Multidisciplinary Approach: Incorporating the HHS Pain Management Interagency Task Force Recommendations into Your Practice

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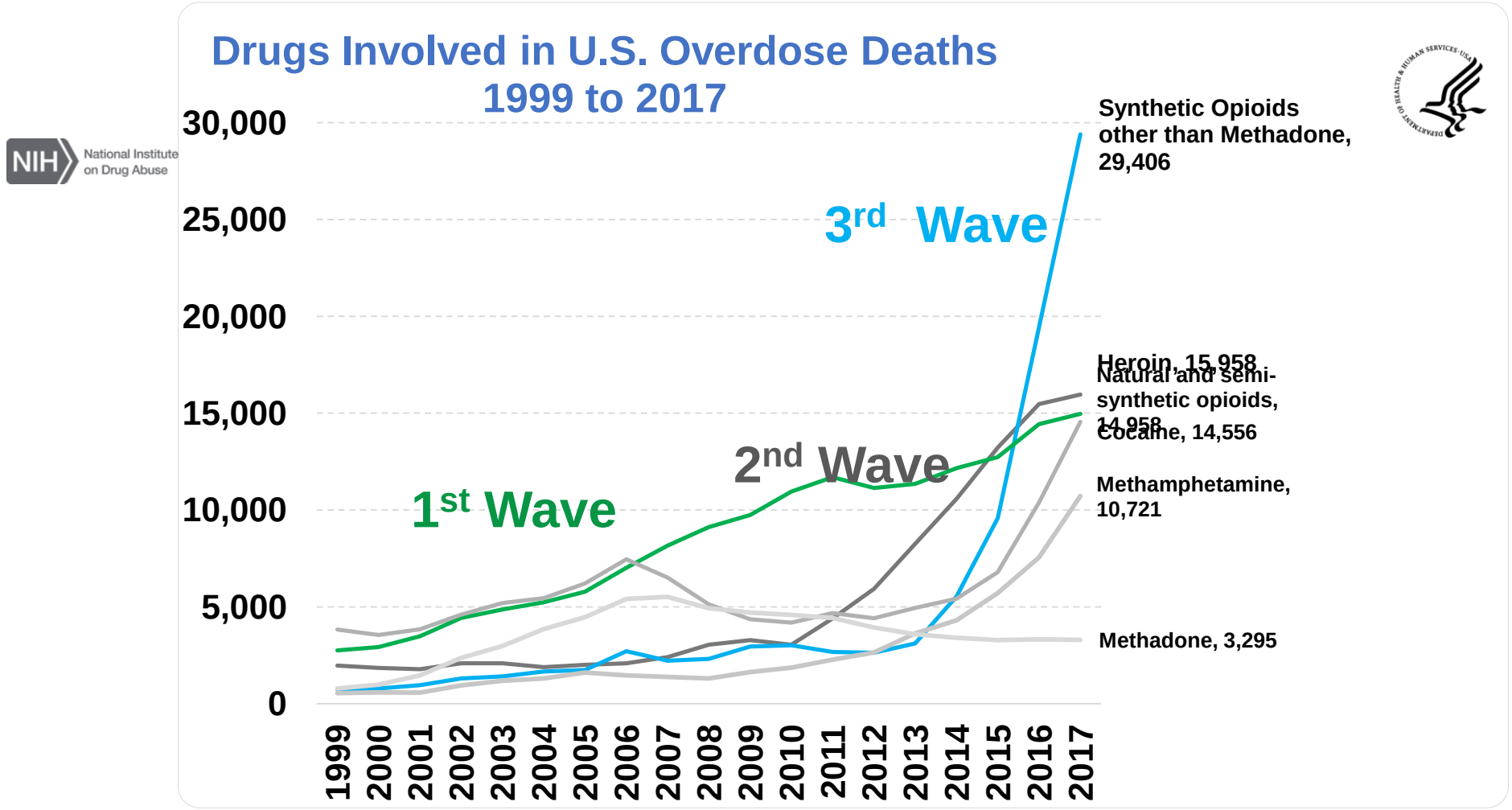
Albany Medical College
Director, Comprehensive Pain Center
Director, Pain Management Fellowship
Albany Medical Center

Overview

- Federal and State Initiatives
- HHS Interagency Task Force
- Multidisciplinary and Interdisciplinary Models
- Components of team based care
- Recent developments
  - AAPM
  - CDC
  - State



4th Wave: Pharmacovigilance and Pain Management Vacuum

Misuse, Addiction

MEDs

Prior Authorizations

Diversion, Overdose

Quality Metrics

Prescribing Metrics

NHIS Estimates of Chronic Pain & High Impact Chronic Pain (HICP)[1.2]

- Chronic Pain: 50 million
- *Pain on most days or every day in past 6 months*

- High Impact Chronic Pain: 20 million
- *Chronic pain limited life or work activities on most days or every day during the past 6 months*

- *91 million prescribed opioids, 2 million with OUD[3,4]*

1. Nahin RL. Estimates of pain prevalence and severity in adults: Unites States, 2012. *Journal of Pain.* 2015;16(8):769-780.
2. Dahlhamer J, Lucas J, Zelaya, C, et al. Prevalence of Chronic Pain and High-Impact Chronic Pain Among Adults — United States, 2016. MMWR Morb Mortal Wkly. Rep 2018;67:1001–1006. DOI: http://dx.doi.org/10.15585/mmwr.mm6736a2
3. Han, B. *Ann Inter Med* 2017l;167:293-302.
4. US HHS. 2015 National Survey on Drug Use and Health 2016;HHS SMA 16-4984, Rockville, MD: SAMHSA.

Efficacy of Interventions

Time

Patient Factors

Patient Expectations

What's causing "the pain" ?

Patient-Centered Approach

- *primum non nocere* –
- “Do no harm.”

- *deinde benefacere* –
- “Then, do some good.”

Smith c. *J Clin Pharm* 2005;45:371-77.

National Pain Strategy (NPS)

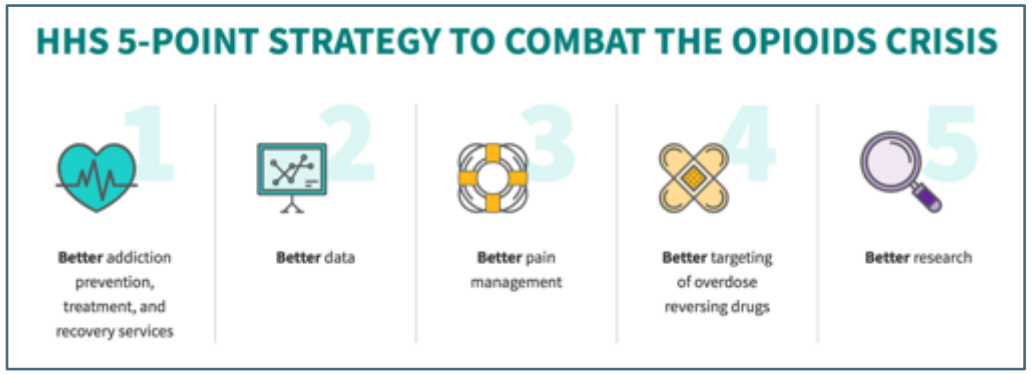
National Pain Strategy

A Comprehensive Population Health Level Strategy for Pain

"The government's first broad-ranging effort to improve how pain is perceived, assessed, and treated: a significant step toward the ideal state of pain care."

HEAL Initiative

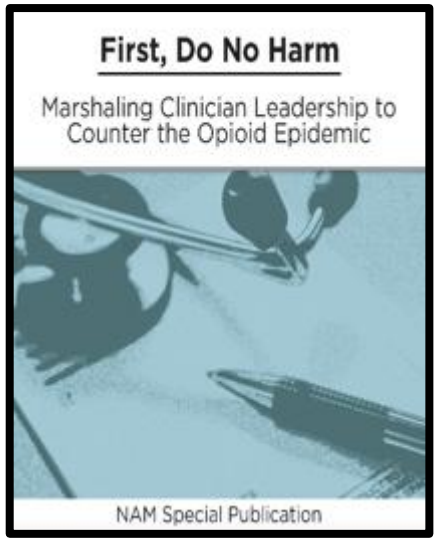
Helping to **E**nd **A**ddiction **L**ong Term



SUPPORT (HR6):
Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment for Patients & Communities

Opportunities for All Clinicians: National Academy of Medicine

- Ensure team approach with patient care
- Assure patient engagement in options, plans
- Conversations about limits and risks
- Counsel regarding secure storage, proper disposal
- Reduce stigma
- Remain alert of early signs of opioid use disorder
- Keep current on CBT treatments for OUD and pain
- Promote individual and community awareness



National Academy of Medicine, 2017.

HHS.gov
Office of the Assistant Secretary for Health

Alex Azar, Sec Dept HHS;
Brett Giroir MD,
Asst. Sec. for Health

HHS Pain Management Interagency Task Force

- Mandated under CARA Act of 2016
- Chaired by Vanila Singh, MD, CMO, OASH
- Review clinical guidelines and identify gaps and inconsistencies for best practices in pain management
- Focus on unintended consequences of CDC guideline including patient abandonment, payer barriers, improving patient access to non-pharm, pharmacologic, interventional, and surgical treatment.
- HHS TF Draft Approved May 10, 2019

https://www.hhs.gov/ash/advisory-committees/pain/reports/2018-12-draft-report-on-updates-gaps-inconsistencies-recommendations/index.html

HHS Pain Task Force

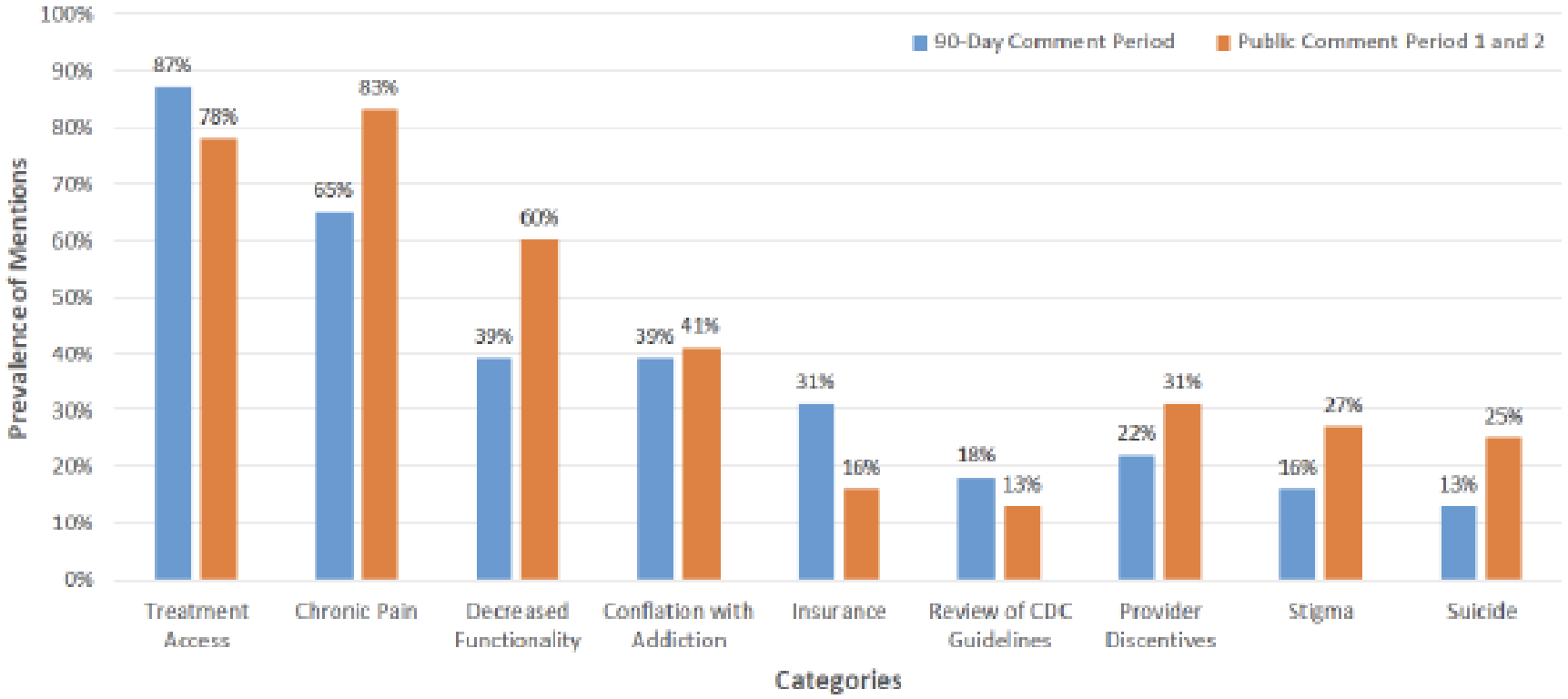
https://www.hhs.gov/ash/advisory-committees/pain/reports/2018-12-draft-report-on-updates-gaps-inconsistencies-recommendations/index.html. May 6, 2019.

HHS.gov
Office of the Assistant Secretary for Health

HHS Task Force Key Concepts

- Balanced pain management
- Individualized
- Multidisciplinary
- Multi-modal approach
- Perioperative home and acute pain guidelines
- Addressing drug shortages
- Access to care
- Stigma as a barrier to treatment
- Education
- Innovative solutions
- Research
- Special Populations

Public Comments



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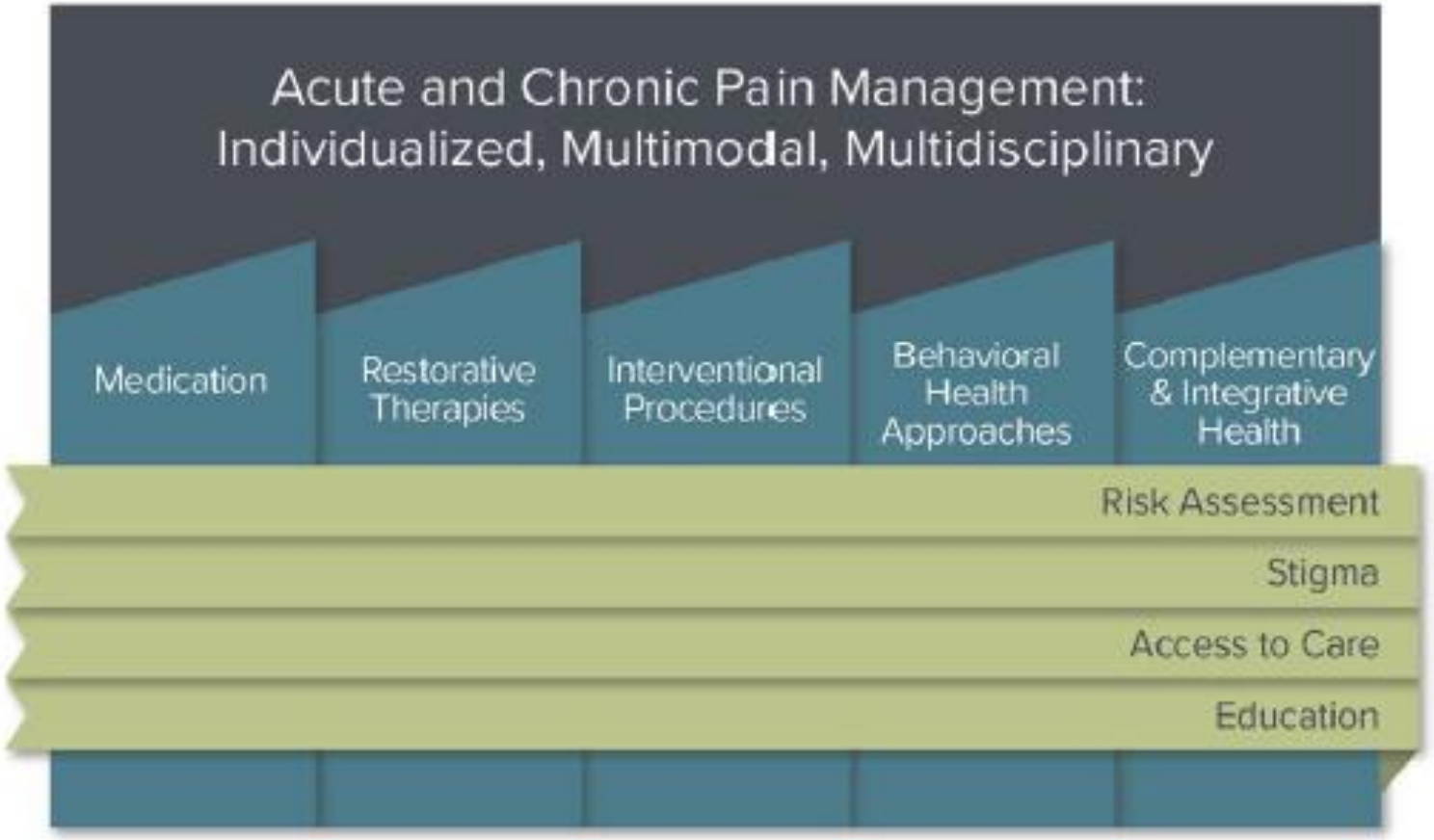
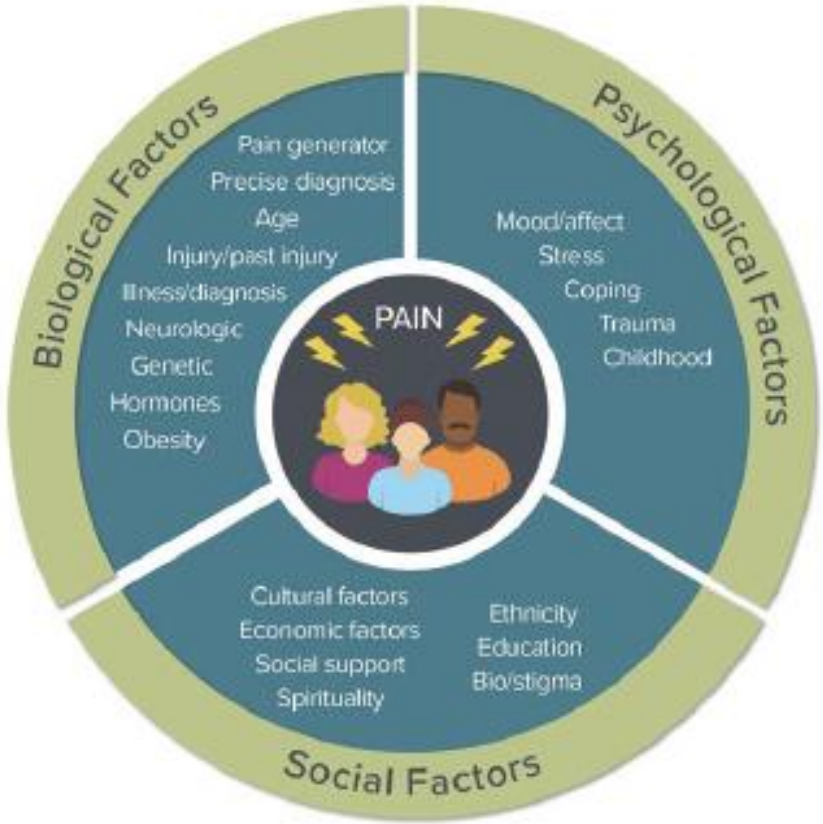
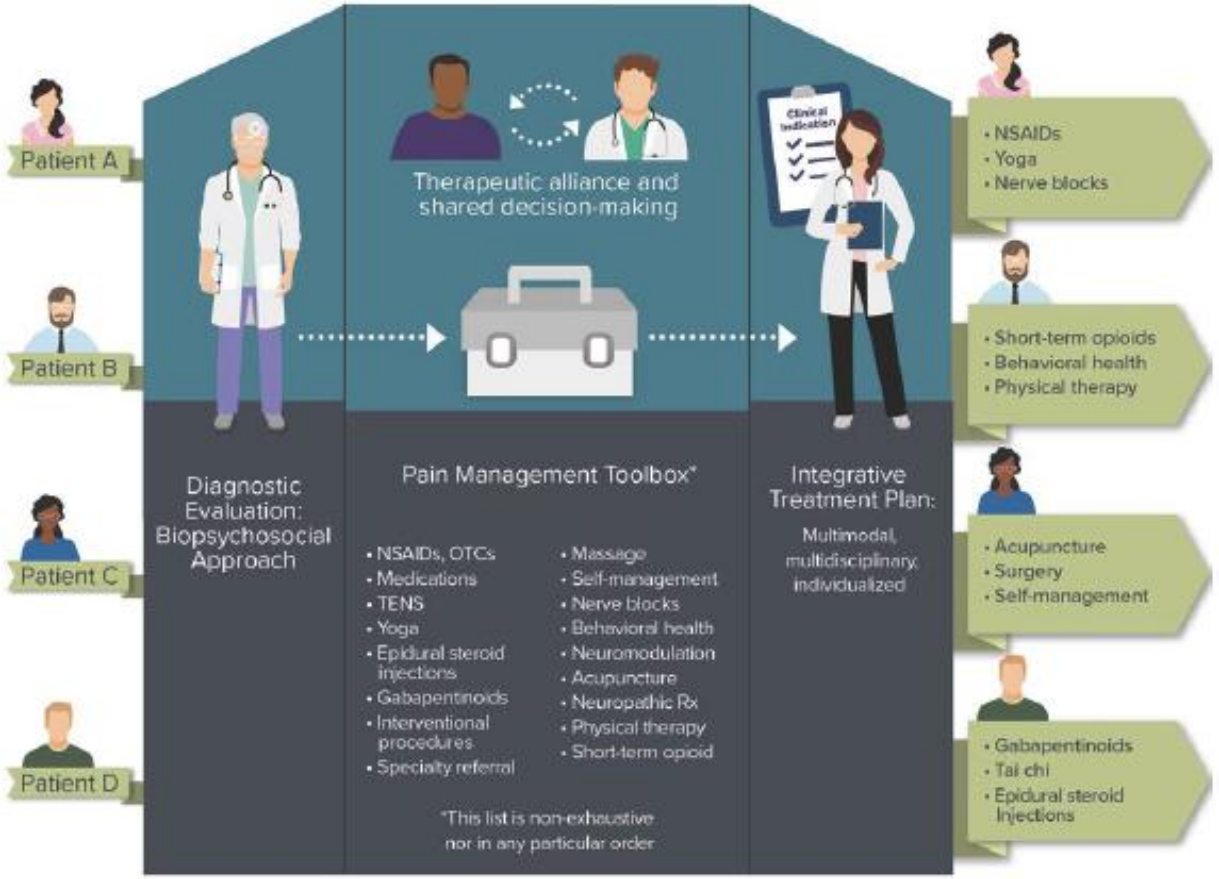


https://www.hhs.gov/ash/advisory-committees/pain/reports/2018-12-draft-report-on-updates-gaps-inconsistencies-recommendations/index.html. May 6, 2019.

Pain: Biopsychosocial Construct



Individualized Patient Care



https://www.hhs.gov/ash/advisory-committees/pain/reports/2018-12-draft-report-on-updates-gaps-inconsistencies-recommendations/index.html. May 6, 2019.

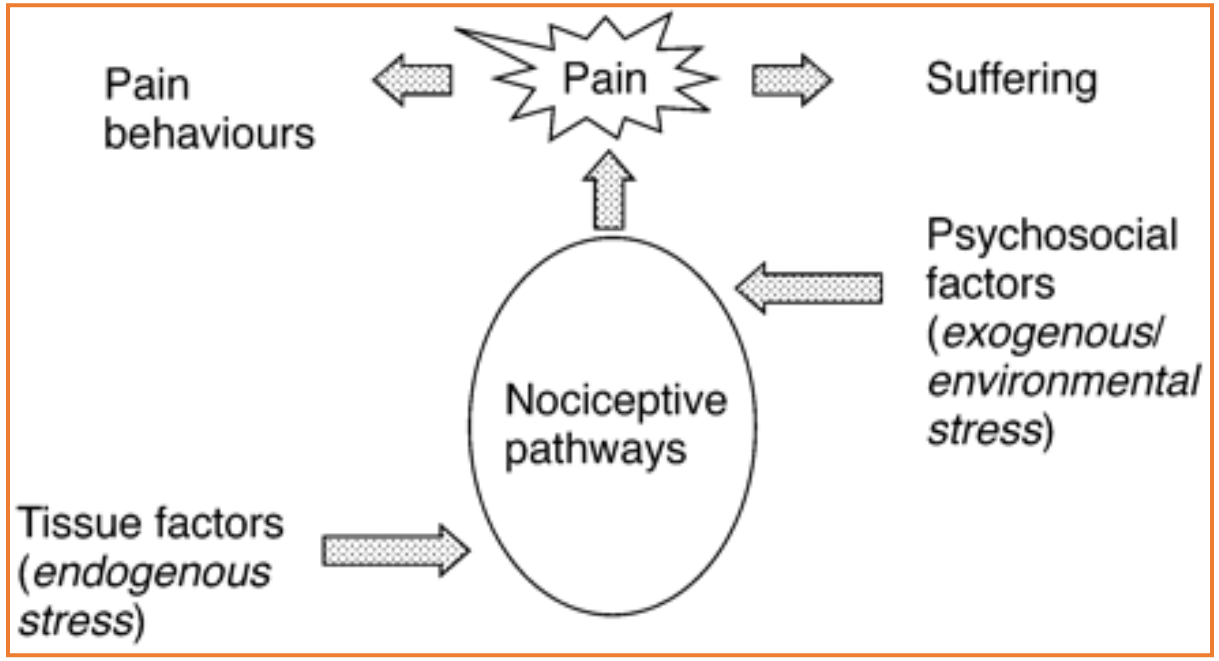
Why multidisciplinary?

CDC Guideline Prescribing Opioids for Chronic Pain

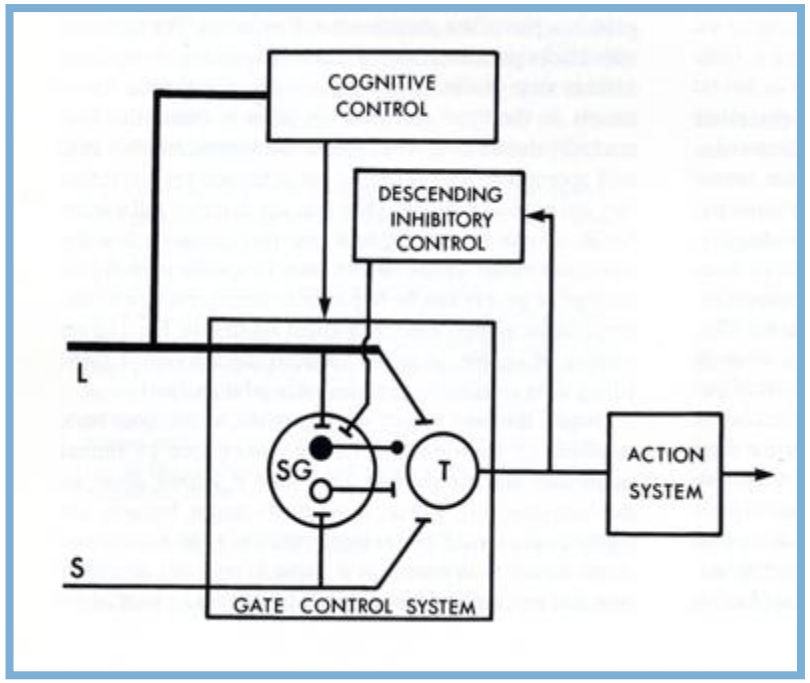
#	Recommendation	Evidence Category/ Type
1	Nonpharmacologic therapy and nonopioid pharmacologic therapy are preferred for chronic pain. If opioids used, should be in combination with non-opioid pharmacologic therapy.	A , 3
2	Establish treatment goals. Continue only if there is clinically meaningful improvement in pain and function that outweighs risks to patient safety.	A, 4
3	Discuss with patients known risks and realistic benefits of opioid therapy and responsibilities of patient and clinician.	A, 3

MMWR, CDC Guidelines for Prescribing Opioids. March 15, 2016, Vol. 65. 1-50.

BioPsychoSocial Model



Gate Control Theory



A. Sensory

B. Affective

C. Evaluative

John Melzack, PhD

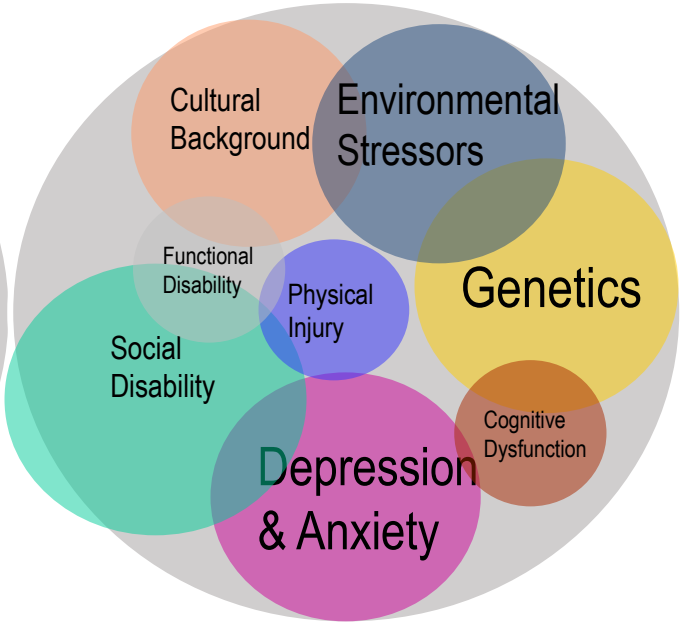
Patrick Wall, PhD

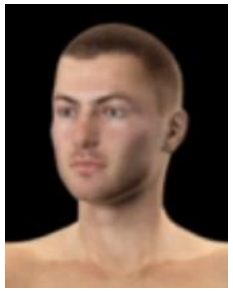
Melzack R. In: Cousins MJ, Bridenbaugh PO, eds. *Neural Blockade in Clinical Anesthesia and Management of Pain*. 3rd ed. Philadelphia, Penn: Lippincott Williams & Wilkins; 1998.

Chronic Pain: Bio-Psycho-Social Model

Jane

Pain 8/10
MED: 0





Bryan

Pain 8/10
MED: 60

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

Body Self Neuromatrix

INPUTS

Cognitive

Evaluative

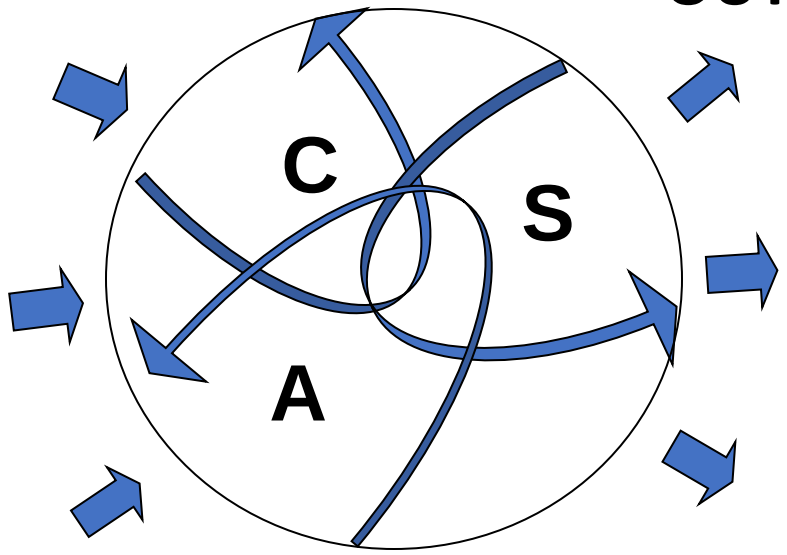
Tissue

Sensory-

Discriminative

Motivational-

Affective



OUTPUTS

Pain Perception

Action Programs

Stress-Regulation

Programs

Melzack R. J Dent Education 2001;65:1378-82.

Sandy: A Patient’s Journey

One tough nut to crack

Catastrophizing

Sullivan et al, *Clin J Pain*, 1995

Anger

Okifuji Turk Curran 1998

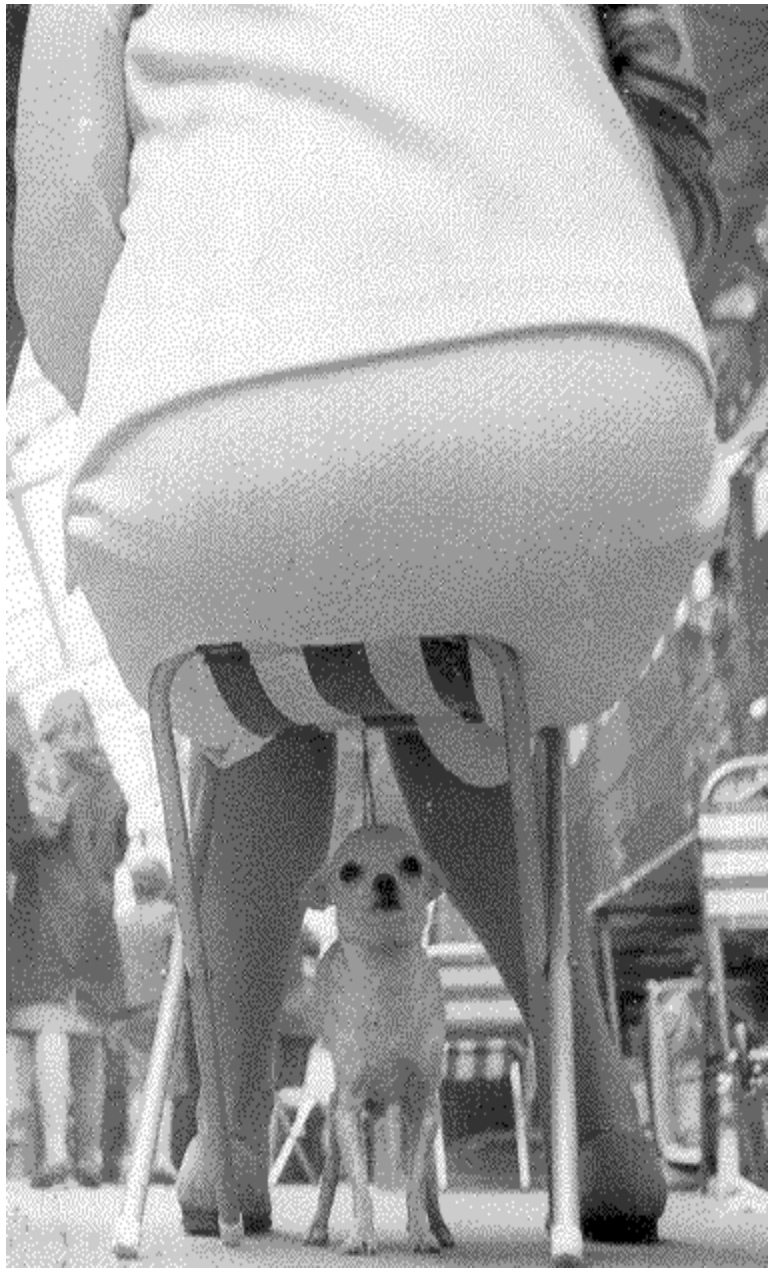
.

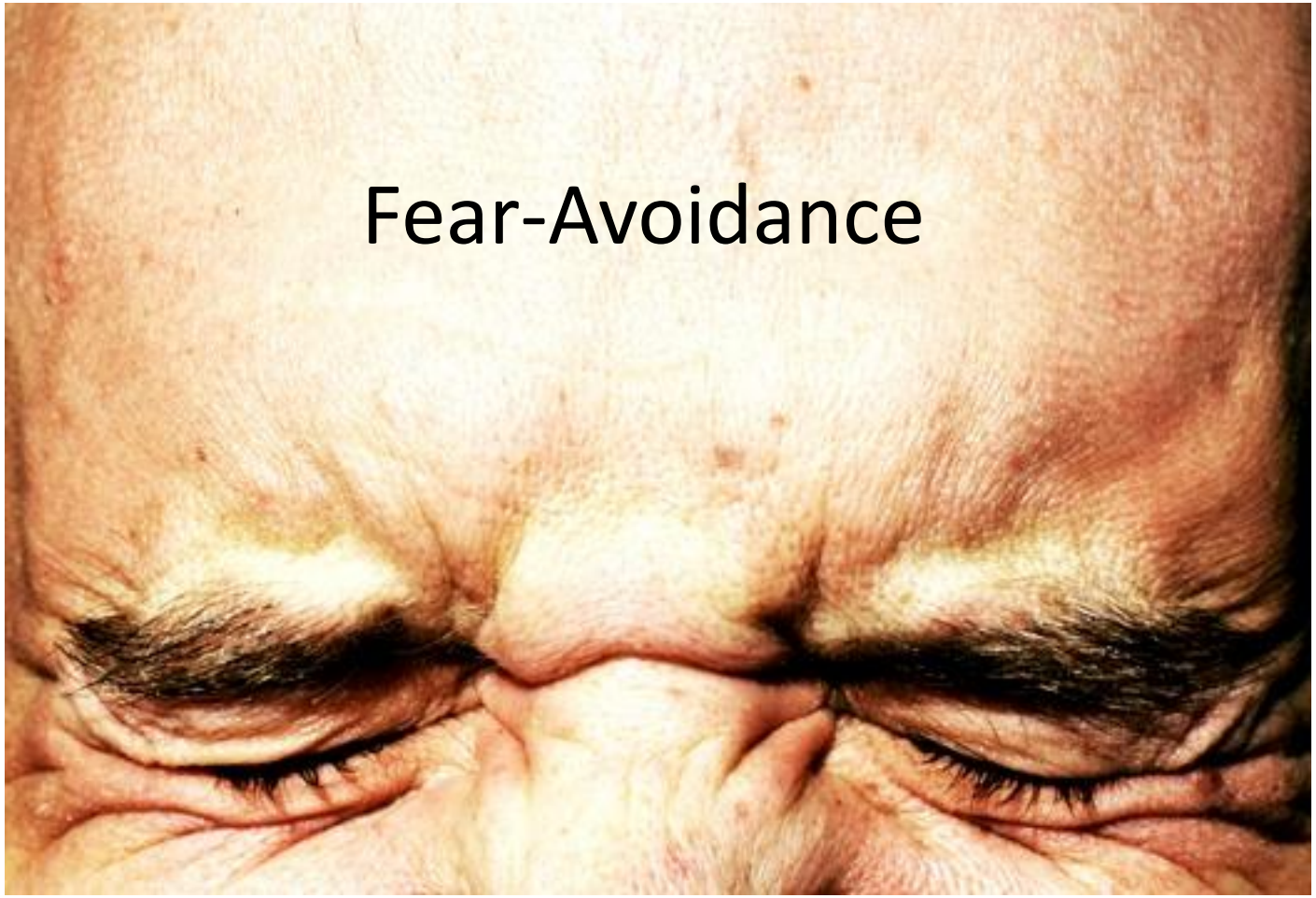
FEAR

ANXIETY

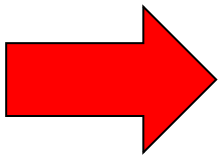
McCracken, Gross.

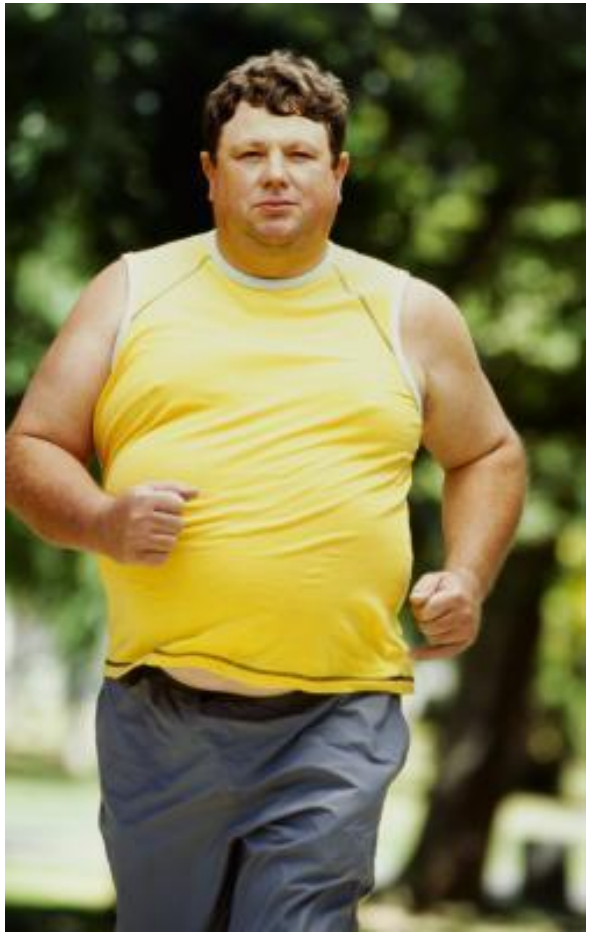
J Occ Rehab 1998;8.




Fear-Avoidance

From “Passive” to “Active” Physically and Psychologically





George Doyle/Stockbyte/Getty Images

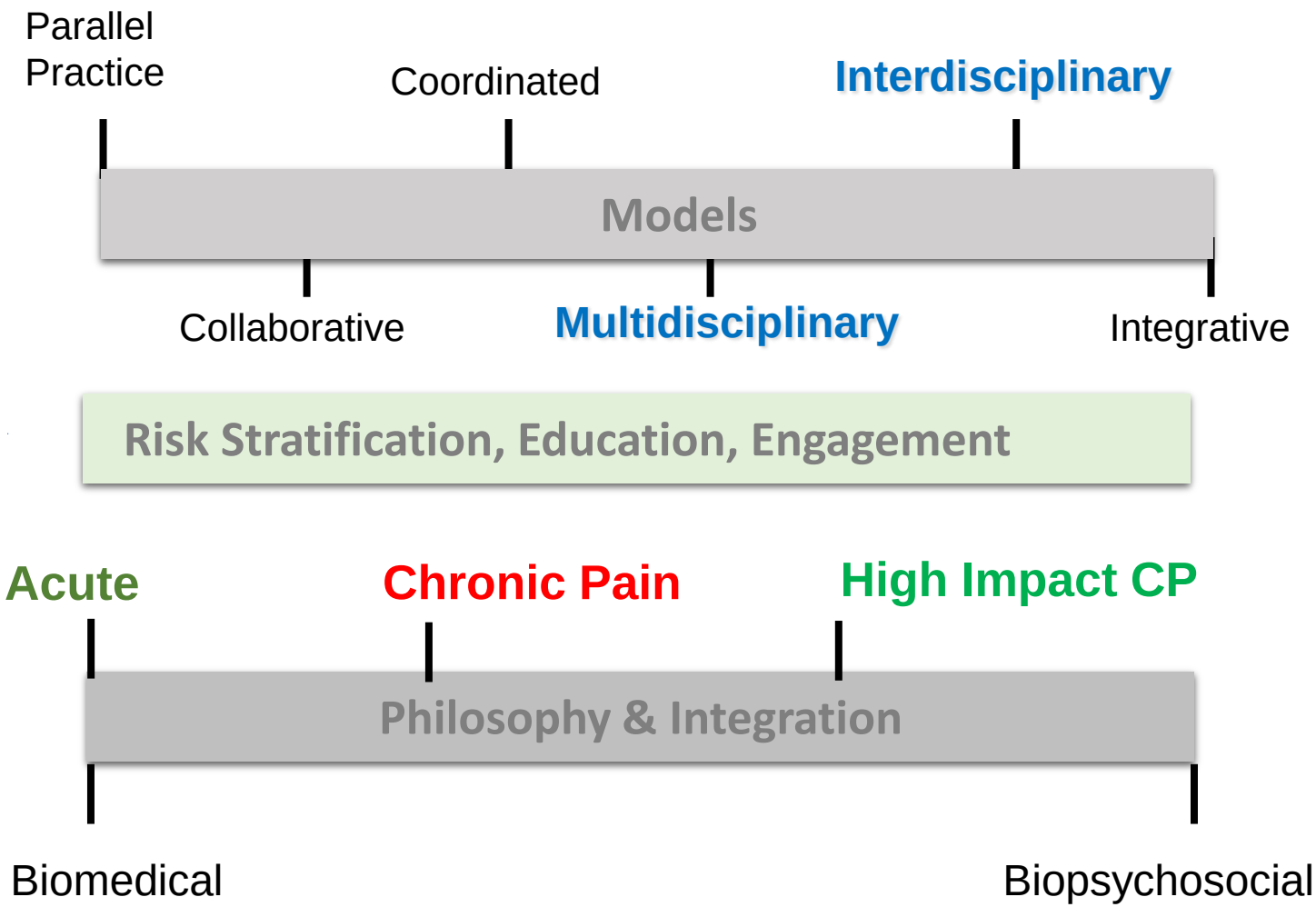
People don’t change behavior because they . . .

- 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

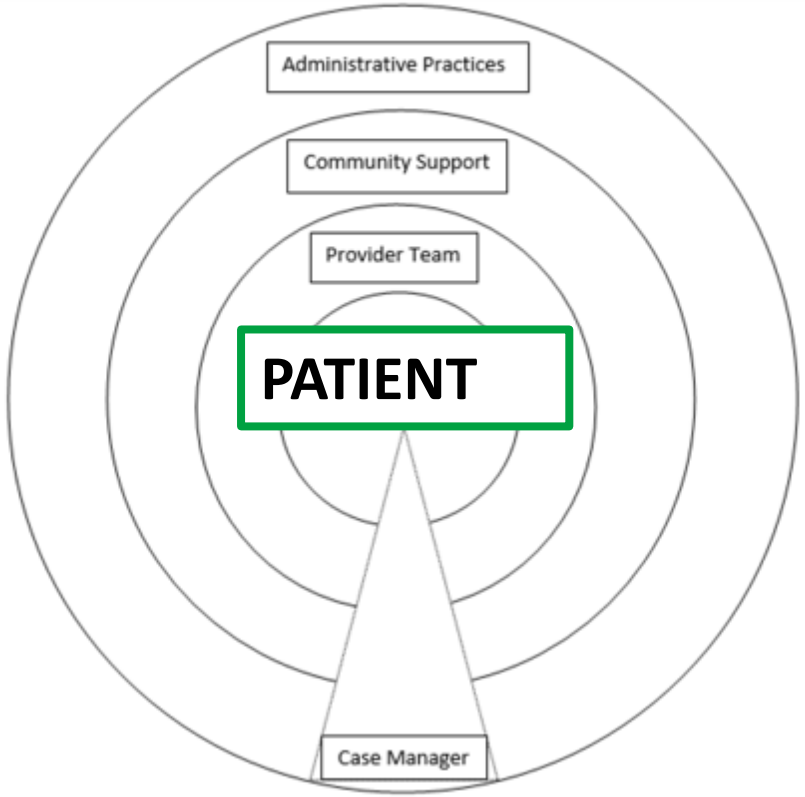
Pain Management Models



Boon H, et al. *BMC Health Services Research.* 2004;4:15.

Integrating Team Models

- <u>Collaborative Care: Focus</u>
- Patient Identification & Population Management
- Care Team
- Care Management
- Evidence-Informed Care
- Patient Supported Self-Management



Dobscha SK, et l. *JAMA*. 2009;301:`242-1252.

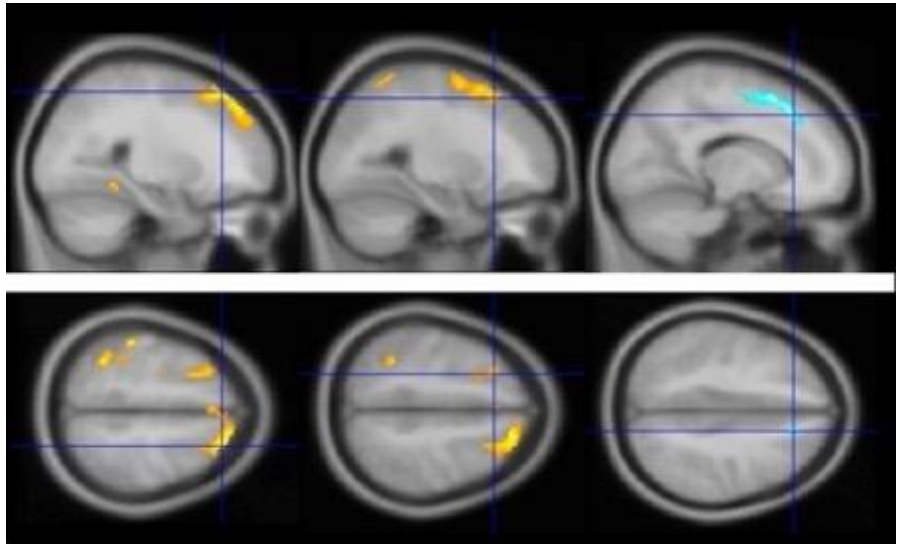
A Biopsychosocial Continuum

- 1. Primary Care
- Collaborative Care
- Integrated Behavioral Medicine
- 2. Multidisciplinary Care: Pain Management

  Interventional Therapies Addiction Medicine (MAT)
- Medication Management Acupuncture
- 3. Rehabilitation Services
- Physical and Occupational Therapy
- Functional Restoration / Interdisciplinary Care

Pain Treatment: Modulating Pain Systems

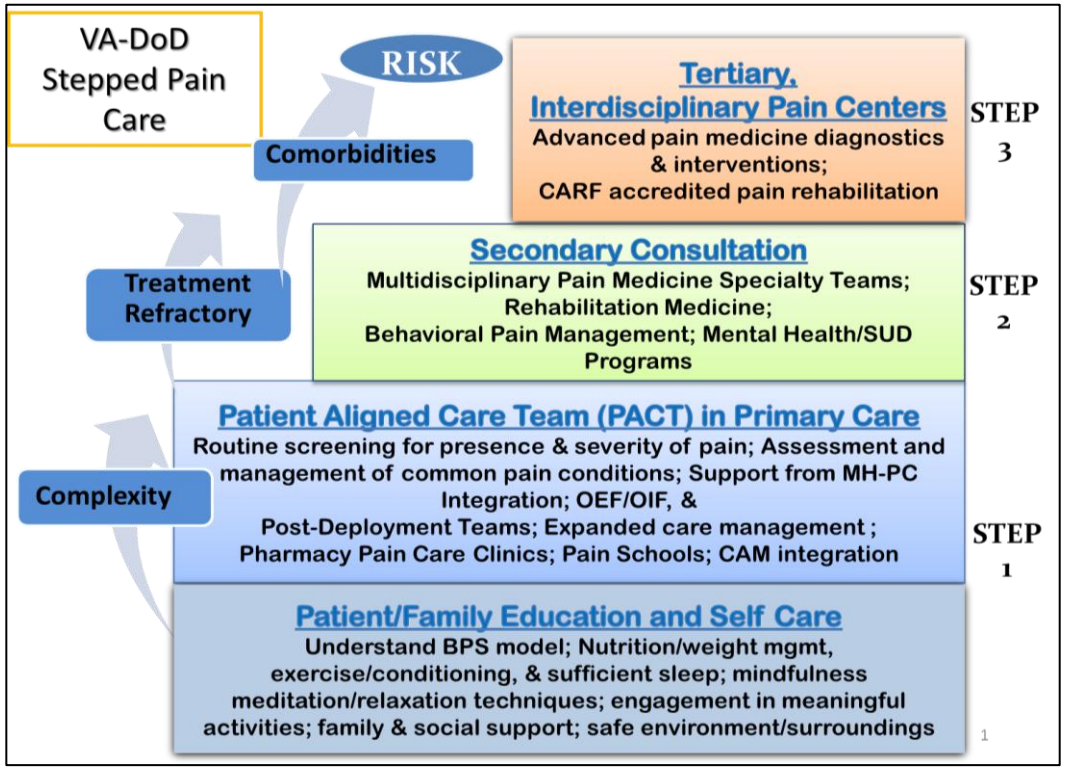
- Group CBT produced increased gray matter volume and density correlating with patient's recovery[1].



- Chronic low back pain treatment: Increased cortical thickness in left DLPFC, and correlated with reduction in pain and disability[2].

1. Seminowicz DA, et al. *J Pain*. 2013: 14(12):1573-84.
2. Seminowicz DA. Et al. J Neurosci.2011;31(20):7540-50.

Stepped Care Model: VA-DoD



Friedhelm Sandbrink, M.D.

Interdisciplinary Functional Restoration Works !

American Pain Society
RESEARCH
EDUCATION
TREATMENT
ADVOCACY
ELSEVIER
The Journal of Pain, Vol 19, No 6 (June), 2018: pp 678-689
Available online at www.jpain.org and www.sciencedirect.com
Longitudinal Treatment Outcomes for an Interdisciplinary Pain Rehabilitation Program: Comparisons of Subjective and Objective Outcomes on the Basis of Opioid Use Status
Wesley P. Gilliam,* Julia R. Craner,[1,†] Julie L. Cunningham,[‡] Michele M. Evans,* Connie A. Luedtke,* Eleshia J. Morrison,* Jeannie A. Sperry,* and Larissa L. Loukianova*

Clinical Note
PAIN
Sustained improvements in pain, mood, function and opioid use post interdisciplinary pain rehabilitation in patients weaned from high and low dose chronic opioid therapy
Kelly L. Huffman[a,b,*], Taylor E. Rush[a], Youran Fan[c], Giries W. Sweis[a,b], Brinder Vij[a], Edward C. Covington[a], Judith Scheman[d], Manu Mathews[a]

- 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

- 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.

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

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

Sandy: 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**
  - Single mother, 2 children, no family support
  - Physical and sexual trauma by mother's ex-boyfriend

- Pain Medicine

- **Assessment**:
- Widespread pain c/w fibromyalgia syndrome
- Anxiety disorder with depressed mood
- Sleep disturbance
- Opioid dependence: MED 15 mg/day

- <u>Recommendation</u>

1. Structured Functional Restoration Program
2. Medication Management:
   - Wean off carisoprodol
   - Initiate duloxetine
   - D/C "muscle relaxers"
   - Agreed plan for discontinuation of hydrocodone/APAP while in program

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	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**

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

- Therapeutic Exercise
- Massage Therapy
- Cold & Heat
- Bracing

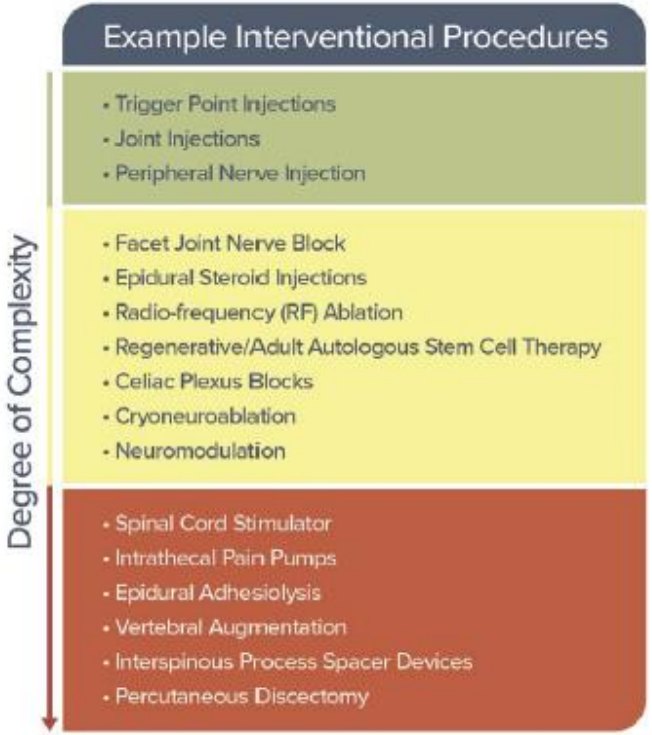
TENS

Traction

Therapeutic Ultrasound

https://www.hhs.gov/ash/advisory-committees/pain/reports/2018-12-draft-report-on-updates-gaps-inconsistencies-recommendations/index.html. May 6, 2019.

Individualized, Multimodal,
Multidisciplinary Pain Management
Medications (Opioid & non-opioid)
Restorative Therapies
Interventional Procedures
Behavioral Health Approaches
Complementary & Integrative Health


Example Interventional Procedures
Degree of Complexity
• Trigger Point Injections
• Joint Injections
• Peripheral Nerve Injection
• Facet Joint Nerve Block
• Epidural Steroid Injections
• Radio-frequency (RF) Ablation
• Regenerative/Adult Autologous Stem Cell Therapy
• Celiac Plexus Blocks
• Cryoneuroablation
• Neuromodulation
• Spinal Cord Stimulator
• Intrathecal Pain Pumps
• Epidural Adhesiolysis
• Vertebral Augmentation
• Interspinous Process Spacer Devices
• Percutaneous Discectomy

Individualized, Multimodal,
Multidisciplinary Pain Management
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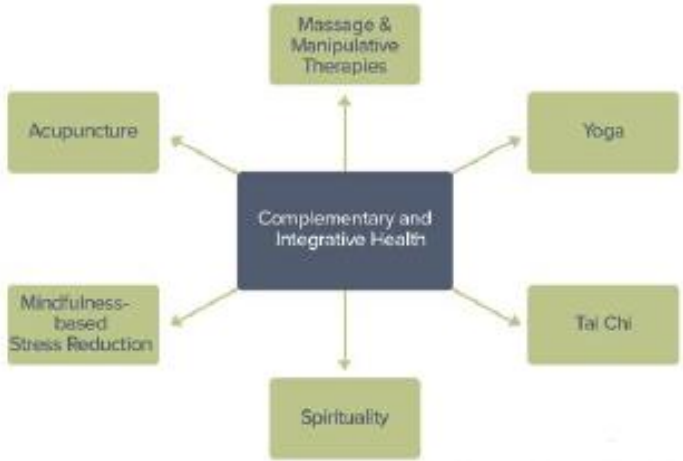

Massage & Manipulative Therapies
Acupuncture
Yoga
Complementary and Integrative Health
Mindfulness-based Stress Reduction
Tai Chi
Spirituality

Physical Therapy Rehabilitation Approach

WEEK 1	WEEK 2
➢Assessments ➢Movement-based Therapy 	➢Strengthening Exercises ➢Aerobic Conditioning
WEEK 3	**WEEK 4**
➢Neuromobilization ➢“Active” vs “Passive” 	➢Sex & Chronic Pain (with Nurse) ➢Home Exercise Plan ➢Pain Flare Plan

Treatment Principles

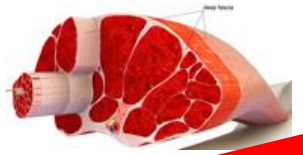
- Strengthening and Stretching
- Motor Control
- Stabilization: Trunk Pressure and Control
- Aerobic Conditioning
- Intensity Monitoring:
- Target Heart Rate: Calculate 50% max heart rate

  (220-age) x 0.50 = 50% of max heart rate (MHR)

  Example: 50 yr old

  (220-50 = 170) X 0.50 = 85 MHR

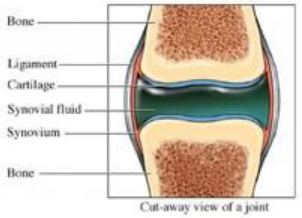
Education About Your Body



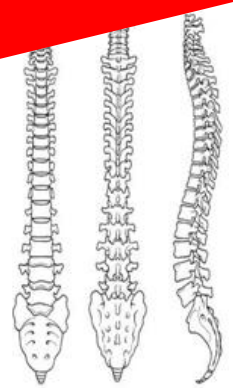
FASCIA

Ligaments

Joints



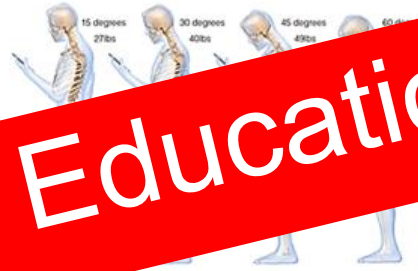
Cut-away view of a joint



Autonomic Nervous System

Peripheral Sensors

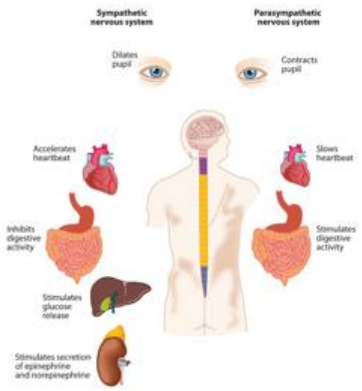
Motor Control



Body Mechanics

Stretching/Strengthening

Aerobic Conditioning



Pain Neuroscience Education (PNE)

Pain Neuroscience Education (PNE)

- 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 form tissues
- Neural activation includes upgregulation or downregulation
- 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”

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

General Sequences

Created by Dr. Timothy Zepelak DPT, Dr. Kristin Vinci DPT Dec 7th, 2018

Cat Cow

Position yourself on your hands and knees with your hands placed under your shoulders and your knees directly under your hips. Slowly round your back up towards the ceiling as head goes down, and then arch your back down by pulling your abdomen towards the floor and raise head up.

PRAYER STRETCH

While in a crawl position, slowly lower your buttocks towards your feet until a stretch is felt along your back and or buttocks.

This is a great opportunity to utilize your diaphragmatic breathing and feel how it releases muscle tension in your spine.

PRAYER STRETCH - LATERAL

While on your hand and knees in a crawl position, slowly lower your buttocks towards your feet. Also, lower your chest towards the floor as you reach out towards the side.

Use deep diaphragmatic breathing to release muscle tension.

Comprehensive PT Program

- Education
- Strengthening
- Endurance
- Nutrition
- Sleep
- Emotional Health Techniques

Putting it All Together

Stretching

Oxygenation

Mindfulness

Daily Integration

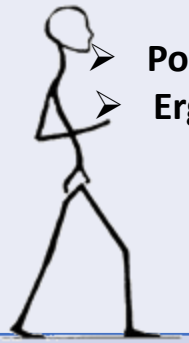
Relaxation

Occupational Therapy

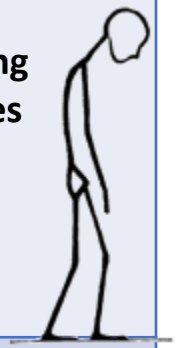
WEEK 1

- Assessments
- Pacing Techniques

WEEK 2



- Posture & Positioning
- Ergonomic Principles



WEEK 3

- [illegible]
- [illegible]

Tolerance
Movement

- Tai Chi
- Qi-Gong

WEEK 4

- Realistic Schedule
- Return to leisure vocational

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
- Joint protection and compensatory strategies

OT: Pacing

- Time management
- Determine exact amount of activity that can be done without flare up
- Manage pain
- Conserve energy, do activities you value
- Set graded activity level or goals to increase activity level
- Breaking activities up into smaller tasks or parts
- Work at slower less intense pace, take breaks

Therapeutic Movement

- Chronic Pain: decreased strength, endurance, mobility, balance and flexibility
- Therapeutic Movement is controlled movement
- Movement as physiologic tool to promote brain changes
- Therapeutic movement must be performed regularly for long-term structural plasticity

Tai Chi

- 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

CBT: Cognitive Behavioral Therapy
MBSR: Mindfulness Based Stress Reduction

Restoring Psychological Function

Self-Regulatory Approaches	Behavioral Approaches	CBT	ACT
• Utilize interaction between biological and psychological factors to increase individual's sense of control over pain • Include biofeedback, relaxation training, hypnosis, and mindfulness	• Target pain behaviors • Include operant behavioral therapy and treatment of fear avoidance	• Addresses pain maladaptive emotions/ behaviors/ cognitions through a goal-oriented, systematic procedure • Main components are understanding the treatment rationale, learning coping skills/training, and applying/maintaining coping skills	• Acceptance- and mindfulness-based intervention • Emphasizes recognition and acceptance of emotions and cognitions, rather than recognition and change (ie, CBT)

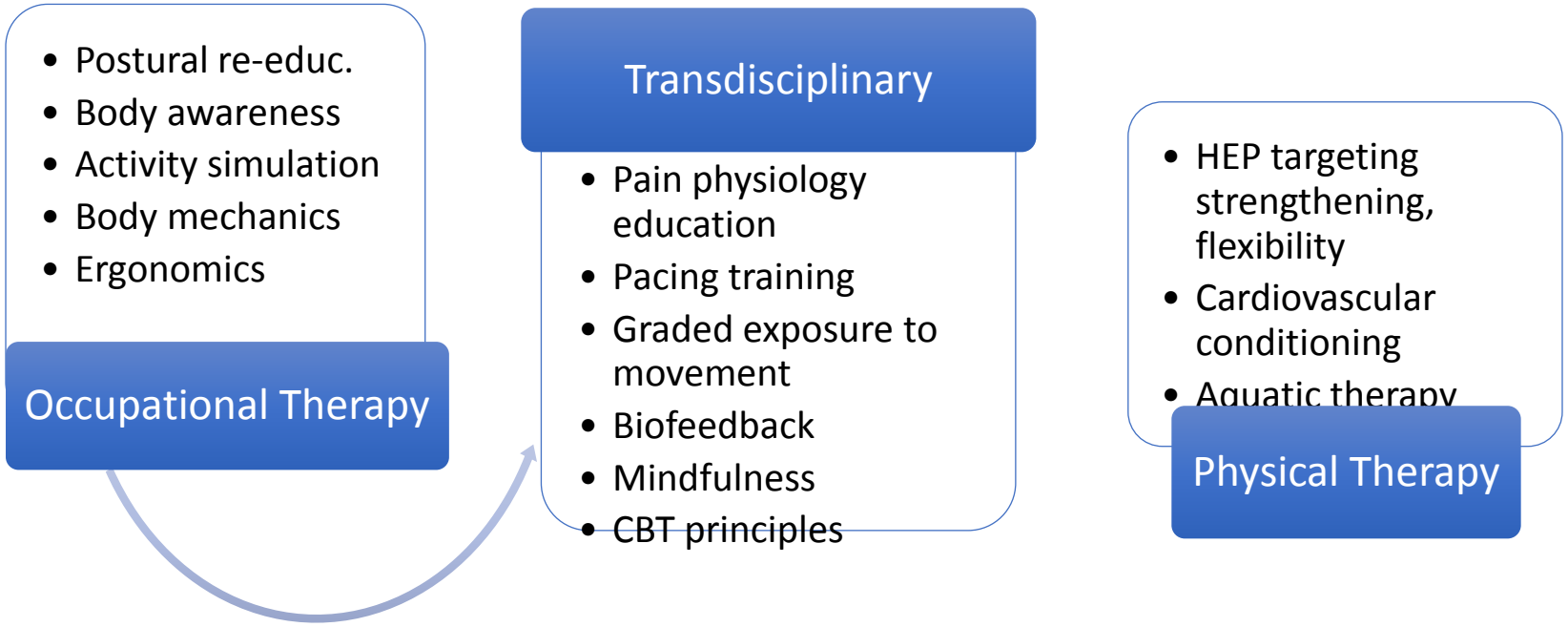
ACT=acceptance and commitment therapy; CBT=cognitive behavioral therapy.

Kerns RD, et al. *Annu Rev Clin Psycho*l. 2011.

Pain Psychology: MBSR Approach

- 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

Shared Role of PT and OT



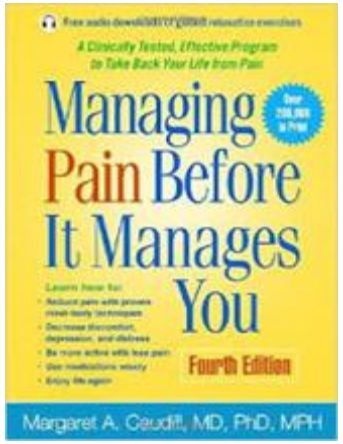
E. Gaffron, OT. Shirley Ryan Ability Lab.

Relaxation Training

- Deep Breathing
- Imagery and Visualization
- Progressive Muscle Relaxation (PMR)
-

Pain Education

- **Orientation to program**
- **Pain pathways**
- **Sleep hygiene**
- **Nutrition**
- **Medications and side effects**
- **Pain Management Tool Box**



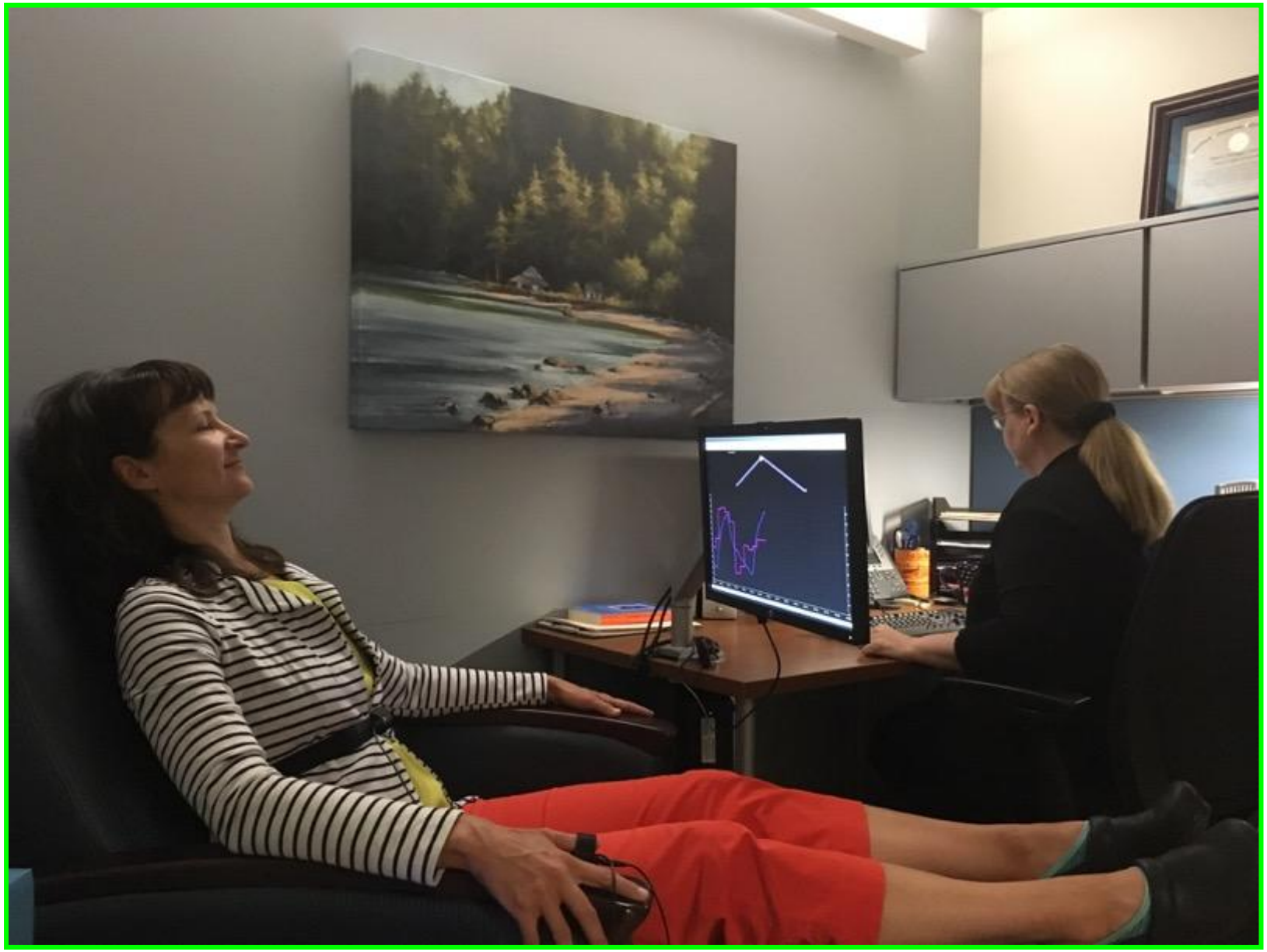
“Fight-or-Flight”

Sympathetic
Nervous System

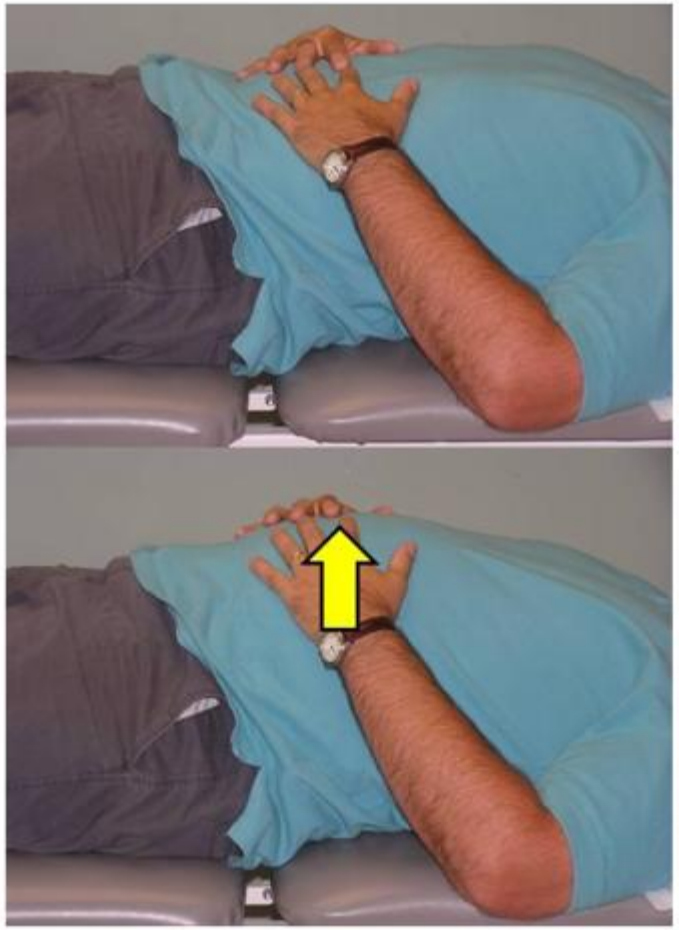
Parasympathetic
Nervous System

TRAINER’S VIEW

PATIENT'S VIEW



Diaphragmatic Breathing



Diaphragmatic (Belly) Breathing

*** Lay on your back * Legs and feet apart and relaxed (pillow under knees, optional) * Inhale and expand abdomen up to ceiling. Exhale and abdomen descends.**

Use 3-5# ankle weight on abdomen for enhanced effect.

Ensure the chest does not move and only the abdomen is moving with the breath.

Perform this for 10-15 minutes focusing on the abdominal (diaphragmatic) movement and creating deep,slow breathing cycles.

This breathing techniques helps to calm the nerves and balance the nervous system.

Sandy

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

- Medication Plan:

- “Positive, encouraging staff. . . So grateful.
- PT & OT, got to my core problems. Relaxation, fascinating to learn about my body and how to control it myself! Psychology, generous and empowered me to get through tough transition in my life. Nursing, great information. Now I understand ‘pain’.”
  - KH

- ”Having 5 providers to teach you and care about you, and help me build my own program was a blessing. Exceptional caring in one great package.” - LP

- “My life is at a much better place and for that I am forever grateful.”
  - PE

Options & Opportunities for Patients

Healthcare Systems & “Pain Management”

Fee for Service

Mergers

Operating Income Struggles

JAMA Network | Open

Original Investigation | Health Policy

Coverage of Nonpharmacologic Treatments for Low Back Pain Among US Public and Private Insurers

James Heyward, MPH; Christopher M. Jones, PharmD, MPH; Wilson M. Compton, MD, MPE; Dora H. Lin, MHS; Jan L. Losby, PhD, MSW; Irene B. Murimi, PhD, MA; Grant T. Baldwin, PhD, MPH; Jeromie M. Ballreich, PhD, MHS; David A. Thomas, PhD; Mark C. Bicket, MD; Linda Porter, PhD; Jonothan C. Tierce, CPhil; G. Caleb Alexander, MD, MS

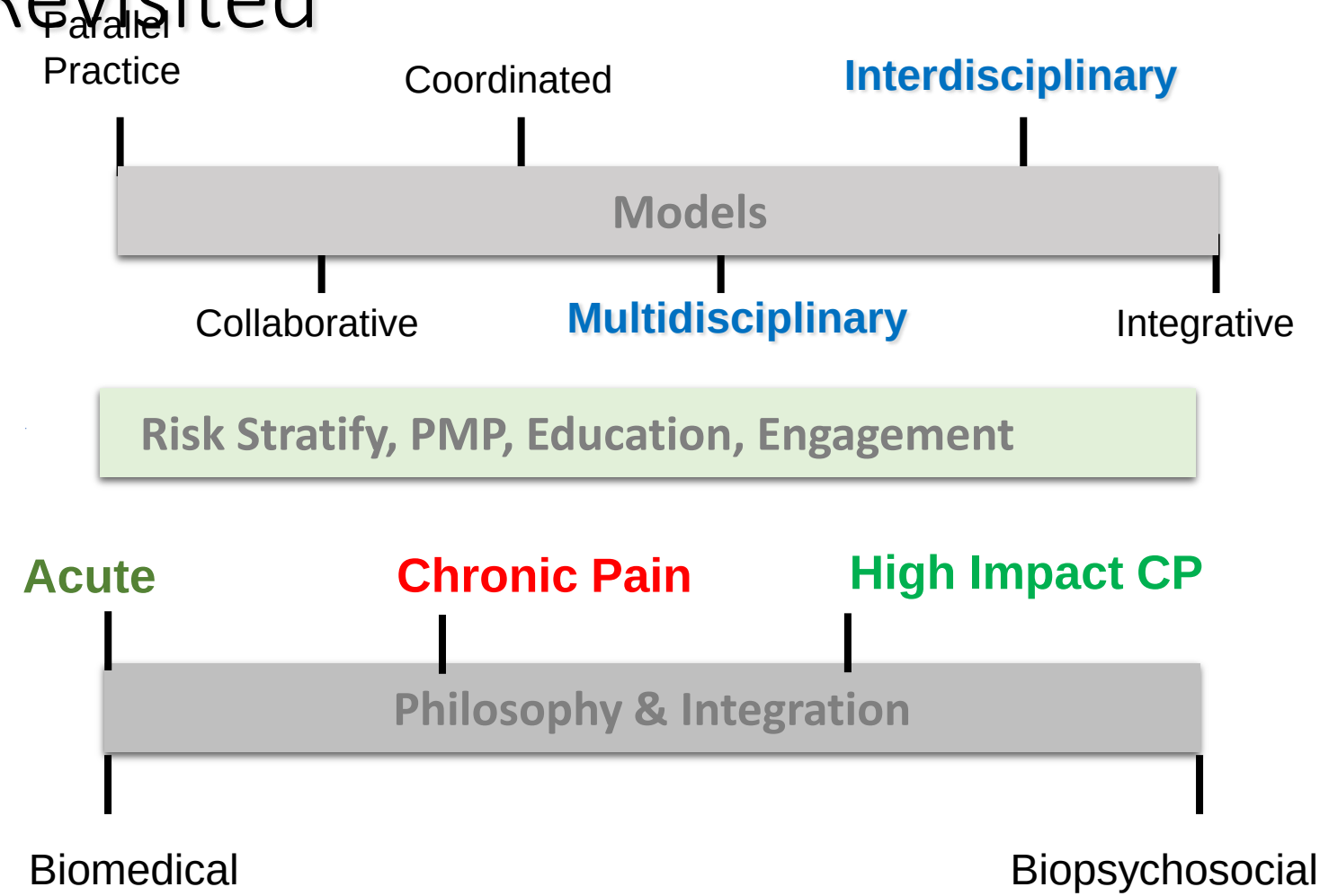
- Examined 2017 policies for LBP treatments
- Commercial and Medicare insurers regarded PT and OT as medically necessary, yet policies varied
- Wide variation existed for coverage for nonpharmacologic treatment for LBP
- Insurance executives more focused on opioid prescribing limits, and overprescribers, and less on improving access to nonpharmacologic therapies
- High number of prior authorizations, out-of-pocket expenses, and lack of coverage information common

Heyward J, et al. *JAMA Network Open*.2018;1(6): 1-14, doi:10.1001/jamanetworkopen.2018.3044

Reality Check

- Patient Access Factors
  - Behavioral Health Denials
  - Co-Insurance, Co-pay
  - Therapy Benefits
  - Non-Coverage
- **Hospital/System Factors**
  - Fee for service vs value-based care
  - Salaries, Benefits
  - Reimbursement
  - Approval process

Pain Management Models: Revisited



Boon H, et al. *BMC Health Services Research.* 2004;4:15.

Pharmacovigilance & Balanced Care

Summary

- HHS Interagency Pain Task Force supports multidisciplinary care
- Current opioid overdose epidemic an opportunity to reshape care delivery
- Reviewed components and disciplines
  - Physical Therapy (PT): Find PT's with PNE focus
  - Occupational Therapy (OT) & Therapeutic Movement
  - Behavioral Medicine (Pain Psych)
  - Relaxation Training (RT)
- A BioPsychoSocial Continuum
- *deinde benefacere* – "Then, do some good."
-

American Medical Association Resources

- end-opioid-epidemic.org

www.end-opioid-epidemic.org

Do you have an app for that?

Relaxation Training Exercises (commercial)

- I-Breathe
- Habit Bull
- Headspace

Nursing Education

- **Understanding Chronic Pain**
  - Acute versus Chronic pain
  - Biopsychosocial Model
  - Chronic Pain as an altered nervous system (Sensitization)
  - Multiple factors can sensitize the nervous system (early trauma, pain, genetics)
- **Medication Management**
  - How do medications effect the nervous system
  - Weighing risks and benefits
  - Patient centered medication changes (managing withdrawal & other side effects)
- **Alternate Coping Strategies**
  - Pacing
  - Getting better sleep
  - Nutrition (anti-inflammatory diet)
  - Pain flare planning (a plan for not making it worse)

Pain Education

Explain Pain in 5 minutes

https://www.youtube.com/watch?v=C_3phB93rvI

Lorimar Mosely videos/websites

https://www.tamethebeast.org/#tame-the-beast

https://www.youtube.com/watch?v=gwd-wLdIHjs

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/

- Mindfulness and Neuroplasticity YouTube
- https://youtu.be/7TN23YiGkAQ

Meditation Resources

Introduction to Mindfulness-Based Stress Reduction (MBSR) by Dr. Ron Siegel: https://www.youtube.com/watch?v=aPlG_w40qOE

Resources for home practice: https://www.wiley.com/legacy/wileychi/Day/mp.html?type=SupplementaryMaterial