

Functional Restoration: A Team-Based Approach. The Time Has Come.

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Disclosures

Consulting

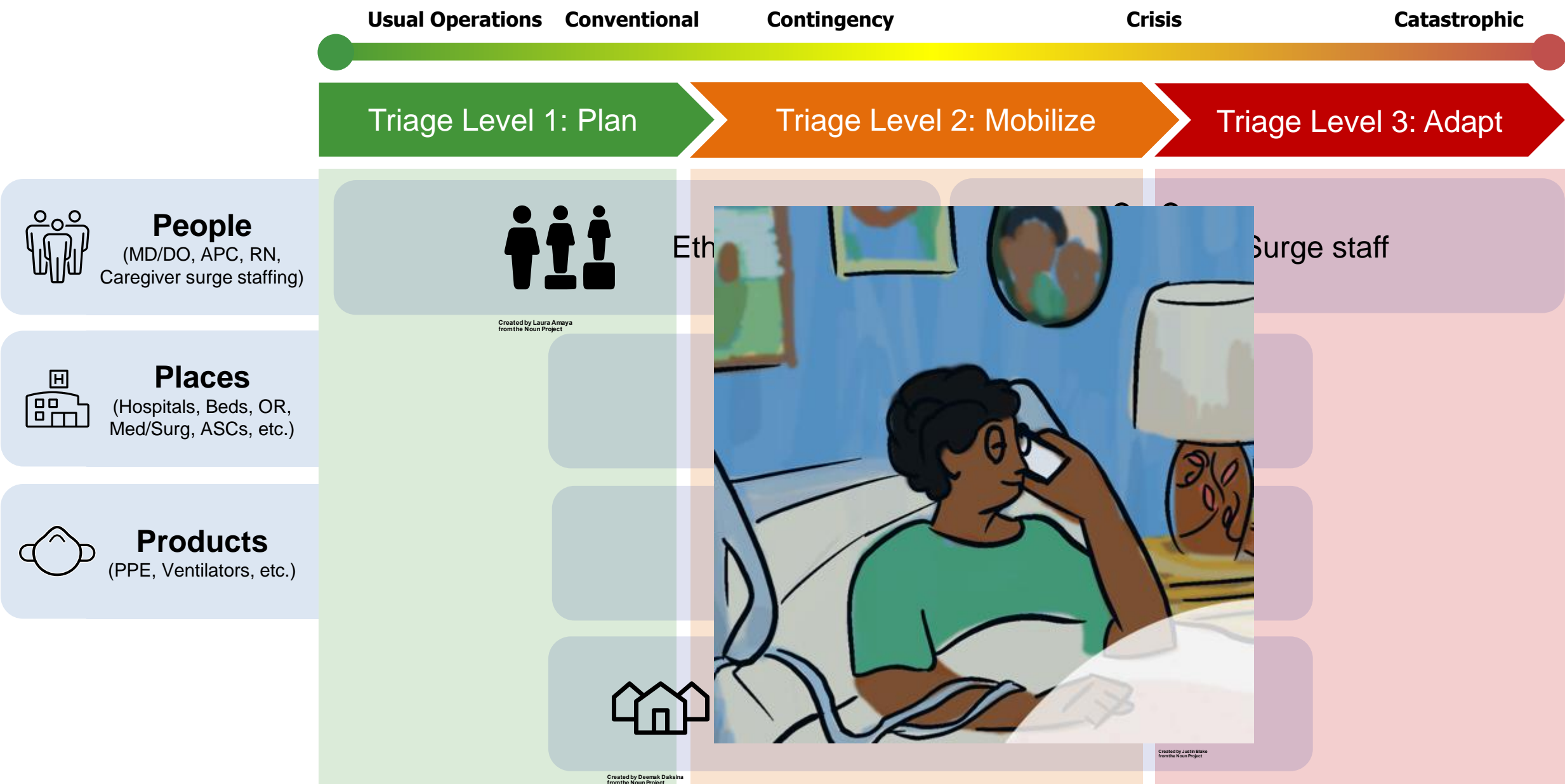
- BDSI
- Emergent Biosolutions
- Hisimatsu
- Lilly
- Pfizer
- Vertex

Overview

- Continuum of pain rehabilitation
- Historical perspective & models of care
- Outcomes of interdisciplinary care
- Components of interdisciplinary functional restoration
- Physical Therapy & Pain Neuroscience Education
- Occupational Therapy
- Relaxation Training
- Medical Management
- Pain Psychology



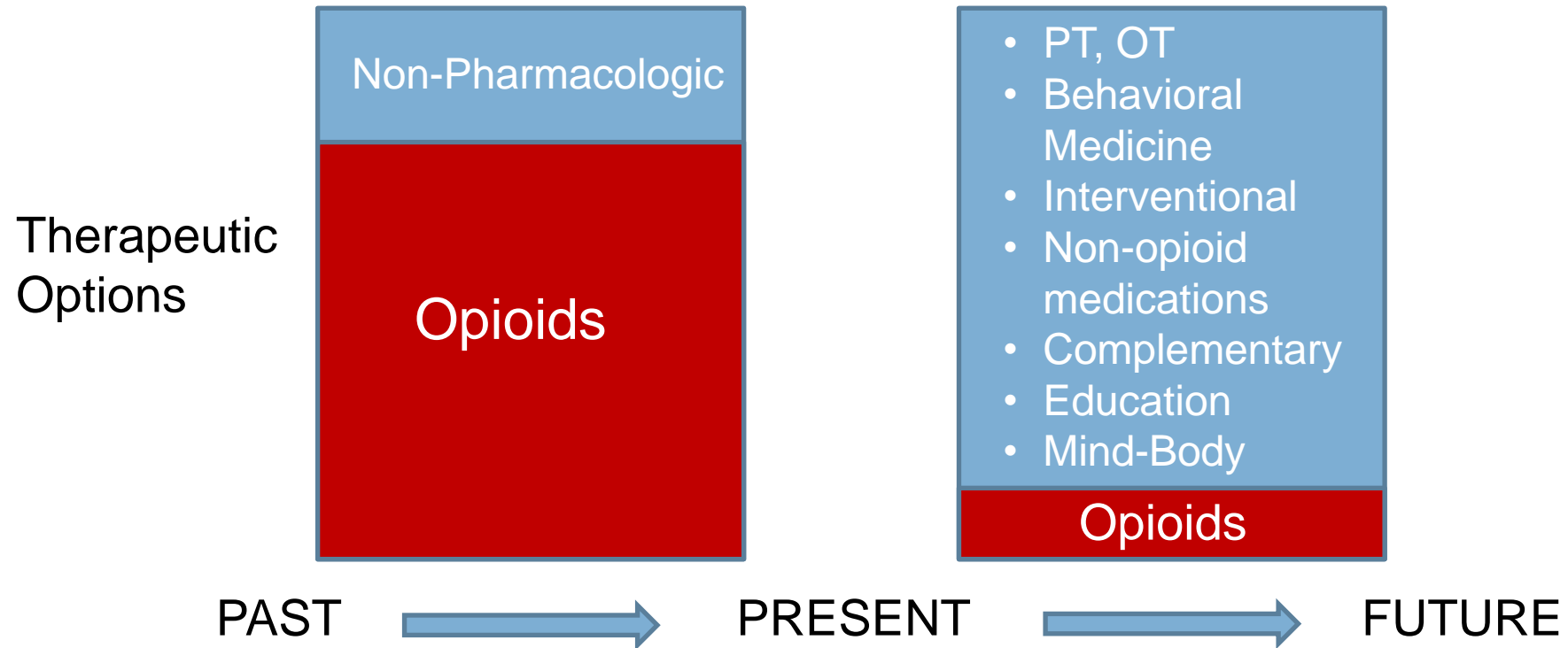
Providence: Pandemic Playbook, Spring 2020





Why is treating pain such a challenge?

Opioid Therapy: Current & Future State



What about pain rehabilitation?

An opportunity?





Pain Management Definitions

High-impact chronic pain: Pain associated with substantial restrictions of participation in work, social, and self-care activities for six months or more

Integrated care: The systematic coordination of medical, psychological and social aspects of health care and includes primary care, mental health, and, when needed, specialist services.

Interdisciplinary care: Care provided by a team of health professionals from diverse fields who coordinate their skills and resources to meet patient goals.

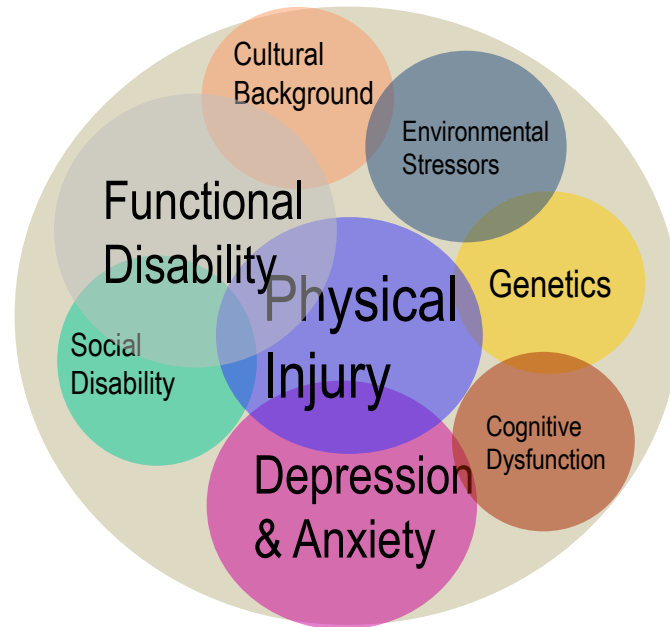
Multimodal pain treatment: Addresses the full range of an individual patient's biopsychosocial challenges by providing a range of multiple and different types of therapies as needed.

Chronic Pain: Bio-Psycho-Social Model



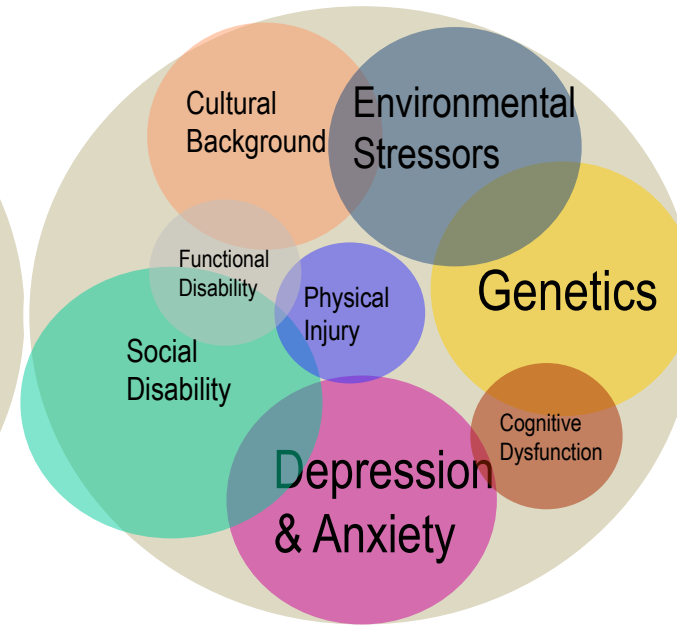
Jane

Pain 8/10
MED: 0



Tim

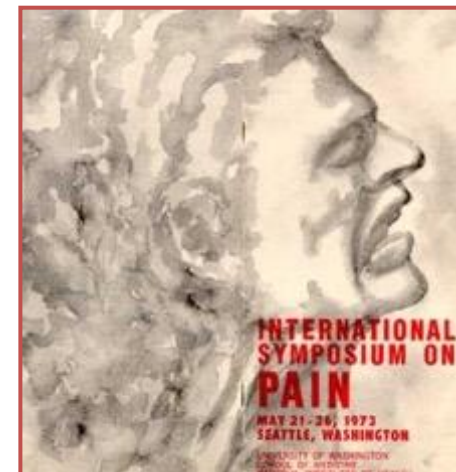
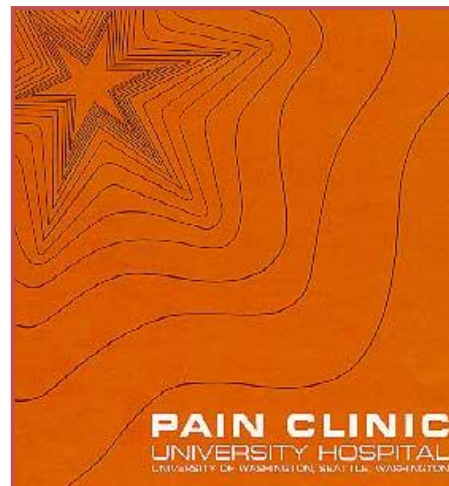
Pain 8/10
MED: 60



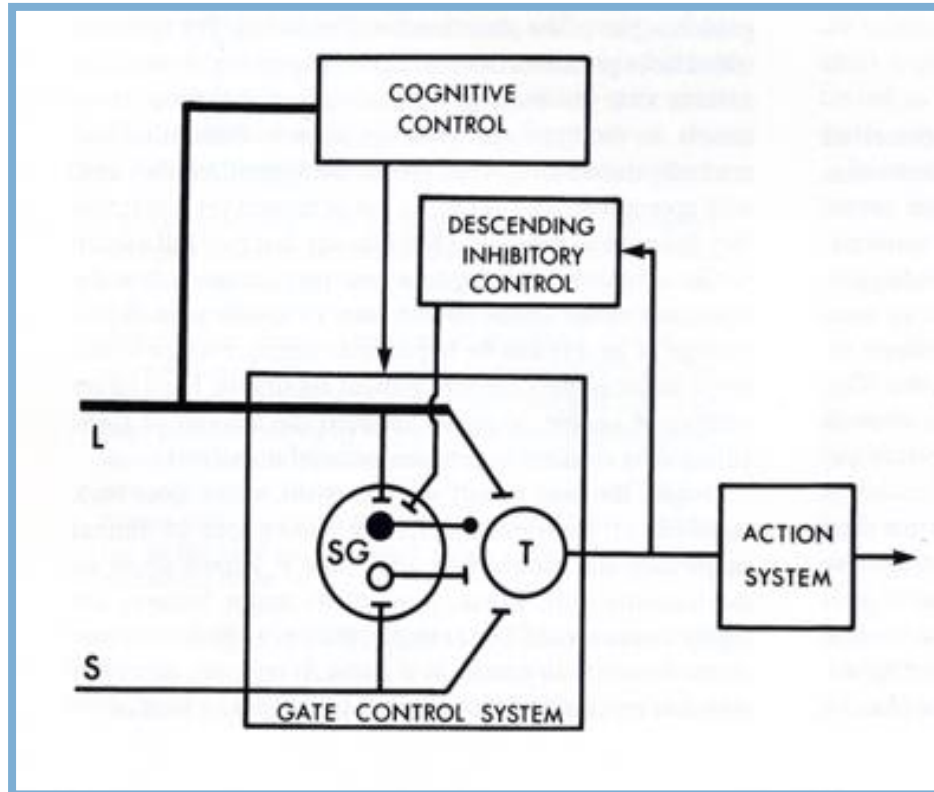


John J Bonica, MD
(1917-1994)

- Chairman, Department of Anesthesia (1960)
- “Multidisciplinary Clinic”
 - John Bonica, MD
 - Lowell White, MD
 - Dorothy Crowley
- Patients evaluated on Monday, conference with team on Friday
- “Multidisciplinary Pain Center” (1978)



Gate Control Theory



A. Sensory

B. Affective

C. Evaluative



John Melzack,
PhD



Patrick Wall,
PhD

Melzack R. In: Cousins MJ, Bridenbaugh PO, eds. *Neural Blockade in Clinical Anesthesia and Management of Pain*. 3rd ed. Philadelphia, Penn: Lippincott Williams & Wilkins; 1998.



Wilbert Fordyce, PhD

“Pain behavior”

1. factors that maintain pain problem can be different from those that initiated it
2. pain behaviors subject to shift from structural/mechanical to functional/environmental control

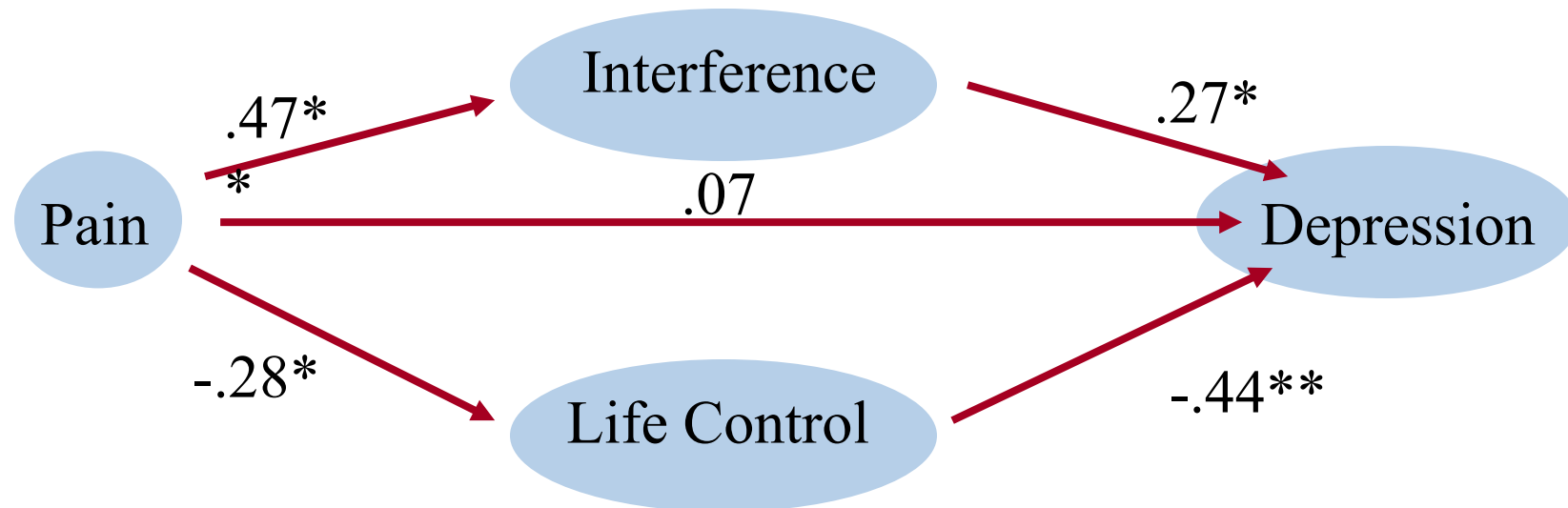


Dennis Turk, PhD

“BioPsychoSocial approach”

- Attributions, efficacy, expectations
- Personal control, problem solving within cognitive-behavioral perspective

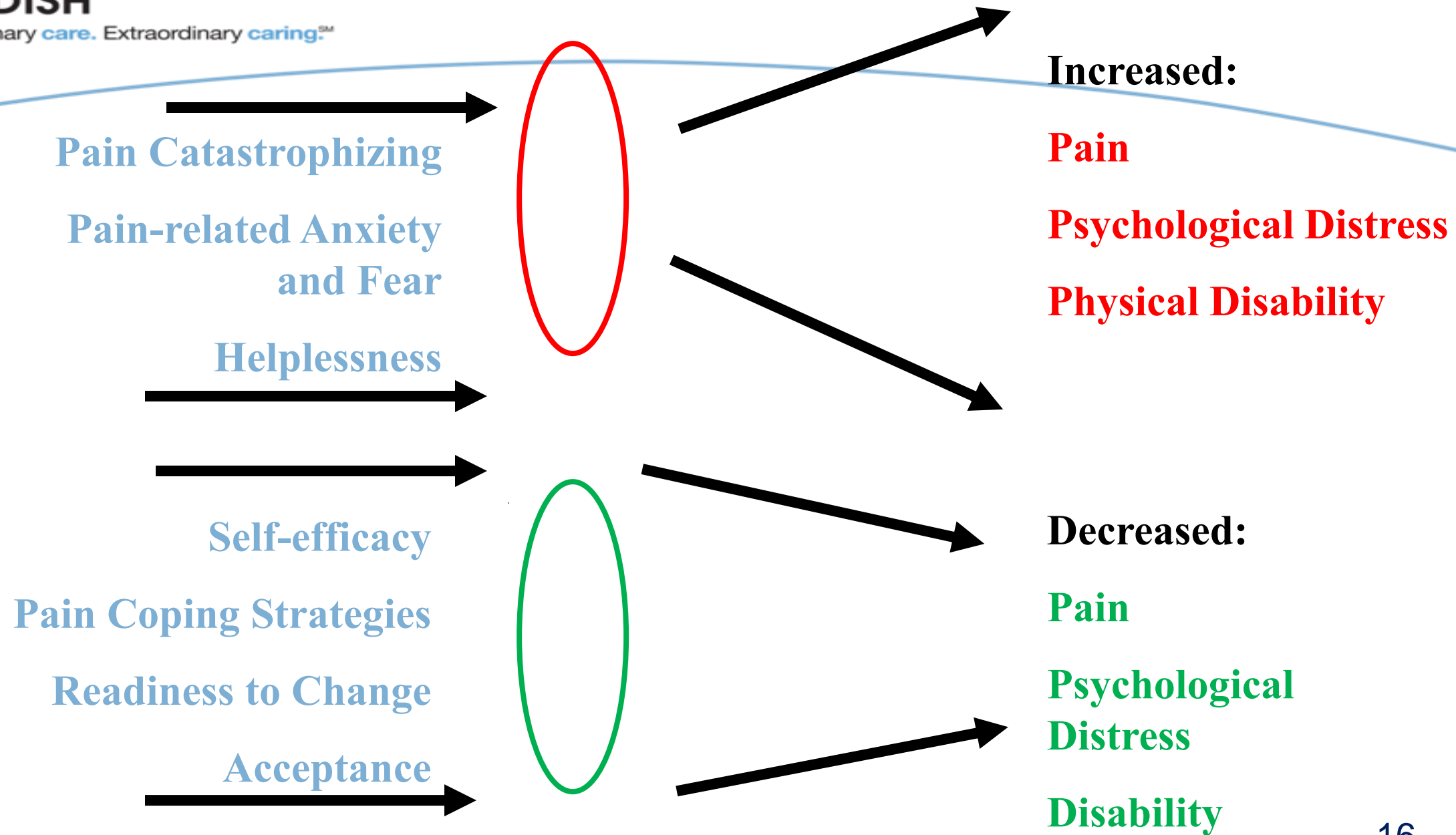
Cognitive-Behavioral Mediation Model



Catastrophizing

**Fear Avoidance
Beliefs**

Turk et al. Pain, 61, 1995



Pain Rehabilitation

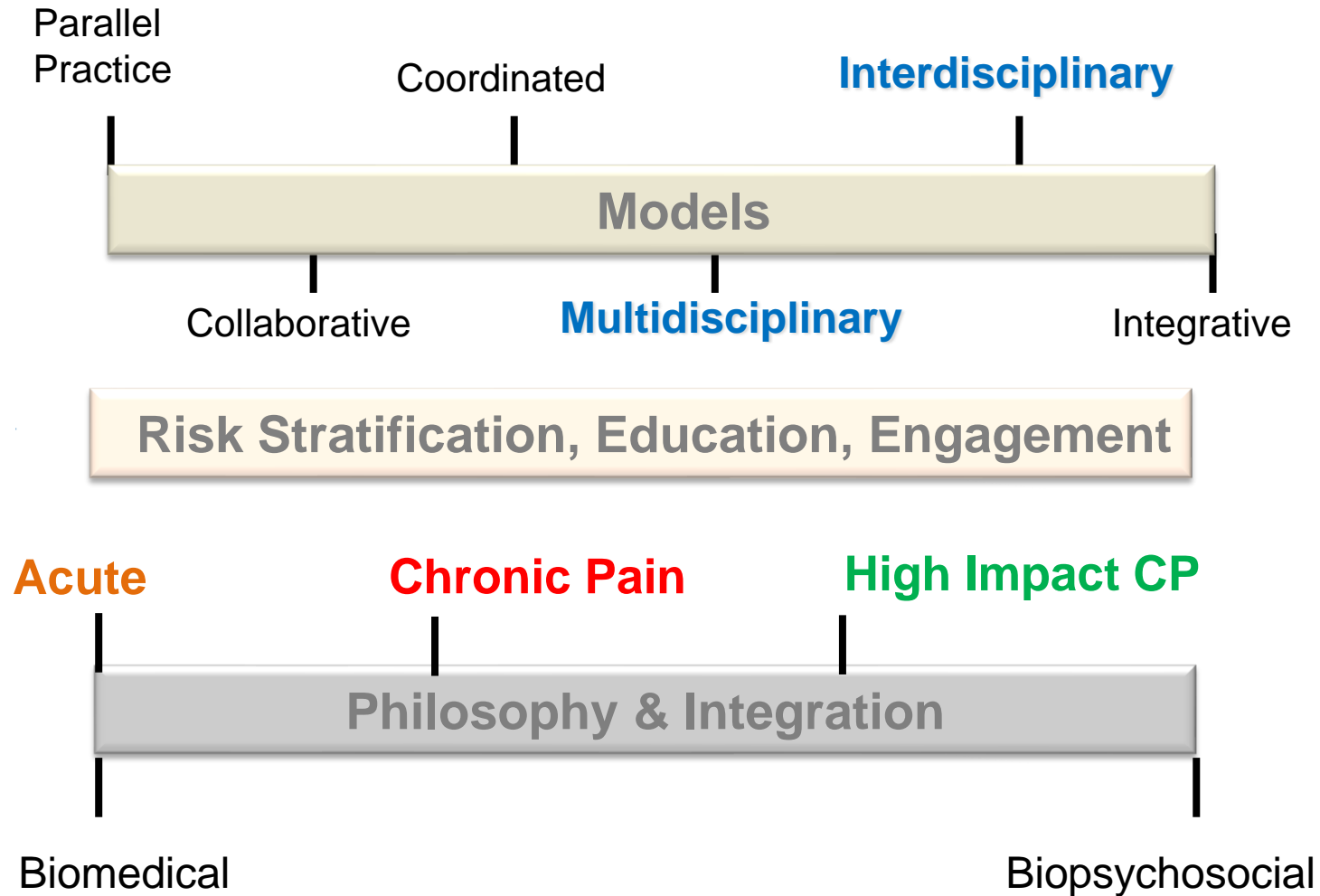
- Egypt and Ramses 1500 BC
- Multidisciplinary Care: John Bonica (1960s)
- Interdisciplinary Care (1980s)
- Swedish Back Schools (1960s-1980s)
- Functional Restoration: Mayer & Gatchel (1990s)
- Virtual Rehabilitation, Apps, Self-management



Pain Rehabilitation: A Continuum

- Back Schools
- Integrative Primary Care
- Multidisciplinary
- Work Rehabilitation
 - Work Hardening
 - Work Conditioning
- Interdisciplinary Functional Restoration

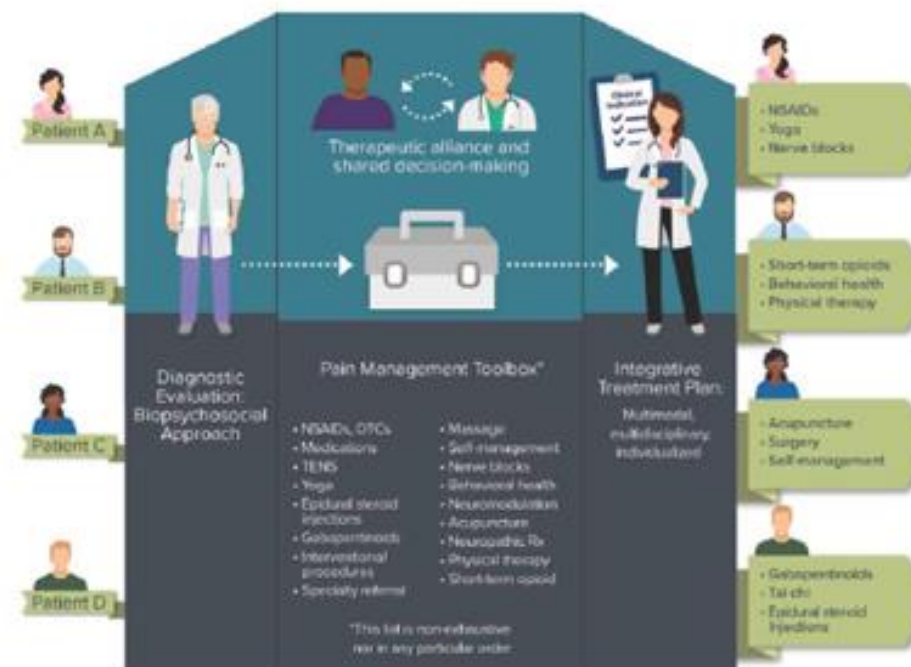
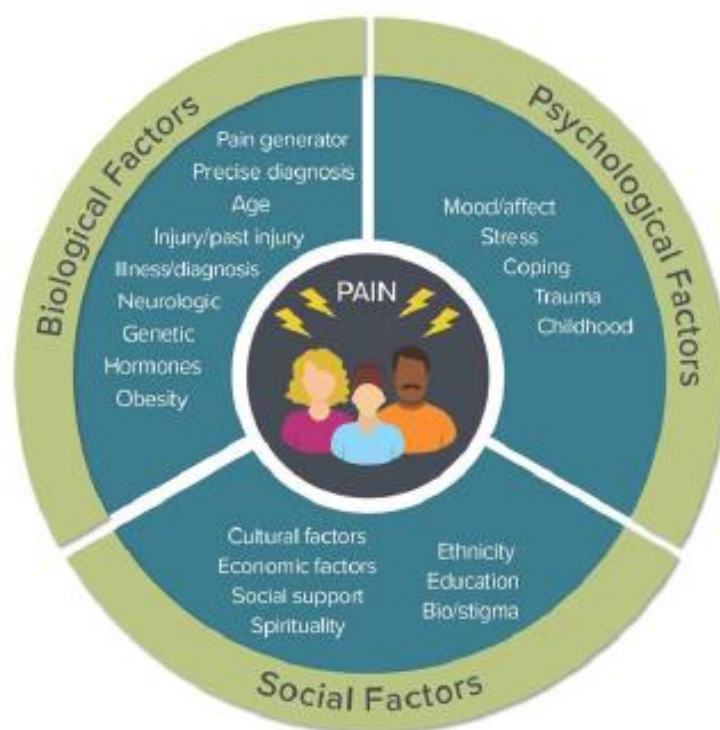
Pain Management Models of Care



**“Pain for me, arrives as a complete package,
and that demands a team approach.”**

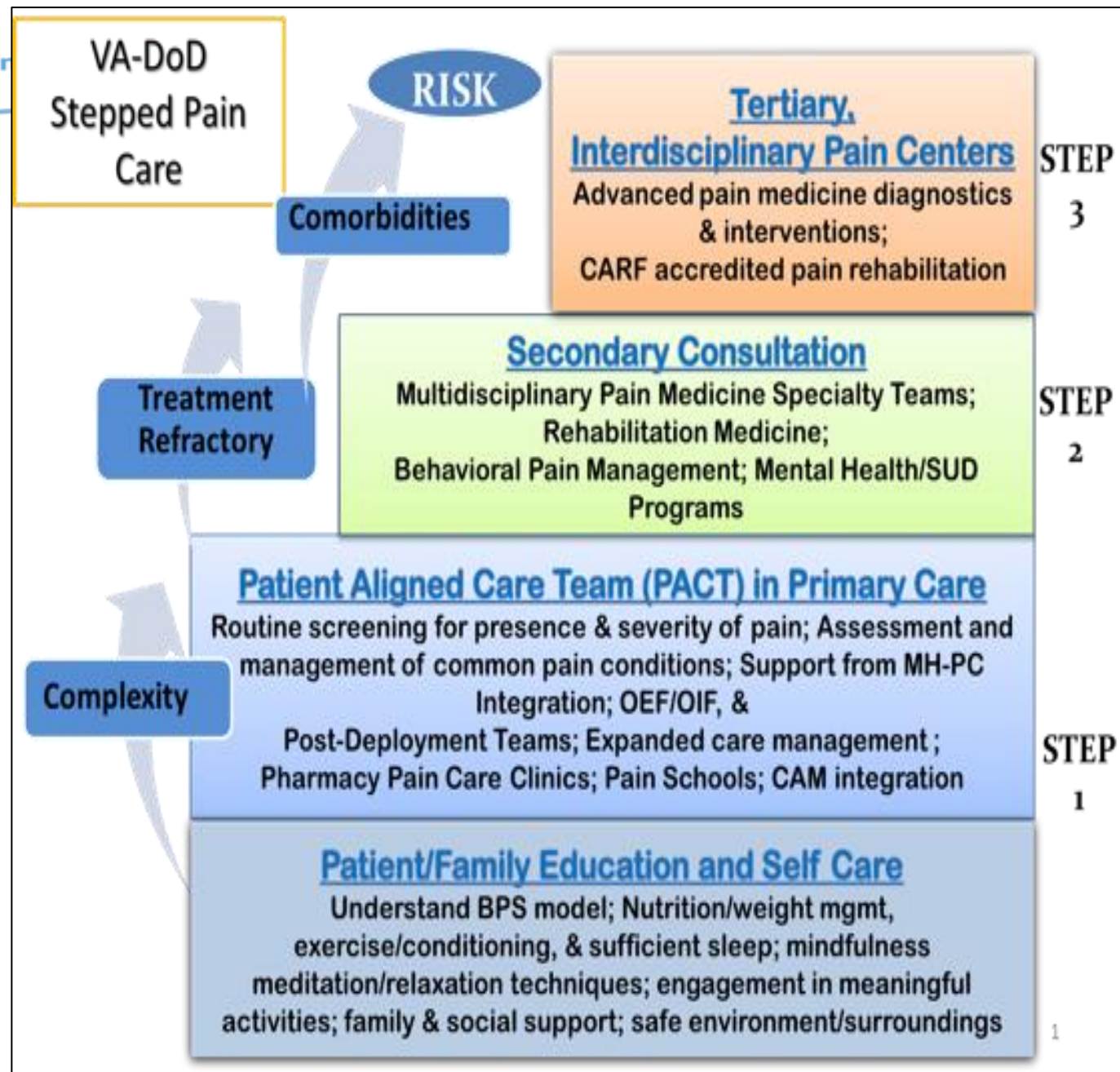
- Patrick Wall, PhD

HHS Pain Management Interagency Task Force



HHS: Interagency Task Force

Stepped Care Model: VA- DoD



VHA National Pain Management
Strategy, 1998.

Interdisciplinary Functional Restoration Works !



Mayo Clinic: Chronic Pain Program, n= 353; 3 weeks, 8 hrs/day

- Focus on learning skills to improve function and foster sustained benefits
- Pre-treatment: opioid patients more interference, more likely on polypharmacy
- Patients tapered off opioids, same outcomes at 6 months as non-opioid patients

Gilliam W, et al. *J Pain* 2018;19(6):678-689.



Cleveland Clinic Interdisciplinary Pain Program

- High dose opioid patients weaned from opioids same improvements in pain, depression, anxiety, and pain-related function vs lower dose or no opioids
- 73% of weaned patients remained off opioids
- Treatment benefits declined at 6 and 12 months but remained clinically significant.

Huffman, K. Et al. *Pain* 2017;158:1380-1394.

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

Interdisciplinary Care: Phases

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



Tim: Comprehensive Evaluation

Pain Psychology

Screening

- > PHQ-9: Moderate Depression
- > GAD-7: Moderate Anxiety
- > PCS: Elevated
- > TSK: Elevated

Behavioral

- > Poor coping skills
- > Poor limit setting

Affective/Cognitive

- > Maladaptive pain-related thought patterns
- > Depression and anxiety

Social

- > Divorced, 2 children, no family support
- > Physical trauma by mother's ex-boyfriend

Pain Medicine

Assessment:

- Right L5-S1 radiculopathy
- Anxiety disorder with depressed mood
- Sleep disturbance
- Opioid Use Disorder, stable on buprenorphine

Recommendation:

1. Structured Functional Restoration Program
2. Medication Management:
 - Continue buprenorphine
 - Initiate duloxetine
 - D/C "muscle relaxers"

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)

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

	Monday		Wednesday	Friday
Noon	Nursing Lecture		Group Stretching Class	Nursing Lecture
1:00	PT		PT Group	PT
2:00	OT	Med Visit	OT Group	OT
3:00	Psychology		Psychology Group	Psychology
4:00	Relaxation Training		Relaxation Group	Relaxation Training
5:00	Team Conference: Physician, Nurse, PT, OT, Psych, Relax Therapist			

Treatment Team

- > Pain medicine
- > Physical therapy (PT)
- > Occupational therapy (OT)
- > Pain psychology
- > Relaxation training
- > Nursing education



Medical Management

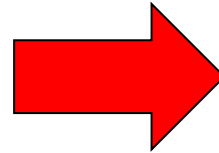
- Clarify the diagnoses, educate
- Put patient's "story" together, set context for success
- Sell a new approach, engage patient to change
- Be flexible
- Guide, encourage, give feedback
- Celebrate successes and help manage setbacks

ANAGLESIA

MOOD

SLEEP

From “Passive” to “Active” Physically and Psychologically



People don't change behavior because they . . .

- Do not think they can
- Are not ready for it
- Their values don't support it
- Do not think it is important
- Do not believe it is needed
- Do not have adequate support



Is the patient 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
- Shift patients as the “true” change agent
- Incorporate therapies that help to alter or reverse their dysfunctional response to pain

Week #1: Structured Functional Restoration Program: 4 weeks

SFRP WEEK 1

PHYSICAL THERAPY

PT lecture Topics:

- #1 Introduction and Overview
- #2 Pain Neuroscience Education
- #3 Acute vs Chronic pain
- #4 Medicine Cabinet in Brain and Aerobic Exercise

PT Individual Session Goals:

- Virtual Assessment to establish needs, goals, and treatment trajectory.
- 2. Begin setting the time and space for daily movement
- 3. Start a graded aerobic exercise program

PT Lecture #1 Intro

<https://youtu.be/i7cXg7ppX2o>

PT Lecture #2 Pain Neuroscience Education

https://youtu.be/8zMDvTvX_98

PT Lecture #3 Acute vs Chronic Pain and Sensitive Nerves

<https://youtu.be/bDDxkGzOJls>

PT Lecture #4 Medicine Cabinet In Brain and Aerobic Exercise

<https://youtu.be/GDUDVPmS4io>

Overall program handouts: located in binder Tab 4

- 1. PT Pain Flare Plan
- 2. Therapeutic Exercise Log
- 3. PT Patient Video and ebook references
- 4. Recovery Strategies Pain Guidebook

Overall program Lecture materials: located in

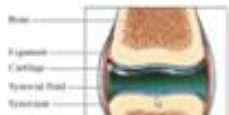
- 1. PT Lecture
- 2. Sex Lecture (Week 3)



Tissue Conditioning: Joints

Movement of all sorts helps to:

- Lubricate joints
- Produces a natural "WD-40" called synovial fluid and lubricin
- Spread the fluid across the cartilage—making a slick surface
- Provide the cartilage with nutrients
- Remove inflammatory chemicals and waste products
 - Think of squeezing a dirty sponge under the faucet



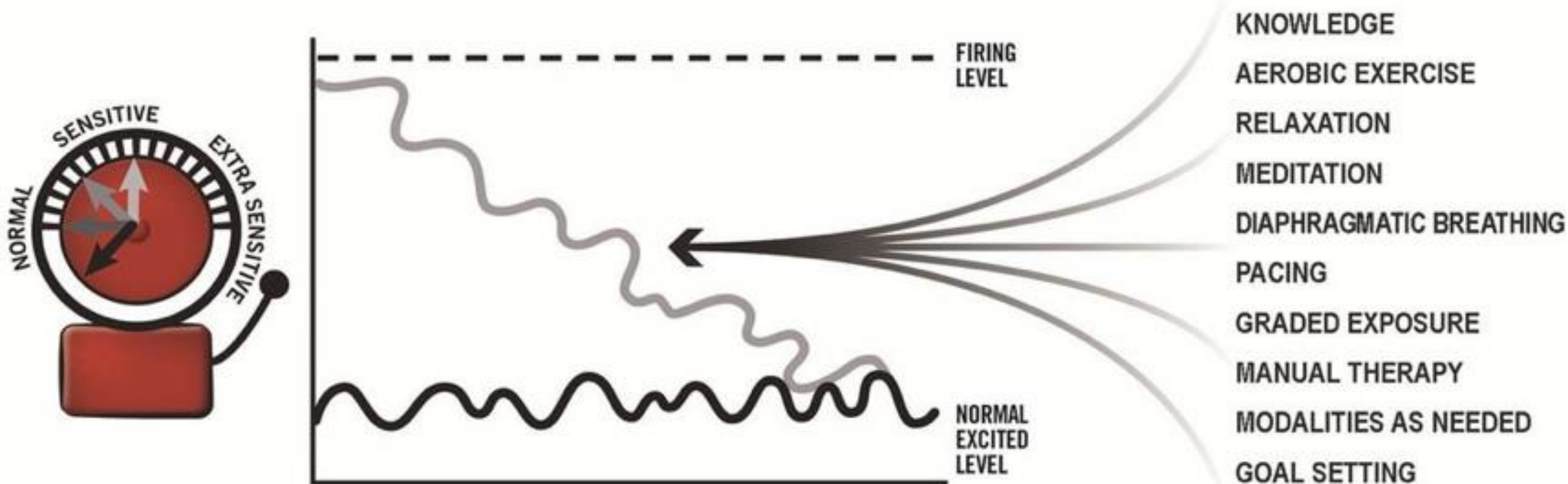
Pain Neuroscience Education (PNE)

Adriaan Louw, PT

- Traditional education 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
- Pain is not always a “status of the tissues”
- **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.

HOW WE GET FROM HERE TO THERE



Pain Neuroscience Education



Patient Resources

Adriaane Louw,
PT



Lorimer Mosely, PT



Graded Exercise Approach

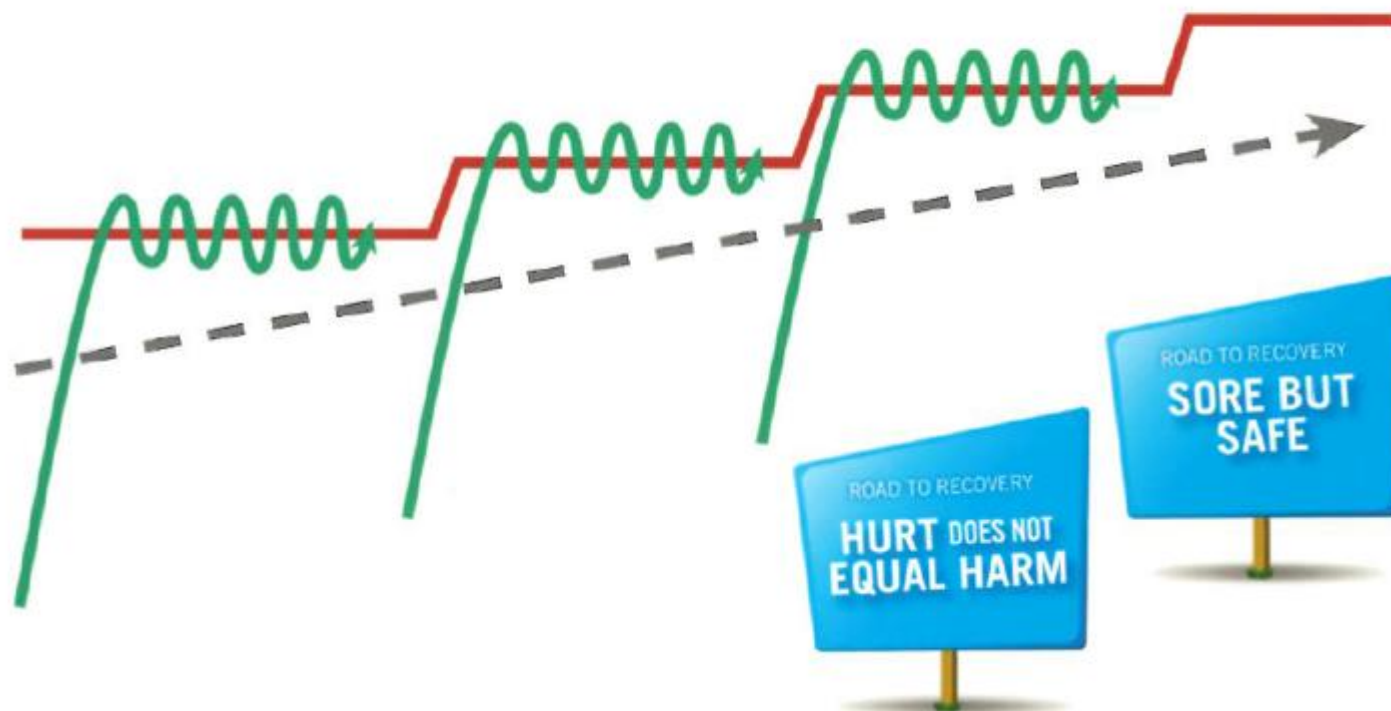


Image: A. Louw/ISPI.

Exercise Evolution

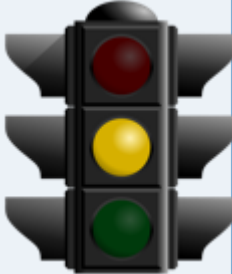
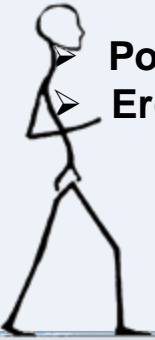



Progress Over Time

- 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

Occupational Therapy

WEEK 1 <ul style="list-style-type: none">➤ Assessments➤ Pacing Techniques 	WEEK 2 Posture & Positioning Ergonomic Principles  
WEEK 3  <ul style="list-style-type: none">➤ Activity Tolerance➤ Therapeutic Movement➤ Tai Chi➤ Qi-Gong	WEEK 4 <ul style="list-style-type: none">➤ Realistic Schedule➤ Return to leisure & vocational activities 

Occupational Therapy

- Posture
- Pacing Techniques
- Set goals and improve activity tolerance
- Activities of Daily Living: dressing, bathing
- Instrumental Activities of Daily Living (IADLs): homemaking, yard work, shopping, driving, sleeping, hobbies
- Sleep hygiene & positioning
- Therapeutic movement: Tai Chi, Qi Gong
- Compensatory strategies



OT: Pacing

1. Deciding on reasonable activity goals based on what you value.
2. Establishing time baselines of what your present time limits and tolerances are for activities.
3. Gradually increase the amount of time spent doing a task.
4. Planning your daily activity level on pre-set realistic goals.
5. Prioritizing, organizing and breaking up your daily activities
6. Delegating less important tasks to others.

“Work smarter, not harder.”

OT: Pacing

7. Breaking activities up into smaller tasks or parts.
8. Taking rest breaks between tasks.
9. Working at a slower less intense pace.
10. Breaking up high and low intensity tasks during the day or over the week.
11. Use the best hours of your days for the most demanding task.
12. Vary or change tasks often so that you use different parts of the body.

**“Staying within my limits
gives me a sense of control.”**

Tai Chi

Characteristics

Circular

All movements flow in a circular path, promoting dynamic stretching and balance.

Relax

Deep breathing facilitates relaxation throughout entirety of the practice. Overexertion is avoided.

Calm

Calmness in movement and mind, meaning no excessive movements and the mind is clear of superfluous thoughts.

Continuous

Smooth transitions with one movement flowing to the next.

Intent

Mind is present and fully focused on moving with purpose.

Energy

Movements are biomechanically efficient, using the least amount of effort to execute.

Therapeutic Movement

Tai Chi

<https://www.youtube.com/watch?v=ZxcNBejxlzs&feature=youtu.be>

1. Morone NE, et al. *Pain Medicine* 2007;8(4):359-375.
2. Ross MC, et al. *J Holistic Nurs* 1999;17:139-47.
3. Irwin MR, et al. *Psychosom Med* 2003;65:824-830.

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

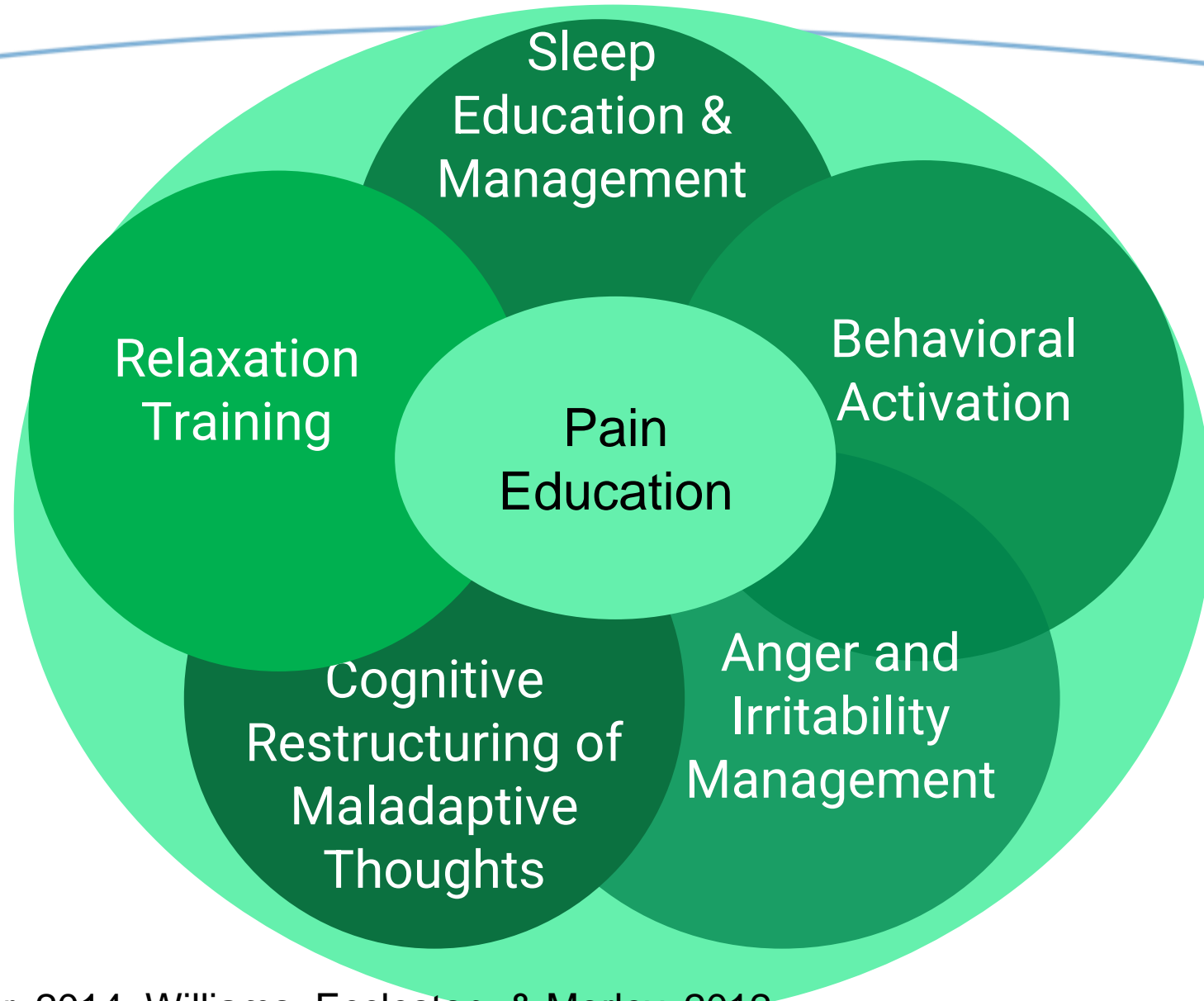


WEEK 4

- Barriers to Success
- Family Education



Cognitive Behavioral Therapy



Mindfulness

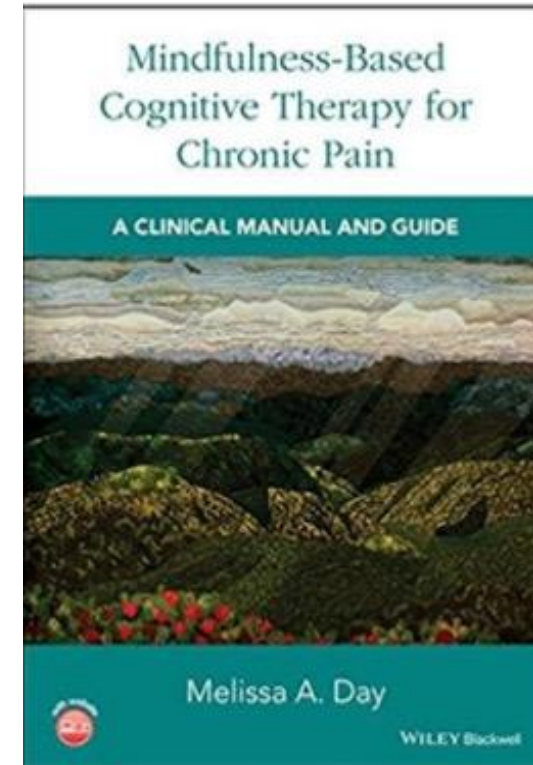
- Observing
- Describing
- Acting with awareness
- Non-judging of experience
- Non-reactivity to experience



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

Swedish Pain Services, 2018.



Melissa Day, PhD, 2017.

	Mindfulness-Based CBT Sessions	Clinical Context and Example
1	Stepping out of Automatic Pain Habits	Pain can seem unpredictable to many patients. Helping them identify habitual behaviors contributing to the pain-stress cycle is an important first step for treating pain
2	Facing the Challenge	Managing pain is stressful, and reacting to stress can be a powerful habit. Mindfulness meditation can help patients learn to respond rather than react to stress
3	The Breath as an Anchor	Stress, pain-related or not, may stem from dwelling on the past or the future. Learning how to ground oneself using one's breath is the best way to connect to the present moment, which can reduce stress
4	Learning to Stay Present	Pain- and stress-related self-talks can occur without awareness. Improving awareness allows patients to choose how to respond to unhelpful self-talks
5	Active Acceptance	Many patients have a hard time accepting pain, which leads to poor self-management. Breathing with pain during meditation promotes acceptance and reduces pain-related stress
6	Seeing Thoughts as Just Thoughts	Buying into unhelpful, habitual self-talks may lead to the same disappointing results for pain management. Learning how to pause, become aware, and respond is the key to obtain a different result
7	Taking Care of Myself	Struggling with pain management may indicate a lack of self-care. Practicing key elements of mindfulness meditation- awareness, acceptance, and compassion, may promote better self-care
8	Harnessing the Power of Mind for Chronic Pain Management	Sitting with strong sensation, thoughts, and emotion can be challenging, regardless of how long one has been practicing mindfulness meditation. Session eight draws on the body scan meditation and 3 min breathing space meditation, two foundational practices, to promote mind body awareness and to help patients reflect on progress made during the program



Relaxation Training

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

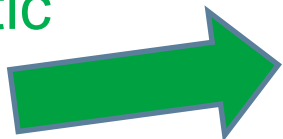
- Benson (1970)

Patient Goals

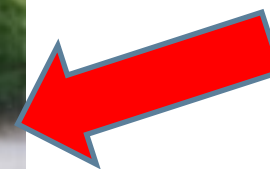
- Nervous system balancing
- Maintain physiologic balance
- Increase sense of calm and decrease overall tension

“Fight-or-Flight”

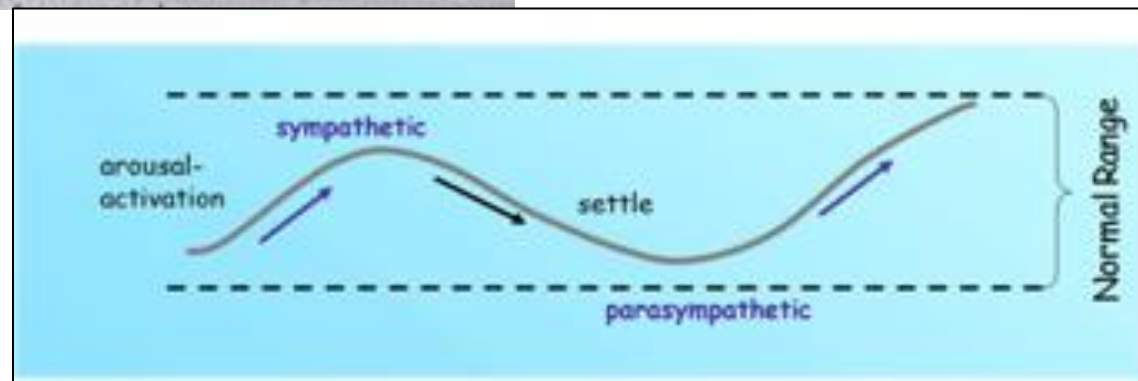
Parasympathetic
Nervous
System



Sympathetic Nervous
System



www.southshieldsdogwalker.com



Exercise	Technique (example)
Diaphragmatic breathing (DB)	Breathe through your nose (inhale) while pushing abdomen out; breathe out (exhale) while pushing abdomen in
Progressive muscle relaxation (PMR)	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
Grounding exercises	“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
Autogenic training (AT)	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
Guided Imagery	Guided experience encourages mentally generated images that simulate or re-create the sensory perceptions: sight, sound, taste, smells, and touch



Patient Apps:

Breathing & Relaxation

- Breathe2Relax (VA app, android)
- Breathe+ (i phone)
- Calm, Headspace
- Adjustable in/out counts
- 4 in, 6 out is a good target
- Longer exhale is more relaxing

Meditation & Imagery

- Guided Imagery Meditation (10 min)
https://www.youtube.com/watch?v=t1rRo6cgM_E
- The Forest Awakens (5 min)
https://www.youtube.com/watch?v=gU_ABFUAVAs
- Guided-Imagery Meditation (18 min)
https://www.youtube.com/watch?v=t1rRo6cgM_E
- Ease Anxiety (15 min)
<https://www.youtube.com/watch?v=pPBxNLpOLNU>

Pain Education: Class Curriculum

Group Session (four to eight patients): Led by Nurse Educator

PROGRAM ORIENTATION

- Prior to the program: Virtual & in-person orientation
- First day: Rules of the program, expectations
- Preparing your own “Pain Toolbox”

SLEEP AND CHRONIC PAIN

- How is sleep regulated?
- Co-occurring conditions: insomnia, sleep apnea, mood disorders, PTSD
- Sleep Hygiene: Habits for sleeping better

NUTRITION

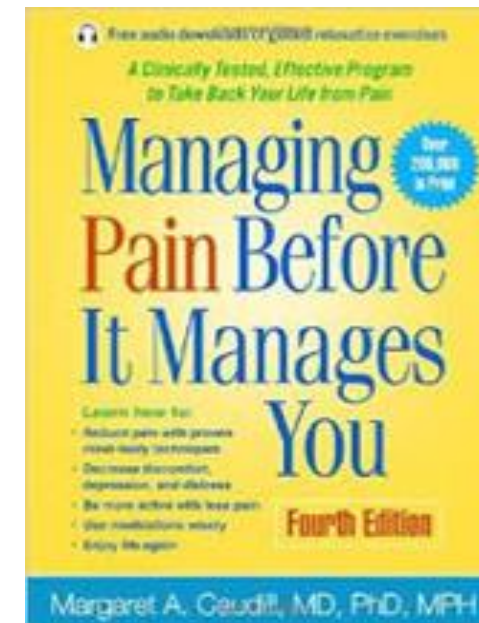
- Anti-inflammatory diet
- Pain triggers in your diet
- Healthy eating habits

MEDICATIONS FOR CHRONIC PAIN

- Managing your medications effectively (how to track, one pharmacy, safe storage, communication with Doc)
- Over the counter medications (ASA, NSAIDs)
- Antidepressants, Anticonvulsants
- Opioid Therapy: dependency, tolerance, addiction, tapering, benefits, harms
- Benzodiazepines & Muscle Relaxers

*Swedish Pain Services, Seattle, WA. Structured functional restoration program patient workbook (Becca Taylor, RN).

Pain Education



Patient Educational Videos



Understanding Pain Rebrand



Persistent Pain Explained in 3 minutes



Understanding Pain: Brainman chooses



TEDxAdelaide – Lorimer Moseley – Why Things Hurt

Tim



- Physical Therapy
- Occupational Therapy
- Relaxation Training
- Pain Psychology
- Pain Education

Medication Regimen:

Functional Restoration Programs

PROGRAM	Mayo Clinic Pain Rehabilitation Center (Rochester, MN)	Savas Health Unitized Transdisciplinary Care™ ICA)	Pacific Rehabilitation Centers (Bellevue, WA)
I N T E N S I T Y	<ul style="list-style-type: none"> -15-day program -weekdays 8am-4pm 	<ul style="list-style-type: none"> - Transdisciplinary Care™ model. - One year program consistent of: 4 Cycles: 12 weeks treatment - Periods: cycle of 3, 4 week periods - Units: 2.5 hour unites of transdisciplinary treatment session combining group and individual treatments. 	<ul style="list-style-type: none"> - 20 day program - 6 hours /day, five days/week

Functional Restoration Programs

PROGRAM	Mayo Clinic Pain Rehabilitation Center (Rochester, MN)	Savas Health Unitized Transdisciplinary Care™ ICA)	Pacific Rehabilitation Centers (Seattle, WA)
D I S C I P L I N E S	<ul style="list-style-type: none"> - Psychiatry, psychology, NP, OT, RN (case managers) PT, Vocational counseling, biofeedback training - Group based practice with a rolling admission model. - Approximately 25-27 patients actively receiving care at any given point in time. - Fee-for-service 	<ul style="list-style-type: none"> - Medical: Medicine MD (Anesthesia, PM&R), Physician Assistant, Nurse Practitioner, Care Manager (RN) and Care Coordinator (LVN) -Behavioral Health: Pain Psychology (Licensed), LMFT, LCSW - Physical Reconditioning: Chiropractic, - Massage, Physical Therapy, Mindful - Movement Classes (combines elements of - Yoga, Tai Chi, Feldenkrais) - Alternative Therapies: Acupuncture, Chinese Medicine, Naturopathic Medicine, Dietitian) - 8-12 Participants/ Unit - Case Rate 	<ul style="list-style-type: none"> - Medicine (PM&R) & Nursing - Psychology (Licensed) & Relaxation - Vocational Counseling - Physical Therapy - Occupational Therapy - CARF-Accredited - Daily Rate
Integrative therapies	Yoga, Tai chi	Tai chi, yoga, acupuncture	Tai chi, yoga

Pain Rehabilitation. Our time has come.



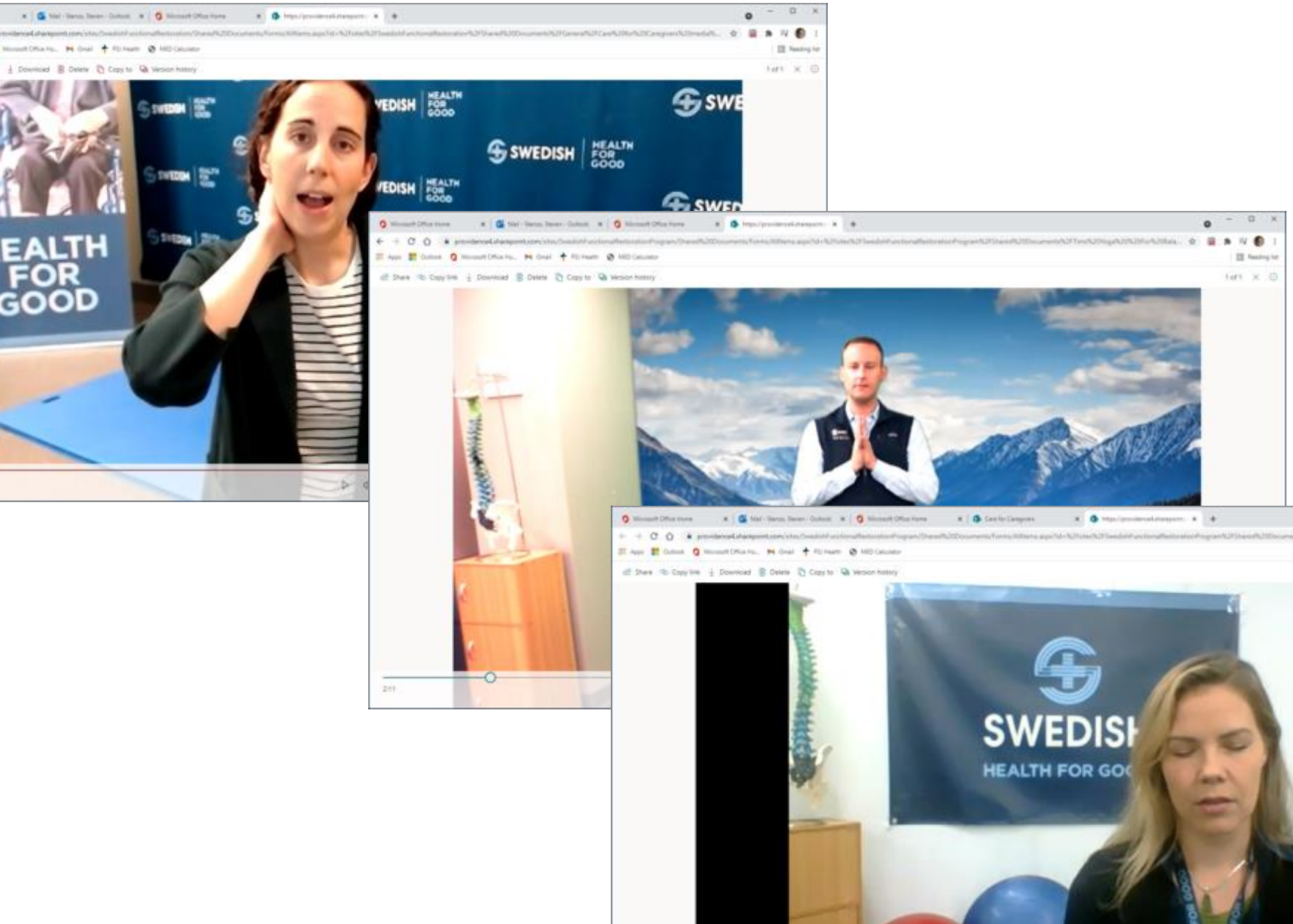


BioPsychSocial Approach

Assessment
Physical Exam
Treatment Plan



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 Sonya 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](https://careforcaregivers.com) site and connect with links to live webinars (click on the rectangle on the right side).



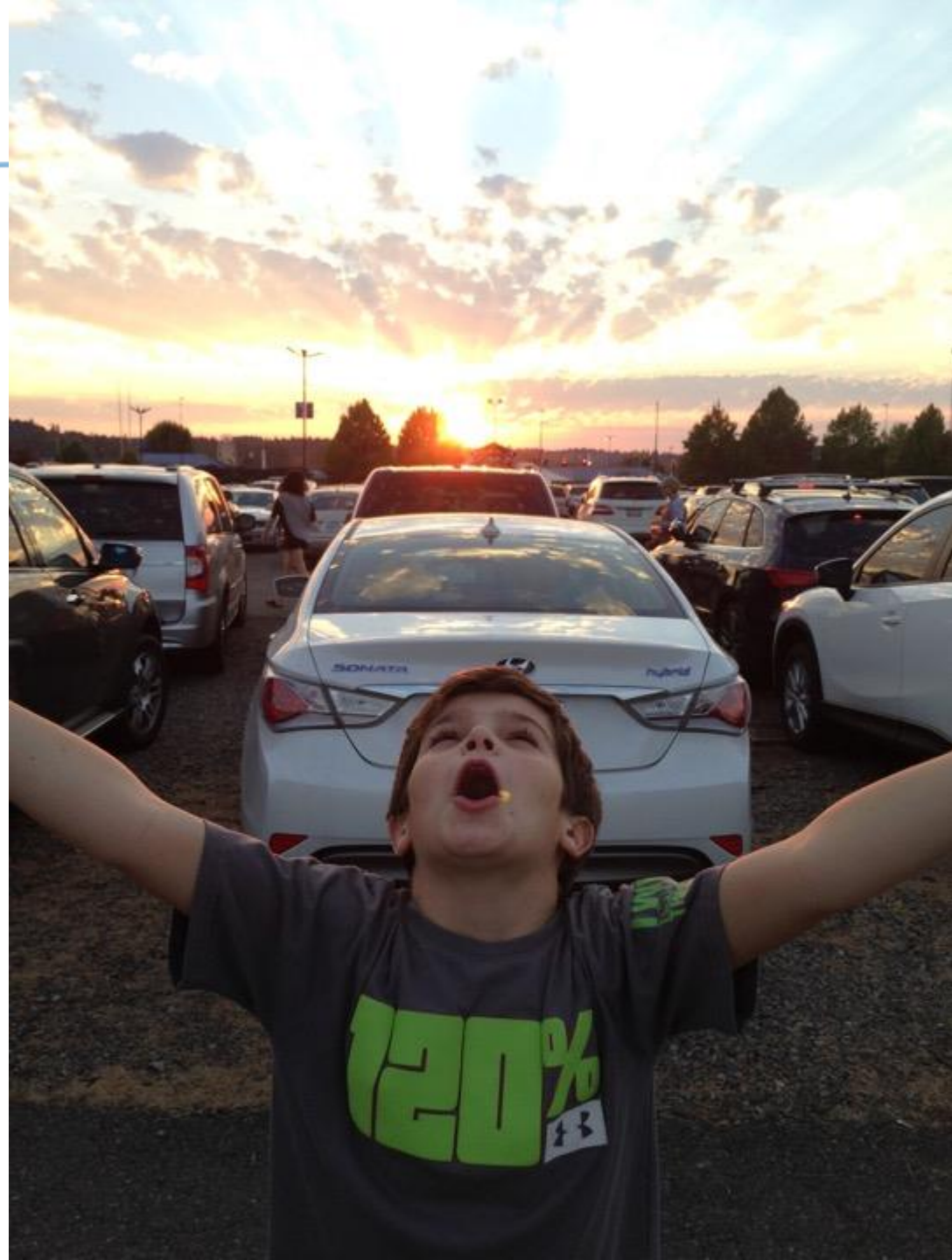
Summary: Interdisciplinary Care

- Continuum of pain rehabilitation
- Evidence supports Interdisciplinary care
- Importance of **BioPsychoSocial** approach
- Disciplines act in synergy to help promote self-management
- A strong emphasis on patient education
- Movement based therapies as additional component
- People, Places, Products

“ Repent ”

Change your mind

Change your thinking





Thank you

Steven.Stanos@Swedish.org

Comet Neowise Over Mount Baker, WA

Advocate !



American Medical Association Resources

www.end-opioid-epidemic.org

<p><i>PDMPs</i></p> <p>Register for and use your state PDMP to make more informed prescribing decisions</p> <p>TAKE ACTION ></p>	<p><i>Education</i></p> <p>Ensure you have the education and training on effective, evidence-based treatment</p> <p>TAKE ACTION ></p>	<p><i>Treatment</i></p> <p>Support and advocate for comprehensive care for patients in pain and those with a substance use disorder</p> <p>TAKE ACTION ></p>
<p><i>Stigma</i></p> <p>Removing stigma is essential to ending the nation's opioid epidemic</p> <p>TAKE ACTION ></p>	<p><i>Naloxone</i></p> <p>Expand access to naloxone in the community and through co-prescribing</p> <p>TAKE ACTION ></p>	<p><i>Safe Storage and Disposal</i></p> <p>Work with your patients to promote safe storage and disposal of opioids and all medications</p> <p>TAKE ACTION ></p>



Patient Apps:

Breathing & Relaxation

Breathe2Relax (VA app, android)

Breathe+ (i phone)

Calm, Headspace

Adjustable in/out counts

4 in, 6 out is a good target

Longer exhale is more relaxing

Meditation & Imagery

Guided Imagery Meditation (10 min)

https://www.youtube.com/watch?v=t1rRo6cgM_E

The Forest Awakens (5 min)

https://www.youtube.com/watch?v=gU_ABFUAVAs

Guided-Imagery Meditation (18 min)

https://www.youtube.com/watch?v=t1rRo6cgM_E

Ease Anxiety (15 min)

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

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=bFCOm1P_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_w40qOE

Resources for home practice:

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