# Non-opioid Treatment of Pain: A Team Approach

**Steven Stanos, DO**
**James Babington, MD**
**Sharon Hsu, PhD**
**Sonja Braasch, OT**

Verdant Healthier Community Conference
3/12/2018

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# Multidisciplinary Care

- Overview of chronic pain
- Present opioid ”epidemic” as opportunity to redefine our approach to chronic pain
- Discuss a BioPsychoSocially centered model(s)
- Collaborative community-based models
- Structured interdisciplinary care
- Introduce “Mary”
- Mind body approaches

# Swedish Pain Services (SPS): Pain Medicine Specialist

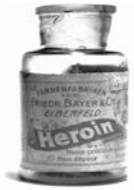
- **First Hill**
  - Pain Management — **Wilson Chang, MD** — **Steven Stanos, DO**
  - Functional Restoration — **Chris Merifield, MD** — **Greg Rudolf, MD**
  - **Cong Yu, MD**
- **Swedish Edmonds**
  - Pain Management — **James Babington, MD**
- **Swedish Issaquah**
  - Pain Management — **Wilson Chang, MD** — **Steven Stanos, DO**
  - **Cong Yu, MD**

# Prescription Opioid, Heroin & Illicit Fentanyl Crisis

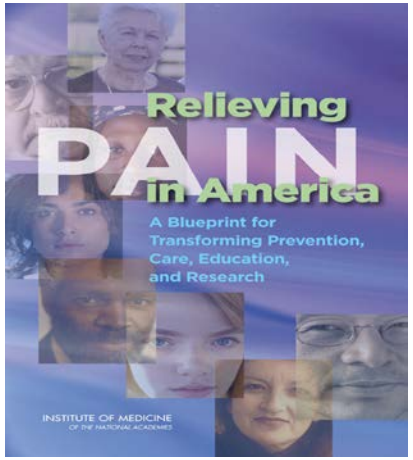
# "Under-treatment" of Pain & Limited Behavioral Health Resources

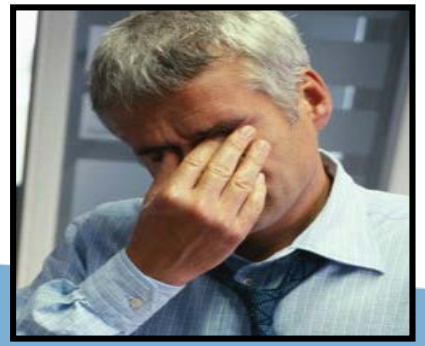
The Boston Globe

abcNEWS







U.S. Food and Drug Administration
Protecting and Promoting Your Health

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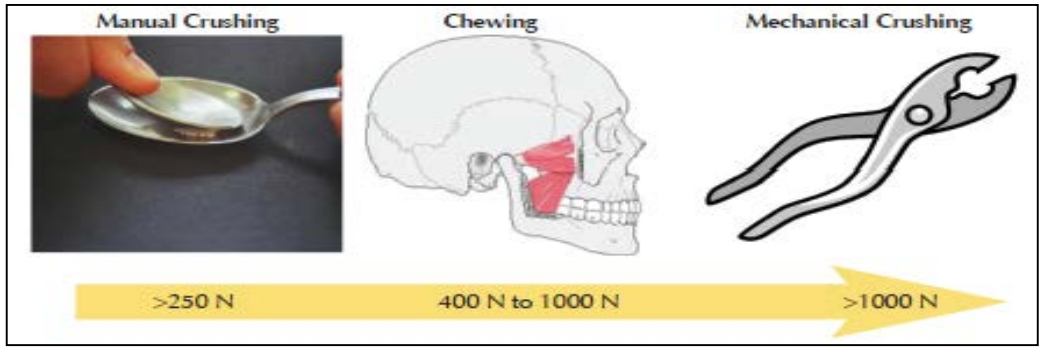
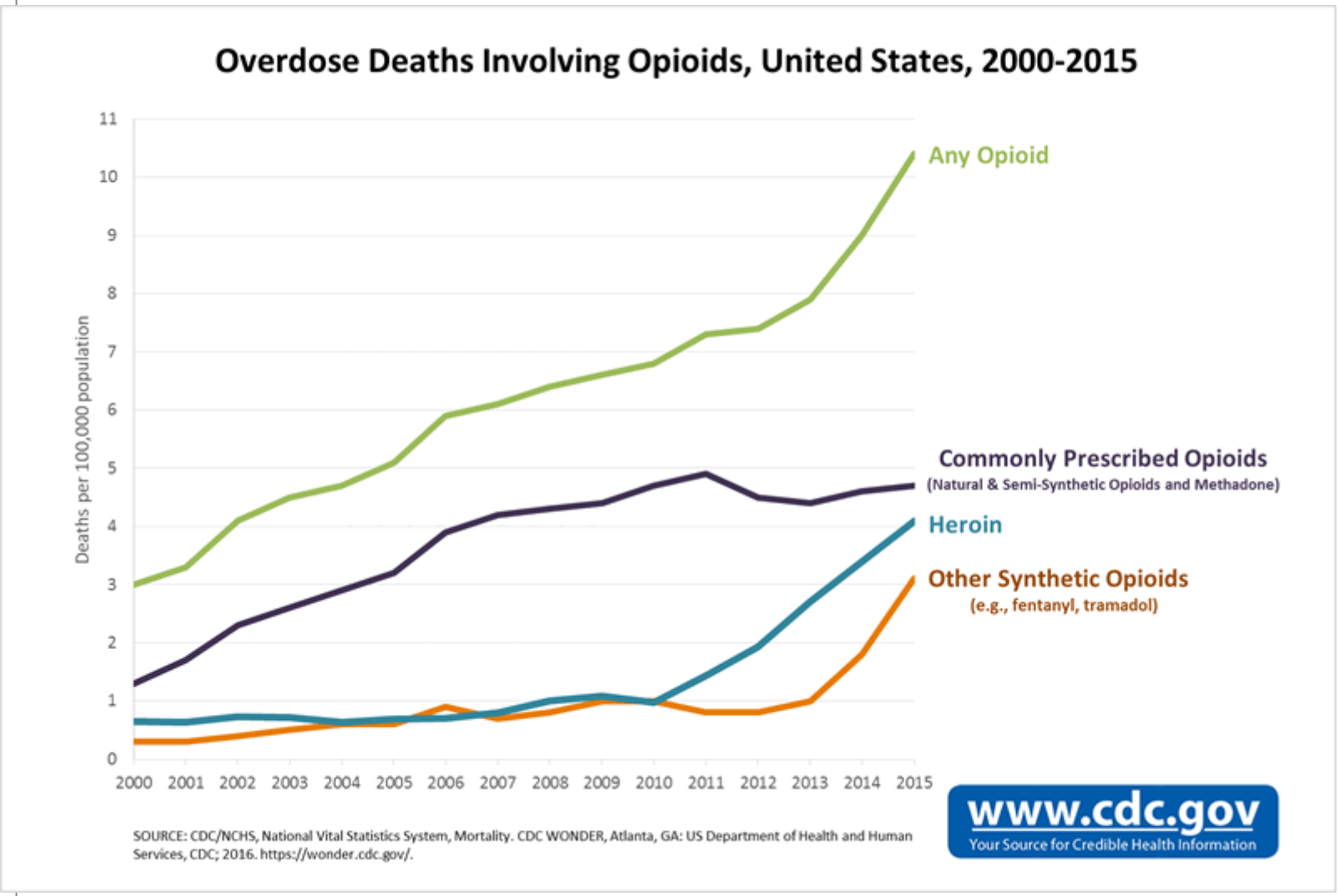
# Patient & Recreational Use, Misuse, Abuse & Addiction


# Overdose Deaths Involving Opioids, US, 2000-2015




- 2015: 52,404 deaths
- 2015-2016: increase by 20%
- Deaths related to Illicitly manufactured fentanyl doubled
- * contaminated heroin with illicit fentanyl

Dowell, D, et al. *JAMA* 2017; 318 (23): 2295-2296.

# Fentanyl Deaths


- Illicitly manufactured fentanyl (IMF)
- Unlawfully produced, mixed with or sold with heroin
- Since 2013 unprecedented levels[1]
- Increase in number of fentanyl submissions (426%) & synthetic opioid deaths (79%)
- 2016[2]: illicit fentanyl deaths > those for heroin related deaths

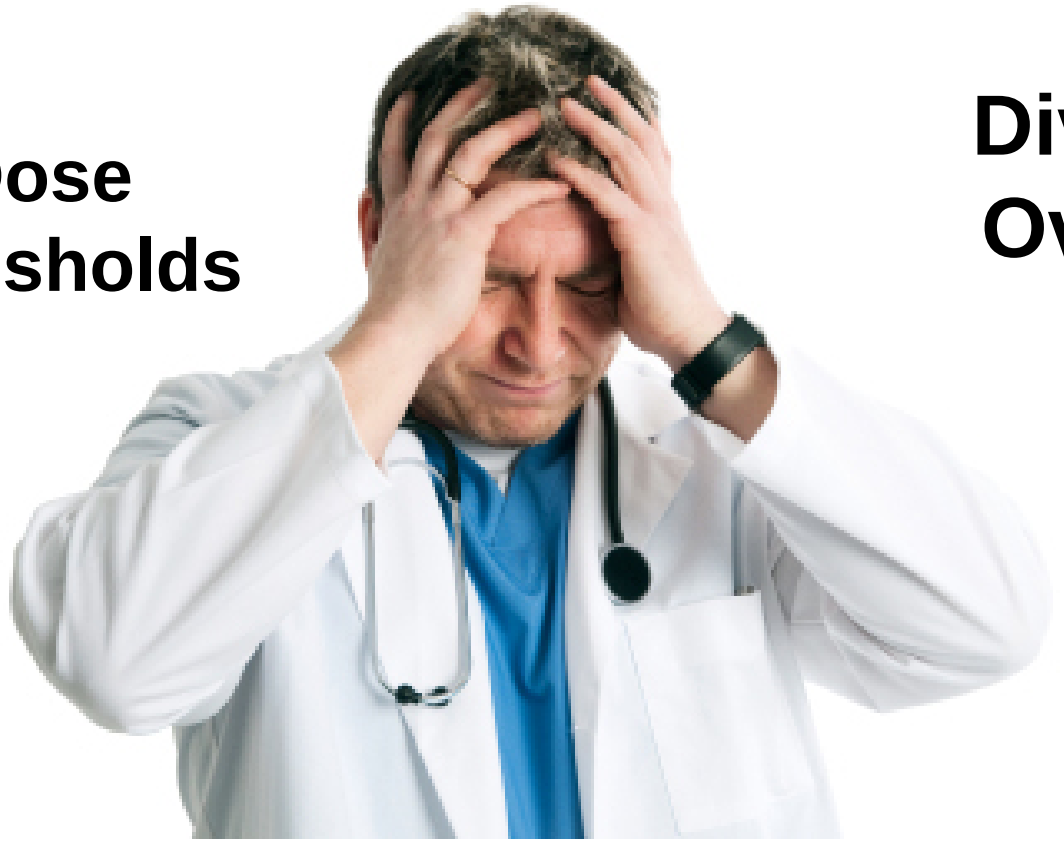
2016 Total OD Deaths: 64,070

| | United States | |
|---|---|---|
| Drug Type | Jan-16 | Jan-17 |
| Heroin (T40.1) | 13,219 | 15,446 |
| Natural and semi-synthetic opioids (T40.2) | 12,726 | 14,427 |
| Methadone (T40.3) | 3,276 | 3,314 |
| Synthetic opioids excluding methadone (T40.4) | 9,945 | 20,145 |
| Cocaine (T40.5) | 6,986 | 10,619 |
| Psychostimulants with abuse potential (T43.6) | 5,922 | 7,663 |
| Quality: % of overdose deaths with drug(s) specified | 83% | 85% |


1. CDC, MMWR. *Weekly/* August 26, 2016/65(33):837-843.
2. CDC National Center Health Statistics. 2017.

Abuse, Misuse, Addiction

MEDs



Dose Thresholds

Diversion, Overdose

Evidence

Quality Metrics

Prescribing Metrics

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# Balance: Starting Point

*primum non nocere* – “Do no harm.”

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

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

# Comprehensive Addiction & Recovery Act (CARA)

U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON ENERGY AND COMMERCE

**Summary of the House–Senate Conference Report on S. 524, the Comprehensive Addiction and Recovery Act**

**TITLE I – PREVENTION AND EDUCATION**

# 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."

# Collaborative Care Approach to Pain Management

James R. Babington, MD

Swedish Pain Services - Edmonds

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# Chronic Pain Adversely Affects Communities

- Appropriate pain management extends beyond opioids
- Team approach to care improves outcomes
- Redirecting focus away from isolated management with opioid therapy
- Education of physicians and patients
- Engagement with community resources to extend care


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# Collaborative Model

- Extends the role of scarce consultants
- Empowers and educates primary care
- Creates a registry
- Offers alternatives to stand alone opioid therapy

# Partnership

- Partner with Verdant Health on Living Well with Chronic Illness Classes
- Goal to reduced all patients managed in primary care to less than 90 morphine equivalents per day
- Ensure that statutory and best practice guidelines implemented

# Outcomes

- Identified cohort of patients
- Enrolled patients in database
- Established collaborative team (RN, Psychiatry, Pain Specialist, Primary Care)
- Outcomes pending

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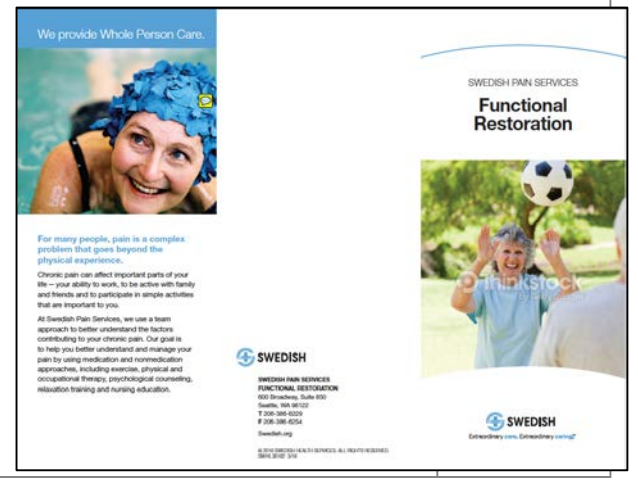
SERVICES

## Pain Management

- Pain Medicine Evaluation & Multidisciplinary Care
  - Pain medicine evaluation
    - Ongoing Medical Management
    - Spine interventions
    - Spinal cord stimulation,
    - Intrathecal opioids
  - Addiction Medicine

## Functional Restoration

- Comprehensive evaluation
  - Medical & Psych Evaluation
  - Structured Functional Restoration Program (SFRP)
- Physical Therapy
- Occupational Therapy
- Behavioral Health
  - Pain psychology
  - Relaxation therapy
- Nursing Education



# Structured Functional Restoration Program (SFRP)

- A team-based approach to helping patients better manage the complex nature of their chronic pain
- Coordinated interdisciplinary interventions to support self-management of pain including:
  - physical and occupational therapy (exercise, strengthening, posture training)
  - behavioral health interventions (pain psychology, relaxation training)
  - medical management and pain education
- Strong emphasis on patient education and helping patients take a more active role in their care

# Treatment Timeline for SFRP

1. **Comprehensive evaluation** (2-3 hrs. in duration)
   - Medical evaluation (Pain Medicine Specialist)
   - Pain psychology evaluation (Pain Psychologist)
   - Nurse intake and orientation to facility and program
2. **Four-week interdisciplinary pain program**
3. **Weekly team conference**
   - Objective assessment of progress and plan for further treatment
   - Written team progress note prepared shared with patient
4. **Program Completion**
   - Patient attends own discharge conference on final day of SFRP
   - Discharge recommendations forwarding to referring provider
   - Patient follows up with pain medicine team after 1 month to reassess compliance and progress in self management

Structured Functional Restoration Program (SFRP)

# Case: Mary

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# Medical

**History**

- 42 yr old, chronic migraine headache, fibromyalgia, MVA 2011, 2013 LBP, annular tear L5-S1, hemiplegic migraine
- Later diagnosed with ankylosing spondylitis

**Treatment History**

- Pregabalin, gabapentin, topiramate, verapamil, propranolol, duloxetine, methocarbamol, cyclobenzaprine, tizanidine, botox injections
- MTX and humira for AS
- Unable to tolerate PT due to increase in pain, no aerobic exercise
- May 2016, MSK evaluation
    - STarT Back: high risk
    - 9/10 pain, fatigue, sitting tolerance 30 min

**Pain Assessment**

- Widespread tenderness
- Trigger points cervical and scapula
- Core weakness, lumbopelvic
- Cervical dural tension upper limb, C7 radicular pain

# Comprehensive Evaluation

## Pain Psychology

- Screening
  - PHQ-9: 13/27
  - GAD-7:16/21
  - PCS: 37
  - TSK: 32
- Behavioral:
  - Uses distraction and denial to cope
  - Poor limit setting
- Affective/Cognitive:
  - Maladaptive pain-related thought patterns
  - Depression and anxiety
- Social:
  - Interpersonal conflict with husband due to financial issues
  - Working full time, “exhausted” “overwhelmed”

## Pain Medicine

- Widespread pain, fatigue
- Myofascial pain scapula, cervical spine
- Cervical spondylosis with residual C7 radicular pain
- Ankylosing spondylitis
- Depression

## Recommendation

Structured Functional Restoration Program

Medication trial

Tramadol trial

Trazodone 50 mg QHS

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# SFRP

## Comprehensive Evaluation

- Pain Psychology
  - Sharon Hsu, PhD
- Pain Medicine
  - Wilson Chang, MD
  - Steven Stanos, DO

## Recommendations

- Not a candidate
- Individual modalities
- Pre-Program
- Start SFRP

**Swedish Pain Services NPS Implementation**
**Structured Functional Restoration Program (May '16- April '17)**
**Seattle, WA**

| Outcome Measures | Pre-Program | Post-Program | Reference Ranges (Change color highlighted) | |
|---|---|---|---|---|
| **Pain VAS** | **6.15** | **5.17** | 1 | No Pain |
| | | | 10 | Extreme Pain |
| **ODI (%) [disability]** | **41.09** | **37.06** | 0%-20% | Minimal disability |
| | | | 21%-40% | Moderate disability |
| | | | 41%-60% | Severe disability |
| | | | 61%-80% | Crippled |
| | | | 81%-100% | Bed-bound |
| **GAD-7 [anxiety]** | **7.06** | **4.72** | 0-4 | Negative |
| | | | 5-9 | Mild |
| | | | 10-14 | Moderate |
| | | | 15-21 | Severe |
| **PHQ-9 [depression]** | **9.06** | **6.66** | 0-4 | Negative |
| | | | 5-9 | Mild |
| | | | 10-14 | Moderate |
| | | | 15-19 | Moderately Severe |
| | | | 20-27 | Severe |
| **CPAQ - Activity Engagement** | **34.42** | **39.94** | (5.5) (Improvement) | |
| **TSK [kinesiophobia]** | **37.68** | **32.96** | (4.9) | |
| PCS –(catastrophizing) **Rumination** | **8.66** | **5.19** | (3.5) | |
| PCS – (catastrophizing) **Magnification** | **4.60** | **3.21** | (0.9) | |
| PCS – (catastrophizing) **Helplessness** | **11.36** | **6.04** | (5.3) | |
| PCS – (catastrophizing) **TOTAL** | **24.62** | **14.43** | (10.2) | |
| **6 minute walk test (m)** | **495.54** | **697.85** | (203.3) | |

# Goals

- Decrease pain intensity
- Increase physical activity
- Improve pain medication regimen
- Improve psychosocial functioning
- Return to leisure pursuits and work
- Reduce utilization of health care services
- Focus on self management

# Structured 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 |

**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

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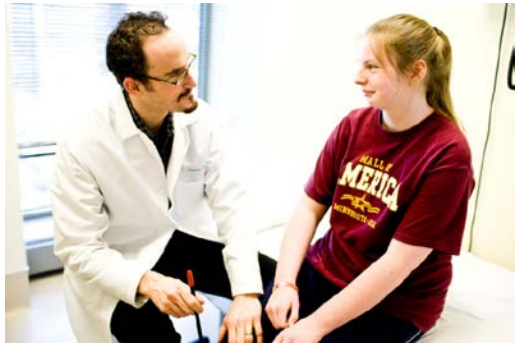
# Medical Management

- Team led by a pain medicine specialist focusing on clarifying diagnoses, managing medications, and coordinating care
- Reassess and improve medication related to mood, sleep, and analgesia
- Appropriate need for repeat imaging or procedures
- Ensure accordance and compliance to program
- Provide team feedback
- Opioid assessment and management



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# Opioid Management Classification

(Risk Assessment Monitoring & Managing ) RaMM)

1. Risk Assessment
   - Opioid Management Classification
     - MED (daily morphine equivalent)
     - Opioid Risk Tool (ORT)
   - Establish baseline Functional Assessment
     - Pain, Enjoyment, General Activities (PEG3)
2. Monitoring
   - Informed Consent and Safety and Management Agreement for Controlled Substances
   - Urine Drug Monitoring (UDM)
   - Prescription Drug Monitoring Database (PDMP)
3. Management
   - PEG3, physical exam, Co-treat, Triage

# Opioid Management Classification

## Management Classification

### Step #1 Adjustment

**MED (Morphine Equiv. Dose)**
Low: < 50
Medium: 50-90
High: > 90

**Opioid Risk Tool (ORT)**
Low risk = neutral risk
Moderate risk = at least "medium" risk
High risk = at least "high" risk

| Consider higher of the two categories | | |
|---|---|---|
| **MED** | **ORT** | **Step 1 Adjustment** |
| Low | Medium | Medium |
| Medium | Low | Medium |
| High | Low | High |

### Step #2 Adjustment — Medical comorbidities and concurrent meds (add "A" and "B")

**A. Medical comorbidities (1 point per)** impaired respiratory function, COPD, CHF, untreated sleep apnea, high fall risk, altered drug metabolism, advanced age/ frail, impaired renal or hepatic dysfunction, unstable psychiatric condition (i.e., depression, anxiety), other

Subtotal A: _____

**B. Concurrent high risk co-prescriptions: (1 point per)** Benzodiazepines, barbiturates, carisoprodol, non-benzodiazepine hypnotics, stimulant medications, other

Subtotal B: _____

Add subtotals "A" and "B" for total adjustment score: _____

If > 2 points = Consider grade **UP**
If 1 point = Maintain classification
If 0 points = Consider grade **DOWN**

**Final "management classification" score**

**"Low"**
**"Medium"**
**"High"**

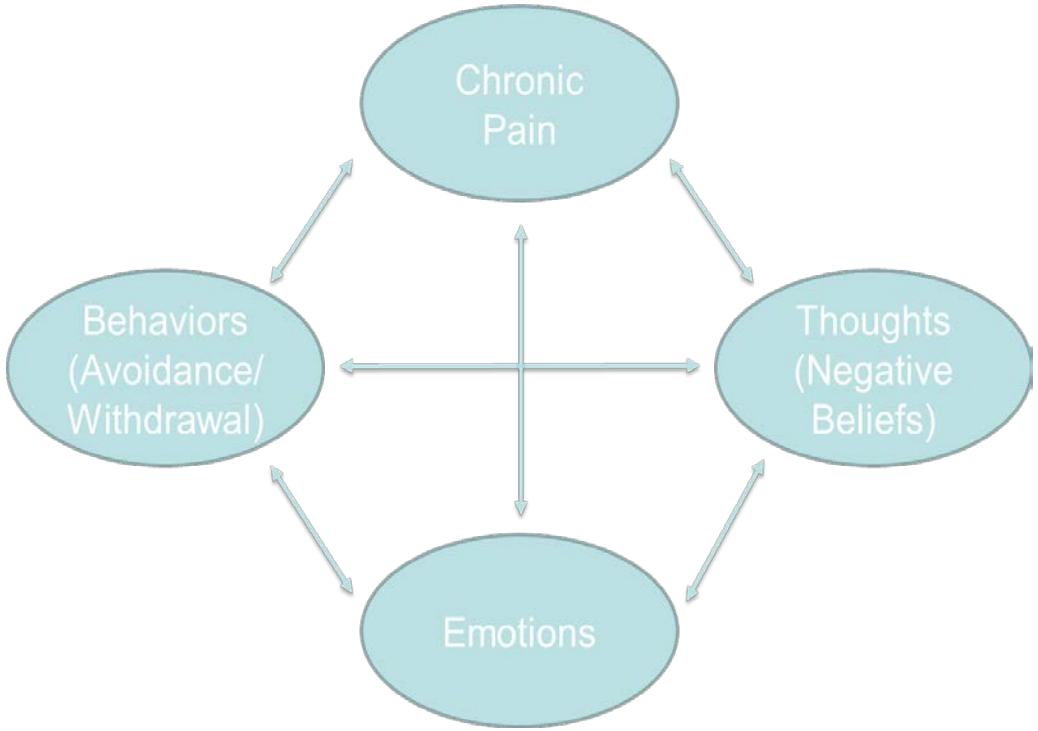
- **Use the management classification score for ongoing monitoring.**
- **Risk factors may change over time. Reassess regularly.**
- **Methadone MED classification is limited by unique qualities of the drug.**

## Opioid Options

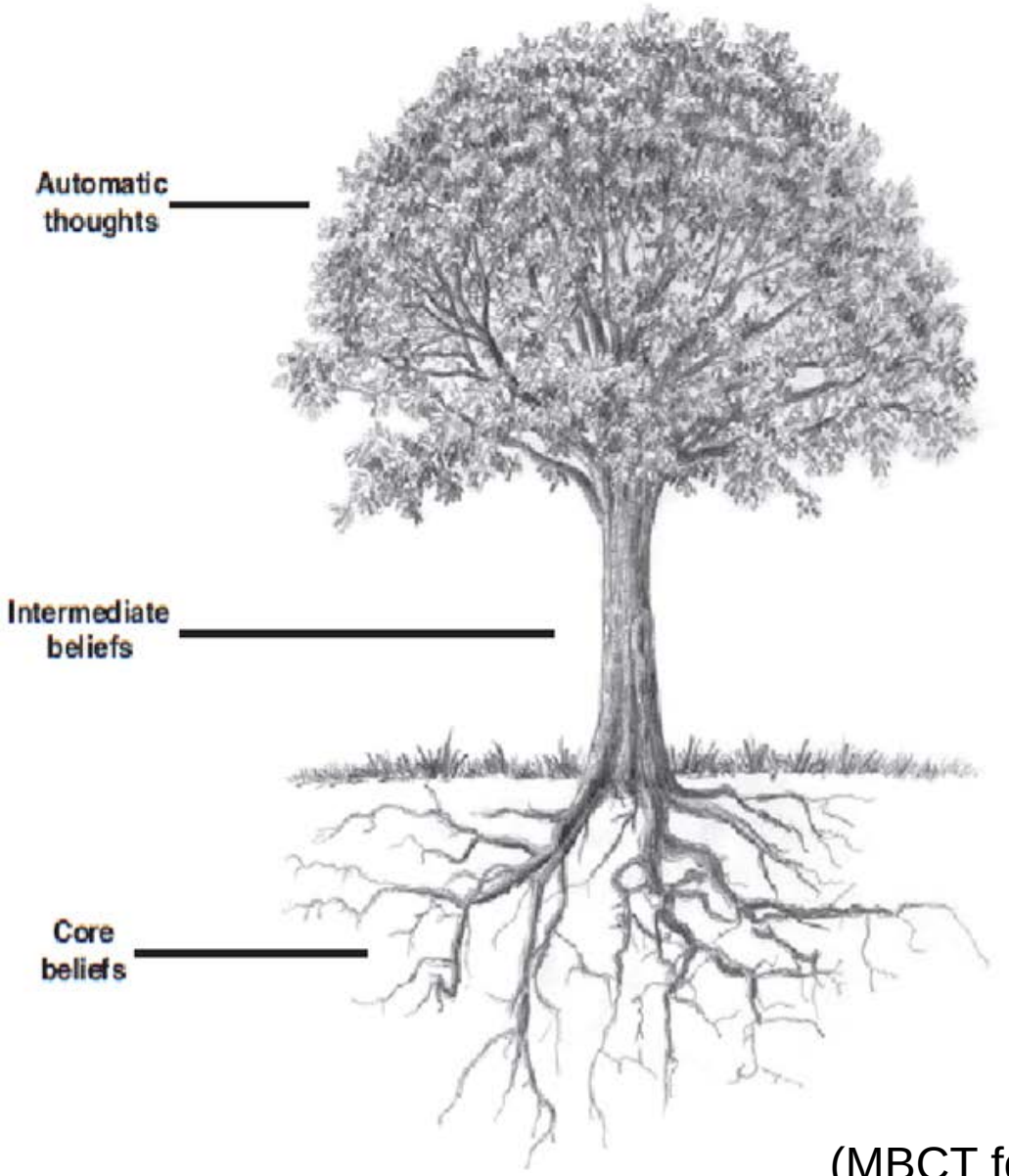
- Continue/Reassess
- Taper Down
- Wean
- Buprenorphine
  - suboxone
  - subutex

# Pain Psychology

- Cognitive Behavioral Therapy to target:
  - Maladaptive thoughts and behaviors
  - Anger and irritability
  - Problems in support system
  - Problems in communication skills



## Getting Down to the Root of Our Thoughts and Beliefs about Pain




"My head is going to explode"

"I need to be in control"

"My pain is the worst in the world! I can't stand it!"

"I can't do anything right"

"There's not enough time in the day"

"I can't work anymore, so I'm good for nothing"

"I am sure my doctor thinks I exaggerate my pain"

"I should be able to provide for my family"

"I have to work hard"

"I should be the strong one"

"I shouldn't have to take pain medication"

"I should always do my best"

"I have to hold it together"

"A good doctor should figure out what's wrong with me and fix it"

"I am bound to be alone/rejected"

"I am half a person"

"I am worthless"

"I am defective"

"I'm a failure"

"I am unlovable"

"I'm not good enough"

"I am inadequate"

"I am useless"

(MBCT for Chronic Pain; Day, 2017)

# Pain Psychology

| WEEK 1 | WEEK 2 |
| --- | --- |
| ➢ Education: Neuromatrix model, Gate Control Theory<br>➢ Introduction to mindfulness meditation | ➢ Mindfulness training for coping with maladaptive thoughts and negative emotions |
| **WEEK 3** | **WEEK 4** |
| ➢ Acceptance toward chronic pain<br>➢ Interdisciplinary pain flare plan | ➢ Maintaining mindfulness practice and other home practice<br>➢ Family education and support |

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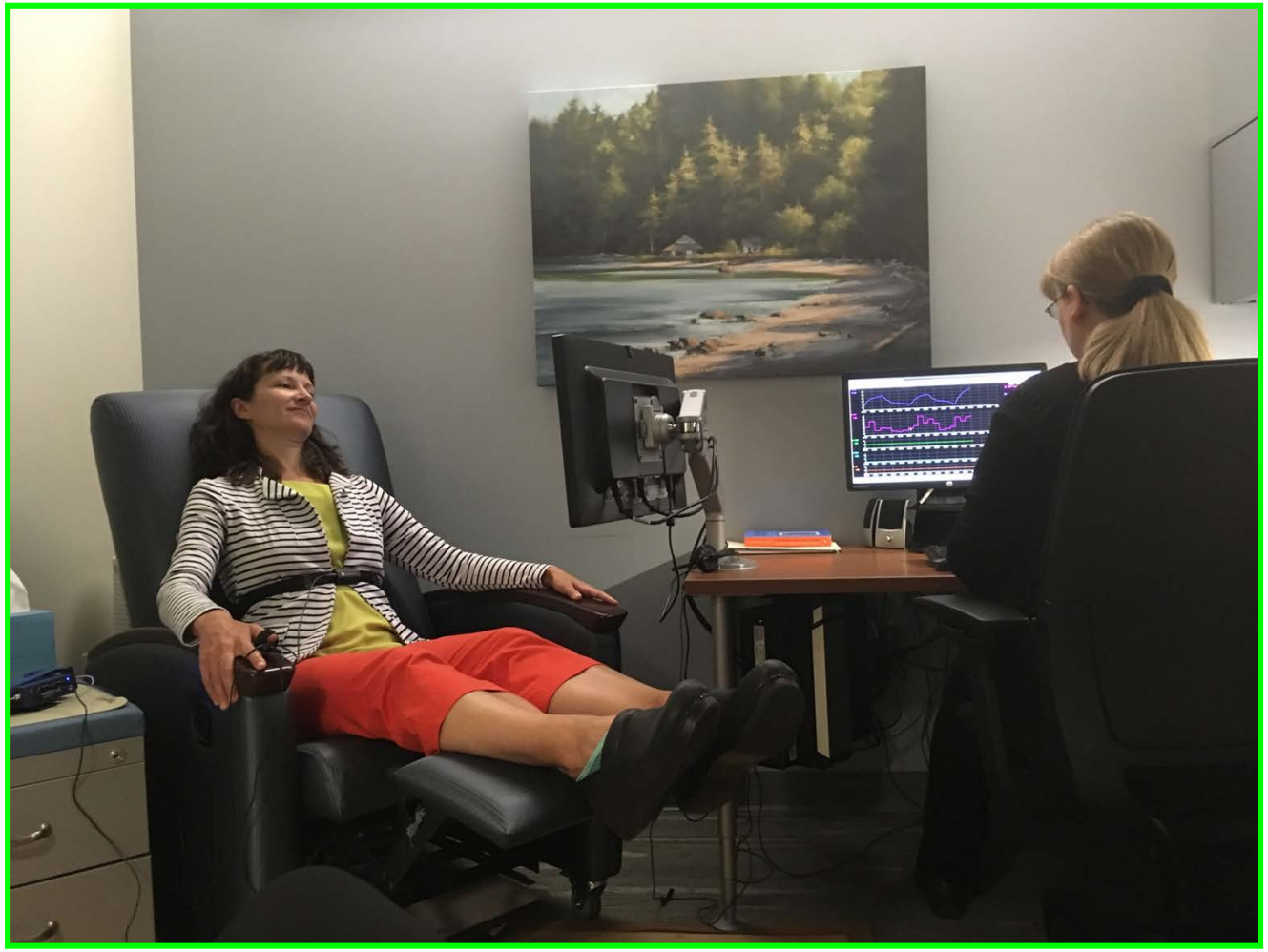
# “Biofeedback” Enhanced Relaxation Training




# THE ELECTRODES

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# Biofeedback-Enhanced Relaxation Training

| WEEK 1 | WEEK 2 |
| --- | --- |
| ➢ Education about autonomic nervous system and chronic pain<br>➢ Assessments | ➢ Respiration BFT<br>➢ Heart Rate Variability BFT |
| **WEEK 3** | **WEEK 4** |
| ➢ Progressive Muscle Relaxation<br>➢ Autogenic Training | ➢ Guided Imagery<br>➢ Art therapy |

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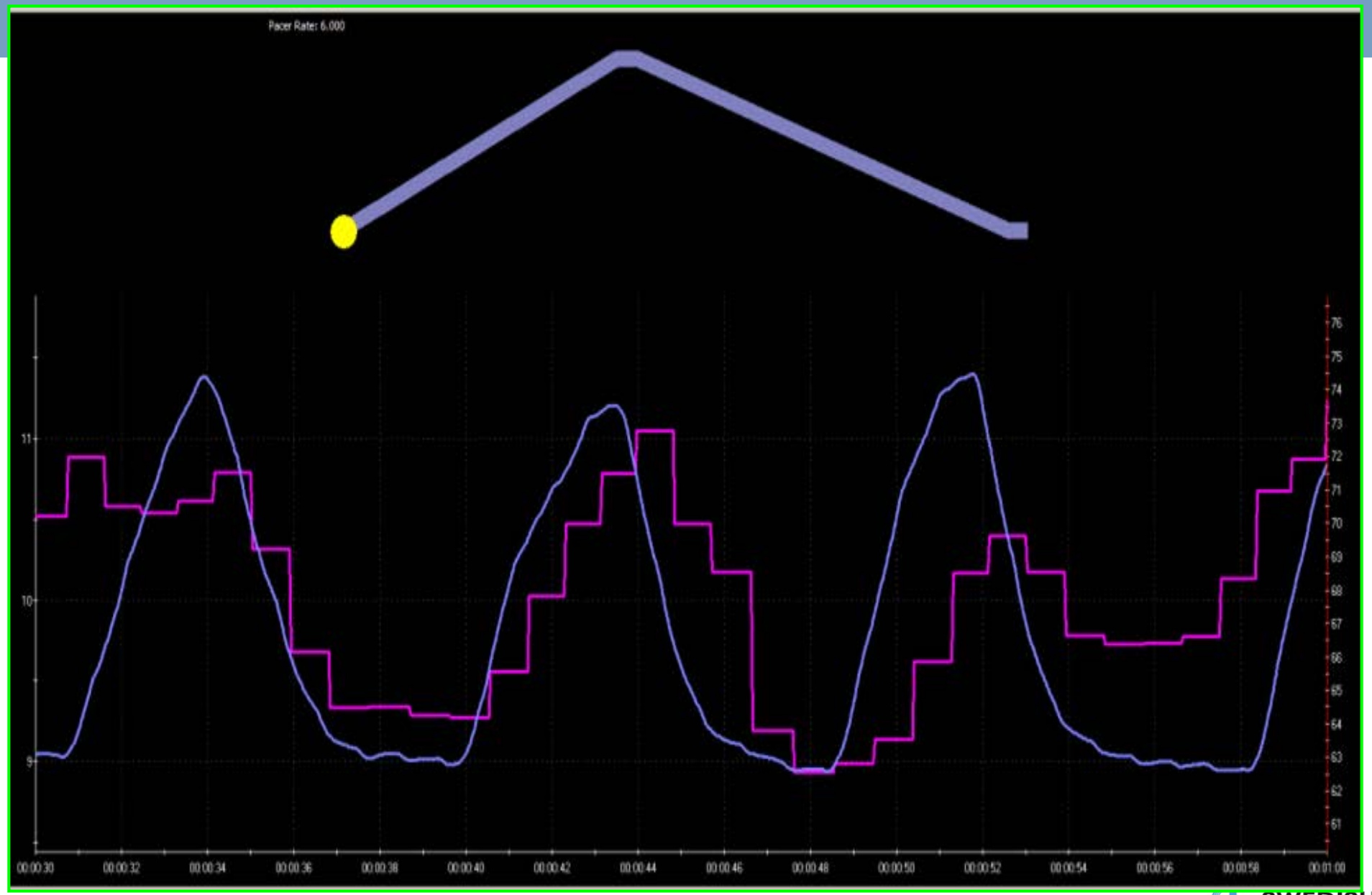


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# Diaphragmatic Breathing

# Physical Therapy

- Comprehensive assessment
- “Active” vs. “Passive” treatment
- Movement based therapy
- Strengthening exercises
- Neuromobilization
- Aerobic conditioning
- Home exercise plan
- Time limited

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# Physical Therapy

| WEEK 1 | WEEK 2 |
| --- | --- |
| ➢ Assessments<br>➢ Movement-based therapy | ➢ Strengthening exercises<br>➢ Aerobic conditioning |
| **WEEK 3** | **WEEK 4** |
| ➢ Neuromobilization<br>➢ Active vs passive treatment | ➢ Sex & Chronic Pain<br>➢ Home Exercise Plan<br>➢ Pain Flare Plan |

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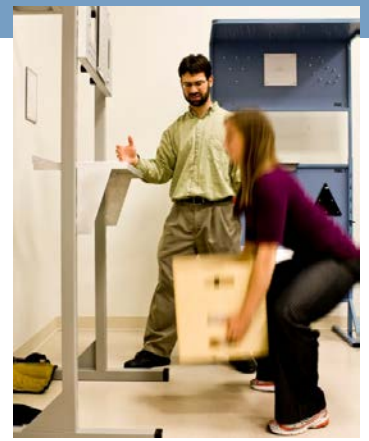
# Occupational Therapy



- Posture, positioning
- Pacing Techniques & Implementation
- Ergonomic Principles
- Activity Tolerance
- Return to leisure and vocational activities

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# Occupational Therapy

## WEEK 1

- Assessments
- Pacing Techniques

## WEEK 2

- Posture & Positioning
- Ergonomic Principles

## WEEK 3

- Activity Tolerance
- Therapeutic Movement

## WEEK 4

- Realistic Schedule
- Return to leisure and vocational activities

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# Tai Chi & Chi Gong

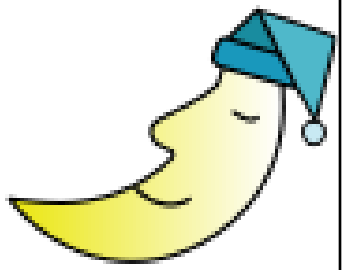
# Nurse Care Coordination and Clinical Support

- Patient-centered care planning from referral to post program maintenance
- Resource person for providers and patients interested in SFRP
- Nursing education/self-management topics:
  - Orientation to self management approach, Sleep hygiene, medication management, nutrition and pain flare planning
- Ongoing coordination and care planning and follow up as needed

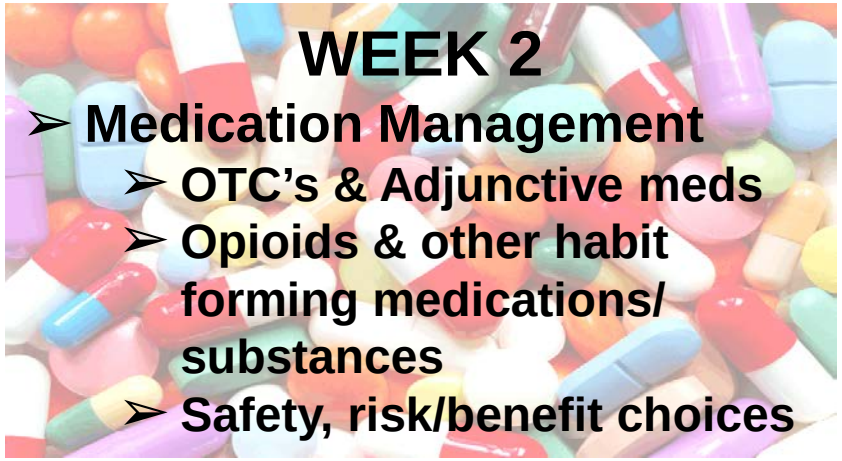
# Nursing Education

## WEEK 1

- Orientation to the program
- Sleeping Better



## WEEK 2



- Medication Management
  - OTC's & Adjunctive meds
  - Opioids & other habit forming medications/ substances
  - Safety, risk/benefit choices

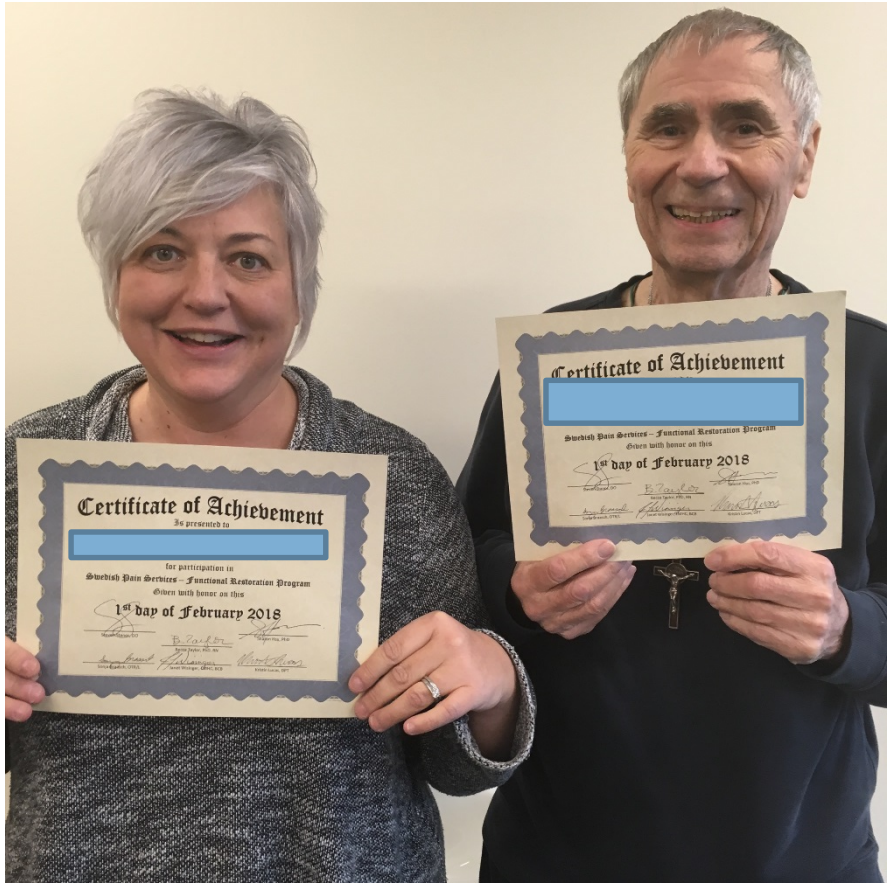
## WEEK 3

- Nutrition and chronic pain
- Sex and chronic pain (PT)

## WEEK 4

- Interdisciplinary maintenance pain flare plan
- Friends & Family Group (Psych)
- Program debrief and Graduation

# Graduates: Life Changing Experience

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# Interdisciplinary Approach

**Coordination**

**Conflict management**

**Consensus**

**Caring**

**Consistency**

**Communication** **Cooperation** **Commitment**

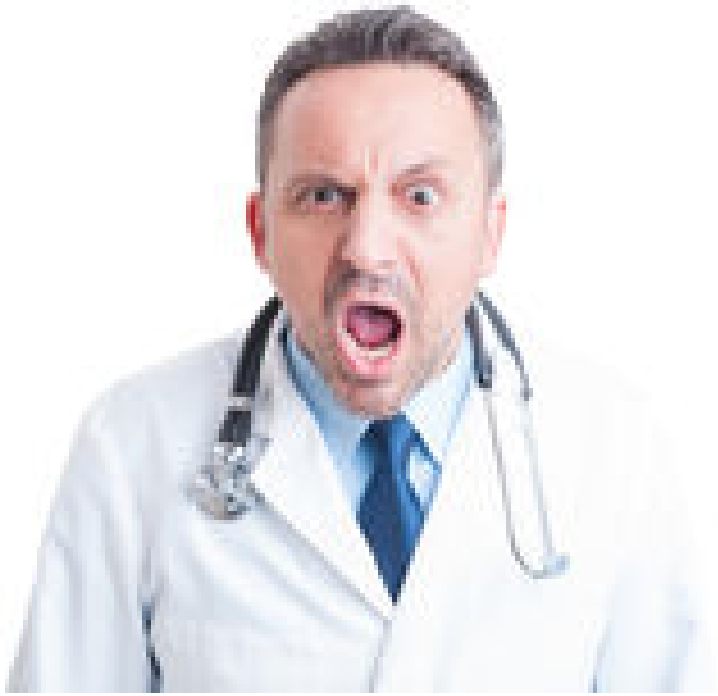
**Collaboration** **Confront Problems**

**Commitment**

(Heinemann GD, Zeiss. New York, 2002)

Don’t just focus on Morphine Equivalent (MED)!

Pain management is more than that !



# Overview

- Present environment is good opportunity for broadening approach
- Multi-disciplinary & Inter-disciplinary across a spectrum
- Collaborative education-based approaches
- When do patients need more?
- “Functional Restoration” as an options for patients with chronic pain
- Coordinated, structured, interdisciplinary program focuses on “managing” pain
- Mind body interventions
- Tai Chi
- Behavoiral Health: Mindfulness Based Stress Reduction

# THANK YOU

American Academy of Pain Medicine
34th Annual Meeting

Vancouver, BC

Preconference: April 25-26
Meeting: April 26-29