Multidisciplinary Pain Rehabilitation

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Declarations

- ABFP Certified Family Physician and Medical Director of The Pain Center at Mary Free Bed Hospital and Rehabilitation Center.
- Fellow of The American College of Pain Medicine
- Clinical Instructor in Family Practice Michigan State College of Human Medicine

- No financial interests or commercial contracts related to this topic or presentation other than my employment at Mary Free Bed.

Objectives

- 1. To differentiate nociception from the pain experience.
- 2. To correctly identify patients requiring multidisciplinary care for chronic pain.
- 3. To be able to successfully refer patients for multidisciplinary treatment.
- 4. To be able to help patients focus on living according to their values.

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

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Chronic Pain Syndrome

- Pain levels unexplained by identified pathology or persisting beyond healing.
- Poor quality non-restorative sleep
- High levels of somatic focus
- Depressed mood
- Fatigue
- Disability out of proportion to injury
- Multiple psycho-social stressors
- Pain related anxiety

Chronic Pain Syndrome: Etiology

- Poorly understood condition with likely multiple contributing factors
- Multiple psycho-social stressors, financial, marital, vocational – particularly high levels of work dissatisfaction
- History of adverse childhood events (ACEs)
- Pre-existing mental health disorders including anxiety, depression, bipolar and personality disorders and PTSD.

Chronic Pain Syndrome: Etiology

Sensitization of the central and peripheral nervous systems may be a common pathway by which these etiologic factors lead to the development of chronic pain.

Central sensitization has been linked to fibromyalgia, irritable bowel syndrome, interstitial cystitis, chronic low back pain, chronic headache as well as the chronic pain syndrome.

How Pain Works

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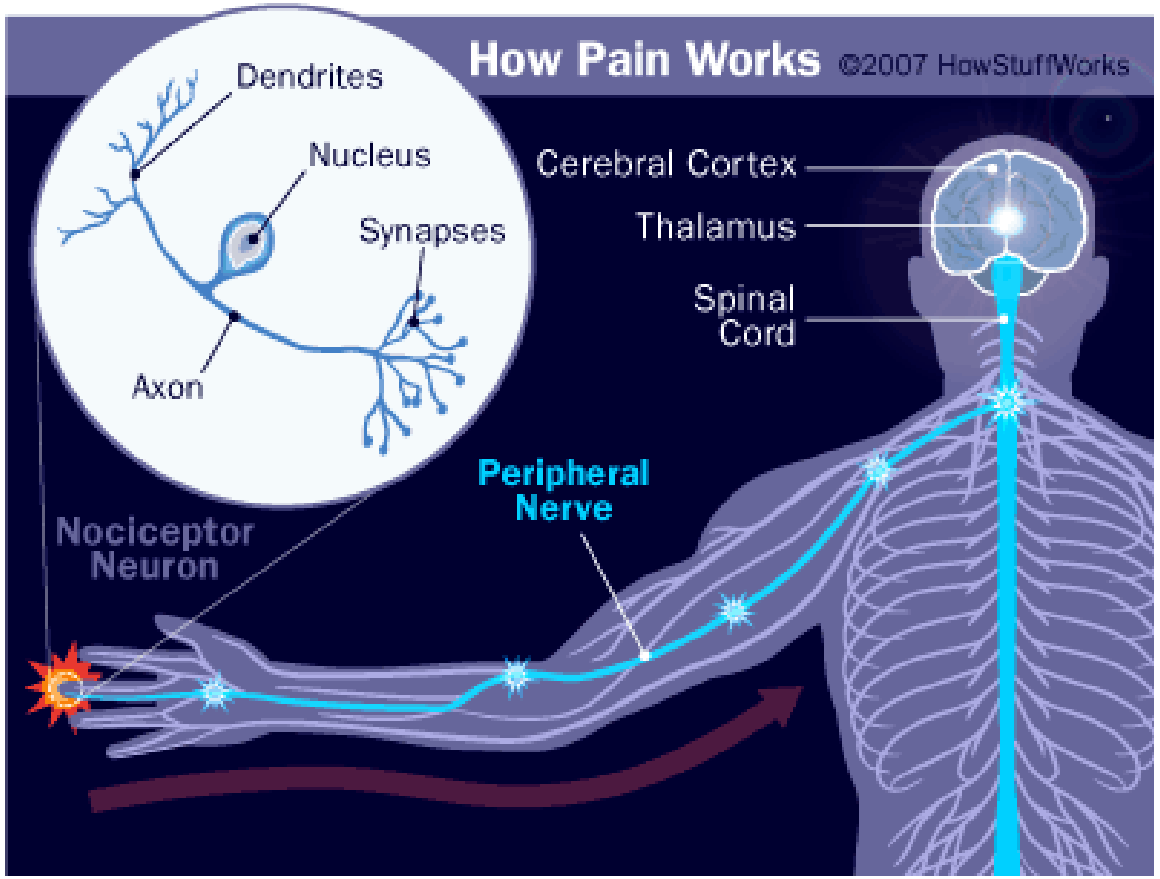
All pain is a private experience mediated by the body's nervous system. We have been taught not to tell patients that pain is all in their head and yet in actuality that is exactly where it is. A proper explanation takes time.



How Pain Works

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The football player and the needle

Living by the railroad track

Wounded on the battlefield

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; Dr. David Butler and Dr. Lorimer Moseley – multiple YouTube videos

- Daniel Clauw, MD; Rheumatologist University of Michigan 90 minute YouTube video on Chronic pain

- Pain is Weird -- Web site.

A Rehabilitation Model

Medical Model	Rehabilitation Model
• Illness and injury focused • Problem focused • Symptom • Surgery and medication • Treatment • Dependence • Patient passively receives care • Others should change to help patient • Reinforces disability • Victim of disease • Genes or luck determine health • Best for acute illness or injury	• Wellness focused • Solution focused • Coping skills • Behavior change • Education and skills • Independence • Patient actively gives self-care • Patient changes to help themselves • Reinforces capability • Empowerment to manage health • Small daily choices determine health • Best for chronic illness

Managing Pain

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- **Clean pain**: the basic nociceptive experience of pain

- **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
Our Programs

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- Musculoskeletal Pain – Most common in Workman's Compensation and Auto
- Headache – Post Concussion frequently seen in auto and some work injuries
- Fibromyalgia – Sometimes seen as a secondary complication of multiple trauma or other injuries
- Complex Regional Pain Syndrome – Occasionally seen after even trivial injuries.

Managing Pain: special problems

- Low back pain and neck pain - poor correlation between diagnostic findings, pain and outcome. Resist the MRI unless you are ready for surgery or epidural steroids. Most low back pain is a functional illness. Think IBS, migraine, headache etc.
- Kinesophobia- pain avoidance
- Complex regional pain syndrome
- Fibromyalgia

A 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.

Integrated Multidisciplinary Treatment

- Integrated treatment is more successful than the sum of its individual parts.
- Medical
- Pain Psychology
- Physical Therapy
- Occupational Therapy

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Integrated Multidisciplinary Treatment

- Integration requires regular communication from team members preferably face-to-face
- Integrated care is intensive and expensive
- Cost effectiveness is found primarily in avoiding ongoing ineffective use of the healthcare system by patients who are high utilizers of care

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Integrated Multidisciplinary Treatment

10-12 week programs for pain rehabilitation consisting of 2-3 days of therapy per week

Pain Psychology 1-2 hour long visits per week.

Physical Therapy 2 visits per week.

Occupational therapy 2 visits per week.

Medical (Physician or PA) Every other week, unless chronic opiate then weekly.

Integrated Multidisciplinary Treatment; Goals of Treatment

1)Return to valued activities including work, recreation, family responsibilities and self-care.

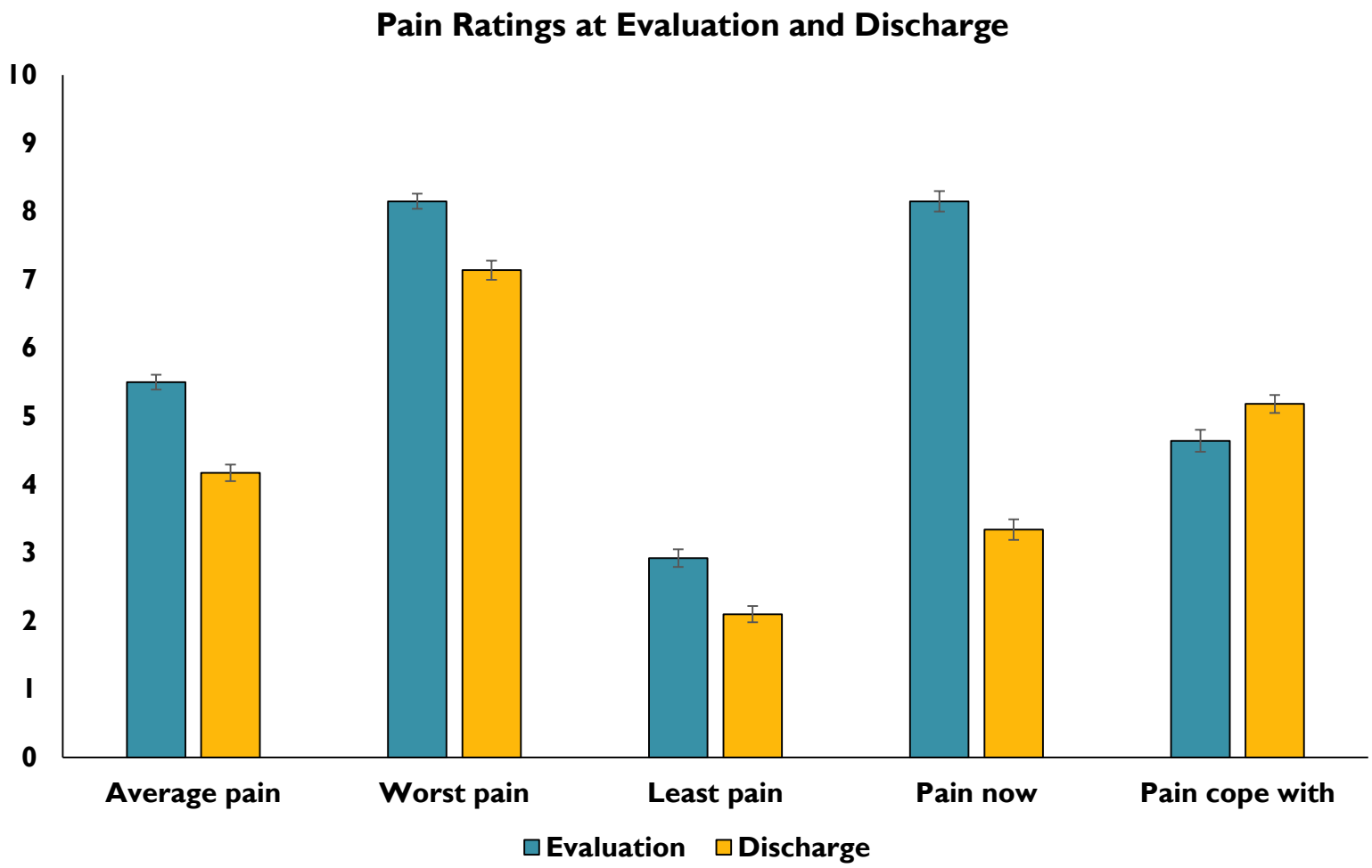
2)Eliminate chronic daily opiates.

3)Minimize other medications by eliminating any ineffective medications.

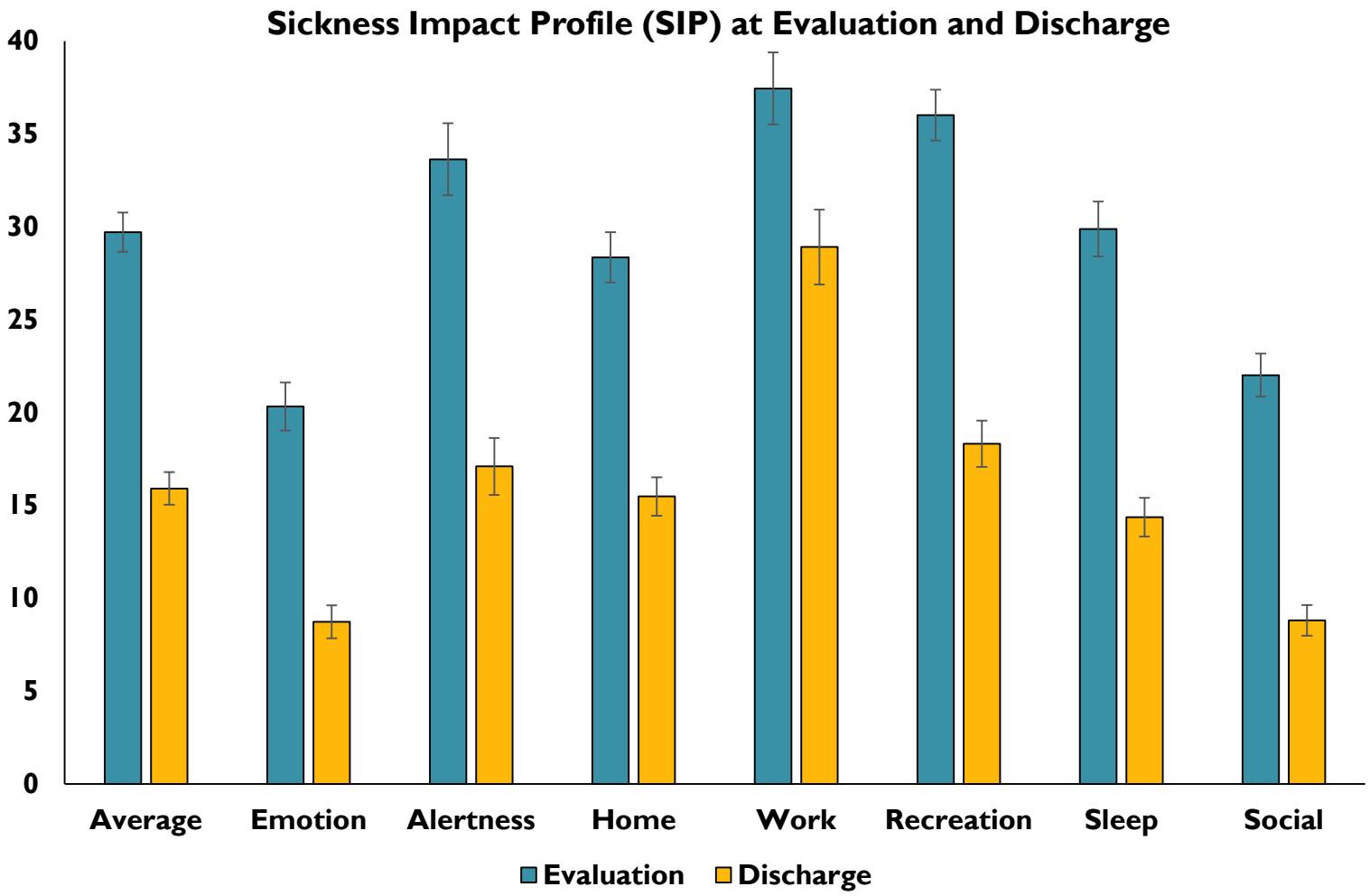
4)Establish a regular home exercise program.

5)Educate regarding proper body mechanics and establish any return to work restrictions that are deemed necessary.

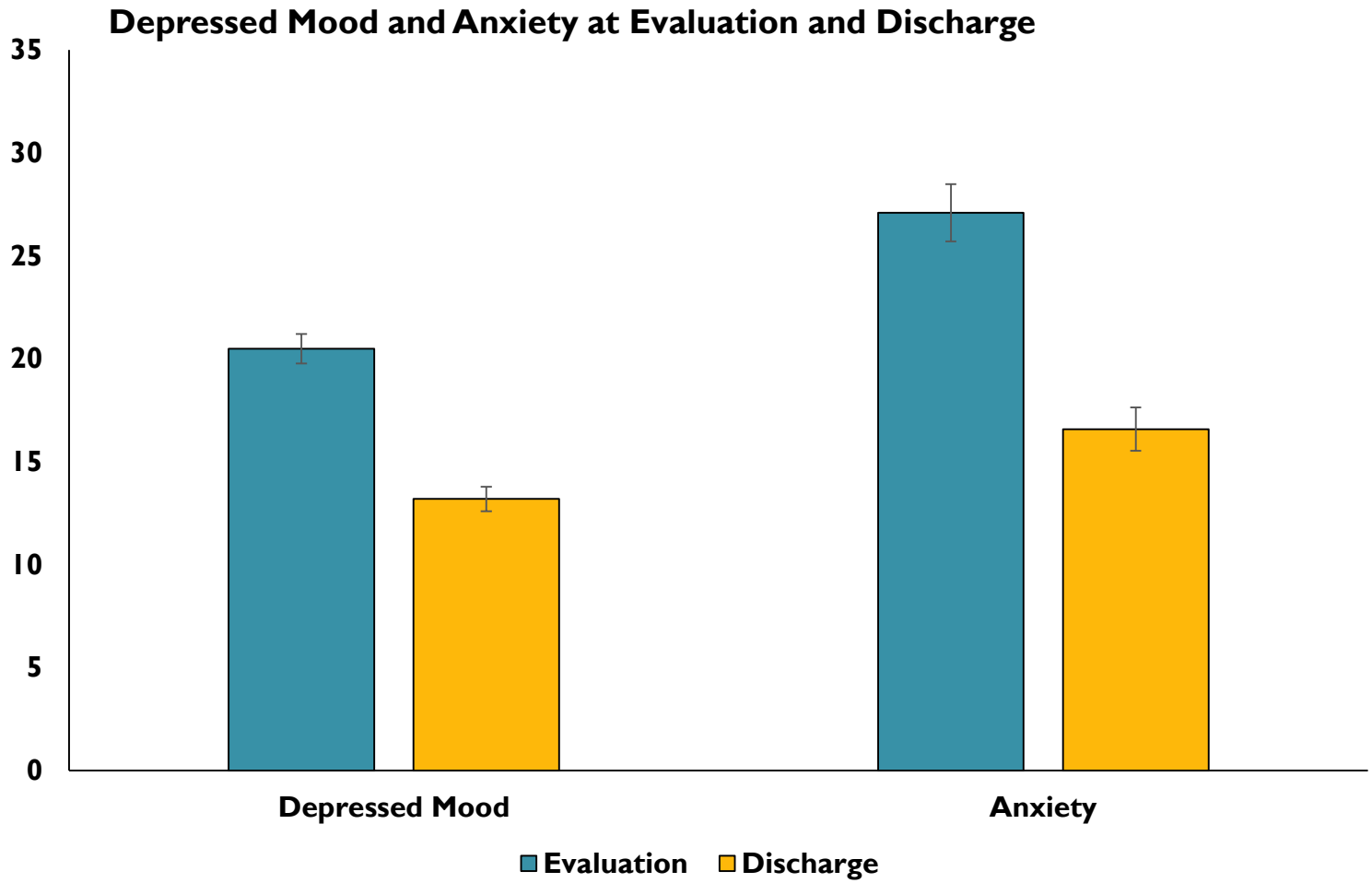
Program outcomes 2015-2018



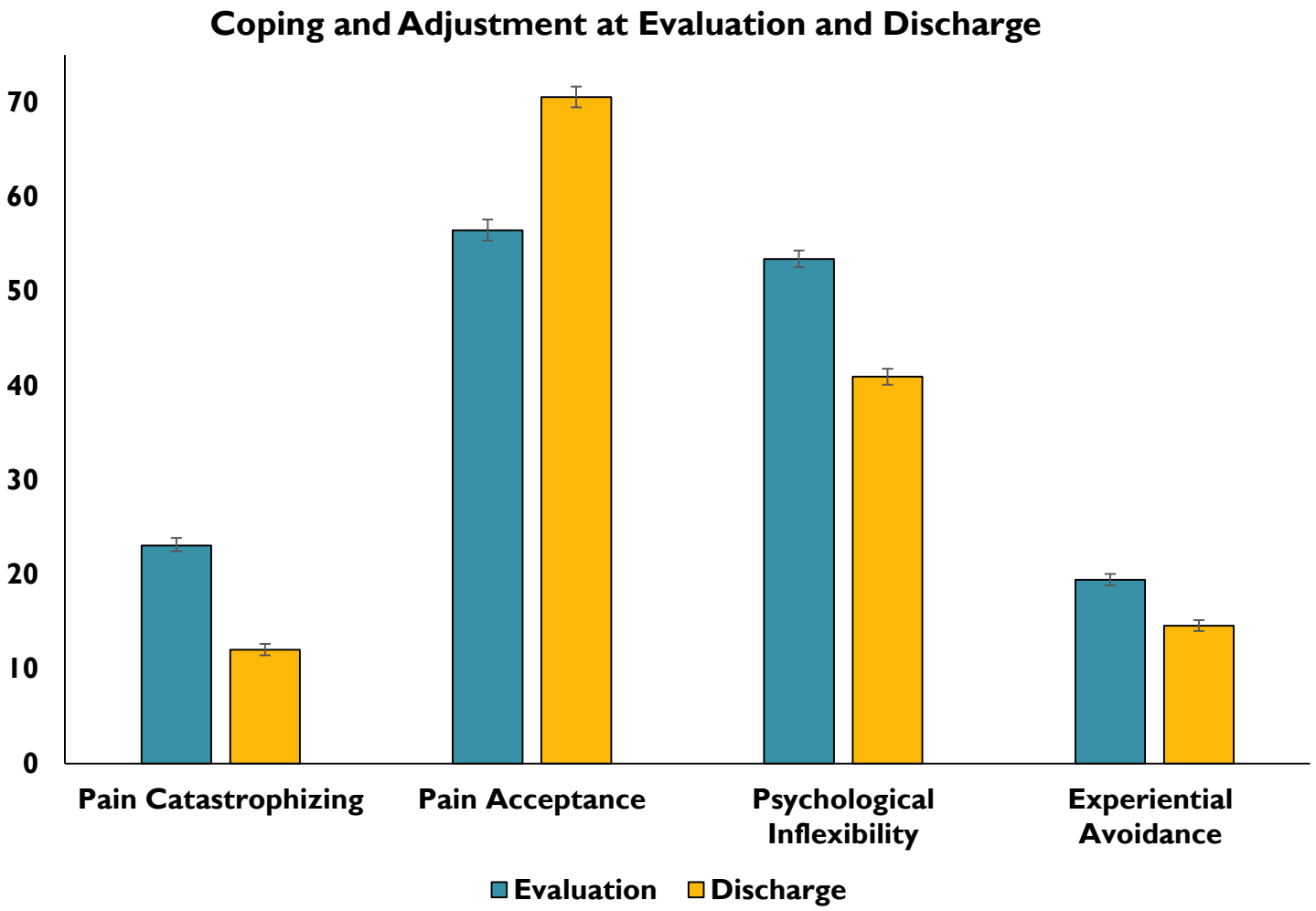
Program outcomes 2015-2018



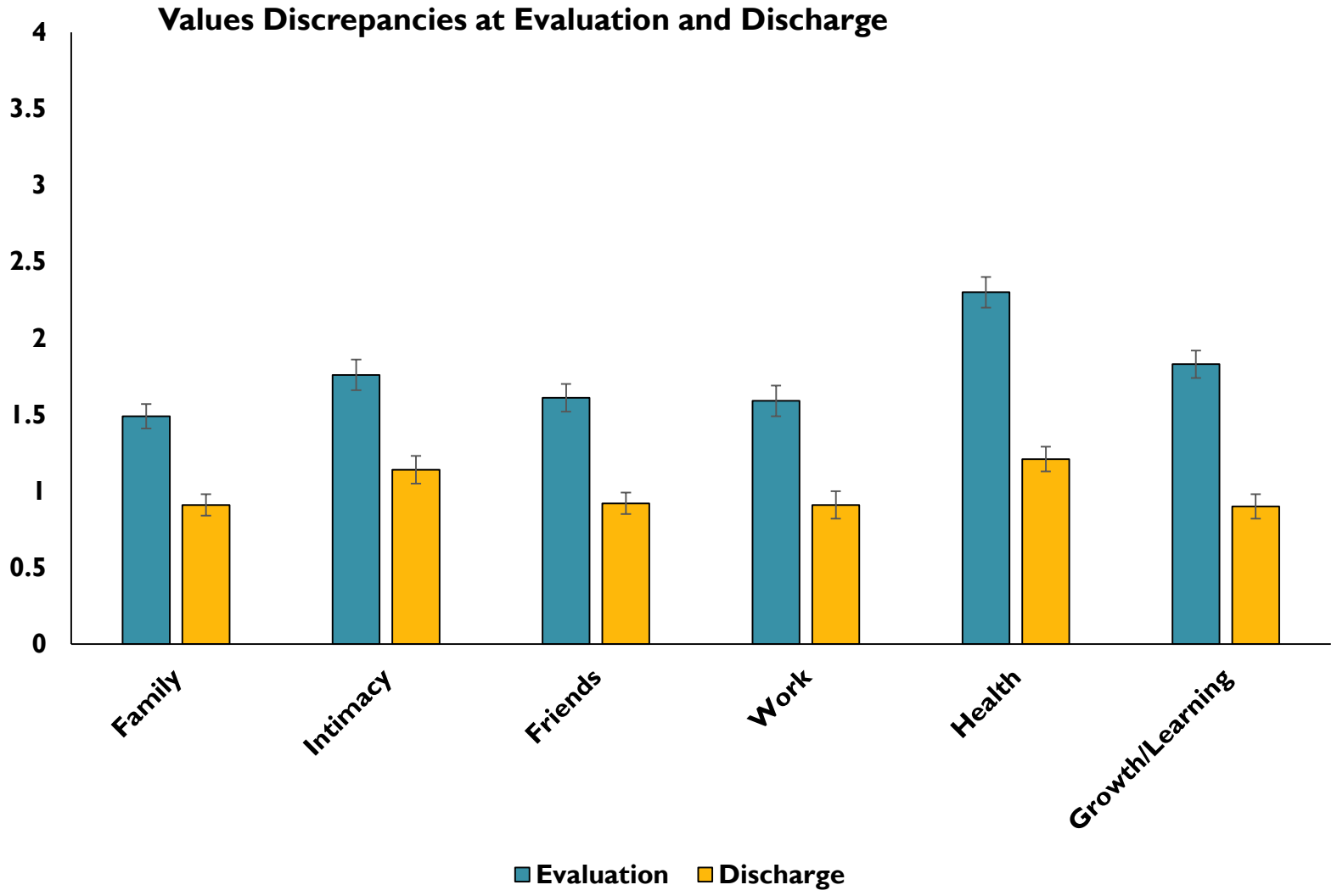
Program outcomes 2015-2018



Program outcomes 2015-2018



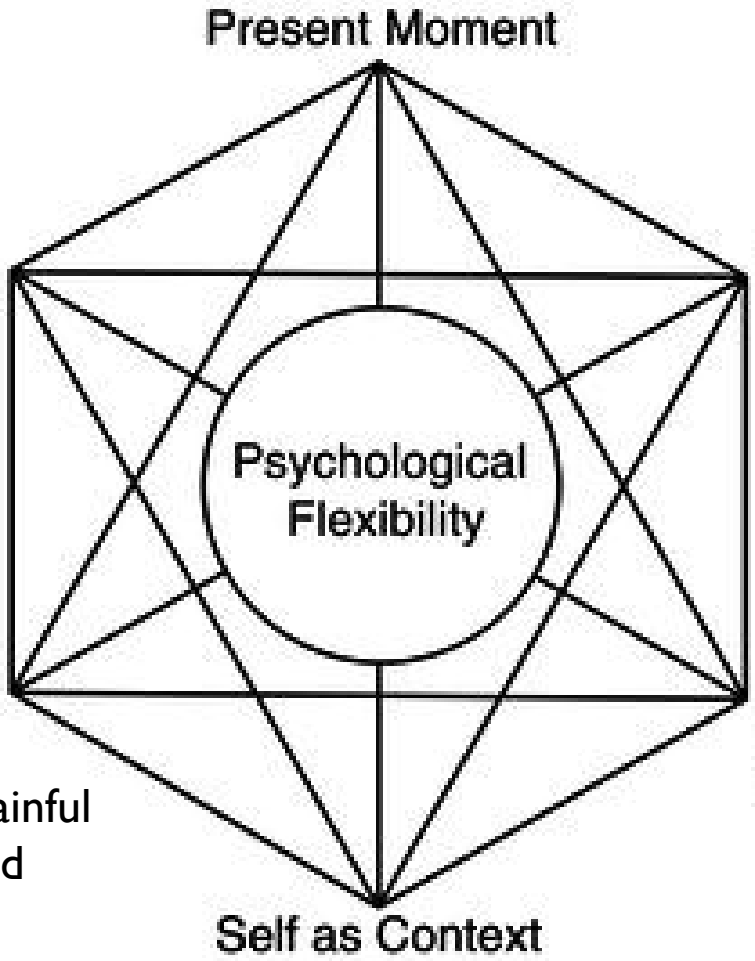
Program outcomes 2015-2018



Acceptance and Commitment Therapy

- Basic Assumptions
- Life is painful and difficult
- "Suffering is a basic characteristic of human life."
- 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 and emotions… willingness to feel and experience

Values

Clarity of what is meaningful

Defusion

Detach from painful thoughts and emotions

Committed Action

Behavior reflects values

Self as Context

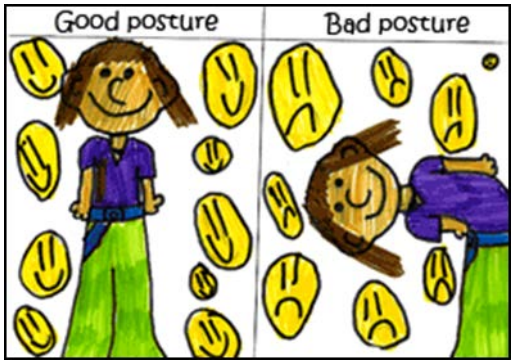
Pain is only a small part of who I am

Pain

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

Who needs a referral?

- Pain that hasn't responded to conventional treatment.
- Excessive meds
- Exaggerated pain behavior or catastrophizing
- Work absences or avoidance of valued activities
- Anxiety or depression
  - Included high achievers and perfectionists



Refer Successfully

- If disability caused by pain, in excess of physical limitations, has occurred, then pain rehabilitation is indicated.
- Help the patient understand that the purpose of the referral is **rehabilitation (ie helping them get their lives back!)**.

Refer Successfully

- Ongoing Management:
  - Chronic disease model asks about health promoting behaviors:
    - sleep, relaxation exercises, aerobic, strengthening and flexibility exercises.
  - 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…the mothering analogy.

Why not prescribe opioids for chronic non-cancer pain?

J Pain, 2010 Sep; 11(9): 807-29. Epub 2010 Apr 28.

…consensus of an interdisciplinary panel of research and clinical experts charged with reviewing the use of opioids for chronic non-cancer pain…contrasting with increasing opioids use are:

1) The lack of evidence supporting long-term effectiveness.
2) Escalating misuse of prescription opioids including abuse and diversion.
3) Uncertainty about the incidence and clinical salience of multiple poorly characterized adverse drug events including endocrine dysfunction, immunosuppression and infectious disease, opioid- induced hyperalgesia and xerostomia, overdose, falls and fractures and psychosocial complications.

Chief among the limitations of current evidence are:

1) Sparse evidence on long- term opioid effectiveness in chronic pain due to short-term time frame of clinical trials.
2) Insufficient comprehensive outcome assessment
3) Incomplete identification and quantification of ADEs.

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).

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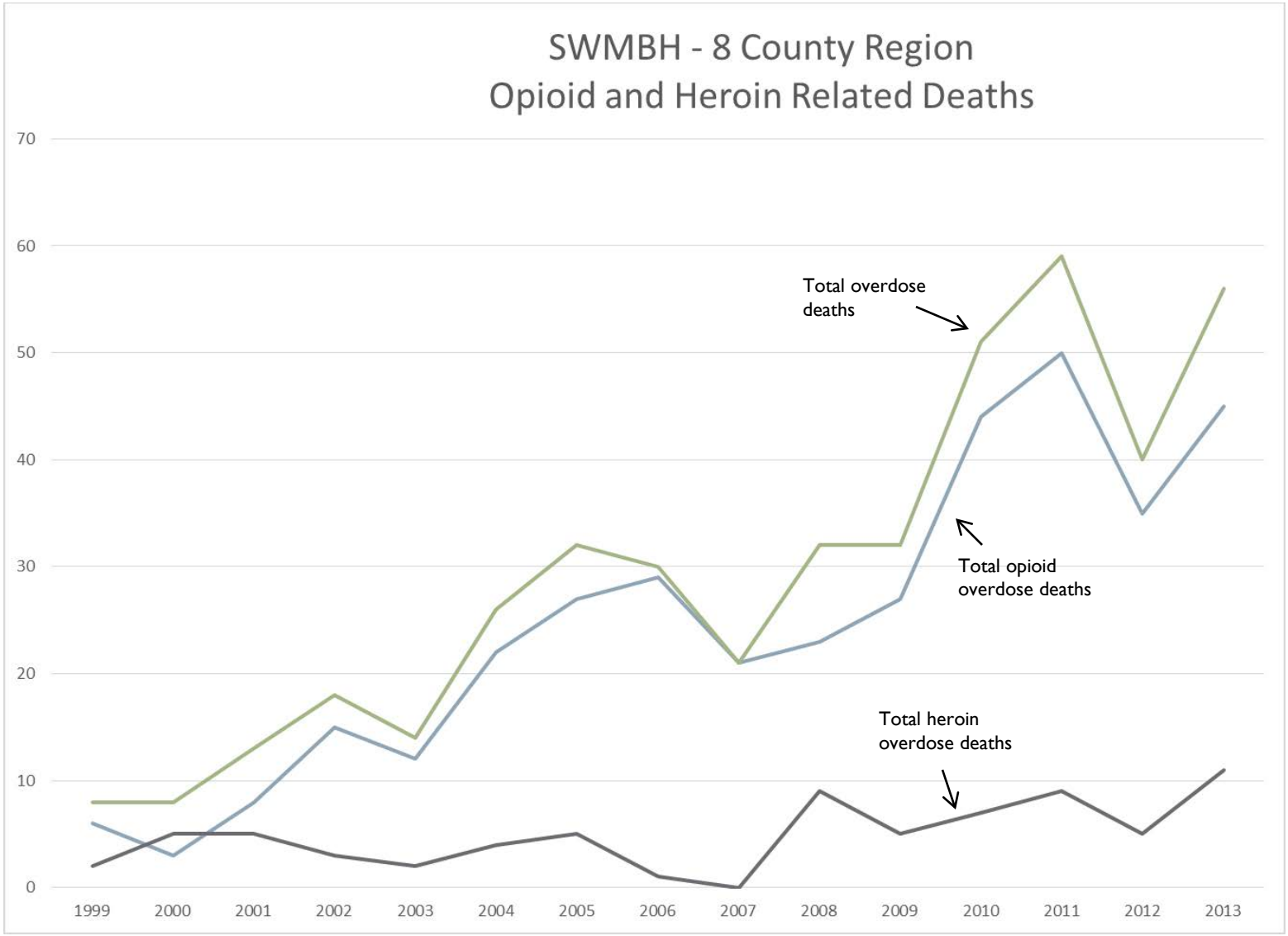
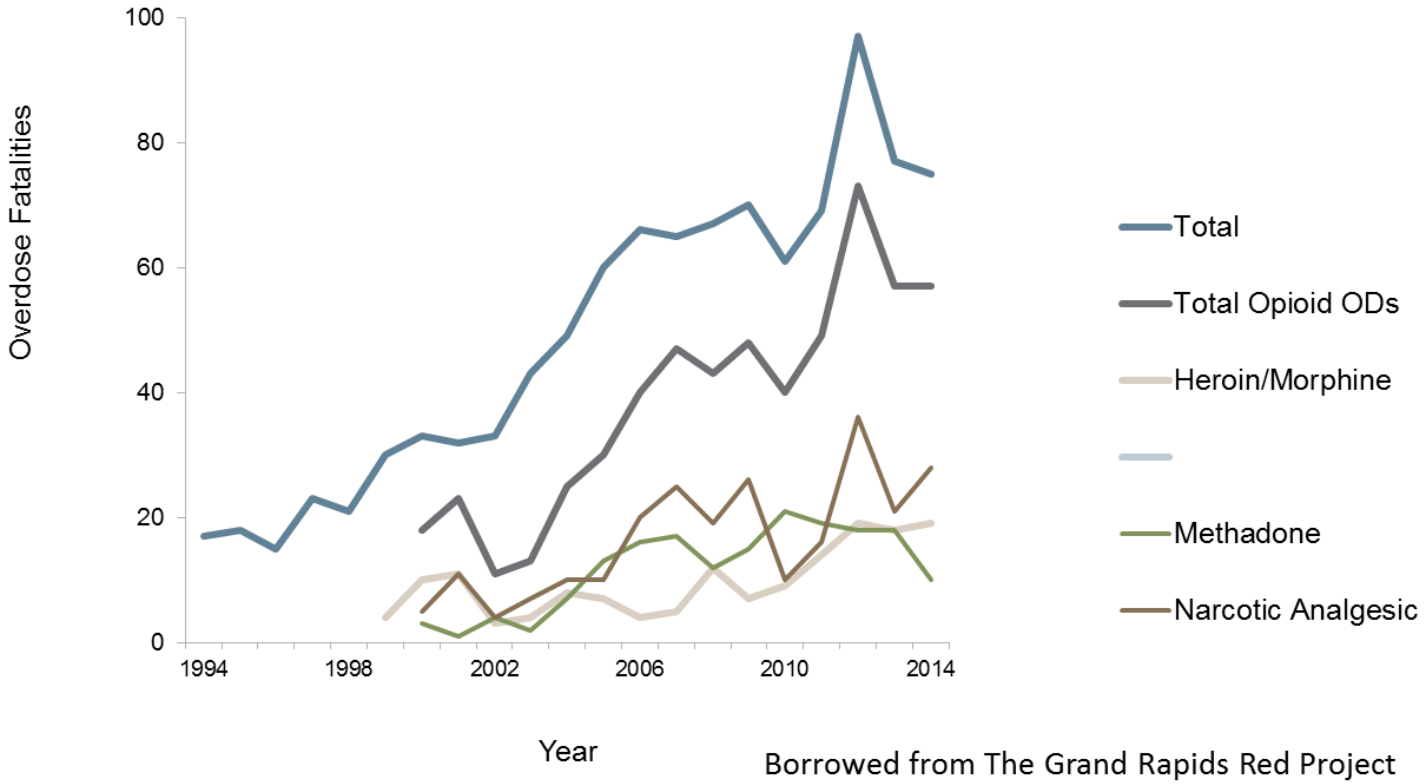
Why not prescribe opioids for chronic non- cancer pain?

- The number of opioid overdose deaths are increasing rapidly.
  - More than motor vehicle crash deaths
  - Many are preventable
- 91% of overdoses were prescribed opioids after their overdose and 10% had repeat overdoses.
- The only group that did not have any repeat overdoses were those prescribed buprenorphine.


SWMBH - 8 County Region
Opioid and Heroin Related Deaths
70
60
50
40
30
20
10
0
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Total overdose deaths
Total opioid overdose deaths
Total heroin overdose deaths

Kent County Overdose Fatalities by Drug of First Mention



Borrowed from The Grand Rapids Red Project