Restoring Hope and Freedom
Mary Free Bed
Rehabilitation Hospital

Rehabilitation Approach to Treating Chronic Pain

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Declarations for Dr. Hudson:

- ABFP Certified Family Physician employed by Advantage Health/ St. Mary's Medical Group
- Working under contract with The Pain Center at Mary Free Bed Hospital and Rehabilitation Center
- Planning for the opening of The Heartside Pain Center in 2016 to serve the Medicaid population
- Fellow of The American Board of Pain Medicine
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No financial interests or commercial contracts related to this topic or presentation other than my employment.

Declarations for Dr. Lidderdale:

- Licensed Clinical Psychologist
- Employed with The Pain Center at Mary Free Bed Hospital and Rehabilitation Center
- Employed with River City Psychological Services
- Member of the American Psychological Association
- Member of the American Academy of Pain Management

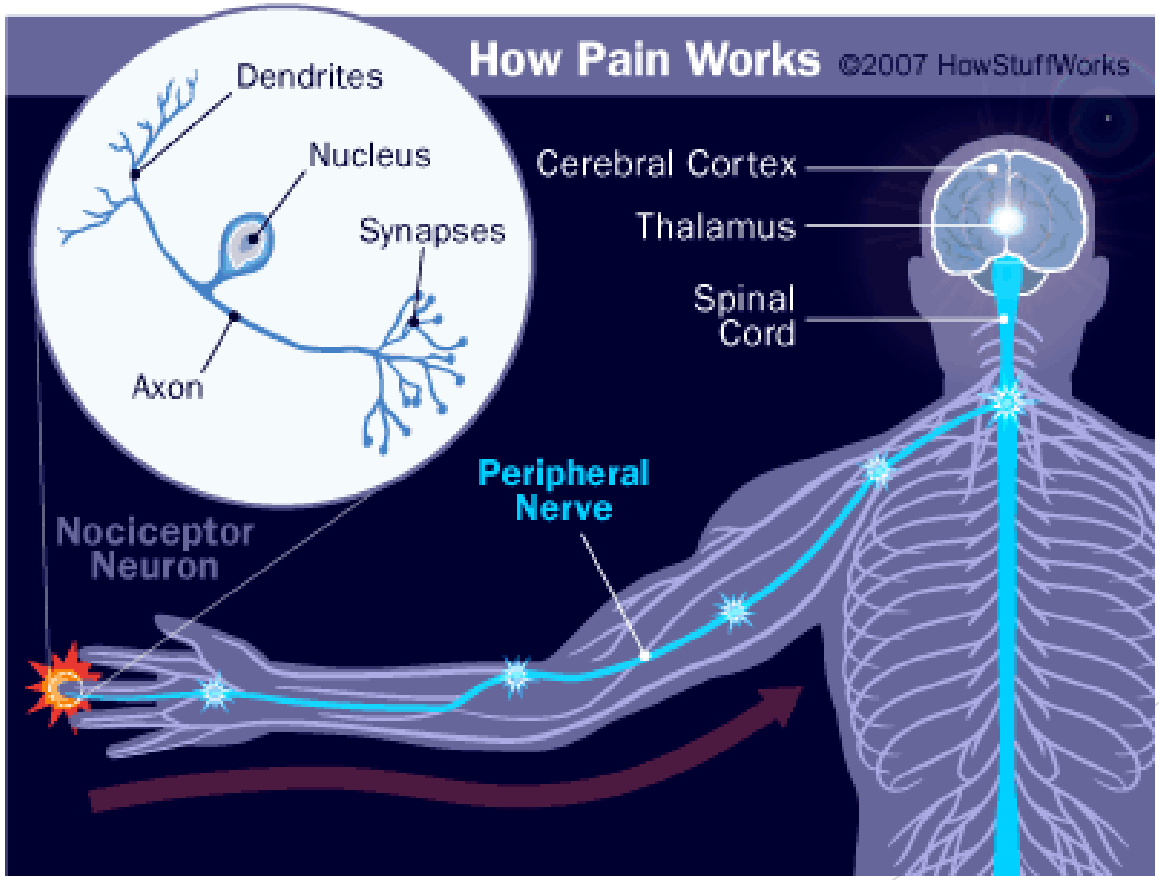
No financial interests or commercial contracts related to this topic or presentation other than my employment.

Objectives

- To increase understanding of pain and acute pain vs. chronic pain.
- To increase understanding of treatment options and developments in pain management.
- To increase understanding of a rehabilitation approach and interdisciplinary treatment for chronic pain.
- To increase care management options for coordinating treatment and pain management.
- To provide information to best identify a good candidate for interdisciplinary treatment.
- To provide information on how to navigate the referral process with patient and with MFB system.

How Pain Works

All pain is a private experience mediated by the body's nervous system. We have been taught not to tell patients that pain is all in their head and yet in actuality that is exactly where it is.



How Pain Works

- Nociception vs. Pain Experience.
- Nociception is the input into the Somatosensory Cortex from the periphery and the spinal cord.
- Pain is more properly seen as the output of the central nervous system.
- Nociception is neither sufficient nor necessary to the experience of pain.

How Pain Works

New understanding and theories of pain. Explain Pain; NOI group Australia- www.noigroup.com

- Dr. David Butler and Dr. Lorimer Moseley

Dr. Daniel Clauw, MD University of Michigan, Rheumatologist

https://www.youtube.com/watch?feature=player_detailpage&v=pgCfkA9RLrM

Acute Pain vs. Chronic Pain

Acute Pain:

- Normal sensation in the nervous system
- Alerts you to possible injury and need for action
- Identifiable trigger (injury, infection, condition)

Chronic Pain:

- Pain persists- present most of the time for 6 months
- Pain signals keep firing in the nervous system
- Often an identifiable initial trigger (injury, infection, condition)
- Some people will not have an identifiable trigger

- American Academy of Pain Medicine

Chronic Pain: The Problem

"One fifth of primary care patients are affected by chronic pain"…defined as pain present most of the time for 6 months in the previous year.

Gureje O, Simon G, Vonkorff M: Pain 92:195-200, 2001

Health economists from Johns Hopkins University writing in *The Journal of Pain* reported the annual cost of **chronic** pain is as high as $635 billion a year, which is more than the yearly costs for cancer, heart disease and diabetes.

Darrell J. Gaskin, Patrick Richard
The Economic Costs of Pain in the United States
The Journal of Pain, 2012; 13 (8): 715 DOI: 10.1016/j.jpain.2012.03.009

Necessary Changes in Pain Treatment

- Increased scientific understanding of chronic pain
- Economic cost has only increased
- Rising prevalence of chronic pain
- Rising opioid overdose rate
  - National Increase
  - Local Increase
- CDC recommendations for opioid use (3/2016)

Why not prescribe opioids for chronic non-cancer pain?

CDC March 2016

"There is no evidence that shows a long- term benefit of opioids in pain and function vs. no opioids for chronic pain with outcomes examined at least one year later (with most placebo controlled randomized clinical trials <= 6 weeks in duration)."

From 1999 to 2014, more than **165,000** persons died from overdose related to opioid pain medication in the United States.

A Rehabilitation Model

- A rehabilitation approach to pain management differs significantly from typical medical approaches to pain management.
- Main difference:
  - Rehabilitation Goal = Return to Functioning and Highest Quality of Life
  - Medical Goal = “Fix” or Eliminate the Pain
- Often patients and providers are “stuck” in the cycle of trying to fix pain.

Failed Treatment Cycle

The biggest reason for failed pain treatment- we are taught discomfort is bad, so we treat it as we would genuine illness.

However:

- "It is how the person reacts to the symptom, rather than the symptom itself that determines health seeking behavior, disability and sick-listing."
- "It is not that pain itself has increased- rather our willingness to accept pain that has decreased."

A Rehabilitation Approach

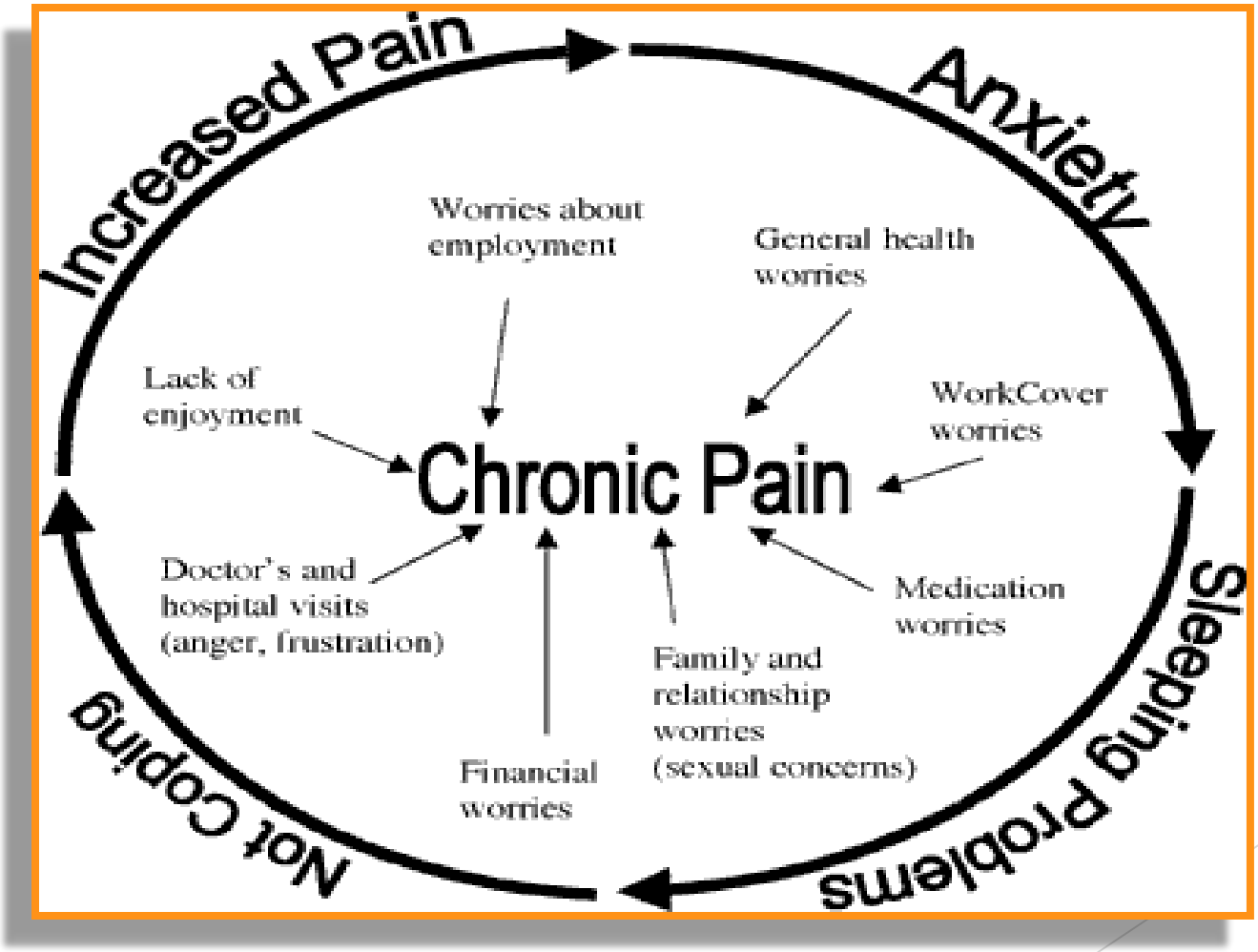
Interdisciplinary treatment

- Medical (MD, PA-C and LPN)
- Psychology
- Physical Therapy
- Occupational Therapy

Increase function and participation in valued life activities

Why the Team Approach to Treatment?

Because pain is a complex experience!



Why the Team Approach to Treatment?

- Consistent communication from all providers
- Support and encouragement
  - To overcome avoidance/fear of activity
  - To make habitual changes
  - To keep working toward patient goals


HEY
YOU CAN DO IT
Troll.me

Medical Team

Provide medical oversight while in treatment program:

- Manage medications including narcotic tapering with withdrawal management
- No injections or other invasive procedures
- Patient education & support
- Weekly rounds with interdisciplinary team
- Contact for external medical care management (PCPs, specialists, care coordinators)

Medical Team and Narcotics

- March 2016 CDC Recommendations
- Narcotic (opioid) dependence
  - Extended use causes increased tolerance → need increased doses over time for relief
  - Withdrawal symptoms if stop abruptly
  - Decreased pain tolerance common with narcotic use
- Tapering narcotics
  - Requires several weeks of regular medical supervision
  - Sample of 30 program patients- average reduction in narcotic dosage by 72.8%

Medical Team and Follow-Up

- Medical follow-up scheduled for 30 days post discharge

Psychology: Why Psychology?

All Pain is Physical AND Psychological.

Pain: An unpleasant ***sensory*** and ***emotional*** experience associated with actual or potential tissue damage, or described in terms of such damage.

- IASP definition (1994)
- The either/ or dichotomy is false and not helpful.

Psychology

Why Pain Psychology?

- Emotional pain and physical pain share common neurological pathways, structures, and processes.
- High comorbidity between psychological disorders and chronic pain (depression, anxiety).
- Psychological factors are more predictive of development of chronic pain than medical imaging and tests.
- Pain catastrophizing and pain avoidance.
- Impacts to relational systems.
- Quality of life concerns.

- Pain **does not** equal disability.
- Pain is only a part of the equation.
- Research summary: pain level, injury, imaging etc. cannot predict disability.

"The psychological status of the patient at presentation has a much stronger influence on outcome than does conventional clinical information gathered at the same time."

- Burton, et. Al (1995) in Spine

"Psychological factors may represent the best criteria on which to base clinical decision rules."

- Dionne, et. Al (1997) in J Clin Epidemiol

In the past month, how much were you distressed by:	Not at all	A little bit	Moderately	Quite a bit	Extremely
Faintness or dizziness	0	1	2	3	4
Feeling low in energy or slowed down	0	1	2	3	4
Blaming yourself for things	0	1	2	3	4
Feeling lonely or blue	0	1	2	3	4
Worrying too much about things	0	1	2	3	4
Trouble getting your breath	0	1	2	3	4
Hot or cold spells	0	1	2	3	4

In the past month, how much were you distressed by:	Not at all	A little bit	Moderately	Quite a bit	Extremely
Numbness or tingling in parts of your body	0	1	2	3	4
A lump in your throat	0	1	2	3	4
Feeling hopeless about the future	0	1	2	3	4
Feeling weak in parts of your body	0	1	2	3	4
Heavy feeling in your arms or your legs	0	1	2	3	4
Feeling everything is an effort	0	1	2	3	4
Feelings of worthlessness	0	1	2	3	4
Feelings of guilt	0	1	2	3	4
Sleep that is restless or disturbed	0	1	2	3	4

When I'm in pain…	Not at all	To a Slight degree	To a Moderate degree	To a Great degree	All the time
I anxiously want the pain to go away	0	1	2	3	4
I can't seem to keep it out of my mind	0	1	2	3	4
I keep thinking about how much it hurts	0	1	2	3	4
I keep thinking about how badly I want the pain to stop	0	1	2	3	4

Psychology

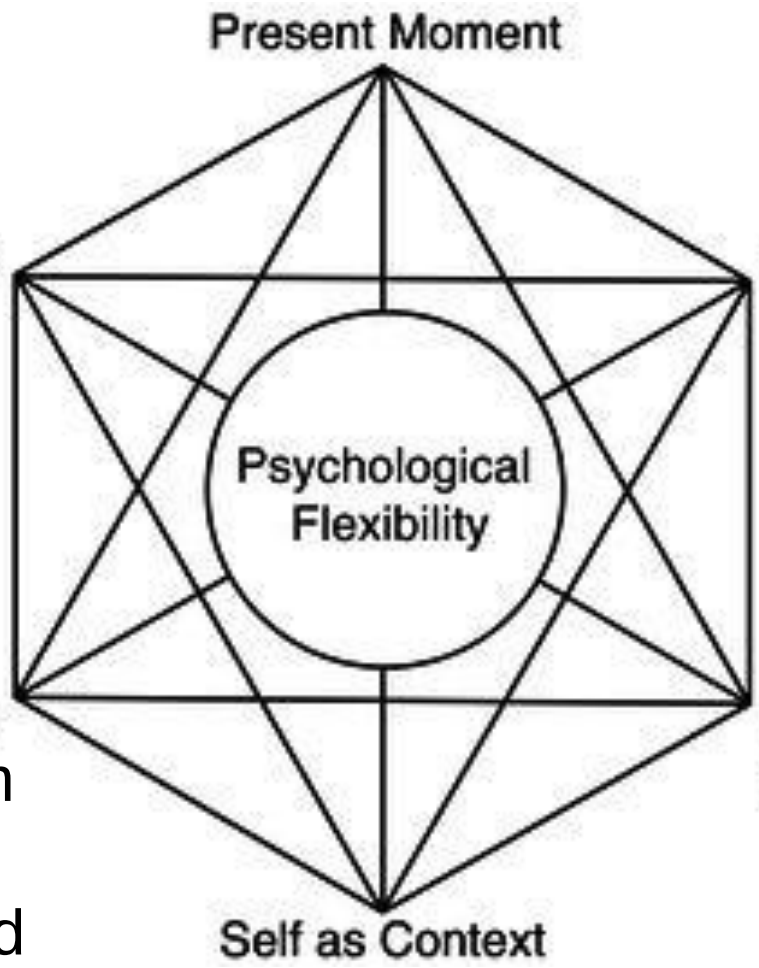
- Pain and health psychology
  - Skills to overcome stress, depression, anxiety
  - Mindfulness
  - Acceptance and Commitment Therapy to address pain and life values
- Biofeedback
  - Education on physiology, attention, body awareness, neuroplasticity
  - Relaxation skills

Acceptance and Commitment Therapy

Basic Assumptions

- Life is painful and difficult.
- “Suffering is a basic characteristic of human life.”
- There is an assumption that there is a healthy normality.
- Language is at the core of human suffering.
- Goal: to interact differently with pain and what our mind tells us.

ACT and Chronic Pain



Acceptance
of pain & emotions… willingness to feel & experience

Values
Clarity of what is meaningful

Defusion
Detach from painful thoughts and emotions

Committed Action
Behavior reflects values

Self as Context
Pain is only a small part of who I am

Biofeedback

- Respiration, GSR, & Surface EMG measures
- Instruct in relaxation techniques
- Biofeedback measures response to relaxation

Occupational Therapy

"Work smarter, not harder" by using proper

- Body mechanics
- Posture
- Lifting Techniques

BTE Functional Simulator

"Our goal in occupational therapy will be to guide you in participating in the things that you value once again."

Physical Therapy

- Assessment and Evaluation Focused
  - Evaluate for mechanical factors first
  - Joint mobility, muscle imbalance, etc
  - Assessment leads to individualized treatment
- Establish Focus on Self Management
  - Home exercise program
  - Flare-up management
  - How to pace daily activities
  - Graded activity progression
  - Strengthening program & aerobic conditioning

Our Programs

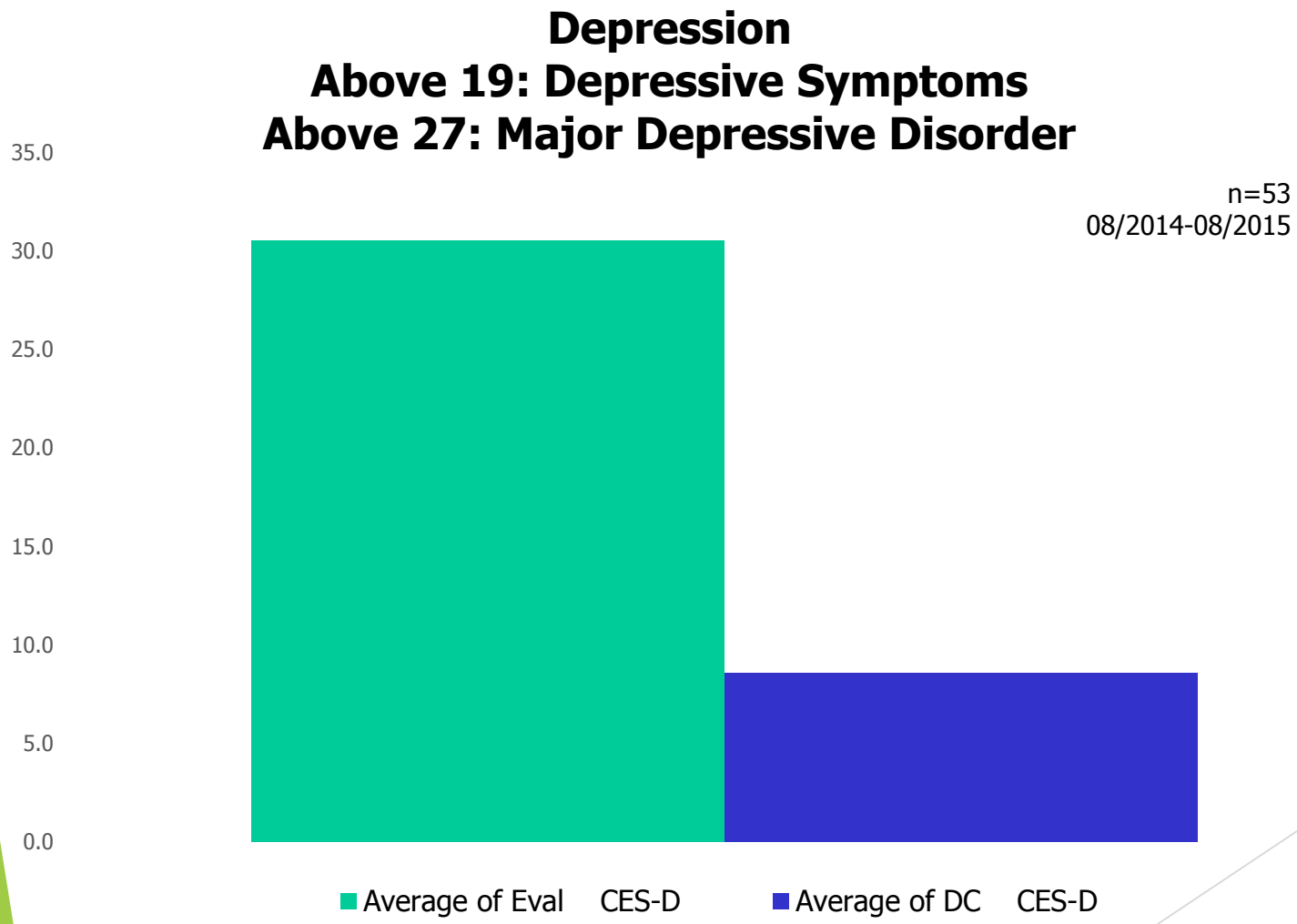
- Headache
- Pain
- Fibromyalgia
- CRPS

Vary in length (6-12 weeks) based on individual patient factors

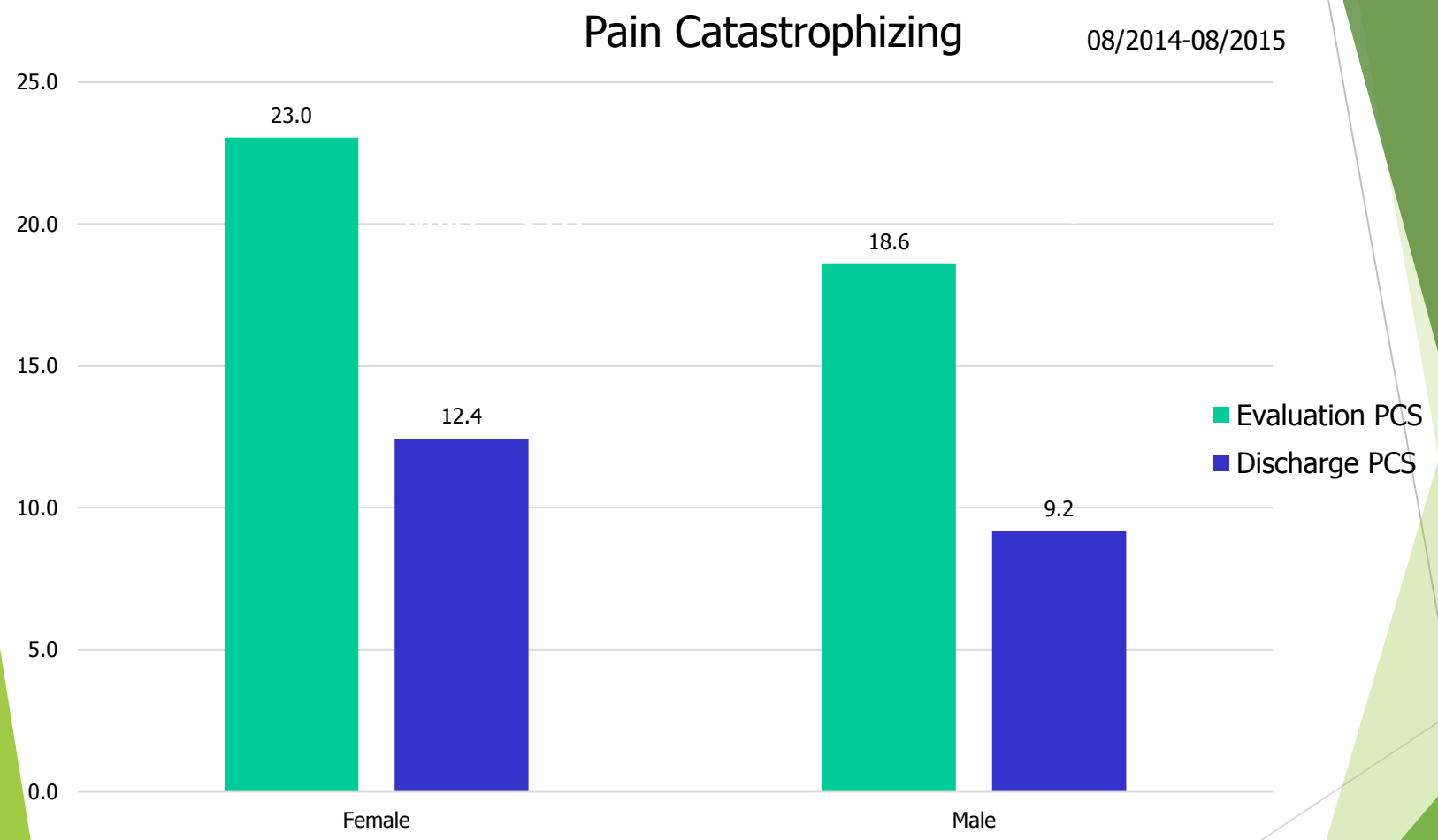
Treatment Requires Patient Commitment

- Attend appointments several days per week
- Agree to have medical team manage medications while in program
- Exercise regularly at home based on recommendations of PT
- Consistent follow through of instructions from treatment team

Program Outcomes



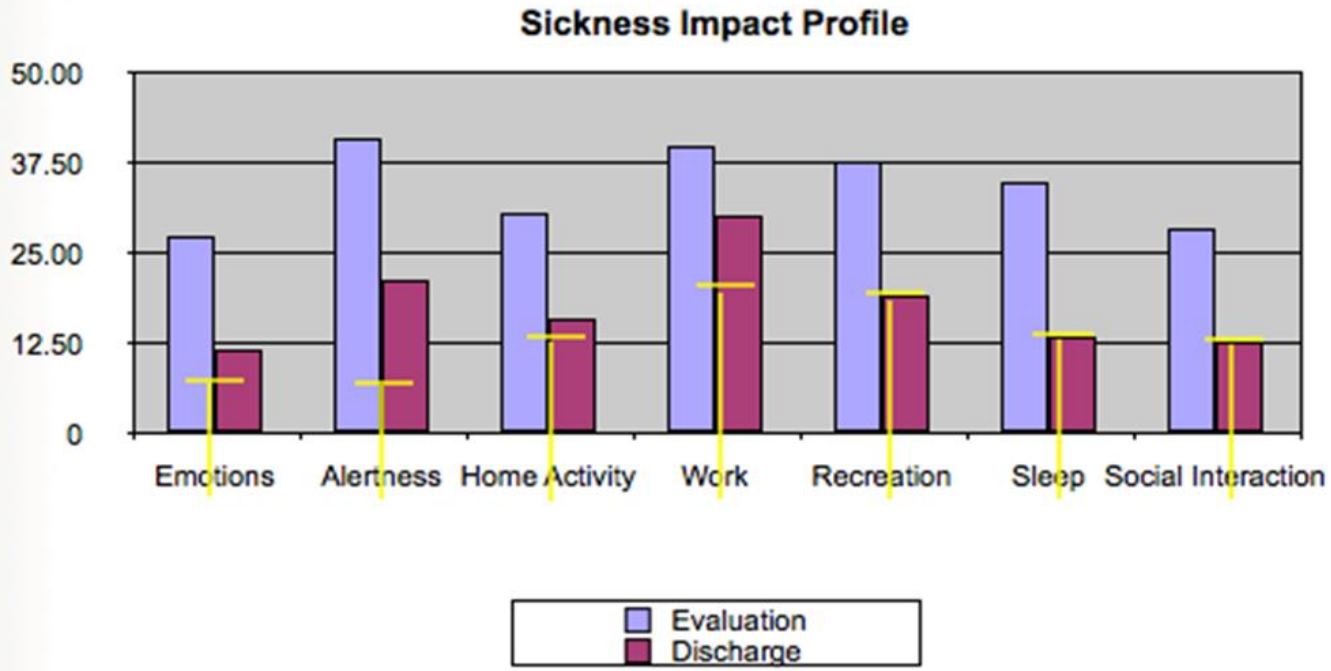
Program Outcomes



Program Outcomes

The goals of the programs are to improve functioning and quality of life of patients with chronic pain. Below are the average Evaluation and Discharge Scores of 275 patients (average age = 43.7 years; 67% female; average pain duration = 13.5 years) between November 2003 and September 2007 across several variables:

Functioning:



Despite the continued experience of chronic pain, patients improve their functioning to within the normal range of functioning in the general population - indicated by the yellow "T" bar - in 5 of 7 areas of living, with meaningful improvement across all areas.

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A Care Management Paradigm

- When dealing with pain we have to decide when we switch from diagnosis and management of acute injury to long term management of chronic disease.
- Chronic pain as chronic disease: think diabetes… the cure may be possible in the future but today it is all about management.
- Goals of treatment are to manage the disease in such a way that it maximizes present functioning and helps to prevent long-term complications and disability.

Care Management of Pain Treatment

- Good management of chronic pain starts with good management of acute pain.
- Collect a careful history with attention to psychological history or symptom presentation.
- Conduct a focused exam.
- Conduct appropriate diagnostics including psychological screening.
- Utilize adequate analgesics.

- Provide information about prognosis and expectations.
- Provide short-term follow up and reassess for response to treatment.
- At follow up, be alert to patients who are not improving as expected.
- Question your diagnosis.
- Expand your testing including psychological screen (e.g., Pain Scale, Pain Catastrophizing Scale).
- Expand your treatment (PT, joint injection, referral).
- Listen for indicators of secondary (“dirty”) pain such as “Nothing helps!”, “I can’t move!”

Managing Pain: Primary vs. Secondary Pain

- **Primary ("clean") pain**: the basic nociceptive experience of pain.

- **Secondary ("dirty") pain**: the fear, anger, resentment, guilt, sadness and loss that we experience because of the pain. The way our life has changed or how we fear it may change. The catastrophizing, fortune telling or despair that we add to the pain.

Managing Pain

The healthcare provider and provider/patient relationship:

- Don't underestimate the effect you can have.
- Stay calm and educate the patient on the condition. Help the patient focus on managing and not catastrophizing, pay attention to sleep, anxiety and depression.
- Help them get moving, challenge them to control their emotions.
- Make sure they understand their treatment plan and follow up with them.

Physical therapy for a painful condition may increase pain but must be done to get to recovery.

- "Don't do it because you feel like it, do it in order to get better."

Who Needs a Referral?

- Pain has not responded to conventional treatment
- Overuse medications, particularly narcotics
- Exaggerated pain behavior or catastrophizing
- Experience a functional decline related to their pain problems
- Experience pain-related depression or anxiety
- Experience comorbid psychological issues
- Want a drug-free alternative
- Want to re-engage in valued activities

The Referral Process

- Referral required from a medical provider.
- Help the patient understand that the purpose of the referral is rehabilitation.
- Pain program physician or physician assistant review past medical history via medical records and evaluate patient.
- Treatment recommendation made and options discussed with patient.

Follow-Up Post Program

- Guidelines for post-program pain management:
  - Determine if a ***new*** pain problem or an ***acute*** *exacerbation* of chronic pain
  - If an *exacerbation* of their chronic pain:
    - Identify triggers for pain flare-up (physical activities, psychosocial factors)
    - Identify patient's pain management and effectiveness of skills
    - Specifically ask about the home exercise program and the relaxation/mindfulness techniques. Reinforce the patient's need to do these regularly or restart them if they have lapsed.
    - Ask about engagement in valued activities
    - Assess adequacy of sleep

- For chronic pain flare-ups lasting more than a few weeks:
    - Refer them back to us for a follow-up visit

Tips For Follow-Up Management

- Ask about health promoting behaviors:

  - sleep, relaxation exercises, aerobic, strengthening and flexibility exercises.

- Ask about changes in depression, anxiety, new injuries and hospitalizations:

  - “How have you been doing with your management tools?”

- Empathize with the struggle but don’t be afraid to challenge them to take care of themselves.

Pain Center Website

- http://www.maryfreebed.com/rehabilitation/the-pain-center/

- http://www.maryfreebed.com/referral/refer-a-patient/

- Contact: 616.840.8005
  800.668.6001

  350 Lafayette Ave., SE, Suite 308
  Grand Rapids, MI 49503

- Feel free to contact our Program Manager with inquiries

(Video)

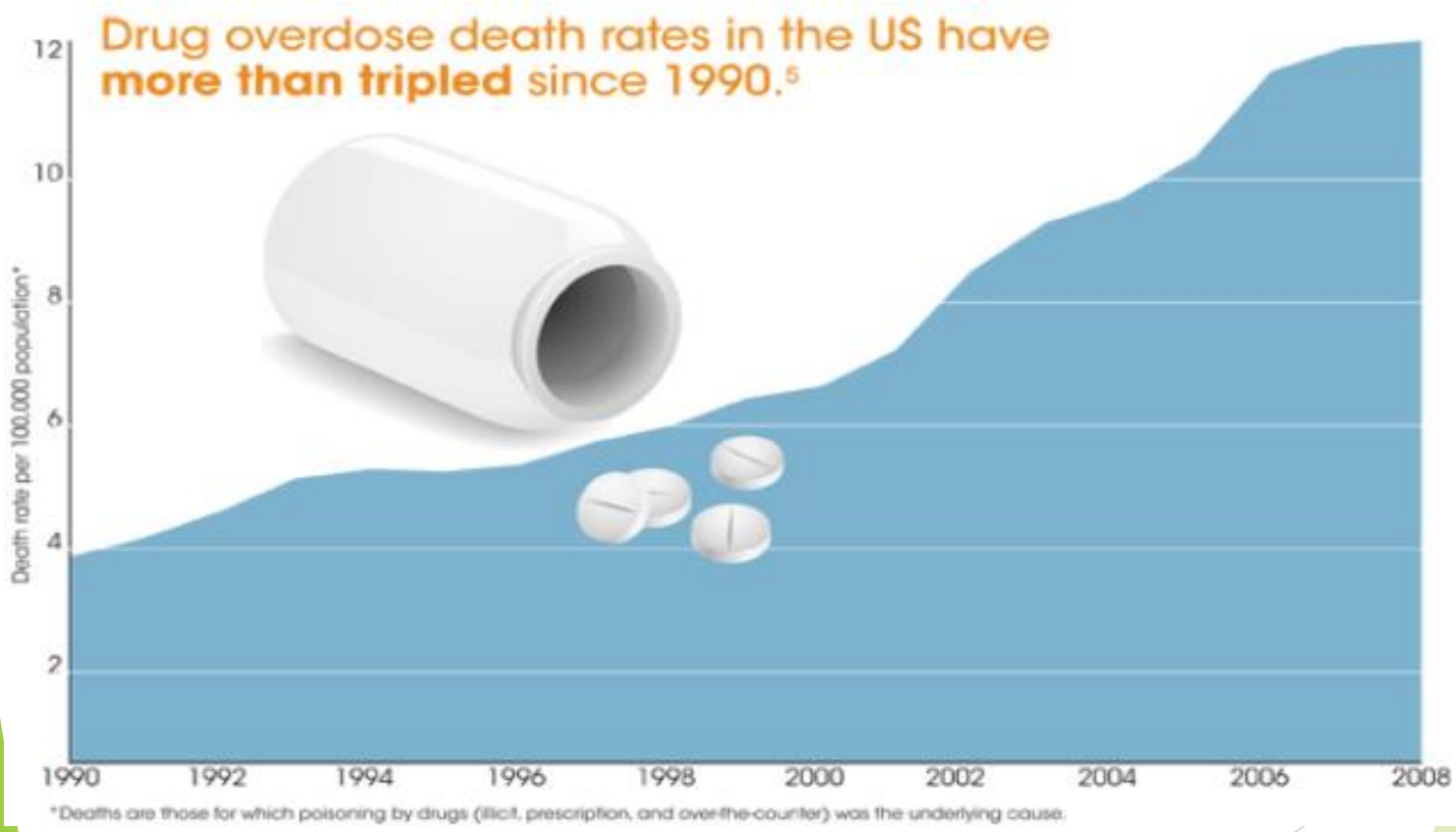
Literature Review

- Related citations in PubMed

Review Opioids for chronic noncancer pain: prediction and identification of aberrant drug-related behaviors: a review of the evidence for an American Pain Society and American Academy of Pain Medicine clinical practice guideline.
[J Pain. 2009]
Review What percentage of chronic nonmalignant pain patients exposed to chronic opioid analgesic therapy develop abuse/addiction and/or aberrant drug-related behaviors? A structured evidence-based review.
[Pain Med. 2008]
Review Research gaps on use of opioids for chronic noncancer pain: findings from a review of the evidence for an American Pain Society and American Academy of Pain Medicine clinical practice guideline.
[J Pain. 2009]
A comparison of common screening methods for predicting aberrant drug-related behavior among patients receiving opioids for chronic pain management.
[Pain Med. 2009]

- Review Opioids in the management of chronic non-cancer pain: an update of American Society of the Interventional Pain Physicians' (ASIPP) Guidelines.
[Pain Physician. 2008]

Why not prescribe opioids for chronic non- cancer pain?



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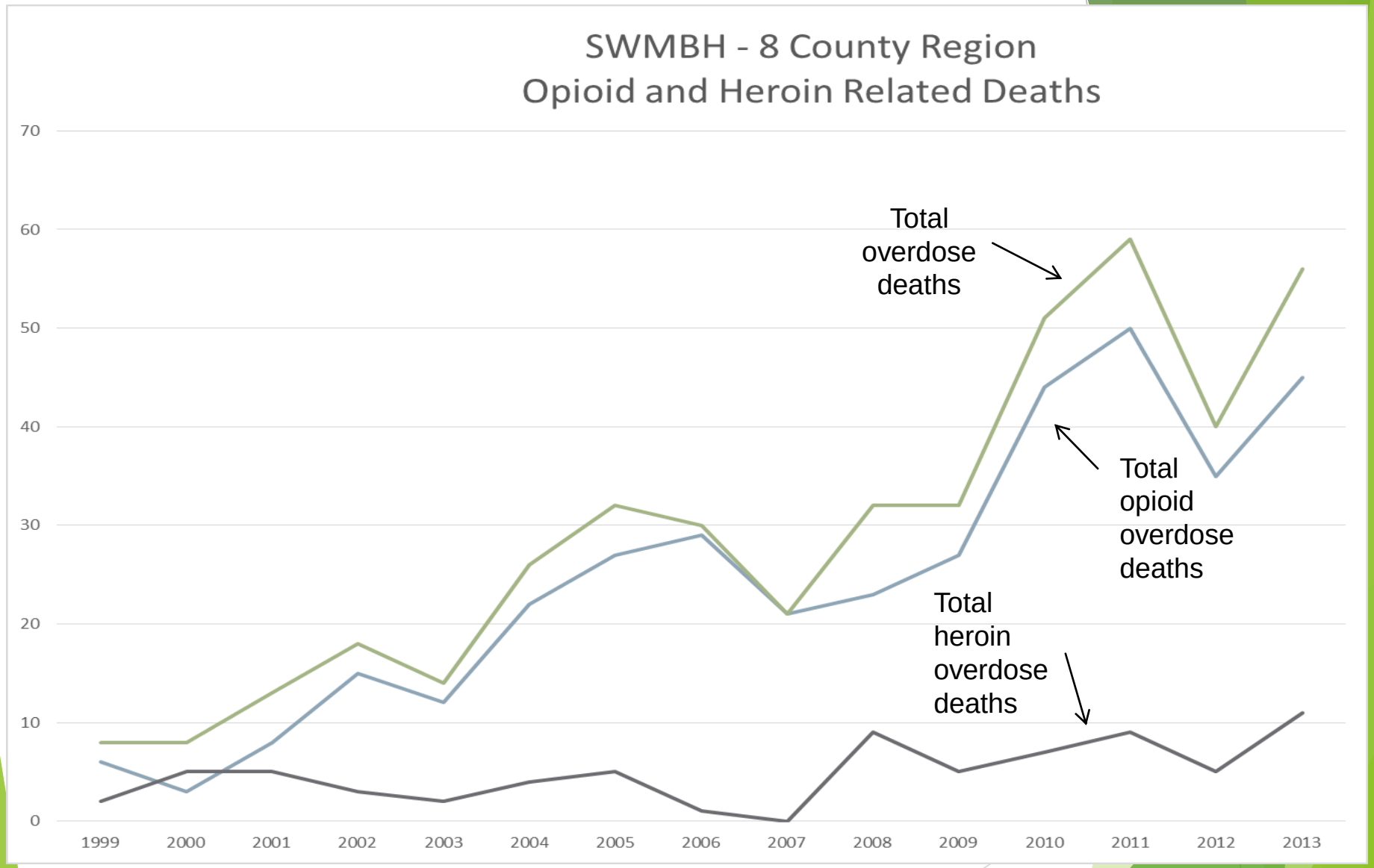

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