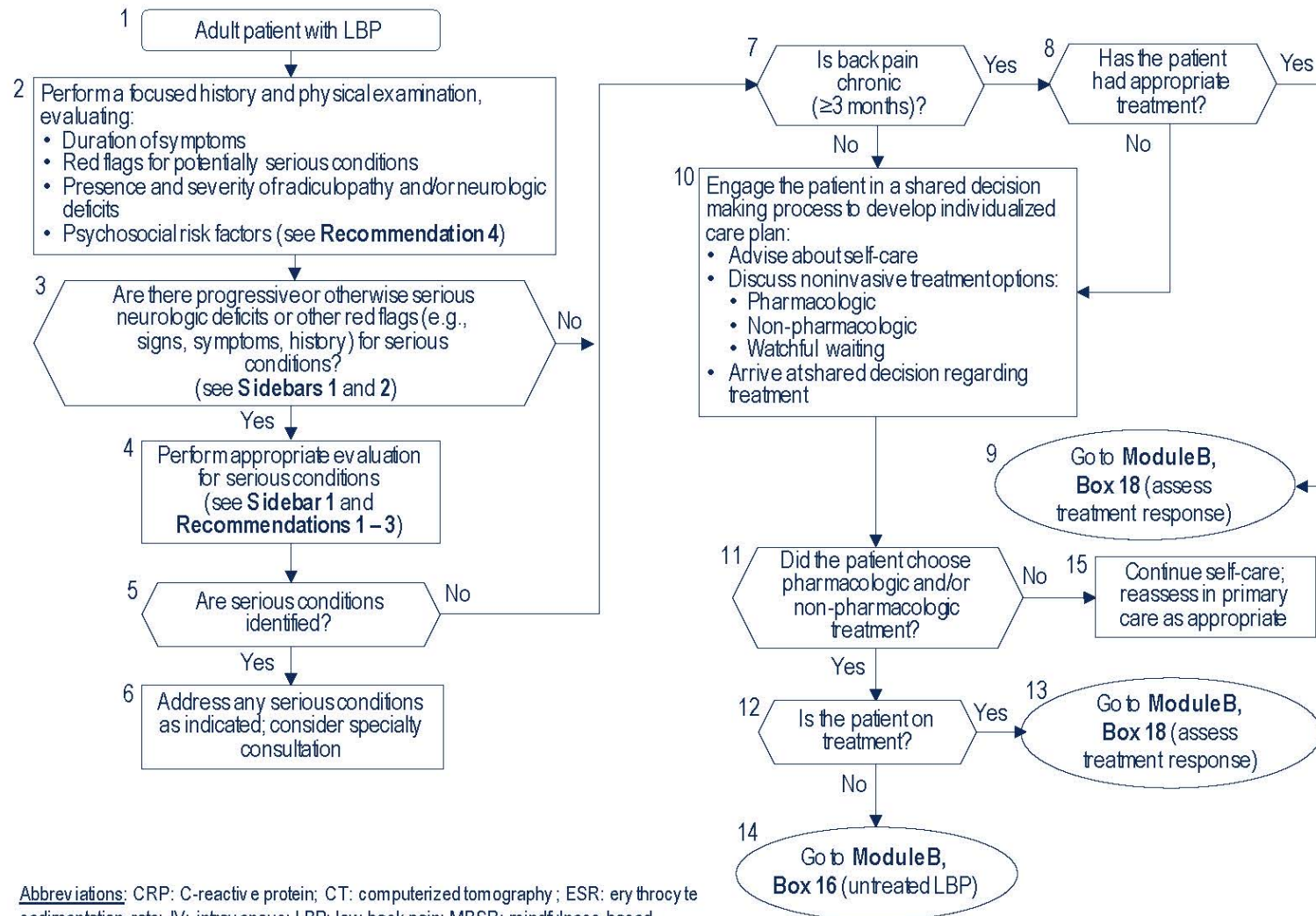
# **Diagnosis and Treatment of Low Back Pain**



**VA/DoD Evidence Based Practice**

[Diagnosis and Treatment of Low Back Pain \(LBP\) \(2022\) - VA/DoD Clinical Practice Guidelines](#)

- [Full Guideline](#)
- [Clinician Summary](#)
- [Pocket Card](#)
- [Patient Summary](#)



Sidebar 1: Evaluation for Possible Serious Conditions		
Possible Serious Conditions	Red Flags (e.g., signs, symptoms, history)	Suggested Evaluation <sup>a</sup>
<b>Cauda equina syndrome or conus medullaris syndrome</b>	<ul style="list-style-type: none"> <li>Urinary retention</li> <li>Urinary or fecal incontinence</li> <li>Saddle anesthesia</li> <li>Changes in rectal tone</li> <li>Severe/progressive lower extremity neurologic deficits</li> </ul>	<ul style="list-style-type: none"> <li>Emergent MRI<sup>b</sup> (preferred)</li> </ul>
<b>Infection</b>	<ul style="list-style-type: none"> <li>Fever</li> <li>Immunosuppression</li> <li>IV drug use</li> <li>Recent infection, indwelling catheters (e.g., central line, Foley)</li> </ul>	<ul style="list-style-type: none"> <li>MRI<sup>c</sup></li> <li>ESR and/or CRP</li> </ul>
<b>Fracture</b>	<ul style="list-style-type: none"> <li>History of osteoporosis</li> <li>Chronic use of corticosteroids</li> <li>Older age (≥75 years old)</li> <li>Recent trauma</li> <li>Younger patients at risk for stress fracture (e.g., overuse)</li> </ul>	<ul style="list-style-type: none"> <li>Lumbosacral plain radiography</li> <li>For inconclusive results, advanced imaging as indicated</li> </ul>
<b>Cancer</b>	<ul style="list-style-type: none"> <li>History of cancer with new onset of LBP</li> <li>Unexplained weight loss</li> <li>Failure of LBP to improve after 1 month</li> <li>Age &gt;50 years</li> <li>Multiple risk factors present</li> </ul>	<ul style="list-style-type: none"> <li>MRI<sup>c</sup></li> <li>Lumbosacral plain radiography</li> </ul>

<sup>a</sup> Consider specialty consultation  
<sup>b</sup> MRI, except where contraindicated (e.g., patients with pacemakers), otherwise CT or CT myelogram  
<sup>c</sup> MRI without and with contrast, except where contraindicated (e.g., renal insufficiency)

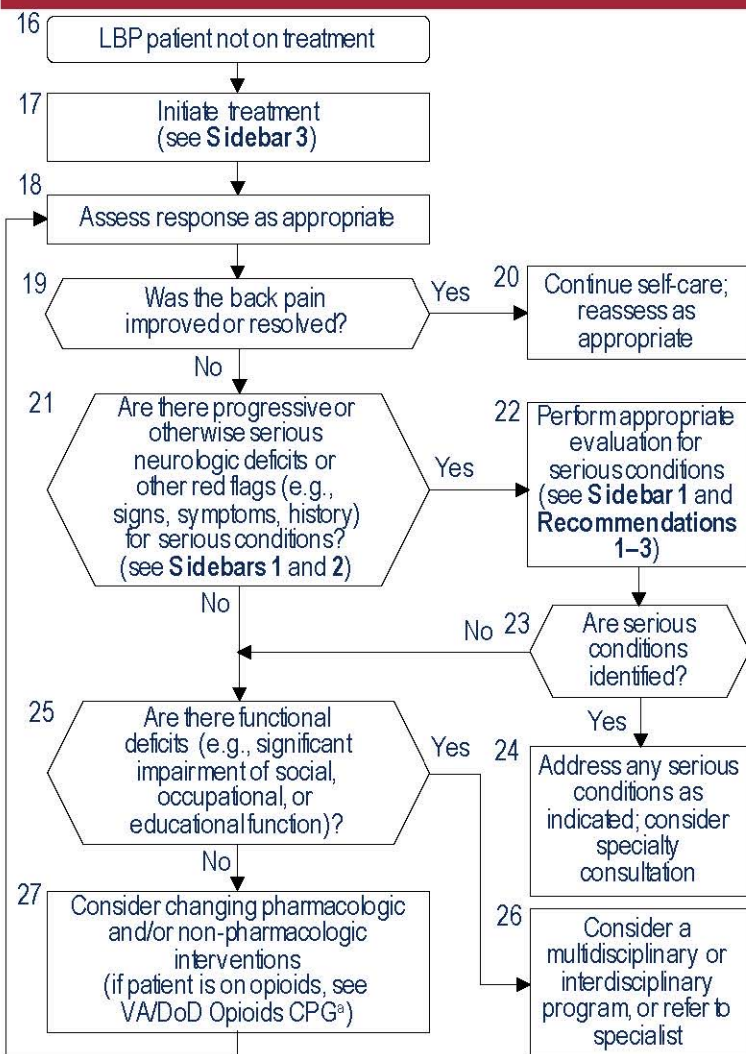


Access to the full guideline and additional resources is available at: <https://www.healthquality.va.gov/>.

**Abbreviations:** CRP: C-reactive protein; CT: computerized tomography; ESR: erythrocyte sedimentation rate; IV: intravenous; LBP: low back pain; MBSR: mindfulness-based stress reduction; MRI: magnetic resonance imaging



Module B: Management of Low Back Pain



² See the VA/DoD Clinical Practice Guideline for the Use of Opioids in the Management of Chronic Pain. Available at <https://www.healthquality.va.gov/>.

Possible Other Conditions	Red Flags (e.g., signs, symptoms, history)	Suggested Evaluation <sup>b</sup>
Herniated disc	<ul style="list-style-type: none"> <li>• Radicular back pain (e.g., sciatica)</li> <li>• Lower extremity dysesthesia and/or paresthesia</li> </ul>	None
	<ul style="list-style-type: none"> <li>• Severe/progressive lower extremity neurologic deficits</li> <li>• Symptoms present &gt;1 month</li> </ul>	MRI <sup>c</sup>
Spinal stenosis	<ul style="list-style-type: none"> <li>• Radicular back pain (e.g., sciatica)</li> <li>• Lower extremity dysesthesia and/or paresthesia</li> <li>• Neurogenic claudication</li> <li>• Older age</li> </ul>	None
	<ul style="list-style-type: none"> <li>• Severe/progressive lower extremity neurologic deficits</li> <li>• Symptoms present &gt;1 month</li> </ul>	MRI <sup>c</sup>
Inflammatory LBP	<ul style="list-style-type: none"> <li>• Morning stiffness</li> <li>• Improvement with exercise</li> <li>• Alternating buttock pain</li> <li>• Awakening due to LBP during the second part of the night (early morning awakening)</li> <li>• Younger age</li> </ul>	Radiography of pelvis, SI joint, and spine area of interest

<sup>a</sup> These conditions usually do not require urgent diagnostic evaluation  
<sup>b</sup> Consider specialty consultation  
<sup>c</sup> Some patients may have contraindications to MRI, contrast usually not required

Abbreviations: CBT: cognitive behavioral therapy; CPG: clinical practice guideline; DoD: Department of Defense; LBP: low back pain; MBSR: mindfulness-based stress reduction; MRI: magnetic resonance imaging; NSAIDs: nonsteroidal anti-inflammatory drugs; SI: sacroiliac; VA: Department of Veterans Affairs

Category	Intervention (listed alphabetically by category)	Low Back Pain Duration <sup>a</sup>	
		Acute <4 Weeks	Subacute or Chronic ≥4 Weeks
Self-care	Advice to remain active	X	X
	Acupuncture		X Recommendation 34
Non-pharmacologic treatment	CBT and/or MBSR		X Recommendation 8 and Recommendation 12
	Clinician-directed exercise program		X Recommendation 9
	Spinal mobilization/manipulation		X Recommendation 10
	Duloxetine		X Recommendation 18
Pharmacologic treatment	NSAIDs	X Recommendation 19	X Recommendation 19
	Multidisciplinary or interdisciplinary program		X Recommendation 39

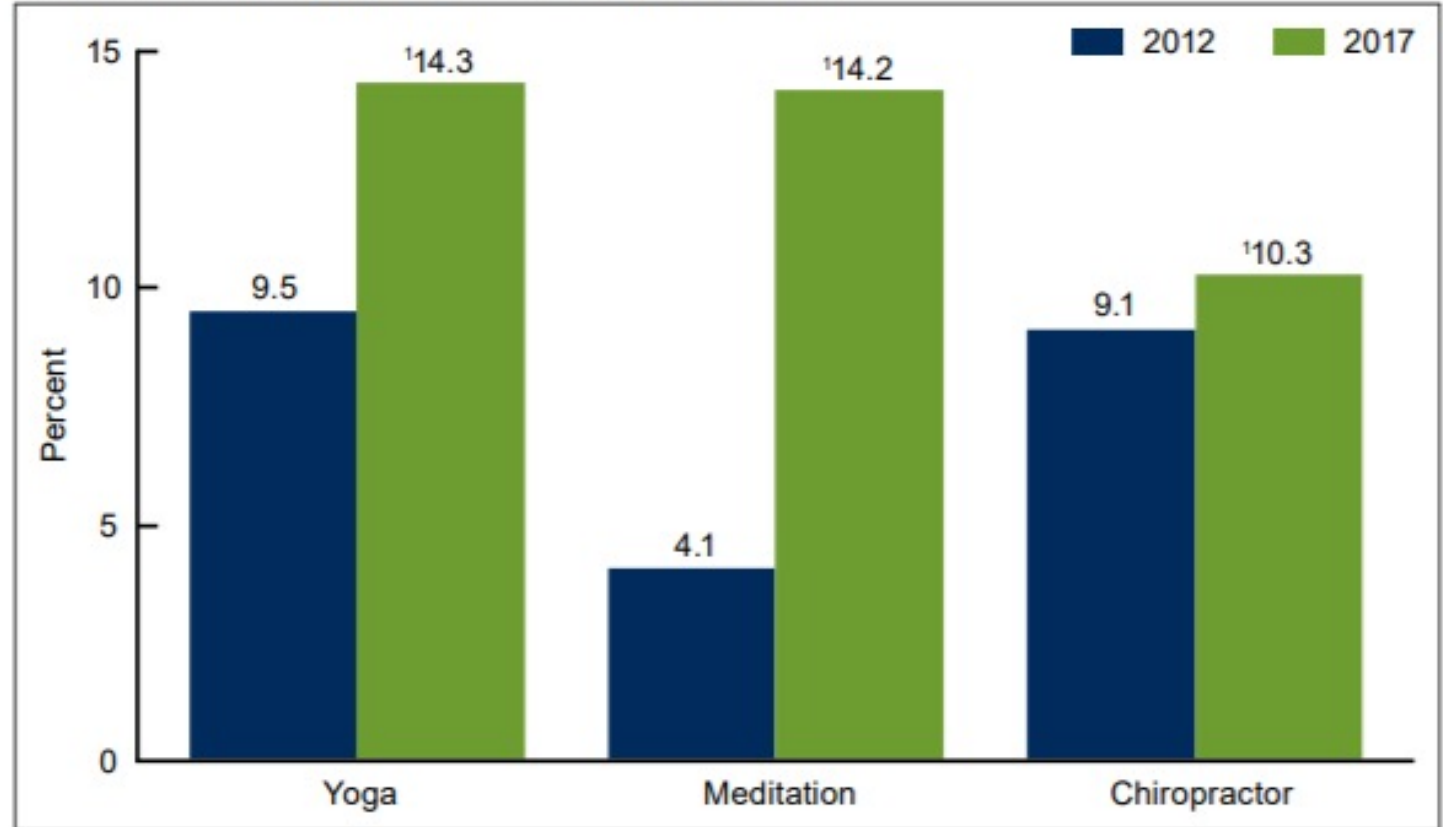
<sup>a</sup> Recommendations can be accessed in the full guideline. Available at: <https://www.healthquality.va.gov/>.



# 33% of adults in US

Used complementary and integrative medicine in 2012 with chronic pain being the most common indication

Figure 1. Age-adjusted percentage of adults who used yoga, meditation, or a chiropractor during the past 12 months, by year: United States, 2012 and 2017



<sup>1</sup>Significantly different from 2012 ( $p < 0.05$ ).

NOTES: Estimates are age adjusted using the projected 2000 U.S. population as the standard population and three age groups: 18–44, 45–64, and 65 and over. Estimates are based on household interviews of a sample of the civilian noninstitutionalized population. Access data table for Figure 1 at: [https://www.cdc.gov/nchs/data/databriefs/db325\\_table-508.pdf#1](https://www.cdc.gov/nchs/data/databriefs/db325_table-508.pdf#1).

SOURCE: NCHS, National Health Interview Survey, 2012 and 2017.

Department of Veterans Affairs  
Health Services Research & Development Service | Evidence-based Synthesis Program

**QUERI**

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**Massage for Pain:  
An Evidence Map**

---

September 2016

Department of Veterans Affairs  
Health Services Research & Development Service | Evidence-based Synthesis Program

**QUERI**

---

**Evidence Map  
of Mindfulness**

---

October 2014

Department of Veterans Affairs  
Health Services Research & Development Service | Evidence-based Synthesis Program

**QUERI**

---

**Evidence Map of Tai Chi**

---

September 2014

Department of Veterans Affairs  
Health Services Research & Development Service | Evidence-based Synthesis Program

**QUERI**

---

**Evidence Map of Yoga for  
High-Impact Conditions  
Affecting Veterans**

---

August 2014

Department of Veterans Affairs  
Health Services Research & Development Service | Evidence-based Synthesis Program

**QUERI**

---

**Evidence Map of Acupuncture**

---

January 2014

**Evidence Synthesis Program**

---

**Guided Imagery, Biofeedback, and  
Hypnosis: A Map of the Evidence**

---

February 2019



# Evidence-Based CIH Therapies required in VA

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



# Whole Health System of Care Evaluation

A Progress Report on Outcomes of the WHS Pilot at 18 Flagship Sites



## Utilization

- **31% of Veterans** with chronic pain engaged in WH services
- **193% increase** in utilization since 2017

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## Patient Impact



**3X reduction in opioid use**



- Engagement in healthcare and **self care**
- Engagement in life, **mission/purpose**
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# Whole Health System of Care Evaluation

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- **193% increase** in utilization since 2017

## Staff Impact



- Voluntary **turnover**
- **Burnout**



- Their facility as “**best place to work**”
- **Motivation**



# Overview

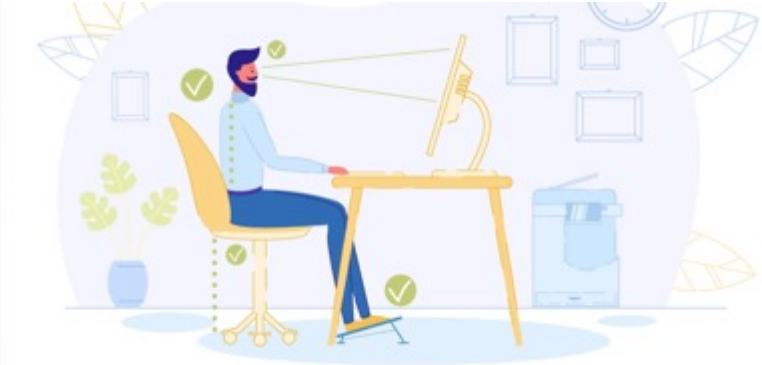
- Whole Person Low Back Pain
- Assessment
- Pain Neuroscience Approach and Retraining the Brain
- Traditional Physical Therapy
- Occupational Therapy
- Relaxation Training
- Pain Psychology



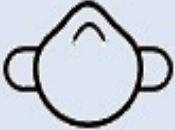
# Patient- Centered Whole Person Pain Care



**People**  
(MD/DO, APC, RN,  
Caregiver surge staffing)



**Places**  
(Hospitals, Beds, OR,  
Med/Surg, ASCs, etc.)



**Products**  
(PPE, Ventilators, etc.)



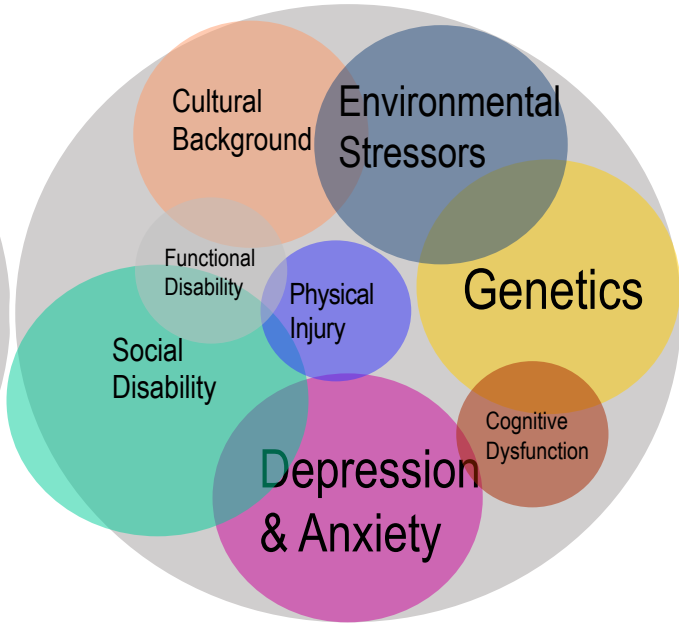
# Chronic Pain: **Bio-Psycho-Social** Model



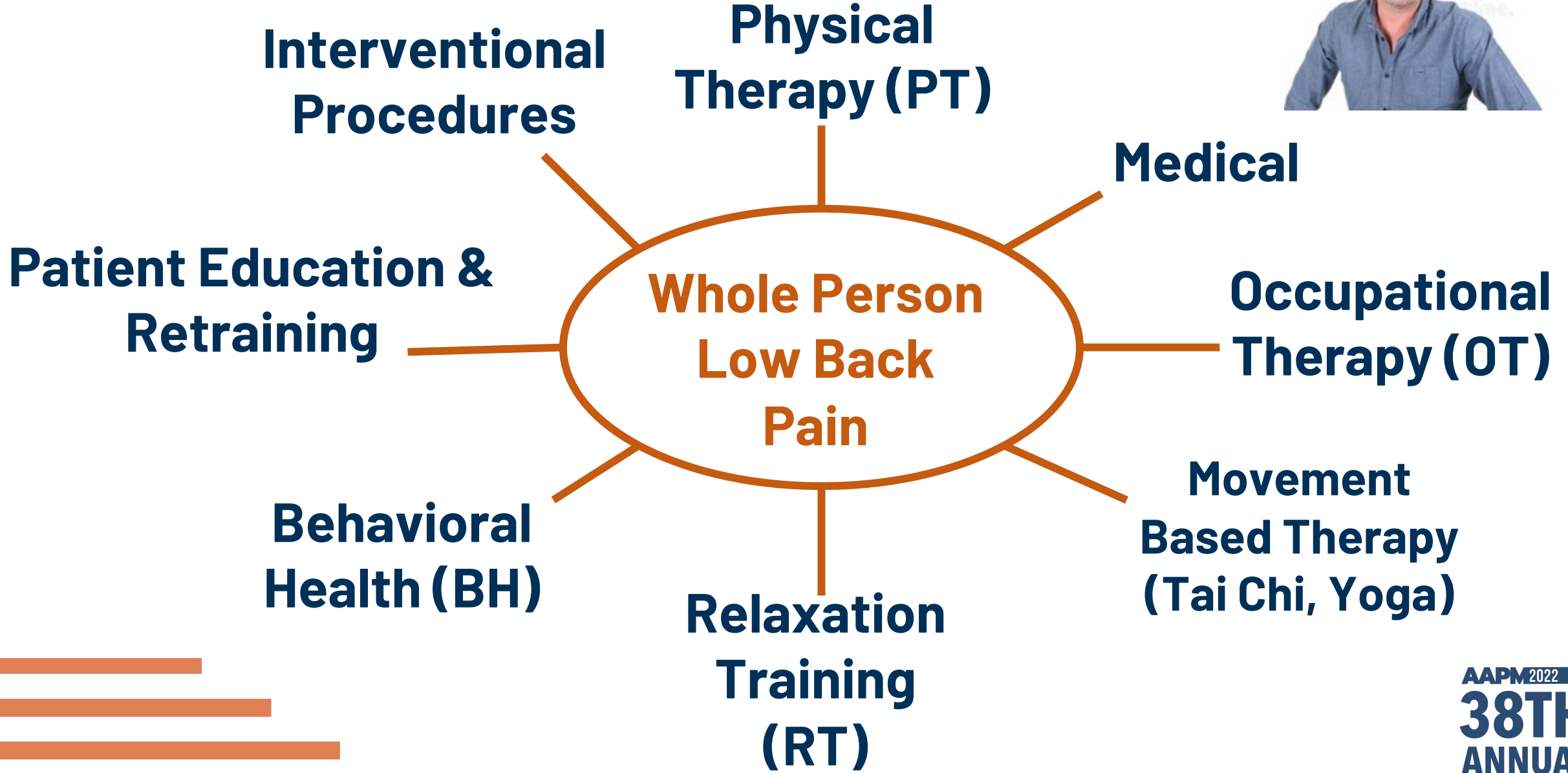
Jane  
Pain 8/10  
MED: 0



Tim  
Pain 8/10  
MED: 60

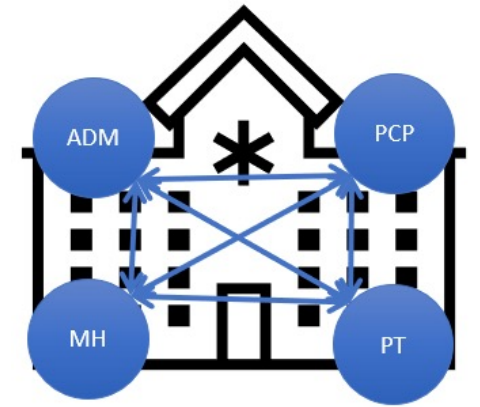


Gatchel RJ. Am Psychol. 2004;59:795-805.





# Interdisciplinary Care: Outcomes



## 6 VA-based programs:

- Group-based treatments, individual psychotherapy, goal setting, and medical visits
- Intensity: 2-3 days per week, 2-6 hours per session, 5-12 weeks
- Inpatient and outpatient, opioid detoxification

## Results:

- Improvements in pain-related functioning, reduced sleep difficulties, pain catastrophizing (ES = medium to large)
- Many programs: improved vitality, negative affect, and reduction in pain

Murphy J, et al. *Pain Medicine* 2021; 00(0):1-14.

# Whole Person LBP: Phases

- Comprehensive Assessment
- Pre-Programming
- Formal Interdisciplinary Care
- After-care



## **Medical Diagnosis:**

Chronic low back pain  
L5-S1 radiculopathy  
Myofascial pain  
Sleep disorder

## **Behavioral Health:**

Depression  
Anxiety  
Poor coping  
Daily alcohol use



# Medical Management: Whole Person LBP

- Clarify the diagnoses, educate
- Put patient's "story" together, set context for success
- Sell a new approach, engage patient to change
- Be flexible
- Guide, encourage, give feedback
- Celebrate successes and help manage setbacks

**ANAGLESIA**

**MOOD**

**SLEEP**

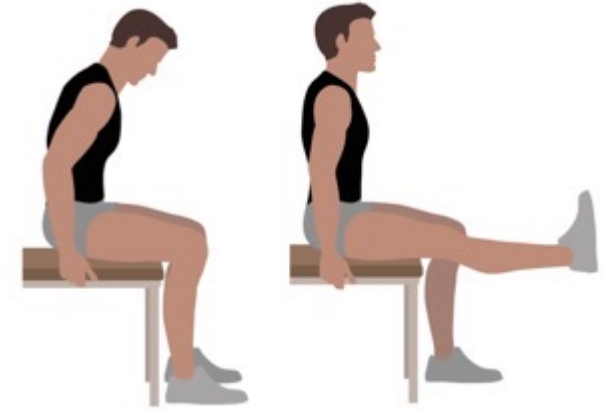
# Dural Tension Signs & Adverse Neural Dynamics



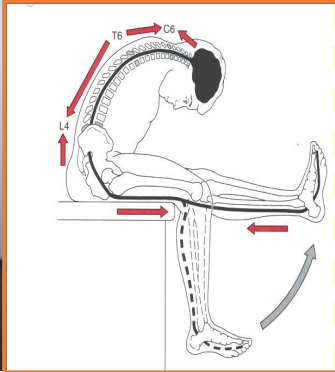
**Straight Leg Raise (SLR)**



**Femoral Nerve Stretch**



**Treatment:** Nerve Glides



**# 1. Slump Seated Test**

**#2**

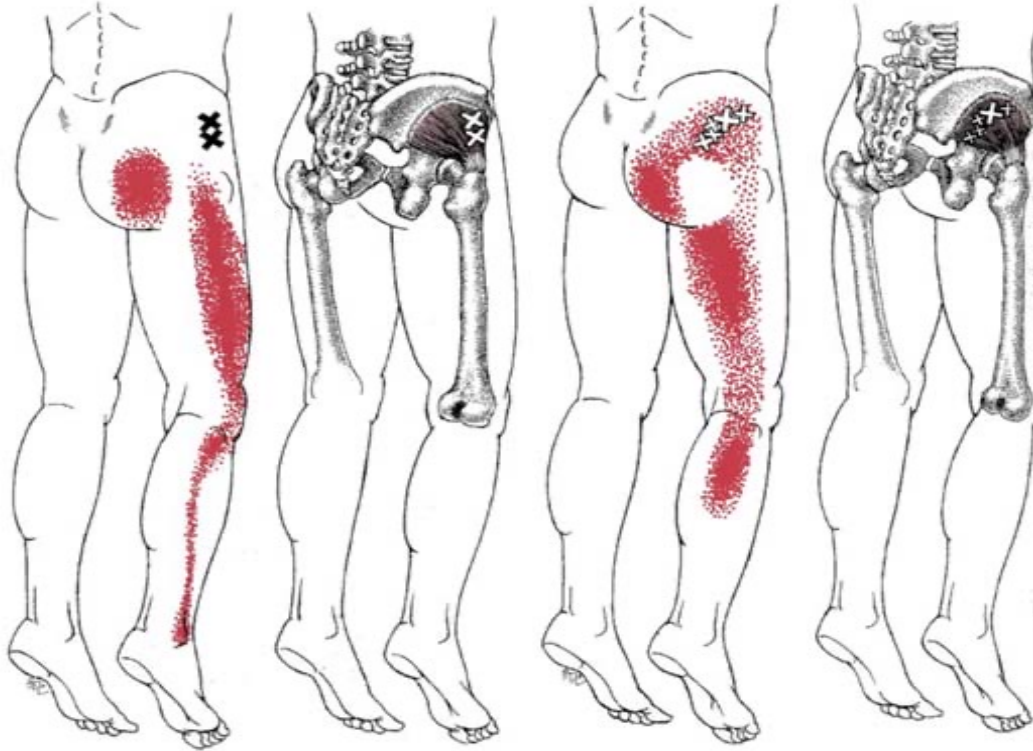
**#3**



(J. Rittenberg. Photos from practice & personal files used with permission)



# Myofascial Pain & Sacroiliac Joint Dysfunction



**Patrick's  
Sign**



**Sacroiliac  
Joint Border  
Tenderness**





**Steven Stanos, D.O.**  
Pain Management Specialist  
Seattle, Issaquah



**Sonja Braasch, OTR/L**  
Occupational Therapist  
Seattle



**Wilson Chang, M.D.**  
Pain Management Specialist  
Seattle, Issaquah



**Cheyenne Dixon, OTD,  
OTR/L**  
Occupational Therapist  
Seattle



**Sharon Hsu, PhD**  
Pain Psychologist  
Seattle



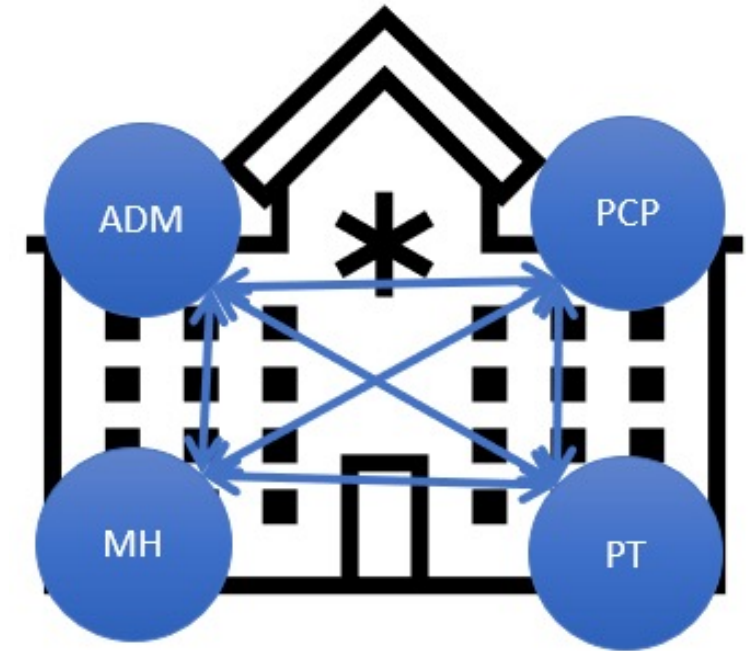
**Tasha Parman, PT, DPT**  
Physical Therapist  
Seattle



**Becca Taylor, RN PhD**  
Nurse Educator &  
Coordinator  
Seattle



**Nate Hadley, PT, DPT**  
Physical Therapist  
Seattle



# Whole Person LBP: Team Approach



# Is the patient and team ready for change?



- Shift away from biomedical model to one based on partnering and engaging the patient
- Provider needs to change and adapt
- Understand patient's perspective
- Educate and correct irrational and uneducated assumptions
- Incorporate therapies that help to alter or reverse their dysfunctional response to pain



# Yellow Flags



Nature	Examples
Beliefs, Appraisals, & judgments	Unhelpful beliefs about pain Expectations of poor treatment outcome
Emotional Responses	Worry, fears, anxiety
Pain Behavior (pain coping)	Avoidance of activities of pain and injury Over-reliance on passive treatment

Nicholas M, et al. *Phys Ther.* 2011; 91:737-753.



**Pathology**



**Psychiatry**



**Work/Health**

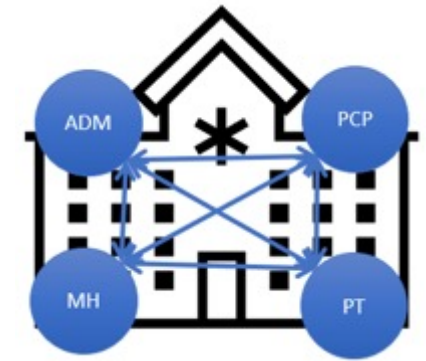


**Contextual**





# Functional Restoration Program



## Outcome Measures

- Pain VAS
- ODI (disability)
- GAD-7 (anxiety)
- PHQ-9 (depression)
- CPAQ  
Activity Engagement
- TSK (kinesiophobia)
- PCS (catastrophizing)  
Rumination  
Magnification  
Helplessness  
Total
- 6 minute walk test (m)

	Monday	Wednesday	Thursday
Noon	Nursing Lecture	Group Stretching Class	Nursing Lecture
1:00	PT	PT Group	PT
2:00	OT	Med Visit	OT
3:00	Psychology	Psychology Group	Psychology
4:00	Relaxation Training	Relaxation Group	Relaxation Training
5:00	Team Conference:		

VAS: Visual Analogue Scale

ODI: Oswestry Disability Index

GAD: Generalized Anxiety Disorder

TSK: Tampa Kinesiophobia Scale

PHQ: Patient Health Questionnaire

CPAQ: Chronic Pain Acceptance Questionnaire


PCS: Pain Catastrophizing Scale

AAPM 2022

**38TH**  
**ANNUAL**  
**MEETING**

# PT APPROACHES

## Traditional Active Treatment

1. Strengthening & ROM
    - Lumbar Stabilization
    - McKenzie: Mechanical Diagnosis & Treatment (MDT)
    - Neurodynamic Therapy
  2. Manual Therapy
  3. Balance & Aerobic Exercise
- 



## Nervous System Retraining

1. Pain Neuroscience Education (PNE)
2. "Protectometer" DIMs & SIMs
3. Movement Visualization

# Prime areas of opportunity: Whole Person LBP

1

Changing beliefs about pain

2

Reducing avoidant behavior

3

Facilitating a balance between improving strength & decreasing sensitization

4

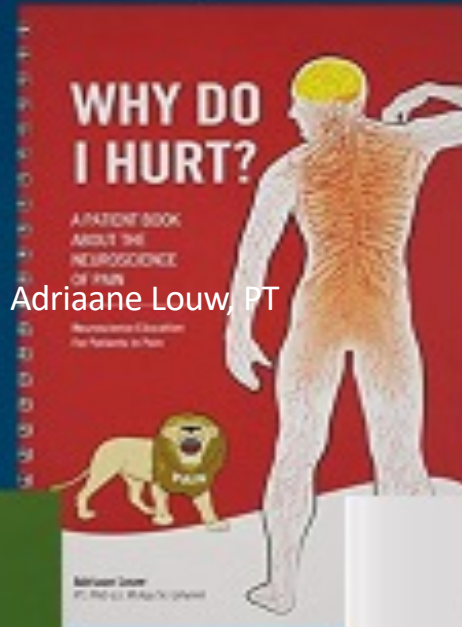
Helping calm the nervous system



# Pain Neuroscience Education



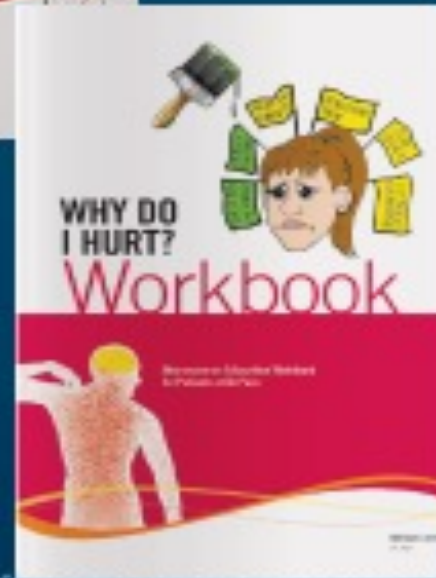
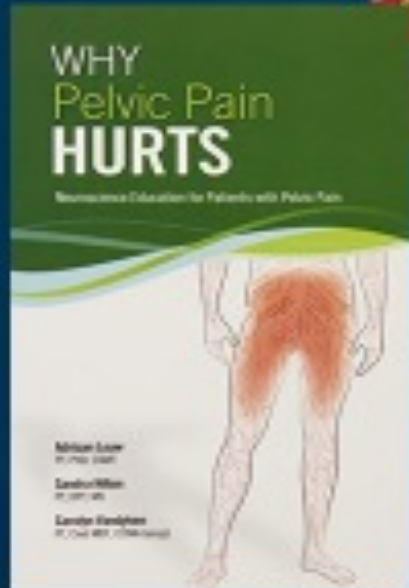
## Patient Resources



Adriane Louw, PT



Lorimer Mosely, PT





# 1. Pain Neuroscience Education (PNE)

Adriaan Louw, PT

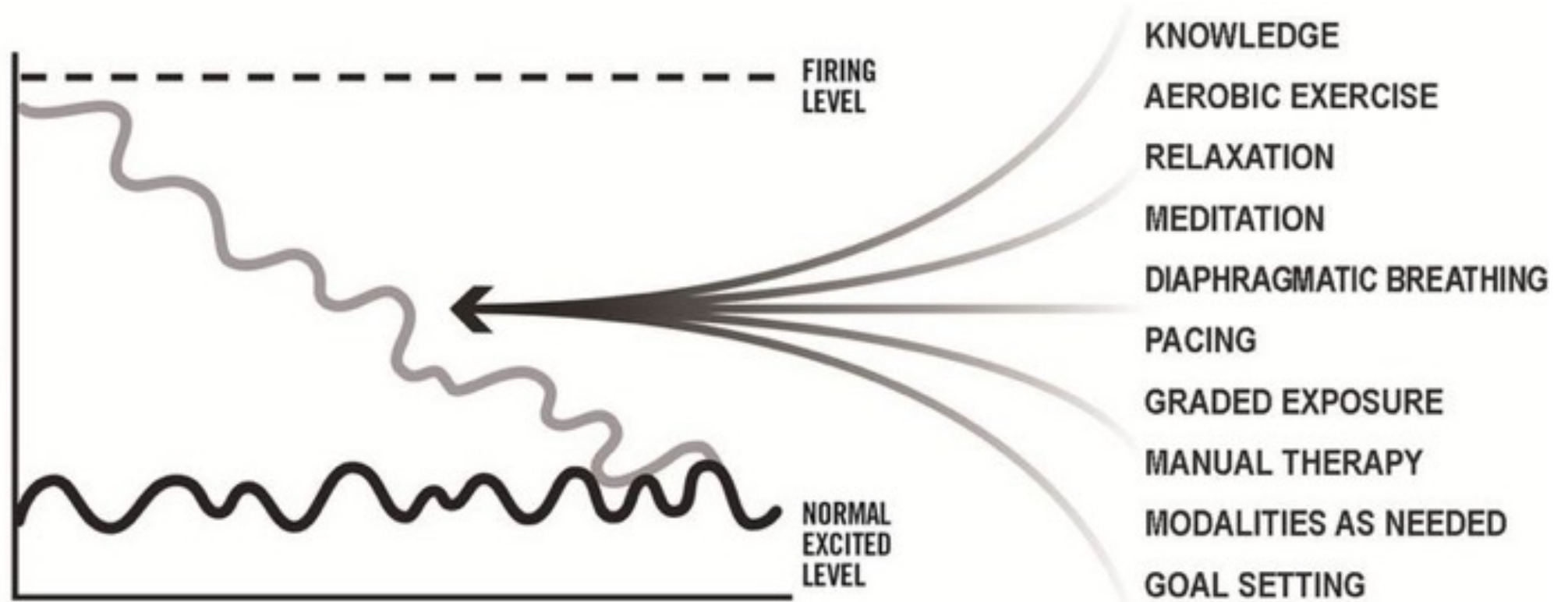


- Traditional model focused on anatomy, tissue injury or nociception
- PNE incorporates how nervous system, via peripheral and central sensitization, synaptic activity, and brain processing, interprets information from tissues
- Patients have ability to modulate pain experience
- Education focuses on the nervous system processing injury in conjunction with psychosocial aspects
- Others: Lorimer Moseley; Howard Schubiner; David Butler

1. Butler, Moseley.2003; Explain Pain. Adelaide, Noigroup Publications.
2. Luow A, et al. *Spine* 2014;39:1449-1457.



# Puts Everything Together



Adriaan Louw, *Why do I hurt?*

# Graded Exercise Approach

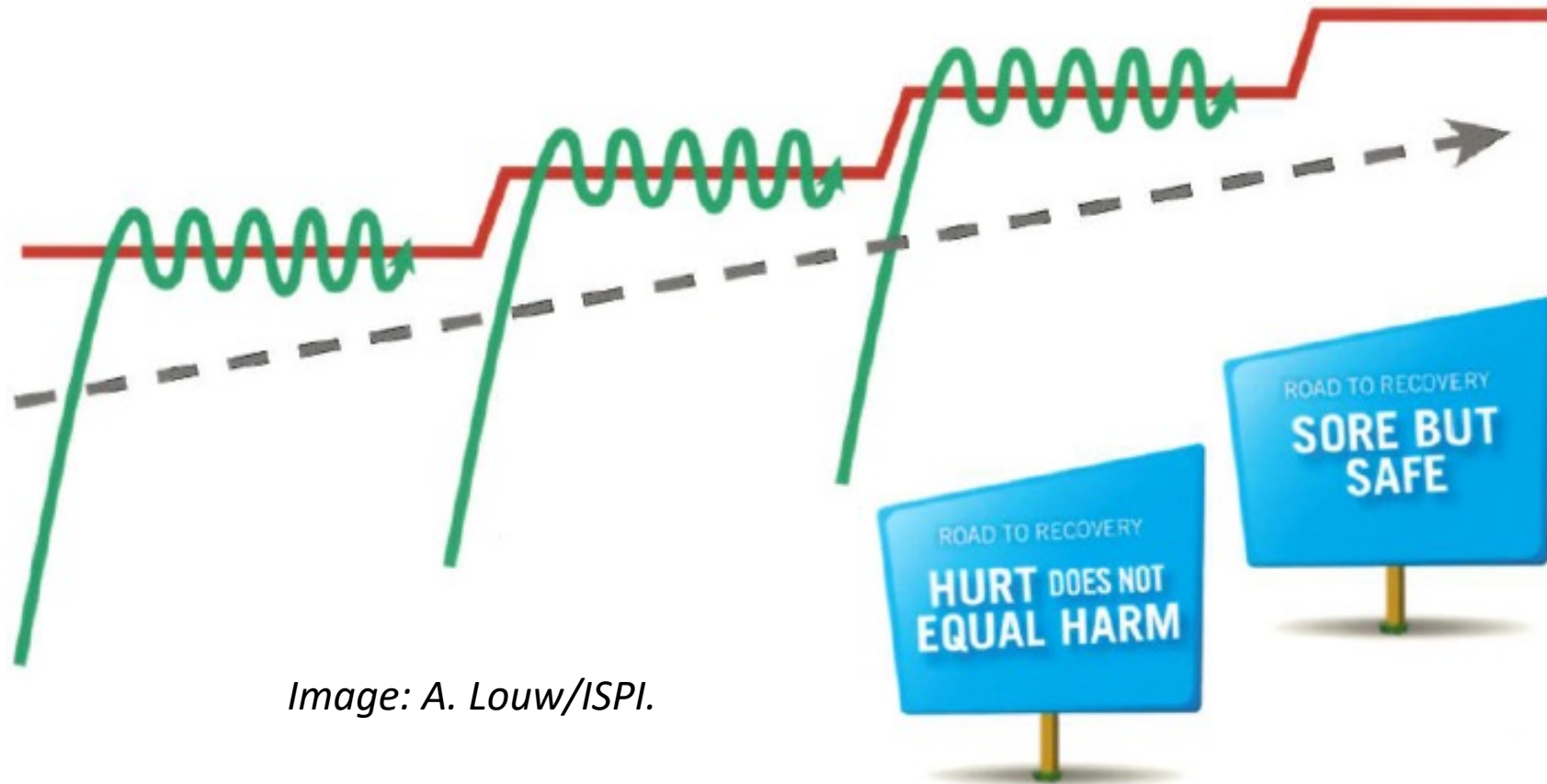


Image: A. Louw/ISPI.



# Exercise Evolution

## Progress Over Time

- Start with 2 sets, build to 3
- Build more repetitions (>10 reps) to increase endurance
- Increase the range of the movement
- Improve coordination and control
- Improve body awareness and sensation connection
- Add weight or resistance if necessary or possible

## Modify when pain is high

- Decrease number of sets
- Decrease repetitions
- Add rest between each repetition
- Decrease range of movement to within comfort
- Decrease total time of activity
- Use relaxation breathing to support movement and breathe between sets while resting
- Practice imagery of movement with no pain while resting

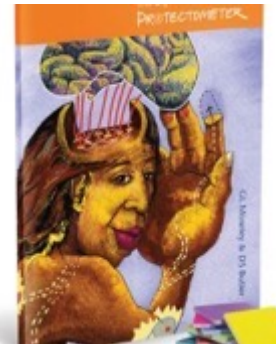


# Pain Revolution



- Pain is always real
- Depends on context
- Doesn't equal tissue damage
- Overprotective pain system
- Retrain your pain system

## Protectometer



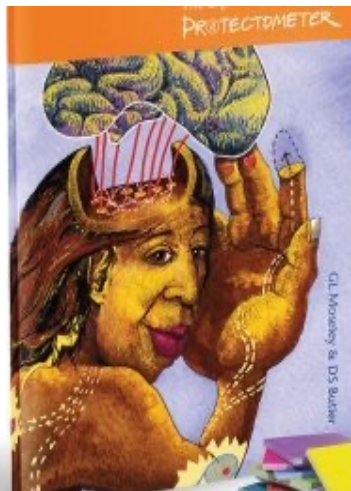
# 2. Pain as Brain Output



D Buter, PT



L. Moseley, PT



## Protectometer

- Your brain will make pain when it concludes body tissues are in danger
- You will have pain when your brain concludes there is more evidence of danger related to your body than safety

## Danger in Me (DIMs)

Anything that is dangerous to body tissues, life, lifestyle, job, happiness or day to day function – threat to you as a person

## Safety In Me (SIMs)

Things that make you stronger, better, healthier, more confident, more sure or certain – within or about yourself



All active challenges



Things you hear, see, smell, taste or touch

Places you go

Things you say

People in your life

Thoughts and beliefs

Things you do

Things happening in your body

Random Tasks

# 3. Movement Visualization: A Tool

- When fear of movement is high, movement is too hard
- Imagining movement activates the sensory and motor cortex
- Practiced between therapy sessions

*“Motor imagery-based mental practice is effective because it activates a comparable cortical network as overt training.”*



Szameitat A, et al. *Neuroimage*. 2007;15(34):702-713.





# Movement Visualization

**1<sup>st</sup> person Imagery:** Imagine yourself moving

**3<sup>rd</sup> Person Imagery:** Imagine someone else moving

**If struggling with visualization:**

- Visualize the opposite side
- Watch others
- Visualize nearby body areas and move closer to more painful area gradually

# Tim's PT Home Program

- Aerobic exercise, walking program
- Lumbar stabilization
- Stretching
- Nerve glides
- Breathing integration
- Pain Neuroscience Education
- Protectometer
- DIMs/SIMs
- Motor Visualization



# Activity level on a downward slope...

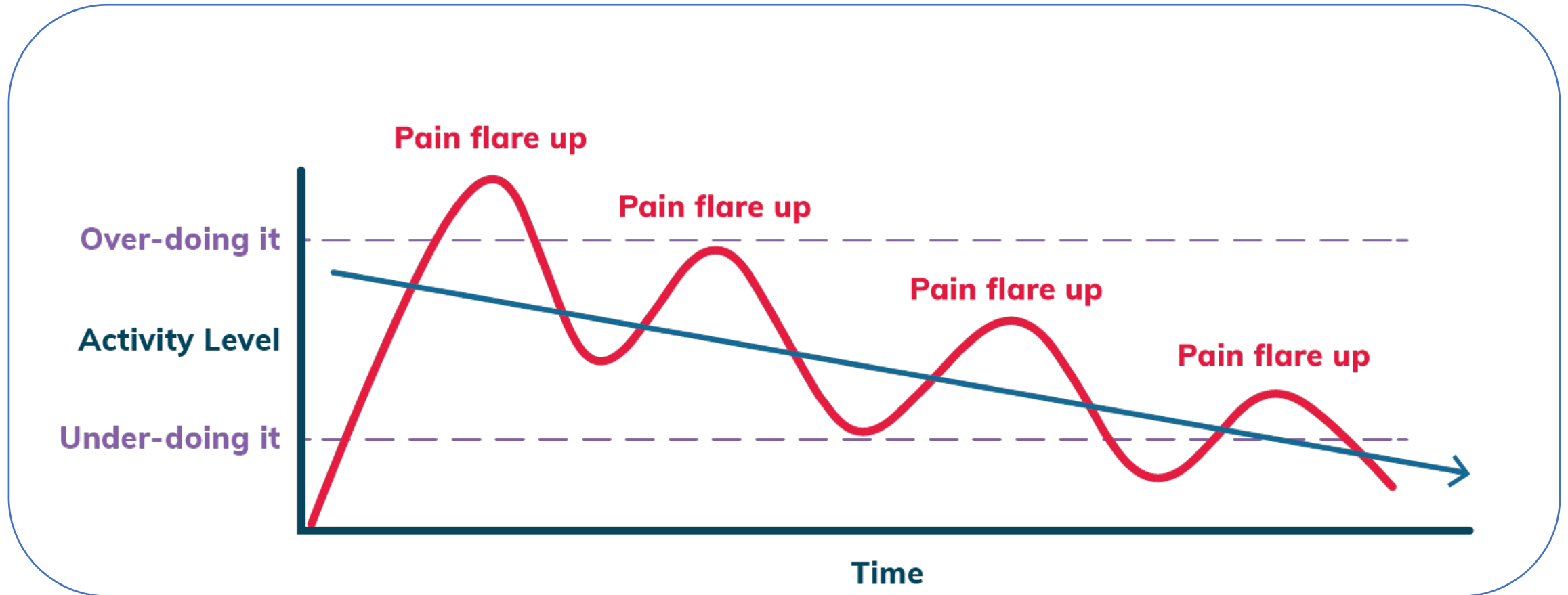
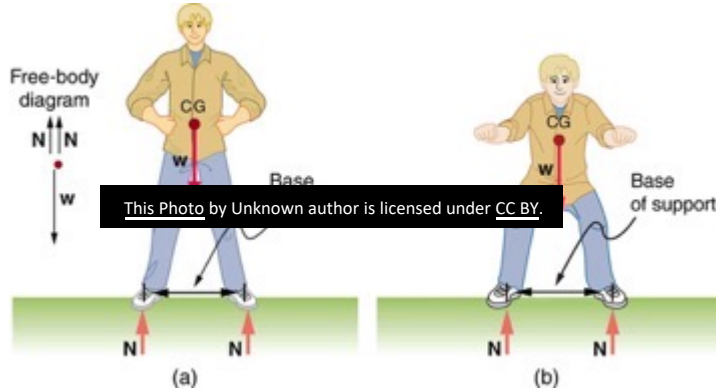


Image from: Agency for Clinical Innovation

# Occupational Therapy



## Energy Conservation

- Pacing
- Delegating
- Planning & Prioritizing
- Simplifying

## Body Mechanics, Ergonomics & Posture

## Sleep Hygiene & Positioning

## Tai Chi & Other Therapeutic Movements

## Joint Protection Principles

## Activity Modification

## Habit formation

## Time Management



# Energy Conservation

## Pacing

- Breaking up activities into smaller portions with breaks in between

## Planning & Prioritizing

- Planning for accomplishing weekly tasks based on energy expenditure

## Delegating

- Getting support from friends/family to accomplish certain tasks

## Simplifying

- Changing the activity to use less energy (includes adaptive equipment)

# Time Management

9 pm

8 pm

7 pm

6 pm

4 pm

4 am

5 am

8 am

9 am

# Tai Chi

## Characteristics

Circular

Relax

Calm

Continuous

Intent

Energy

All movements flow in a circular path to maintain balance.

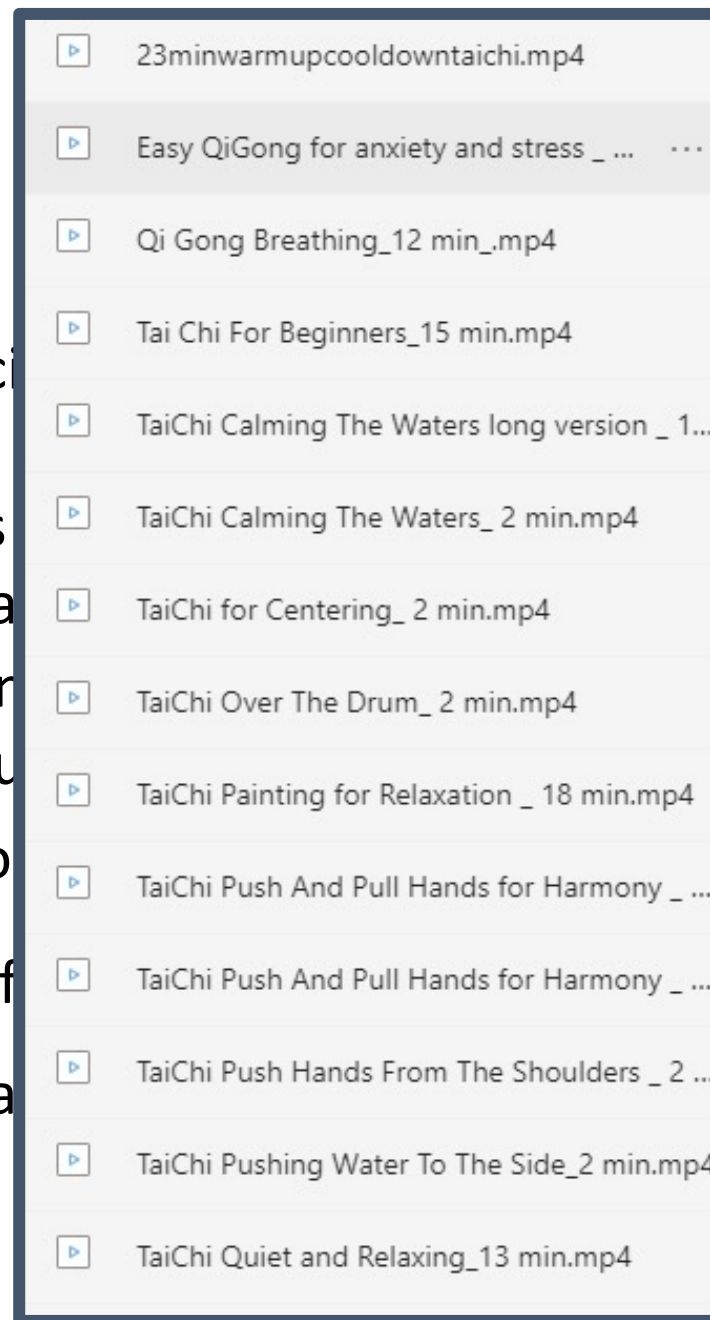
Deep breathing facilitates relaxation during practice. Overexertion is avoided.

Calmness in movement and a clear mind are essential.

Smooth transitions with one movement leading to the next.

Mind is present and fully focused on the movement.

Movements are biomechanically efficient, requiring minimal effort to execute.



Dynamic stretching and

variety of the

diverse movements

lead to the next.

purpose.

at least amount of

# Pain Psychology

## WEEK 1

- Coping Skills Training
- Emotion Regulation
- Stress Management



## WEEK 2

- CBT Model of Pain
- MBSR
- Cognitive
- Restructuring



## WEEK 3

- Assertiveness
- Communication
- Skills



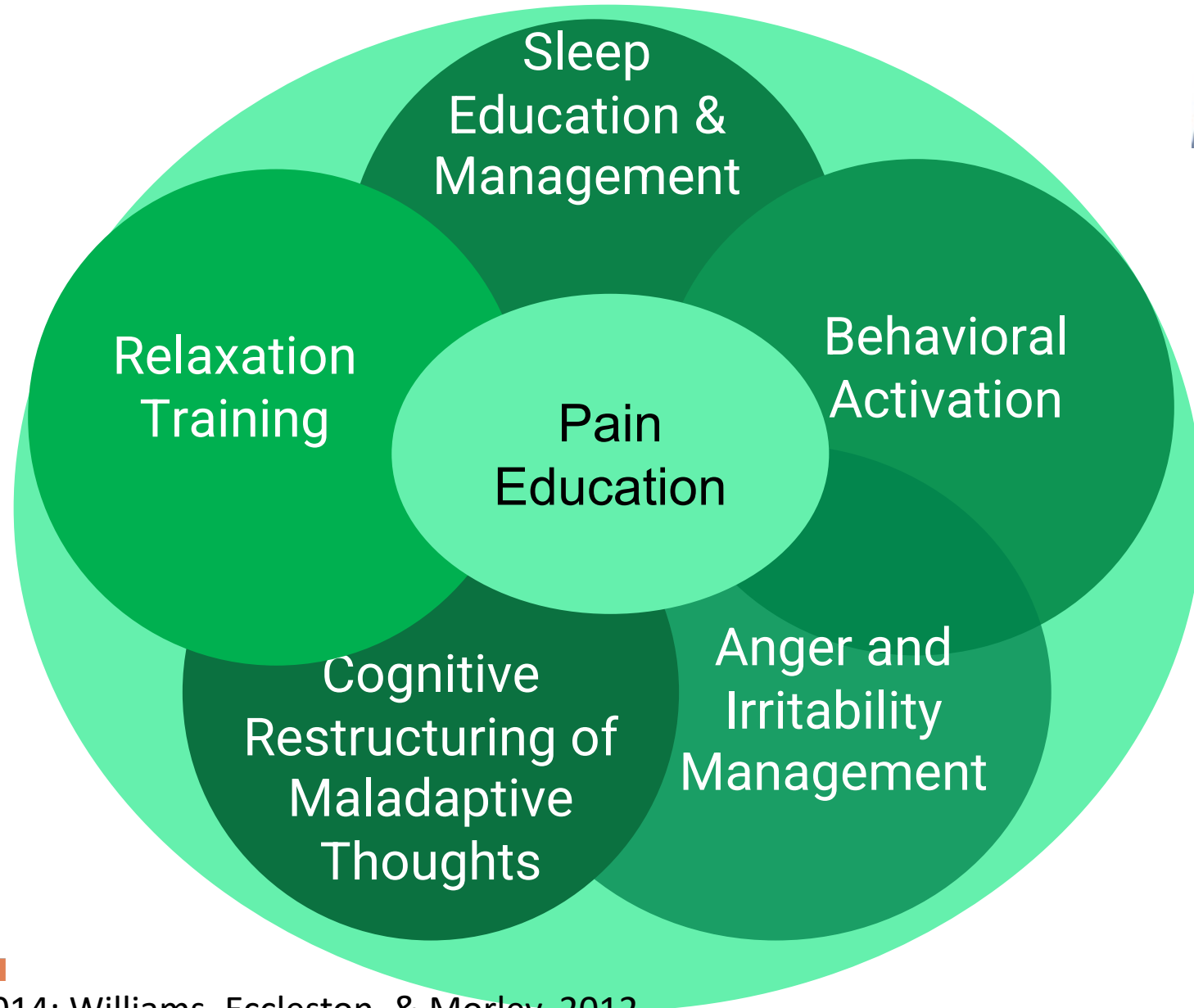
## WEEK 4

- Barriers to Success
- Family Education



CBT: Cognitive Behavioral Therapy  
MBSR: Mindfulness Based Stress Reduction

# Cognitive Behavioral Therapy



Ehde, Dillworth, & Turner, 2014; Williams, Eccleston, & Morley, 2012



# Mindfulness

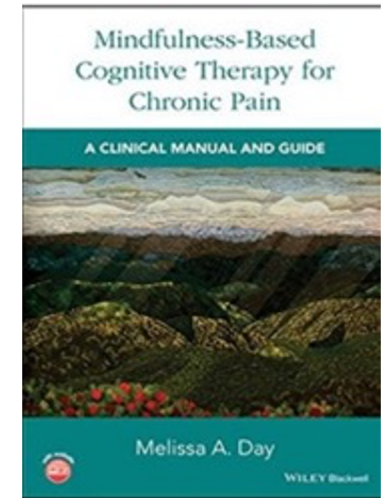
- Observing
- Describing
- Acting with awareness
- Non-judging of experience
- Non-reactivity to experience



Hilton et al. *Ann Behav Med.* 2017

# Pain Psychology: Mindfulness

- The Breath as an Anchor
- Stressful Experiences Diary
- Learning to Stay Present
- Unhelpful Habits of Mind
- Selective Attention
- Relying on Intuition
- Blaming, Personalization and Labeling
- Mindful Activities
- Active Acceptance & Taking Care of Self



Melissa Day, PhD, 2017.

## Behavioral Health

Khoury B, et al *Clin Psych Review*. 2013;33:763-71.  
Keng S, et al. *Clin Psych Review*. 2011;31:1041-56.

## LBP & Pain Management

Tang Y. *Transl Behav Med*. 2016;6:63-72.  
Cherkin D, et al . *JAMA* 2016;315:1240-49.  
Goyal M *JAMA*. 2016;315:1236-7.  
Jacob J. *JAMA*. 2016.  
Garland E, et al. *J Cons Clin Psychol*. 2014;82:448-9

# Pain Psychology: Week #3

The screenshot displays the website for the UC San Diego Center for Mindfulness. The header includes the center's name and logo, along with a navigation menu with options like 'About', 'Schedules & Registration', 'Programs', 'UCSD Mindfulness Research Program', 'Mindfulness & Compassion Resources', 'Professional Training Institute', and 'Free Live Practice Sessions'. The main content area is titled 'GUIDED AUDIO & VIDEO' and features a list of meditation practices: Short Mindfulness & Compassion Meditations, Seated Meditations, Compassion & Loving - Kindness Meditations, MPEAK, Body Scan, and Mindful Movement (Audio). A sidebar on the left contains a secondary navigation menu with the same categories as the top header. Social media icons for Facebook, Instagram, and LinkedIn are located at the bottom of the page.

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Center for Mindfulness

UC San Diego  
CENTERS FOR INTEGRATIVE HEALTH

About ▾ Schedules & Registration Programs ▾ UCSD Mindfulness Research Program ▾ Mindfulness & Compassion Resources ▾ Professional Training Institute Free Live Practice Sessions ▾

Center for Mindfulness

GUIDED AUDIO & VIDEO

The UC San Diego Center for Mindfulness has prepared a number of practices that are now available on SoundCloud.

⊕ Expand All

- ▾ Short Mindfulness & Compassion Meditations
- ▾ Seated Meditations
- ▾ Compassion & Loving - Kindness Meditations
- ▾ MPEAK
- ▾ Body Scan
- ▾ Mindful Movement (Audio)

About ▾ Schedules & Registration Programs ▾ UCSD Mindfulness Research Program ▾ Mindfulness & Compassion Resources ▾ Professional Training Institute Free Live Practice Sessions ▾

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# Relaxation Training



## Goals

- Nervous system balancing
- Maintain physiologic balance
- Increase sense of calm and decrease overall tension

**“A physiologic and homeostatic state that counteracts stress.”**

- Benson (1970)

1

Ways to Use

2

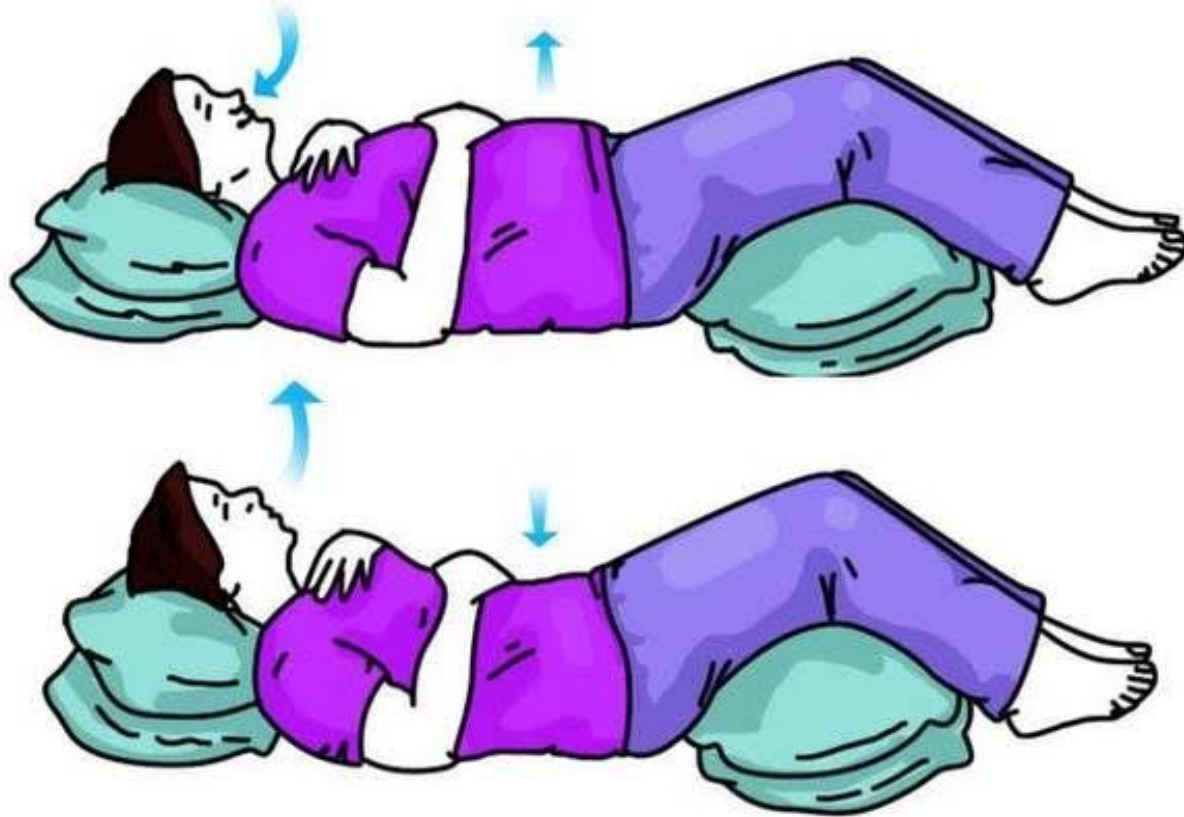
Practice

3

Adapting



# Diaphragmatic breathing



## Education

Role of the diaphragm and the Vagus nerve in regulating the nervous system and reducing muscle tension to manage pain

## Practice

Emphasizing comfort along with filling of the stomach to promote diaphragm movement

## Measure

Respiratory rate and provided counted breaths

- Ideal respiratory rate 6 –8 breaths per minute



Breathe2Relax 4+

National Center for Telehealth & Te

# Progressive Muscle Relaxation (PMR)

## Contracting and relaxing muscles

- Build awareness of muscle tension
- Provide a specific skills
- Trigger the parasympathetic nervous system

## Guidelines

- Use no more that 50% of strength
- Avoid tensing actively spasming areas
- Tense muscles for ~7 seconds, relax muscles for ~45 seconds

# Guided Imagery

- Guides patients in imagining a calming/relaxation environment to calm the mind and body



Relaxation Exercise	Technique (example)
<b>Diaphragmatic Breathing (DB)</b>	Breathe through your nose (inhale) while pushing abdomen out; breathe out (exhale) while pushing abdomen in
<b>Progressive muscle relaxation (PMR)</b>	Tense and release muscle groups, distally to proximally; hands (clench); wrists and forearms (extend and bend hands back); shoulders (shrug towards ears); cheeks and jaws (smile as widely as you can); hips and buttocks (press buttocks together tightly), etc. Hold tension for 4-10 seconds then release and relax for 15-30 seconds
<b>Grounding Exercises</b>	“5-4-3-2-1”; 5 things you see, 4 things you feel, 3 things you hear, 2 things you smell, and 1 thing you taste
<b>Autogenic Training (AT)</b>	6-step sequence allows patients to passively observe sensations in the body. Examples: limbs feel heavy, limbs feel warm, breathing is comfortable, abdomen feels warm, forehead feels cool, and heart is beating calmly or regularly
<b>Guided Imagery</b>	Guided experience encourages mentally generated images that simulate or re-create the sensory perceptions: sight, sound, taste, smells, and touch

# Patient Apps: Enhance Compliance

## Breathing & Relaxation

- Breathe2Relax (VA app)
- Breathe+
- Calm, Headspace
- Adjustable in/out counts
- 4 in, 6 out is a good target



## Meditation & Imagery

Guided Imagery Meditation (10 min)

[https://www.youtube.com/watch?v=t1rRo6cgM\\_E](https://www.youtube.com/watch?v=t1rRo6cgM_E)

The Forest Awakens (5 min)

[https://www.youtube.com/watch?v=gU\\_ABFUAVAs](https://www.youtube.com/watch?v=gU_ABFUAVAs)

Guided-Imagery Meditation (18 min)

[https://www.youtube.com/watch?v=t1rRo6cgM\\_E](https://www.youtube.com/watch?v=t1rRo6cgM_E)

Ease Anxiety (15 min)

<https://www.youtube.com/watch?v=pPBxNLpOLNU>



# Patient Videos



Understanding Pain Rebrand



Persistent Pain Explained in 3 minutes



Understanding Pain: Brainman chooses



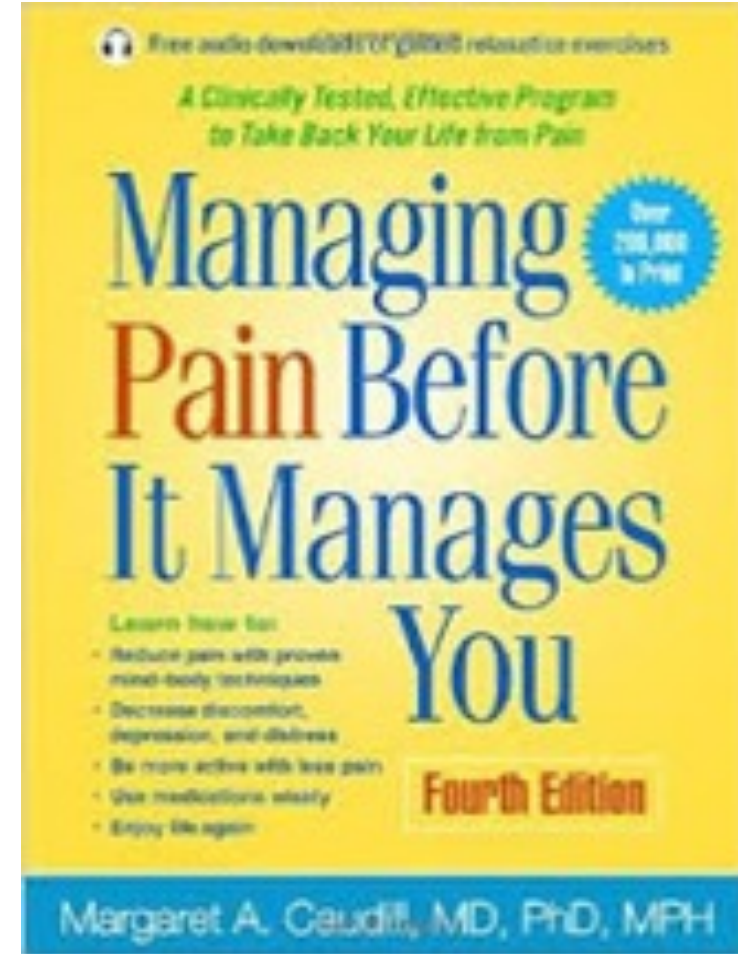
TEDxAdelaide – Lorimer Moseley – Why Things Hurt



# Pain Education



Greg Lehman



Margaret Caudill

# Week #1: Structured Functional Restoration Program: 4 weeks

Discipline: Lecture Topic	Links, Lecture Notes, Worksheets
<b>SFRP WEEK 1</b>	
<p><b><u>PT Individual Session Goals:</u></b></p> <ol style="list-style-type: none"> <li>1. Complete assessment</li> <li>2. Start your journey to learn more about persistent pain</li> <li>3. Begin a gentle, graded aerobic exercise program.</li> <li>4. Start logging for your home program</li> <li>5. Use the Activity Stoplight to build confidence in increasing activity.</li> </ol>	<p><b>Handouts: Week 1 – located in tab 4</b></p> <ol style="list-style-type: none"> <li>1. Pain Neuroscience Education Key Concepts 1-3</li> <li>2. Therapeutic Exercise Log (can use this one or the multi-disciplinary one at the front of your binder)</li> <li>3. PT Patient Video and eBook References (for additional information if desired)</li> <li>4. Aerobic Exercise Sheet</li> <li>5. Activity Stoplight</li> </ol> <p>PT Lecture #1 Introduction and Overview of PT at SPS <a href="http://bit.ly/sfrpPT1">http://bit.ly/sfrpPT1</a></p> <p>PT Lecture #2 Pain Neuroscience Education <a href="http://bit.ly/sfrpPT2">http://bit.ly/sfrpPT2</a></p> <p>PT Lecture #3 Acute vs Chronic Pain and Sensitive Nerves <a href="http://bit.ly/sfrpPT3">http://bit.ly/sfrpPT3</a></p>



# Physical Therapy

This screenshot shows a YouTube video player displaying a PowerPoint slide titled "Physical Therapy Goals". The slide lists several goals for physical therapy:

- Address your Goals!
- Help you establish a comfortable and achievable program to regain an active lifestyle and improve your quality of life
- Reduce, regardless of pain or health status, health care costs and improve your health and quality of life
- Regular movement program to maintain their health and quality of life
- A targeted movement program will:
  - Increase the body's tissue tolerance to load, activity, and stress
  - Increase the sensitivity of the nervous system
  - Decrease body-based "pain memories" through non-painful, gradual and graded return to movement and function

This screenshot shows a YouTube video player displaying a PowerPoint slide titled "Why are we teaching you about pain neuroscience?". The slide discusses the importance of understanding pain neuroscience for physical therapists.

**Why are we teaching you about pain neuroscience?**

- Helps you understand the underlying mechanisms of pain
- Helps you understand the underlying mechanisms of pain
- Helps you understand the underlying mechanisms of pain

This screenshot shows a YouTube video player displaying a PowerPoint slide titled "Medicine Cabinet... in Your Brain". The slide explains how chronic pain affects the brain's ability to process information.

**Medicine Cabinet... in Your Brain**

- When in chronic pain these compounds "dry up"
- Your brain does this to purposefully allow in more information from the tissues about potential danger.
- But we can produce more of them and make a "wet brain"
- Turning on this "faucet" in your brain blocks incoming "danger signals"
- How: exercise!
- A 6 mile run stimulates endorphin release that is equivalent to 10 mg of morphine!
- 15-30 minutes of aerobic exercise releases

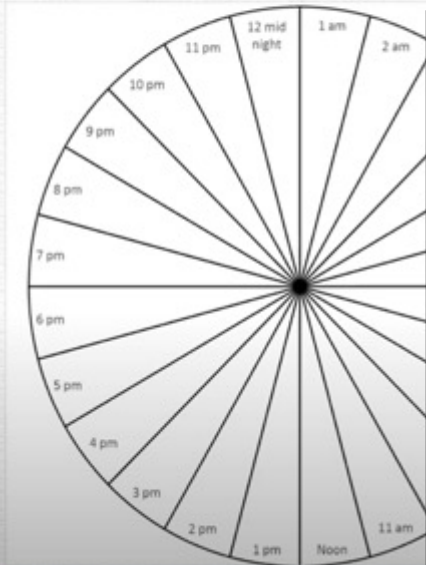
Janal, Colt et al 1984  
Ola Grimby course notes



# Occupational Therapy

YouTube Search

## Time Management – List *current* activities



YouTube Search

## Goal Setting

- Decide on reasonable activities
- Goal setting is one way to get things accomplished in a day.
- Set *achievable/action oriented*, measurable/meaningful, realistic goals

Example  
I will do 1 hour of yard work twice a week with breaks every 20 minutes to rest

YouTube Search

## Importance of Pacing

### Boom & Bust Cycle

```
graph TD; A[Rest to recover] --> B[Having a good day...so have to catch up...]; B --> C[Over do it]; C --> D[Increased pain]; D --> A;
```

The diagram illustrates the Boom & Bust Cycle. It shows a cycle of four stages: Rest to recover (blue), Having a good day...so have to catch up... (red), Over do it (green), and Increased pain (purple). Arrows indicate the flow from Rest to recover to Having a good day, then to Over do it, then to Increased pain, and finally back to Rest to recover.

www.paintoolkit.org



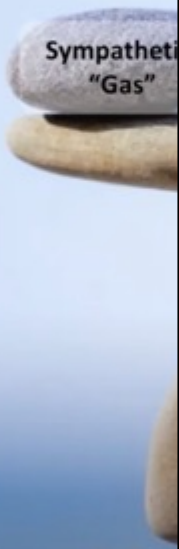
# Relaxation Training

YouTube

Search

## The Optimal State of the Autonomic Nervous System is Balance

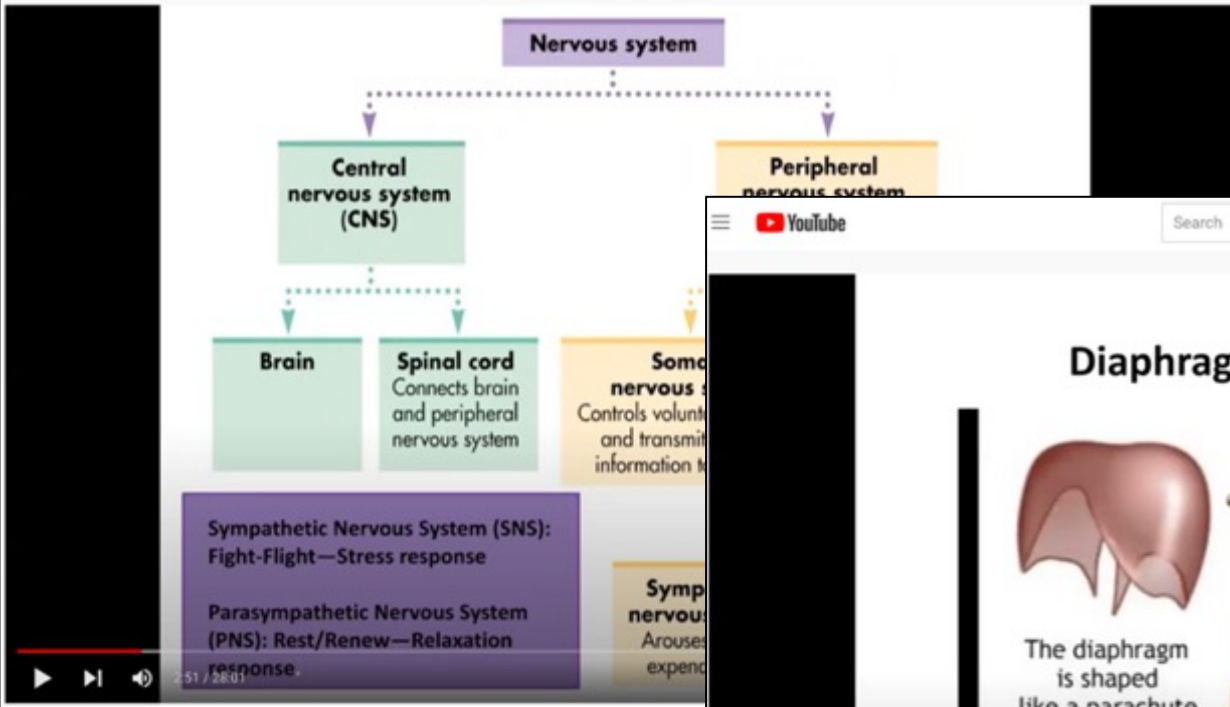
Sympathetic "Gas"



13:58 / 28:01

YouTube

Search



Nervous system

Central nervous system (CNS)

Peripheral nervous system

Brain

Spinal cord  
Connects brain and peripheral nervous system

Soma nervous system  
Controls voluntary and transmits information

Sympathetic nervous system  
Arouses expending response

Sympathetic Nervous System (SNS):  
Fight-Flight—Stress response

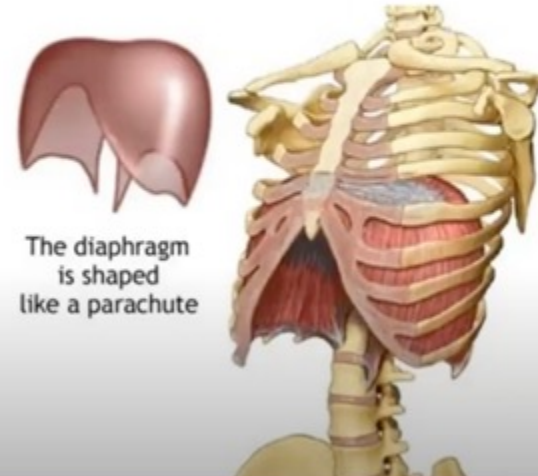
Parasympathetic Nervous System (PNS):  
Rest/Renew—Relaxation response

2:51 / 28:01

YouTube

Search

## Diaphragmatic Breathing



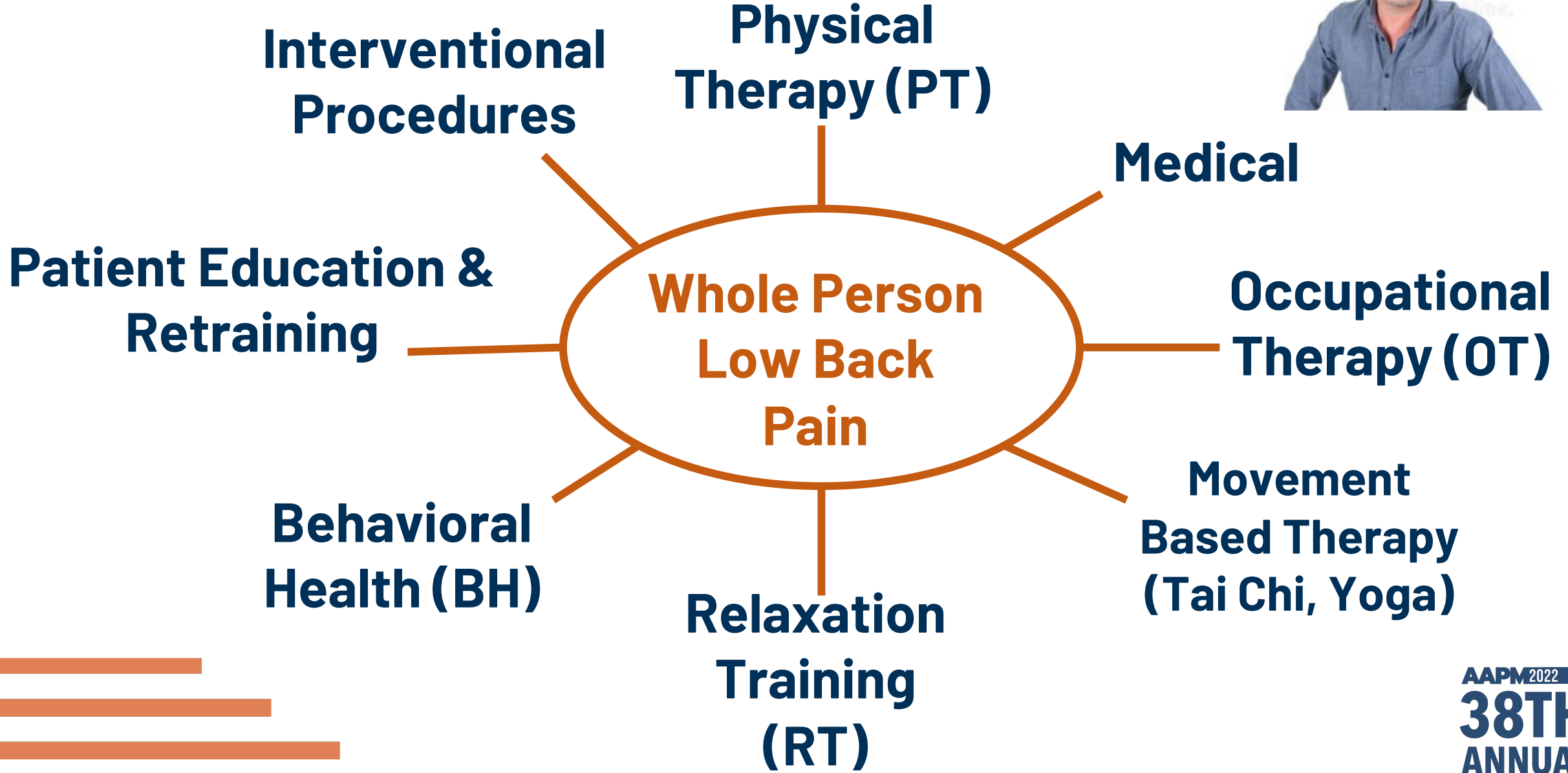
The diaphragm is shaped like a parachute

21:51 / 28:01



# Whole Person Low Back Pain





Curiosity and Interest

Appreciation

Noticing Beauty

Compassion and Empathy

Helping

Friendship and Love

Creativity

Learning

Engagement

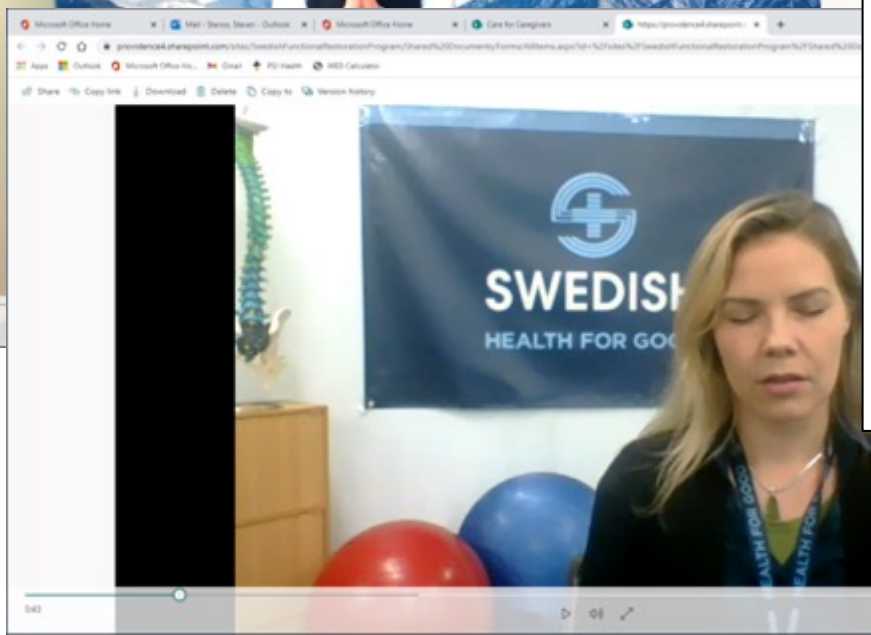
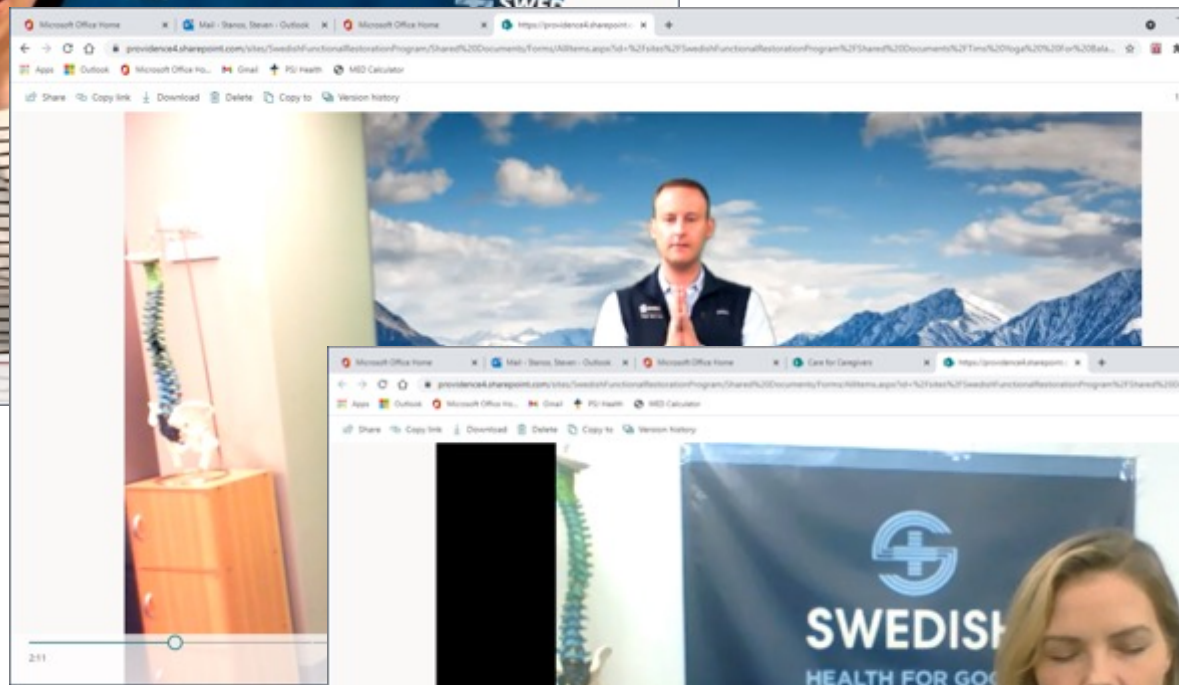
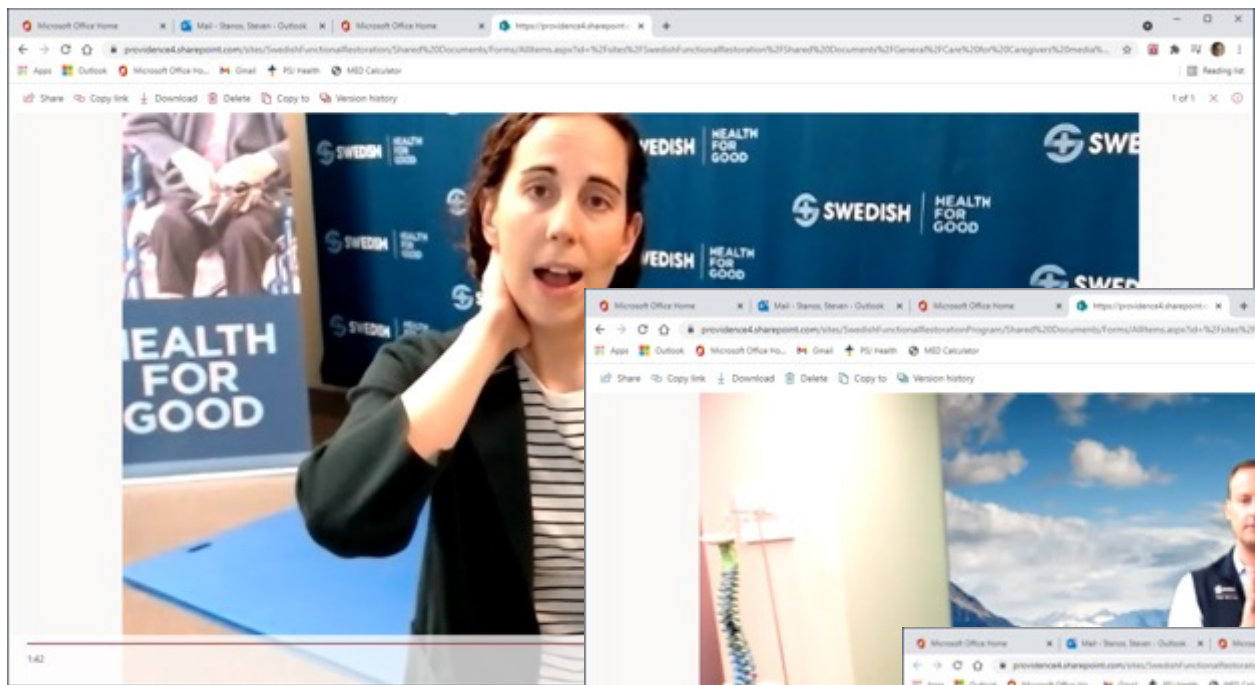
Relationships

Self Growth

Resilience




# COVID SUPPORT: Care For Caregivers



## SWEDISH COVID-19 WELLNESS Care for Caregivers Classes Week of February 15-19

- Monday:**  
"TAI CHI"  
at 8 a.m., noon and 8 p.m.  
Tai Chi for Centering with *Sorja Braasch, OTR*, 2 minutes
- Tuesday:**  
"GUIDED MEDITATION"  
at 8 a.m., noon and 8 p.m.  
Autogenic Training with *Sharon Hsu, Ph.D.*, 18 minutes, audio
- Wednesday:**  
"FOAM ROLLING FOR YOUR BACK"  
at 8 a.m., noon and 8 p.m.  
Foam Rolling for Your Back with *Tasha Parman, DPT*, 5 minutes
- Thursday:**  
"GUIDED RELAXATION"  
at 8 a.m., noon and 8 p.m.  
Mindfulness of Breath with *Katie Kapugi, LMHC*, 20 minutes
- Friday:**  
"NECK TENSION RELIEF"  
at 8 a.m., noon and 8 p.m.  
Cervical Rotation Neck Stretch with *Tim Zepelak, DPT*, 2 minutes

Visit the [CareForCaregivers](#) site and connect with links to live webinars (click on the rectangle on the right side).



COVID-19-0026 2/21



# 38TH ANNUAL MEETING

# Summary: Whole Person Low Back Pain

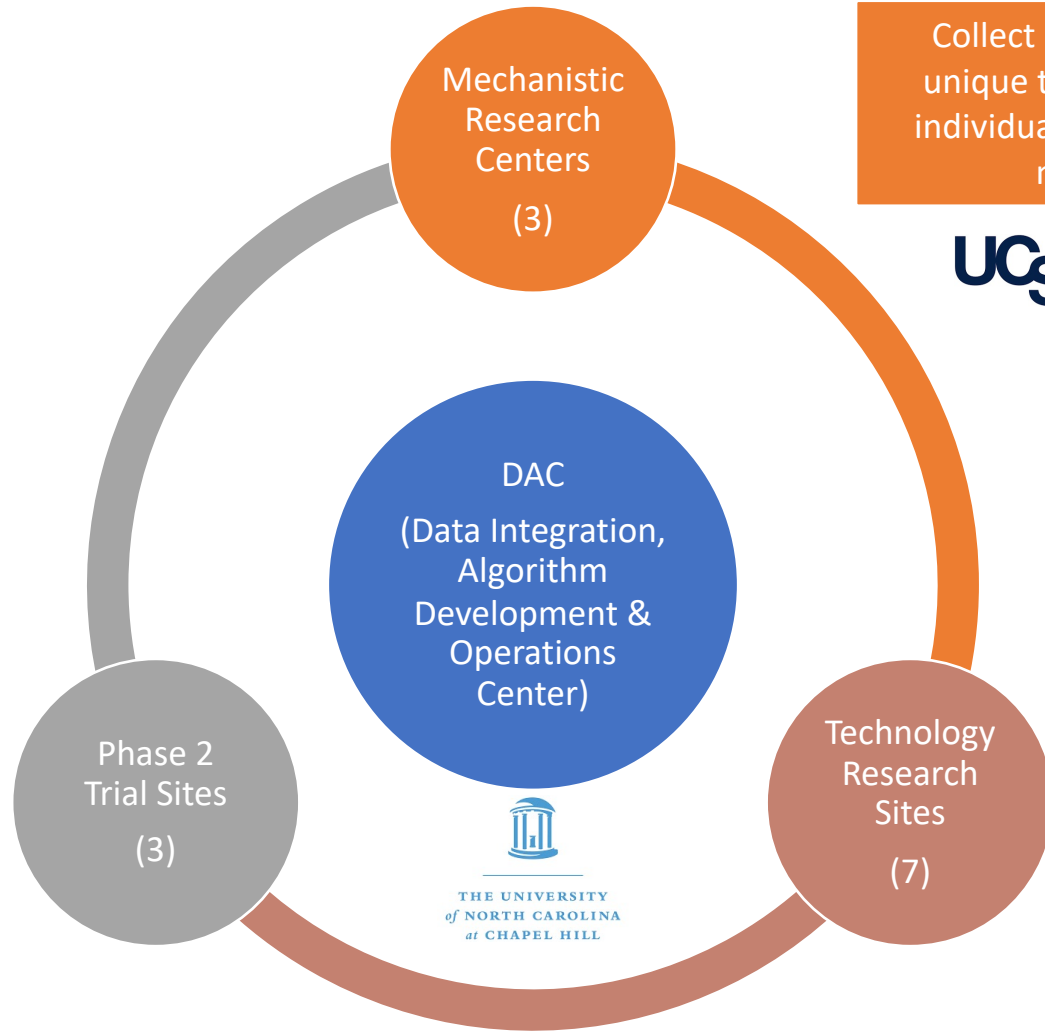
- Team based care with caregiver engagement
- Yellow flags as additional area of focus
- Shift towards changing a "sensitized" nervous system
- Skills training and integration with traditional care
  - Pain Neuroscience Educ; Protectometer, & Movement Visualization
- People, Places, Products

# NIH Back Pain Consortium (BACPAC) Research Program



# NIH BACPAC Research Program

Using a biopsychosocial model, test the safety and value of alternative medicine, non-addictive drugs, and devices that relieve cLBP & help patients carry out ADLs.



Collect patient data to identify specific traits unique to cLBP patients ... to understand how individual characteristics affect cLBP & identify new treatments. [phenotypes]



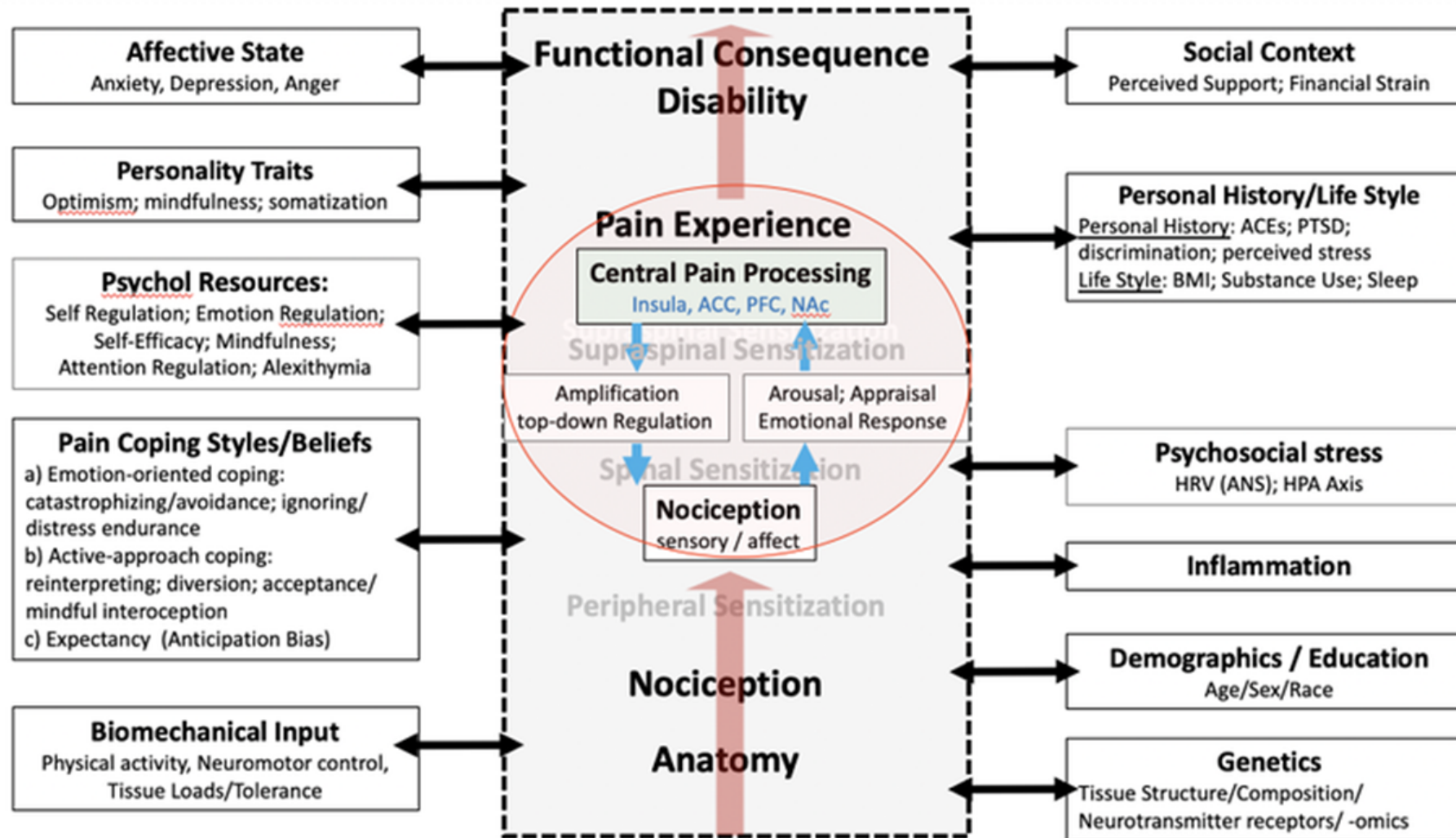
Create, test, and distribute technology and methods to test, quantify, and relieve cLBP.





# NIH BACPAC Research Program

## Goal #1: Develop/Iterate State-of-the-Art Model for cLBP



# NIH BACPAC Research Program

- **Goal #2:**
  - **Identify factors that are predictive of treatment effectiveness for well-defined patient subpopulations**
- **Develop Testable Hypotheses**
  - Identify treatments targeting specific pathways implied by the BACPAC cLBP theoretical model
  - Conduct studies designed to elucidate phenotypes
  - Test novel interventions and phenotyping approaches



# NIH BACPAC Research Program

- **Goal #3:**
  - **Develop an algorithm for multi-modal interventions for individuals with different phenotypes of cLBP**
- Design and conduct a large-scale adaptive cLBP trial that tests multiple bundled or sequential interventions
  - Incorporate research from BACPAC, HEAL & other studies in the design
  - Address novel questions regarding phenotypic factors influencing treatment effectiveness
  - Define optimal treatment strategies for patients based on phenotypic characterization

To learn more: <https://heal.nih.gov/research/clinical-research/back-pain>

# Resources





# Pain Education

Neuroplasticity-Sentis-YouTube (3 minutes)

<https://youtu.be/ELpfYCZa87g>

The Brain That Changes Itself - Norman Doidge  
(50 minutes)

[https://www.youtube.com/watch?v=bFC0m1P\\_cQQ](https://www.youtube.com/watch?v=bFC0m1P_cQQ)

Stress, Portrait of a Killer

<https://www.youtube.com/watch?v=eYG0ZuTv5rs>



# Wellness Resources

NIH Center for Complementary and Integrative Health,  
Chronic Pain: In Depth

<https://nccih.nih.gov/health/pain/chronic.htm>

NIH: Sleep Resources

<https://nccih.nih.gov/health/sleep/ataglance.htm>

<https://www.nia.nih.gov/health/good-nights-sleep>

Harvard School of Public Health Nutrition Resources

<https://www.hsph.harvard.edu/nutritionsource/>

# Meditation Resources

Introduction to Mindfulness-Based Stress Reduction (MBSR) by Dr. Ron Siegel:

[https://www.youtube.com/watch?v=aPIG\\_w40q0E](https://www.youtube.com/watch?v=aPIG_w40q0E)

Resources for home practice:

<https://www.wiley.com/legacy/wileychi/Day/mp.html?type=SupplementaryMaterial>



# APPLY IT

- Use the PHI as PDF or an App



## PERSONAL HEALTH INVENTORY

Use this circle to help you think about your whole health.

- "Me" at the center of the circle: This represents what is important to you in your life, and may include your mission, aspirations, or purpose. Your care focuses on you as a unique person.
- Mindful awareness is about noticing what is happening when it happens.
- Your everyday actions make up the green circle. Your options and choices may be affected by many factors.
- The next ring is professional care (tests, medications, treatments, surgeries, and counseling). This section includes complementary approaches like acupuncture and yoga.
- The outer ring includes the people, places, and resources in your community. Your community has a powerful influence on your personal experience of health and well-being.



Rate where you feel you are on the scales below from 1-5, with 1 being not so good, and 5 being great.

Physical Well-Being  1  2  3  4  5

NOT SO GOOD

GREAT

Mental/Emotional Well-Being  1  2  3  4  5

NOT SO GOOD

GREAT

Life: How is it to live your day-to-day life?  1  2  3  4  5

NOT SO GOOD

GREAT

What matters most to you in your life right now? Write a few words to capture your thoughts:

---

---

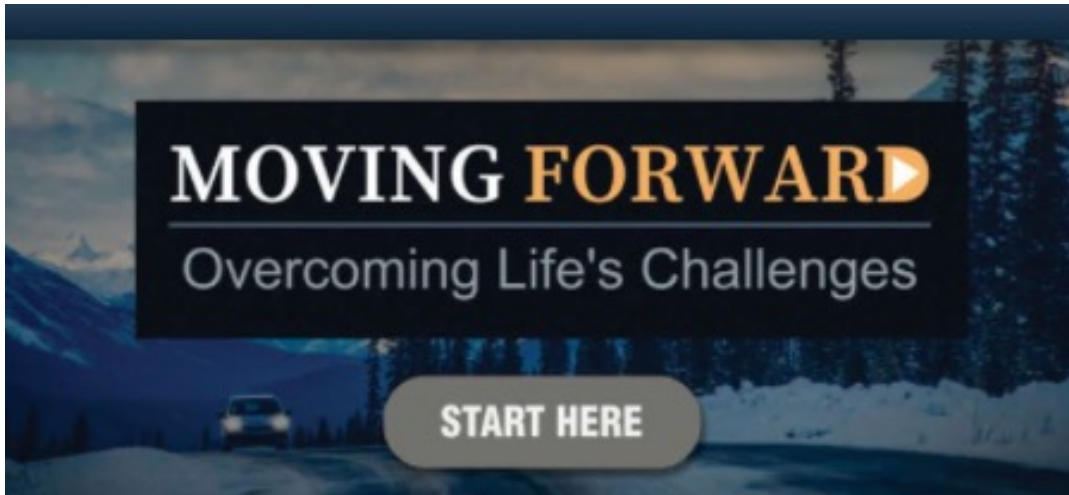
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[Personal Health Inventory \(va.gov\)](https://va.gov)



# Apps and Online Tools



[Moving Forward: Overcome Life's Challenges - Veteran Training \(va.gov\)](#)

- [VA Whole Health Library](#)
  - Coaching Apps for:
    - Smoking cessation
    - weight loss
    - PTSD
    - Mindfulness
  - Resources for:
    - Yoga
    - Tai Chi
    - Biofeedback
    - Meditation



**VA/DoD Clinical Practice Guideline**

# **Diagnosis and Treatment of Low Back Pain**



**VA/DoD Evidence Based Practice**

[Diagnosis and Treatment of Low Back Pain \(LBP\) \(2022\) - VA/DoD Clinical Practice Guidelines](#)

- [Full Guideline](#)
- [Clinician Summary](#)
- [Pocket Card](#)
- [Patient Summary](#)

# Thank You!

Questions?



# Appendix

Whole Person Low Back Pain



iPad 3:21 PM 31%

# PROTECTOMETER

Bills

Kids fighting

Too hard

No time

Supermarket

Doctor

H

Hh

DIMS

Walking to work

Doing the dishes

My ankle is stuffed

Work has it in for me

People at w...

The idiot at the checkout

Pain Level 7  
03/04/2016

Not feeling great today...

eson s-i-a-p 02

GO! | Home

SIMs

Walking on the beach

Afternoon nap

I Will be ok

My doctor is fantastic

Maddy and...

My family!

Walking on...

Just do it

J

Cairns

Music concerts

Yucky

K



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- VA Center for Integrated Health, [Stages of Change Model](#)
- VA Evidence Maps for [Acupuncture](#), [Mindfulness](#), [Tai Chi](#), [Yoga](#), [Massage](#), and [Guided Imagery/Biofeedback/Hypnosis](#)
- [VA/DoD Low Back Pain Clinical Practice Guideline](#)
- [VA Personal Health Inventory – Short Form](#)