

Changing of the Guard:

Effective Pain Management Strategies to Impact Opioid Prescribing Practices

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Taskforce Leader, National Opioid Crisis Community Summit

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PHYSICAL THERAPY
AND REHABILITATION SCIENCE

Objectives

Attendees will:

- Recognize how the prevailing ideas about pain may undermine a patient's chances of recovery
- Understand the mechanisms involved in the transition from acute/nociceptive pain to chronic/persistent pain
- Identify modifiable risk factors for LBP-related disability
- Stratify a patient's risk of developing chronic LBP by utilizing an evidence-based approach
- Understand the strength of evidence regarding various nonpharmacological pain management approaches

Disclosures & Bias

Faculty at the University of Maryland:

Lead the MSK content and pain content in the DPT program at UMSOM
Academic Director, UM Orthopaedic Physical Therapy Residency
Program Director, UMSOM Fellowship in OMPT

Very active in the PT profession:

Current VP of the APTA of Maryland
APTA House of Delegates
AAOMPT Nominating Committee Chair
Accreditation reviewer for residency/fellowship programs
Write questions for our specialty exams (ortho, neuro, sports)

Speak around the US about opioids and nonpharm rehab

Taskforce leader of the National Opioid Crisis Community Summit



Fundamental Ideas

There is no pain pathway

There is no pain center

Pain is a construct of the brain 100% of the time

Nociception is neither sufficient nor necessary for pain

Opioids are intended for pain that is both constant AND acute

Opioids = narcotics





Coming to Terms

Epidemic - an increase, *often* sudden, in the number of cases of disease above what is normally expected in that population in that area.

Pandemic - an epidemic that has spread over several countries or continents, usually affecting a large number of people.



Epidemics may result from:

An increase in amount or virulence of the agent

The introduction of the agent into a new setting

An enhanced mode of transmission

A change in the susceptibility of the host

Factors that increase host exposure

The Chronic Pain Epidemic

Low back pain (LBP) is the world's leading cause of disability. (Hoy, 2014)

Worldwide, years lived with disability caused by LBP have increased by 54% between 1990 and 2015. (Hartvigsen, 2018)

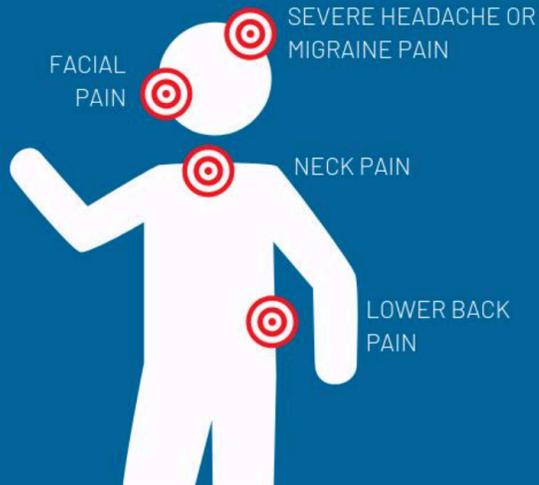
Up to 80% of people experience LBP at some time in their lives. (Rubin, 2007)

On average, full-time working US adults lose 2 days each year due to LBP. (USBJI, 2018)

Most cases of LBP are not caused by serious underlying conditions. (Hartvigsen, 2018)

In 2016, 19.6M Americans had chronic pain severe enough to frequently limit life and/or work activities

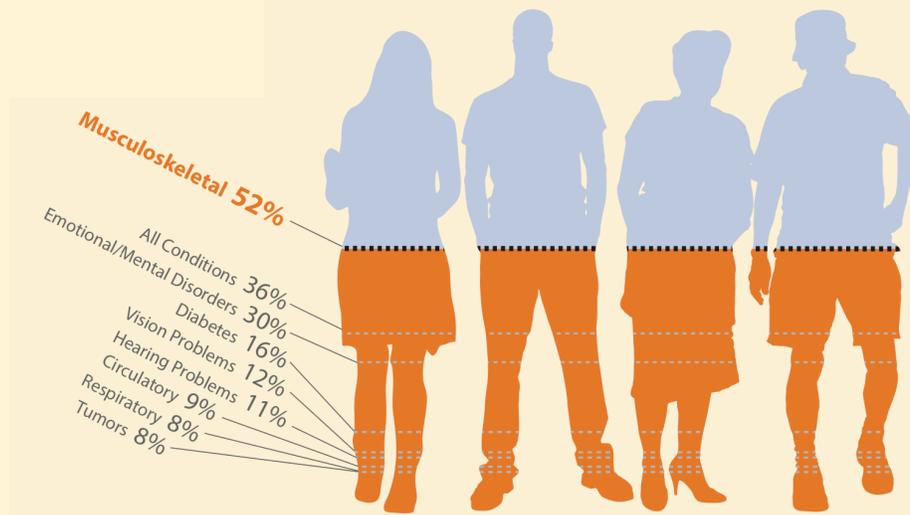
4 MOST COMMON TYPES OF CHRONIC PAIN



#PainAwarenessMonth
Centers for Disease Control and Prevention (CDC)



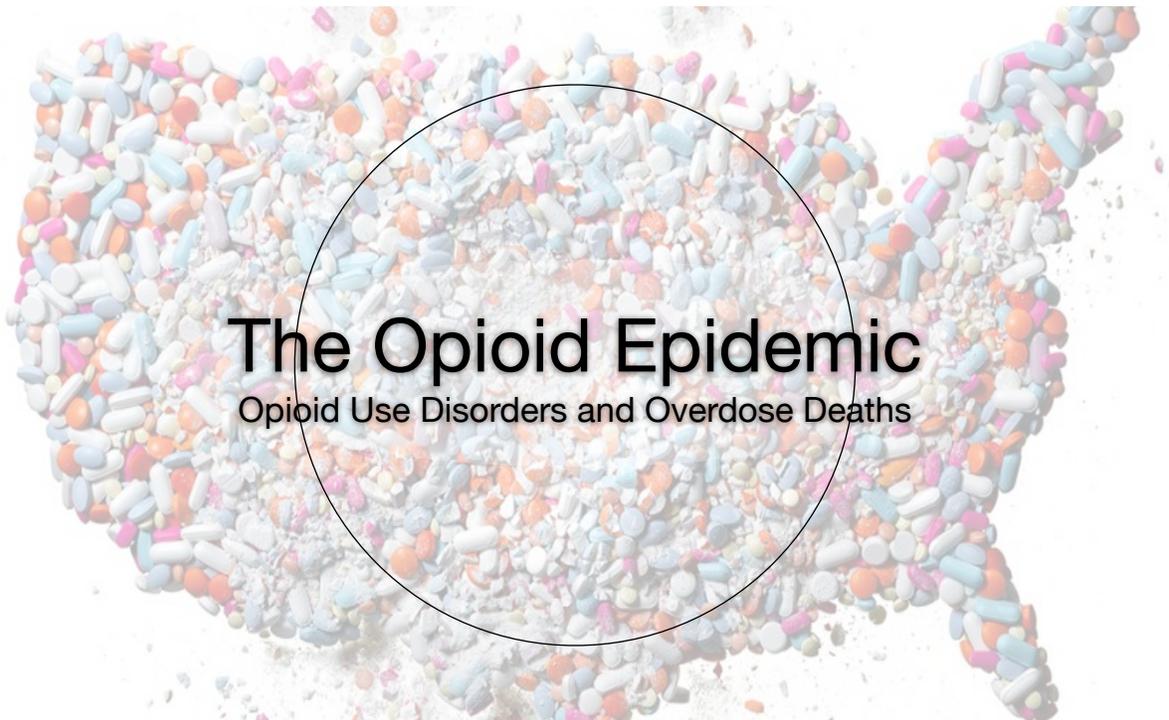
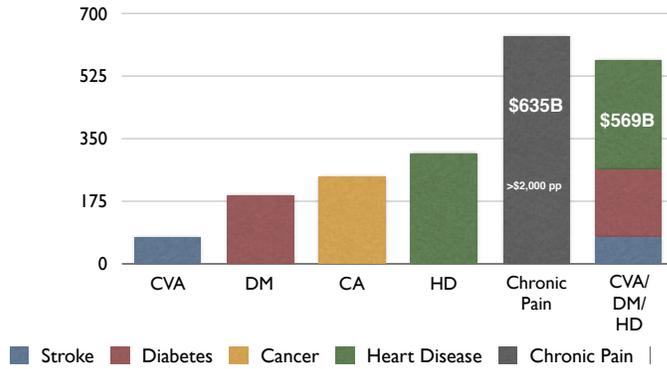
Percentage of people with a medical condition who report it interferes with activities of daily living:
Musculoskeletal conditions exceed all others



United States Bone and Joint Initiative. **The Hidden Impact of Musculoskeletal Disorders on Americans, 4th ed.** USBJI, 2018.

Cost of Treatment

2008 US Medical Expenditure Panel Survey



**The USA has less than 5%
of the world's population
but consumes**

99% of the hydrocodone

&

**80% of all prescription
opioids**

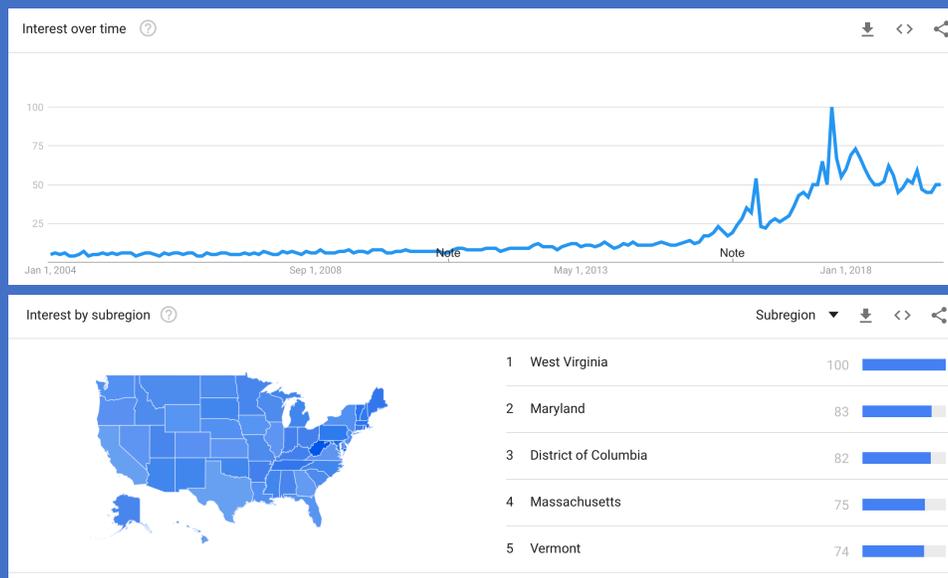
**Prescription painkillers
are now responsible for
more deaths than
crack cocaine in the 1980s**

&

**black tar heroin in the
1970s**

COMBINED

Google search percentile rank for "opioid" Jan 1, 2004 to Sep 8, 2019

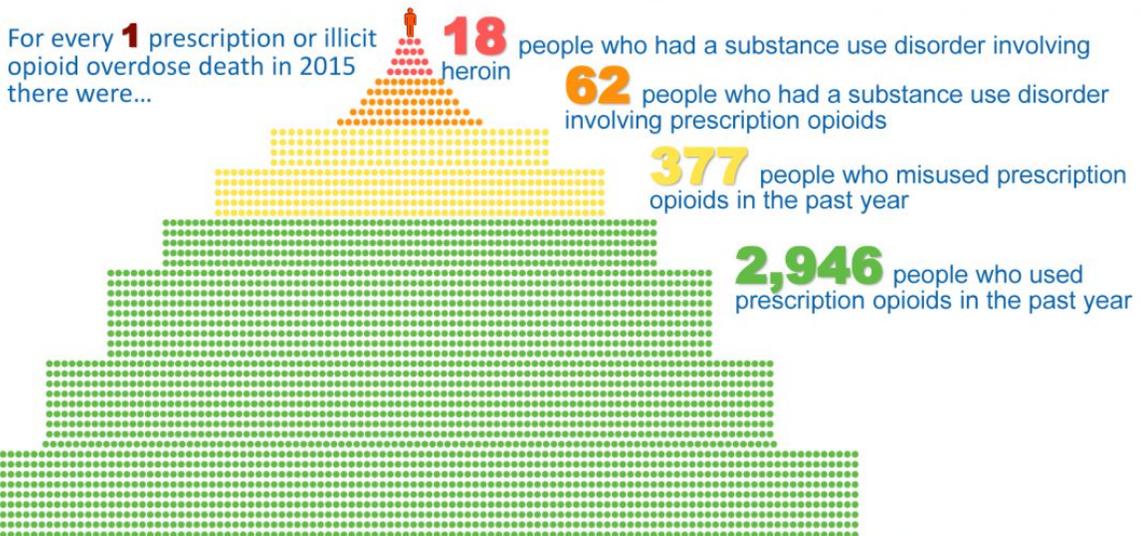


Peak US Deaths

Mechanism	Peak	Deaths	Source
Drug overdose	2017	70,237	CDC
Vietnam War	Total 1955-1975	58,220	National Archives
HIV/AIDS	1995	50,877	UCSF
MVA	1972	54,589	NHTSA
Opioids	2017	47,600	CDC
Gun violence	1993	39,595	Pew Research Center

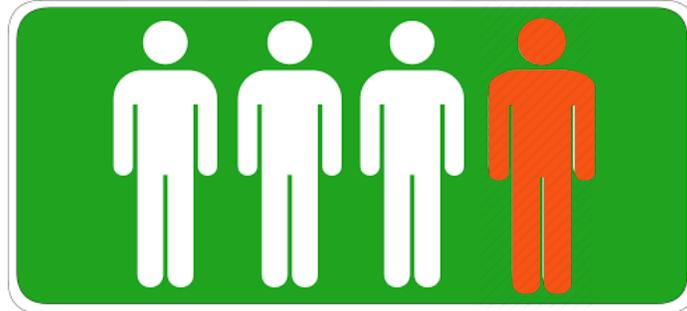
Over 400,000 deaths since 1999

CDC's Unique Work In Action: *Overdose Deaths are the Tip of the Iceberg*

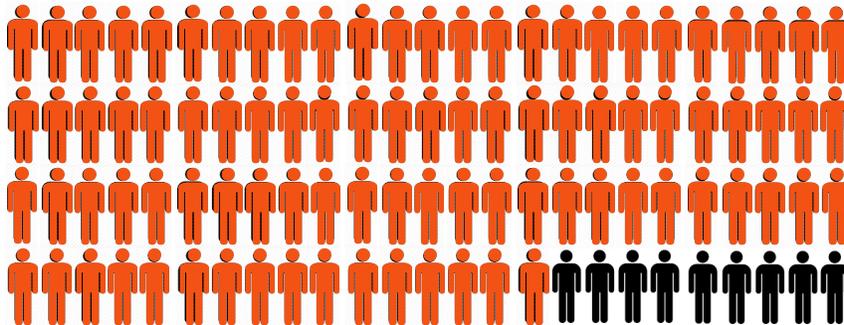


Results from the 2015 National Survey on Drug Use and Health: Detailed Tables <https://www.samhsa.gov/data/sites/default/files/NSDUH-DetTabs-2015/NSDUH-DetTabs-2015/NSDUH-DetTabs-2015.htm#tab1-23a>
 Rudd RA, Seth P, David F, Scholl L. Increases in Drug and Opioid-Involved Overdose Deaths — United States, 2010–2015. MMWR Morb Mortal Wkly Rep 2016;65:1445–1452. DOI: <http://dx.doi.org/10.15585/mmwr.mm650501e1>.

~25% of patients who are prescribed opioid medication become addicted

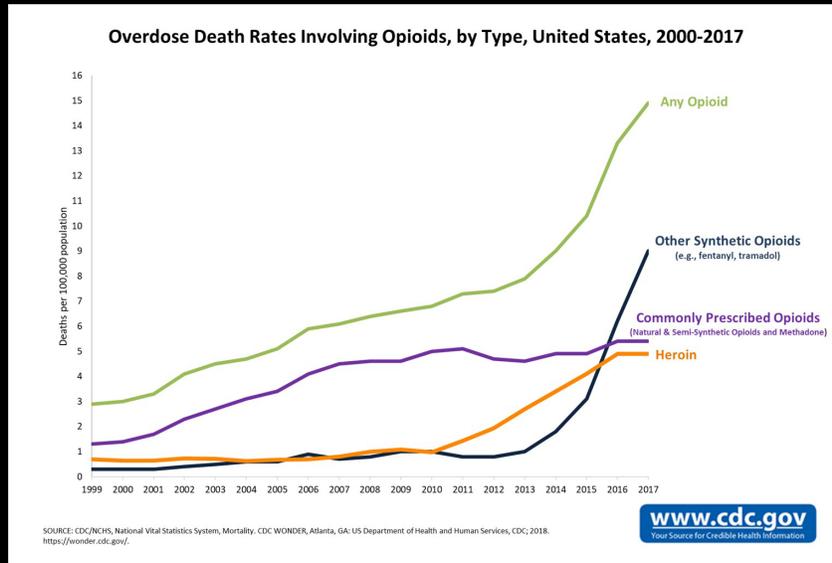


According to the CDC, addiction can occur for some patients within 5-7 days

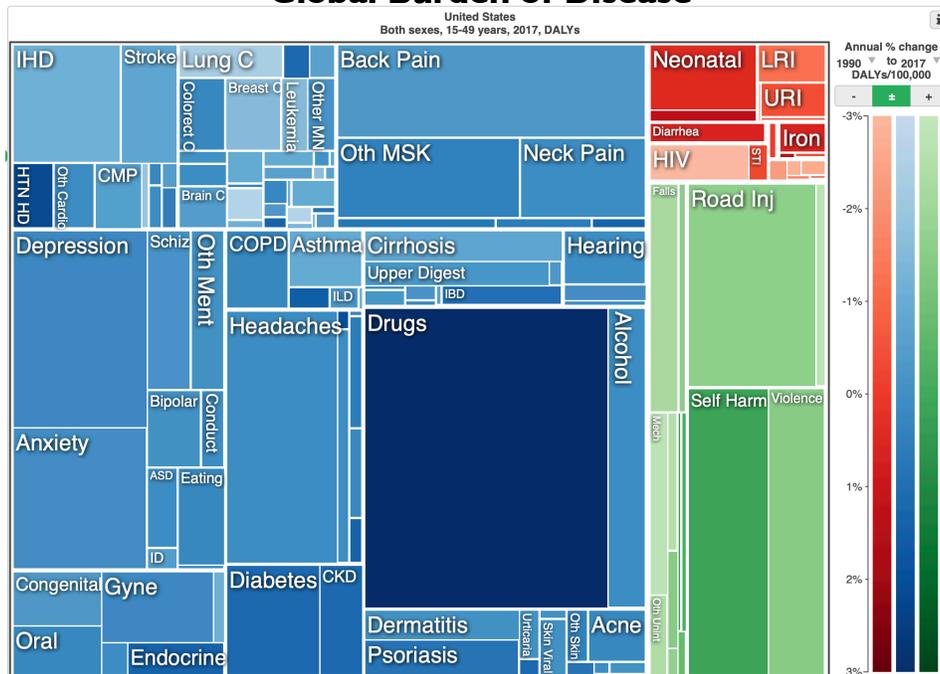


91% of people who survive an overdose of narcotic pain killers are prescribed more narcotic pain killers, often by the same physician.

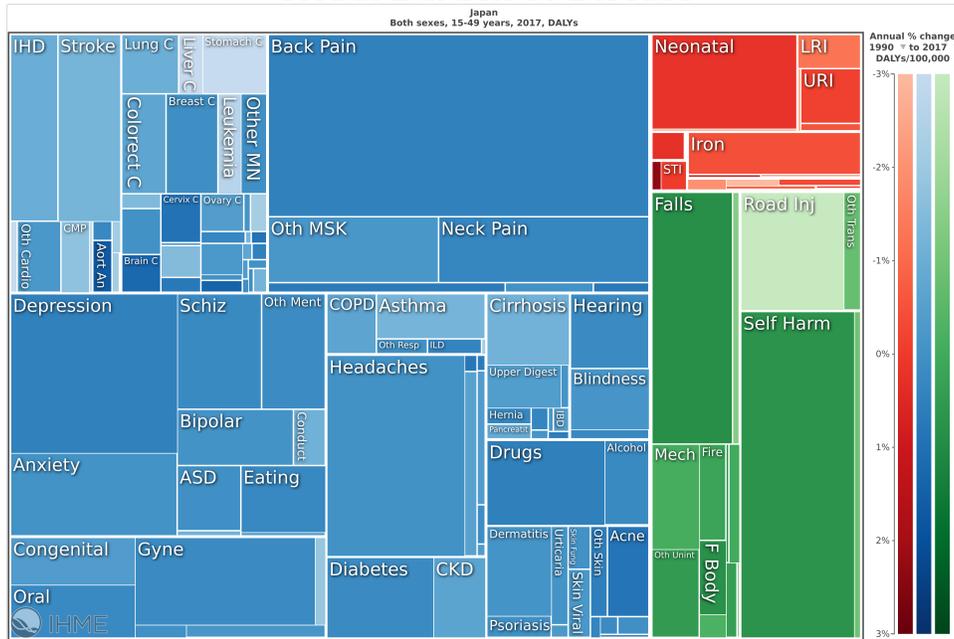
#PainIsNotAVitalSign



Global Burden of Disease



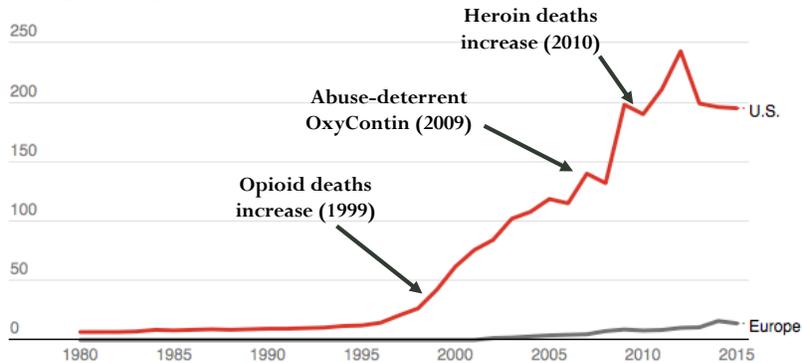
Global Burden of Disease



A Cultural Problem

Oxycodone consumption, mg/capita

Despite a decline in recent years, U.S. per capita opioid consumption remains much higher than oxycodone consumption in Europe.



The Conversation, CC-BY-ND

Source: The International Narcotics Control Board



US Opioid Epidemic

Becoming a worldwide opioid epidemic

The numbers are clearly underreported

We have no way to know truly how severe it is

Second biggest opioid crisis in world history



Chasing the Dragon

Cantonese [追龍]: slang for inhaling heated opium vapor from a piece of foil

"Chasing" occurs as the user keeps the liquid moving

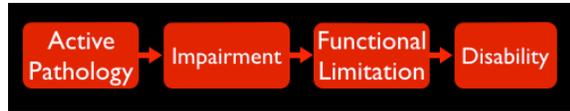
Also performed with heroin, morphine, or oxycodone

Elusive pursuit of the mythical ultimate high

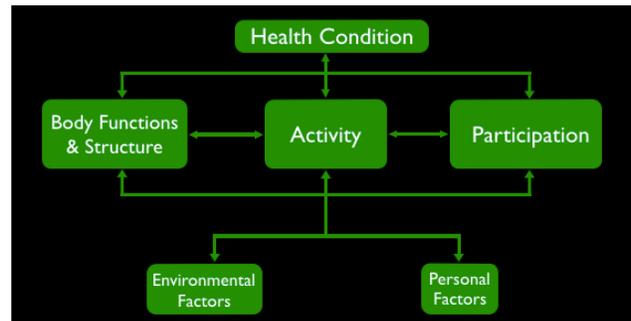


1. Recognize how the prevailing ideas about pain may undermine a patient's chances of recovery

Medical Model of Disability



International Classification of Functioning



...the approximate nature of the model must always be borne in mind.

Nagi SZ. Disability and Rehabilitation. Columbus, Ohio: Ohio State University Press; 1969.

World Health Organization. International Classification of Functioning, Disability and Health. Geneva, WHO, 2001.



The **limitation** of the biomedical model becomes obvious when there is **no correlation** between the size of the tissue injury and the pain experience.

- Jensen et al. N Engl J Med (1994)



Medical Imaging



Patient Education



What percentage of LBP patients are referred to PT?

10%



Between 1997 and 2010, this rate remained fairly constant.

From 1997-2010, the percentage of LBP patients receiving prescription opioids increased from 15% to 45% while the rate of PT referral remained at 10%.

Spine (Phila Pa 1976). 2017 May 1;42(9):670-674. doi: 10.1097/BRS.0000000000001875.

Stagnant Physical Therapy Referral Rates Alongside Rising Opioid Prescription Rates in Patients With Low Back Pain in the United States 1997-2010.

Zheng P¹, Kao MC, Karayannis NV, Smuck M.

Ⓜ Author information

Abstract

STUDY DESIGN: A cross-sectional observational study utilizing the National Ambulatory and National Hospital Ambulatory Medical Care Surveys between 1997 and 2010.

OBJECTIVE: The aim of this study was to characterize national physical therapy (PT) referral trends during primary care provider (PCP) visits in the United States.

SUMMARY OF BACKGROUND DATA: Despite guidelines recommending PT for the initial management of low back pain (LBP), national PT referral rates remain low.

METHODS: Race, ethnicity, age, payer type, and PT referral rates were collected for patients aged 16 to 90 years who were visiting their PCPs. Associations among demographic variables and PT referral were determined using logistic regression.

RESULTS: Between 1997 and 2010, we estimated 170 million visits for LBP leading to 17.1 million PT referrals. Average proportion of PCP visits associated with PT referrals remained stable at about 10.1% [odds ratio (OR) 1.00, 95% confidence interval (95% CI) 0.96-1.04], despite our prior finding of increasing number of visits associated with opioid prescriptions in the same timeframe. Lower PT referral rates were observed among visits by patients who were insured by Medicaid (OR 0.48, 95% CI 0.33-0.69) and Medicare (OR 0.50, 95% CI 0.35-0.72). Furthermore, visits not associated with PT referrals were more likely to be associated with opioid prescriptions (OR 1.69, 95% CI 1.22-2.35).

CONCLUSION: Although therapies delivered by PTs are promoted as a first-line treatment for LBP, PT referral rates remain low. There also exist disparately lower referral rates in populations with more restrictive health plans and simultaneous opioid prescription. Our findings provide a broad overview to PT prescription trend and isolate concerning associations requiring further explorations.

LEVEL OF EVIDENCE: 3.

#ChoosePT

Opioids and Chronic LBP

- No long-term benefit v. non-narcotic meds or placebo
- Significant side effects including:
 - Cognitive impairment
 - Sleep abnormalities
 - ED - within hours 87% of men report severe ED
 - Death by respiratory arrest
- Frequently prescribed despite **contraindications:**
 - mental illness
 - personality disorders
 - substance abuse disorders

Opioid Iatrogenicity

It is important to recognize when a treatment has become iatrogenic

After **1 month** of prescription narcotics:

- pain **thresholds** drop 16%
- pain **tolerances** drop 24%

Prescription narcotics are the **#1 cause of death** among WC patients who have undergone lumbar fusions.

This practice takes a non-life-threatening issue and turns it into the #1 cause of death.

91% of people who survive a prescription opioid overdose are prescribed more opioids, often by the same physician

Opioids were designed to mask pain that is **BOTH severe AND constant**

Chu LF, Clark DJ, Angst MS. Opioid tolerance and hyperalgesia in chronic pain patients after one month of oral morphine therapy: a preliminary prospective study. J Pain. 2006;7(1):43-48.

Opioid Use Disorder

Characterized largely as an impulse control problem, demonstrated by:

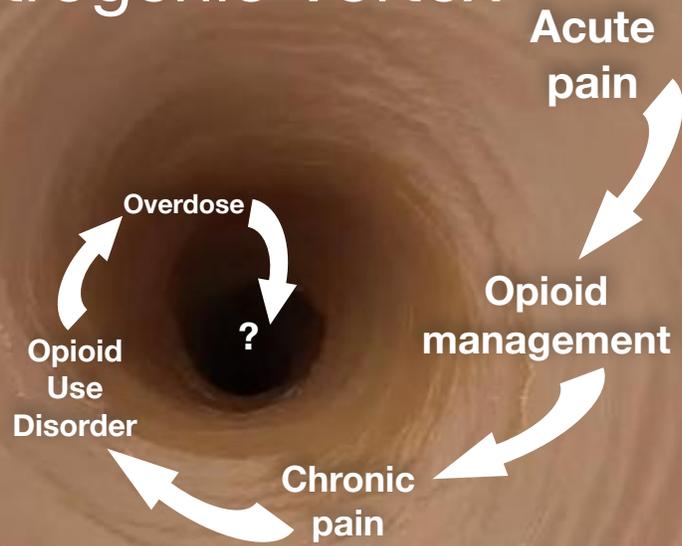
- continued use of a substance often despite knowing that it's doing harm
- essentially self-treating a mental illness
- can also be characterized as a manifestation of a mental illness

A manifestation of a sense of despair, hopelessness, and isolation

Perhaps starting as a means to cope with an otherwise intolerable mental state of unresolved trauma

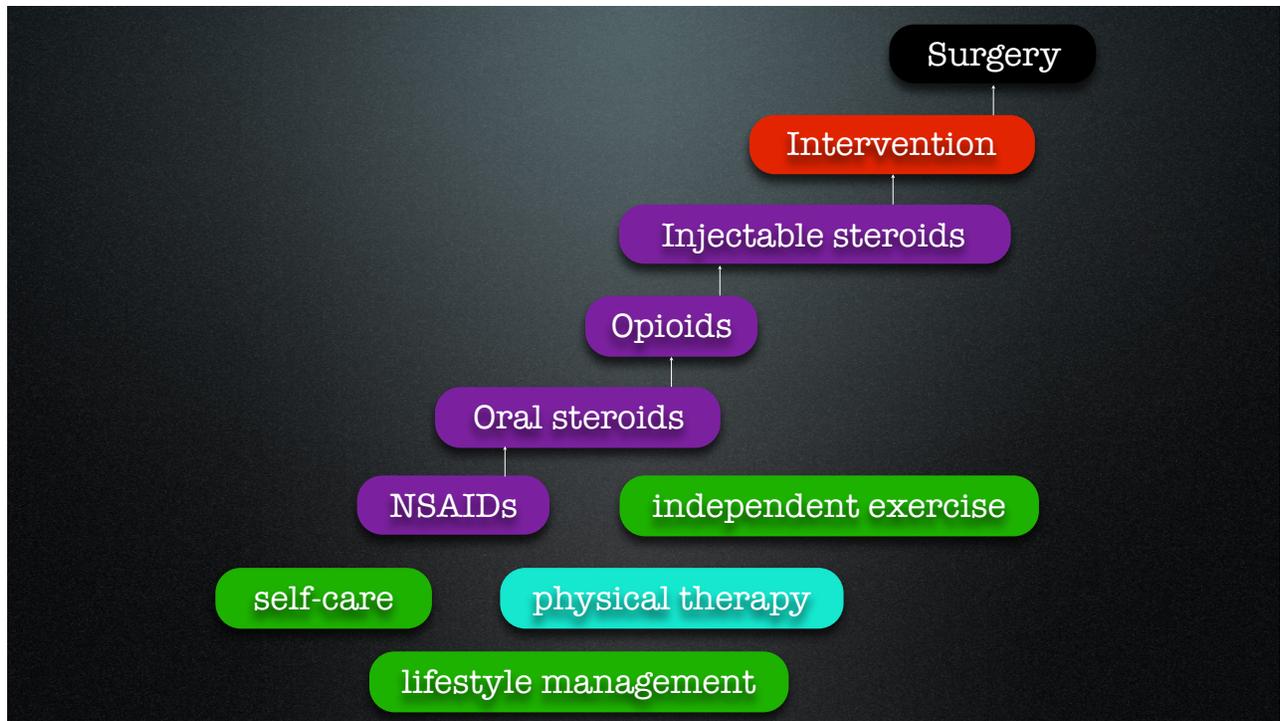
Many are left with few options but to find ways to numb the pain

The Iatrogenic Vortex



Stepped Care Model of Pain Management





Who you see is what you get

“The 0-month to 2-year trajectory of the patient is determined by who’s door you walk through.”

“Utilization of manual therapy techniques tends to drop as you go from commercial insurance to Medicare to Medicaid. Why?”

“Imaging and injections are 2 of the lowest cost value expenditures for spine care.”

– David Elton, Sr. VP of Clinical Programs, Optum Inc.
UnitedHealth Group’s Opioid Task Force and Pain Management Work Group

The “stepped-care” approach allows providers to keep patients in-house

The US health care system rewards clinicians for quantity, not quality

How do we measure success?

When someone has low back pain, how do we know we have successfully addressed the patient's problem?

- Function?
- Discharge from PT?
- Return to work?
- Opioid use?
- Increased activity?
- Sense of self-efficacy?
- Ability to manage?

v.

0/10 pain?

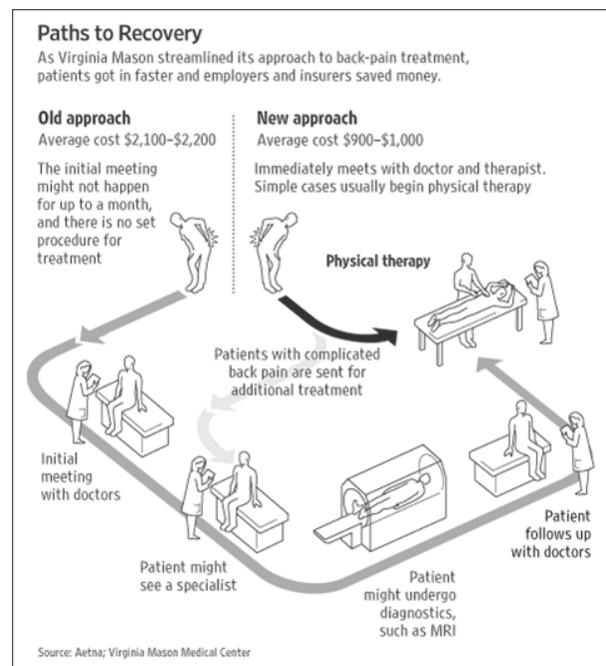
Data suggests that attempts to get a patient to 1/10 or less is part of the problem

- Roger Chou, MD - Oregon Health & Sciences University

The Stepped Care Fallacy

- Traditional medical model follows a stepped-care approach
- Treatment escalates when an intervention fails
- Usually does not include physical rehabilitation
- Often excludes nonpharmacological treatment options completely
- Early nonpharm care has repeatedly been found safe and cost-effective while decreasing opioid exposure

Fritz JM, Childs JD, Wainner RS, Flynn TW. Primary care referral of patients with low back pain to physical therapy: impact on future health care utilization and costs. *Spine*. 2012 Dec 1;37(25):2114-21



How SHOULD we measure success?

And where should resources be allocated?

	Better short-term health outcomes	Worse short-term health outcomes (less optimal)
High strength of evidence	Yes	Consider the value
Low strength of evidence	Consider the value	No

	Favorable cost-benefit ratio	Unfavorable cost-benefit ratio (less optimal)
Low cost	Yes	Consider the value
High cost	Consider the value	No

	Better health outcomes	Worse health outcomes (less optimal)
Low cost	Yes	Consider the value
High cost	Consider the value	No

Financial Access to Care

We drive people to opioids

Treatment Approach	Co-payment
Primary Care Physician	\$10/visit
Opioids	\$10/month
Cortisone injection	\$10-\$50
Lumbar Fusion	\$100
Physical Therapy	\$30/visit
Acupuncture	\$30/visit
Substance Abuse	\$20/visit

Average length of care is 6-8 visits = \$180-\$240

Data from a Private Insurer

United Health Care

Policy holders are 10%-25% less likely to see a PT rather than a PCP if their:

- copay is >\$20
- annual deductible is >\$300

We have a healthcare system that inadvertently drives patients to opioids

- A significant percentage of those patients become addicted
- Many of them die each year
- Many more become heroin addicts
- And many of them die of heroin overdose

A photograph showing a male doctor in a white lab coat examining the back of an elderly woman. The woman is wearing a pink and white striped cardigan and glasses. The scene is set in a clinical or office environment with a window in the background.

**Who are the people with
chronic pain today?**

**Why have these people
decided to become patients?**

Chronic Pain Sufferers

2.06 million episodes of LBP - vast majority are adults

LBP accounted for 3.15% of all emergency visits

Injuries sustained at home account for 65% of visits

Peaks between 25~29 y.o.a. and 95~99 y.o.a. without differentiation by underlying etiology

Caucasians and African-Americans were found to have significantly more LBP compared to Asians

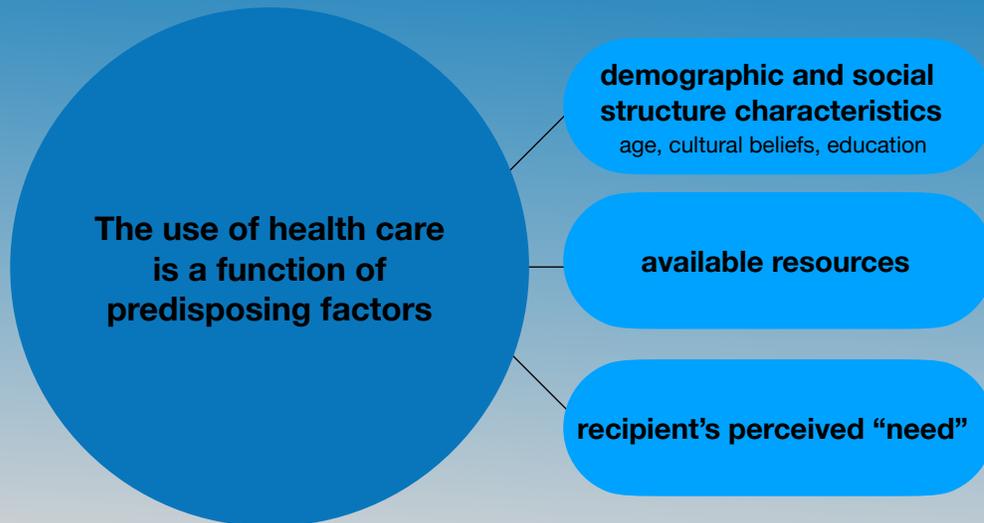
No significant sex differences in the *overall* rates of LBP, but...

- Females - aged 65 to 94 y.o.a.
- Males - aged 10 to 49 y.o.a

Older patients at a greater risk of hospital admission for LBP

Waterman BR, Belmont PJ, Schoenfeld AJ. Low back pain in the United States: incidence and risk factors for presentation in the emergency setting. *Spine J.* 2012;12(1):63-70. doi:10.1016/j.spinee.2011.09.002

Drivers of Care-Seeking Behavior



We Are ALL Complicit

DON'T be a "pusher" - it will backfire

DON'T intimidate your patients in the name of patient education

DON'T tell your patients to take medication prior to therapy

DON'T over-rely on passive treatment

DON'T get jaded - people cope the best way they know how

We scare our patients

Lumbar imaging has **very high** rates of false positives

The anatomical origin of nociceptive input is often impossible to identify

Imaging studies may have detrimental effects on adjustment and QoL

Recommendations from the AMA/AAOS/ACP/APS:

- Avoid routine imaging for LBP
- Avoid emphasizing anatomical structures that "create the pain"
- Resume normal activities despite the presence of pain

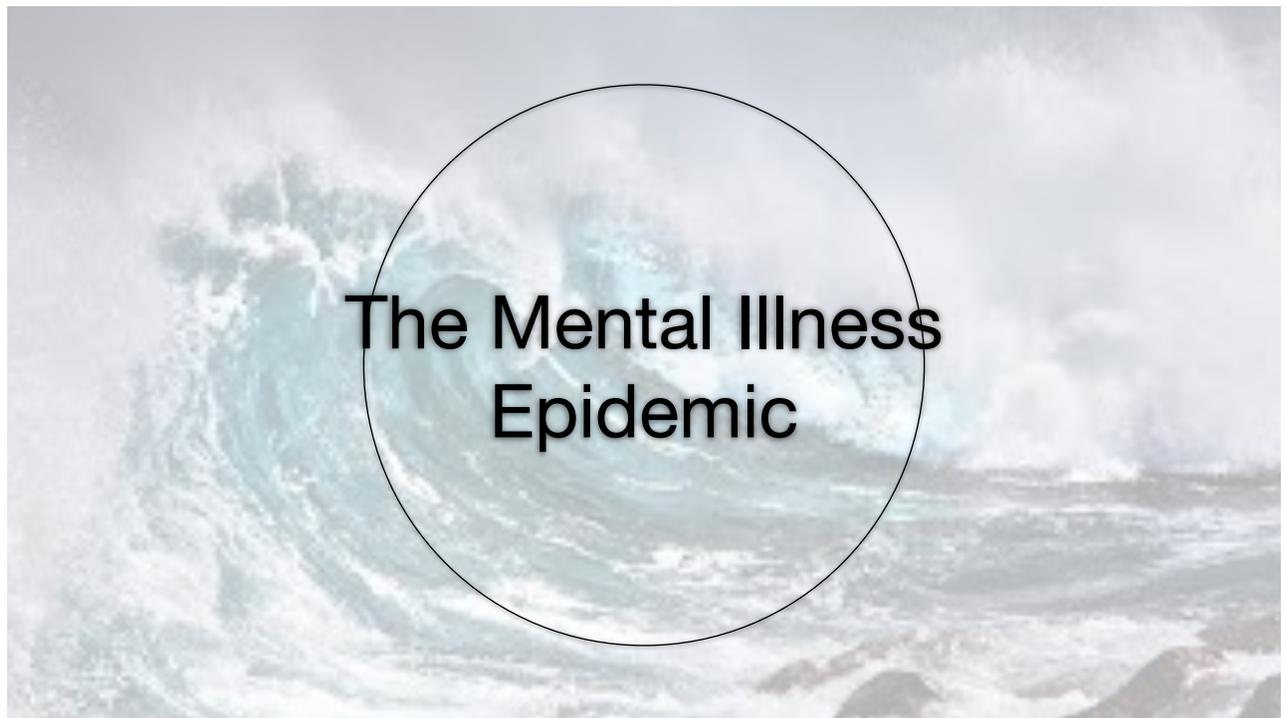
We scare our patients

Avoid asking for a pain rating at every visit - it medicalizes pain

Pain as the 5th Vital Sign is being blamed for the opioid epidemic

Psychological factors can influence the impact of back pain

Many psychological factors are amenable to PT intervention



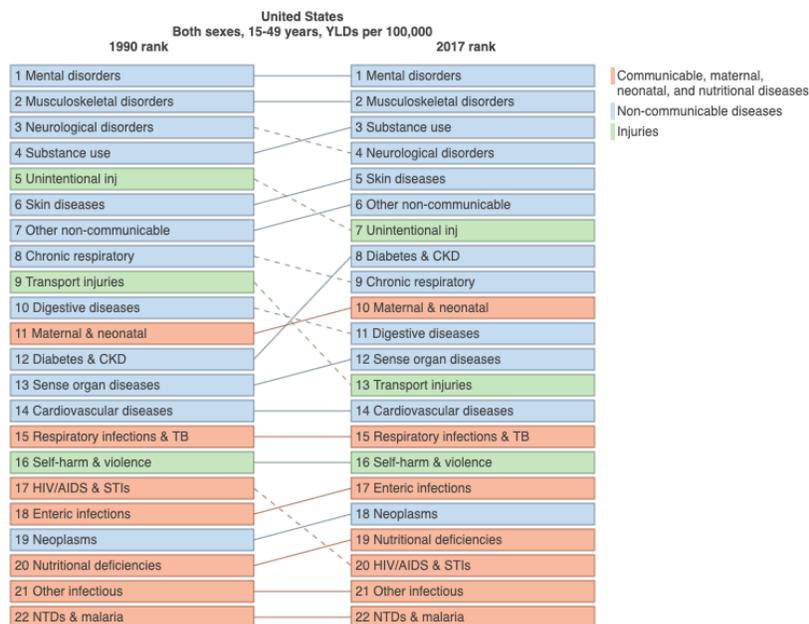
Mental Illness

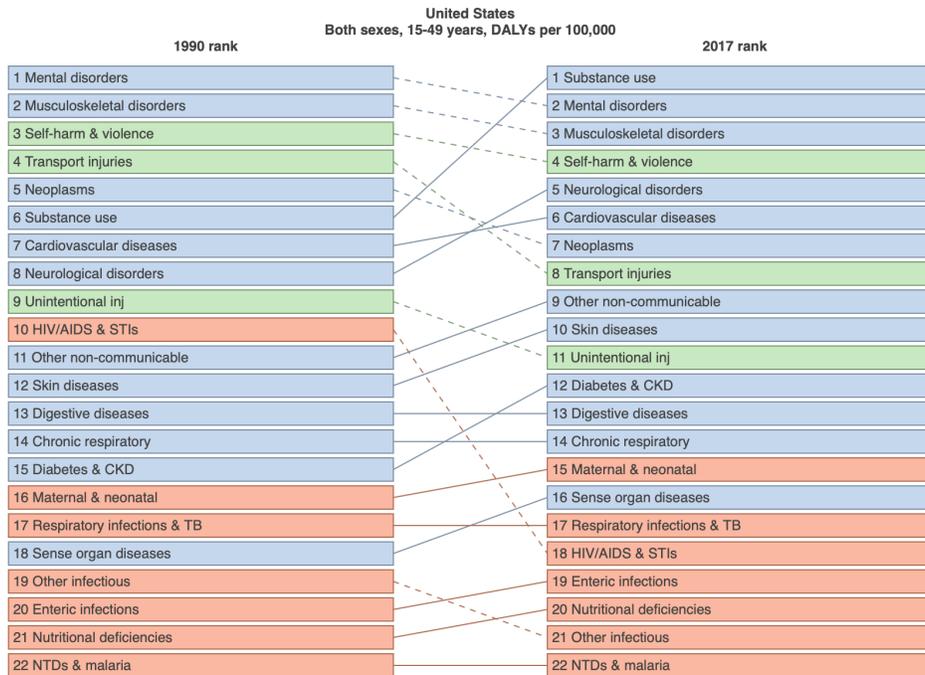
Mental illness is 2nd to MSK disorders in years lived with disability (adults aged 15-49) [Global Burden of Disease data]

	Degree of Mental Illness	
	Any	Severe
Prevalence among US adults	46.6M	11.2M
Received mental health services in the past year	42.6%	66.7%

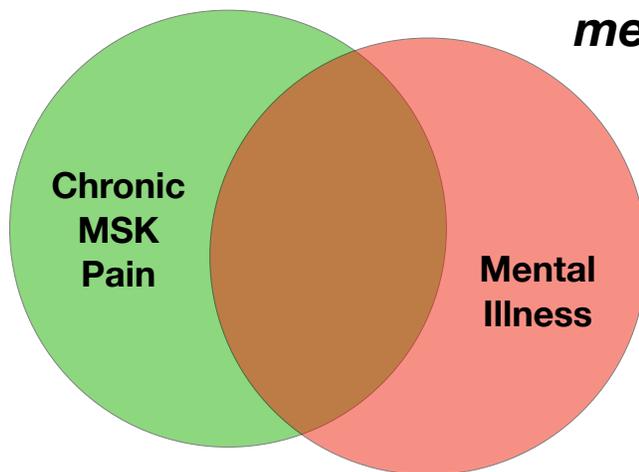
<https://vizhub.healthdata.org/gbd-compare/>

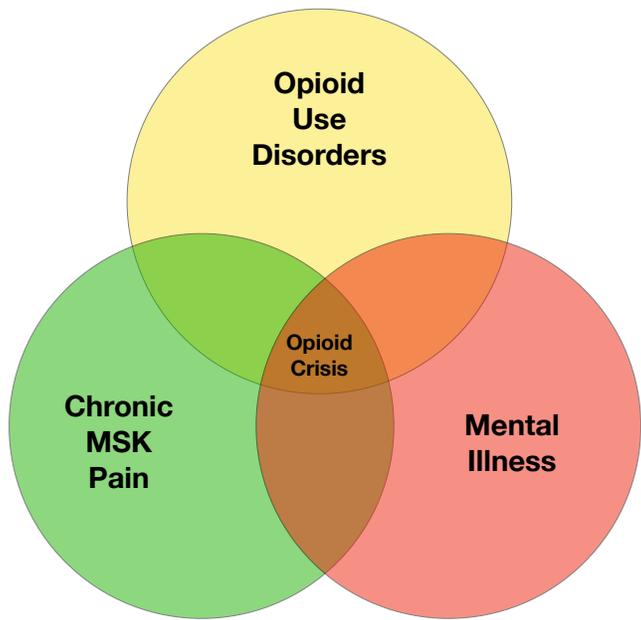
Substance Abuse and Mental Health Services Administration. (2018). Key substance use and mental health indicators in the United States: Results from the 2017 National Survey on Drug Use and Health (HHS Publication No. SMA 18-5068, NSUDH Series H-53). Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.





40% of people with ***chronic pain*** also meet the diagnostic criteria for a ***mental illness***





Substance Use Disorder

A group of intellectual, behavioral and physical symptoms that imply a patient has continued using a substance despite significant substance-related complications.

The diagnosis is based on a compulsive pattern of behaviors that can be attributed to the use of the substance.

Have you seen this in any of your patients that hadn't yet been diagnosed?

Opioid Use Disorder

Not everyone who is prescribed opioids becomes addicted

No one is immune - 20% increased probability each week

Much different from recreational use

People with OUDs do not **want** to get high

Impulse control problem

Know they're doing themselves harm

Mental illness	Chronic pain	Opioid Dependence
Despair	DEPRESSION	
Isolation	ANXIETY	
GENETICS		
Inequity	Mu opioid receptor OPRM1 at position rs799971	
POVERTY		Unemployment
TRAUMA		Higher opioid dosage
Lack of healthcare access	LONG DURATION OF OPIOID USE	
Chronic pain	Mental illness	Untreated psychiatric conditions
SUBSTANCE ABUSE	Adverse childhood experiences	SUBSTANCE ABUSE
Missing sense of purpose	Neglect	Extended-release opioid medication use
Poor housing	Early life adversity	Younger age
Lack of Connection	Socioeconomic status	Enabling family/social environment
HISTORY OF CRIMINAL ACTIVITY	Lower educational attainment	HISTORY OF CRIMINAL ACTIVITY

KEY

BOLD - Known causative factor of another epidemic

CAPITAL - Crosses multiple epidemics

STIGMA

When things don't make sense to your care team





Non-compliant



Symptom magnifier



Malingerer



Drug-seeker

2. Understand the mechanisms involved in the transition from acute/nociceptive pain to chronic/persistent pain

Non-Specific Low Back Pain

Have we merely not identified the pain generator?

	Acute/Traumatic LBP	Chronic NSLBP
Pathoanatomical severity	Significant	Minor
Imaging of pain generator	Easily identified	Misidentified/None
Ease of treatment planning	Easy	Easy
Prognosis	Predictable	Underestimated
Treatment efficacy	High	Low
Type of pain	Nociceptive/ neuropathic	Nociplastic? Multiple?

Nociplastic* - Pain that arises from altered nociception despite no clear evidence of actual or threatened tissue damage causing the activation of peripheral nociceptors or evidence for disease or lesion of the somatosensory system causing the pain.

*IASP definition

The Biopsychosocial Model

Pain is often an unreliable guide

Limiting activity based on pain fosters undertraining

Slow, **graded** exercise gradually acclimates the patient to function

Treatment aimed primarily at changing behavior

Empower the patient to take responsibility

Education regarding maladaptive pain is paramount

Use of narcotic pain medication undermines this process

The Transition

Cortical changes also occur during the transition from acute nociceptive pain to chronic pain

Once CNS sensitization occurs, we have a different problem

Opioids make it much more difficult to help these people

Can we identify future chronic pain patients?

How can we prevent it?

Eliminate pain before it morphs

Avoid passive interventions

Replace opioids with PT or something else - by any means necessary

Follow clinical practice guidelines

Address the risk factors that we can modify

Assess risk for OUD

Keep patients opioid-naïve - by any means necessary

“The current culture of writing narcotic prescriptions for moderate pain, which began about [2000], needs to be changed and doctors need to be retrained.

“In the amount of education and training that doctors get, there is very little time, if any, in medical schools and other places to be devoted to understanding this.”

- Gil Kerlikowske, former Director of the Office of National Drug Control Policy

The Future of Pain Management

Interdisciplinary with *shared* decision making; MDs are NOT team leaders

Emphasizes conjoint problem solving and shared accountability

Treatment decisions are based on consensus rather than any single provider

Encouragement of diverse viewpoints so members can contribute without fear of being discounted

Requires institutional commitment - adequate time must be devoted to the team

Roles may overlap; members are collaborators/partners

The Future of Pain Management

Interprofessional assessment and reassessment

Avoid sequential treatment where possible

Patients and caregivers participate in treatment planning as much as possible

Effectiveness assessed using common goals so all parties are aware of progress

Identify “stop rules” - helps to avoid costly, invasive, ineffective, or harmful interventions

3. Identify modifiable risk factors for LBP-related disability

Modifiable Risk Factors for Chronic LBP

- Current or past regular smoking
- Obesity
- Depressive disorders
- Alcohol abuse
- Physical inactivity
- BMI ≥ 25 (overweight, obese, severely obese)
- PTSD
- >7 hours of sleep nightly
- Chronic opioid use
- Pre-operative opioid use
- Stress disorders

Suri P, Boyko EJ, Smith NL, Jarvik JG, Williams FMK, Jarvik GP, Goldberg J. **Modifiable Risk Factors for Chronic Back Pain: Insights Using the Co-Twin Control Design.** *Spine J.* 2017 Jan; 17(1): 4–14. doi: [10.1016/j.spinee.2016.07.533](https://doi.org/10.1016/j.spinee.2016.07.533)

Shemery ST, Pfefferle KJ, Gradisar IM. **Modifiable Risk Factors in Patients With Low Back Pain.** *Orthopedics.* 2016 May 1;39(3):e413-6. doi: [10.3928/01477447-20160404-02](https://doi.org/10.3928/01477447-20160404-02). Epub 2016 Apr 12.

Jain N, Phillips FM, Weaver T, Khan SN. **Preoperative Chronic Opioid Therapy: A Risk Factor for Complications, Readmission, Continued Opioid Use and Increased Costs After One- and Two-Level Posterior Lumbar Fusion.** *Spine (Phila Pa 1976).* 2018 Oct 1;43(19):1331-1338. doi: [10.1097/BRS.0000000000002609](https://doi.org/10.1097/BRS.0000000000002609).

CDC Opioid Prescribing Guidelines

March 2016

RCTs support short-term efficacy (≤ 12 weeks) of opioids for reducing pain and improving function in noncancer nociceptive and neuropathic pain

Physicians should reduce the use of opioids in favor of safer alternatives, like physical therapy.

High-quality evidence supports exercise as part of a PT treatment plan for conditions such as LBP

GUIDELINE FOR PRESCRIBING OPIOIDS FOR CHRONIC PAIN

IMPROVING PRACTICE THROUGH RECOMMENDATIONS

CDC's *Guideline for Prescribing Opioids for Chronic Pain* is intended to improve communication between providers and patients about the risks and benefits of opioid therapy for chronic pain, improve the safety and effectiveness of pain treatment, and reduce the risks associated with long-term opioid therapy, including opioid use disorder and overdose. The Guideline is not intended for patients who are in active cancer treatment, palliative care, or end-of-life care.

DETERMINING WHEN TO INITIATE OR CONTINUE OPIOIDS FOR CHRONIC PAIN

- 1 Nonpharmacologic therapy and nonopioid pharmacologic therapy are preferred for chronic pain. Clinicians should consider opioid therapy only if expected benefits for both pain and function are anticipated to outweigh risks to the patient. If opioids are used, they should be combined with nonpharmacologic therapy and nonopioid pharmacologic therapy, as appropriate.
- 2 Before starting opioid therapy for chronic pain, clinicians should establish treatment goals with all patients, including realistic goals for pain and function, and should consider how opioid therapy will be discontinued if benefits do not outweigh risks. Clinicians should continue opioid therapy only if there is clinically meaningful improvement in pain and function that outweighs risks to patient safety.
- 3 Before starting and periodically during opioid therapy, clinicians should discuss with patients known risks and realistic benefits of opioid therapy and patient and clinician responsibilities for managing therapy.

CLINICAL REMINDERS

- Opioids are not first-line or routine therapy for chronic pain
- Establish and measure goals for pain and function
- Discuss benefits and risks and availability of nonopioid therapies with patient

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

LEARN MORE | www.cdc.gov/drugoverdose/prescribing/guideline.html

OPIOID SELECTION, DOSAGE, DURATION, FOLLOW-UP, AND DISCONTINUATION

CLINICAL REMINDERS

- Use immediate-release opioids when starting
- Start low and go slow
- When opioids are needed for acute pain, prescribe no more than needed
- Do not prescribe ER/LA opioids for acute pain
- Follow-up and re-evaluate risk of harm, reduce dose or taper and discontinue if needed



- 4 When starting opioid therapy for chronic pain, clinicians should prescribe immediate-release opioids instead of extended-release/long-acting (ER/LA) opioids.
- 5 When opioids are started, clinicians should prescribe the lowest effective dosage. Clinicians should use caution when prescribing opioids at any dosage, should carefully reassess evidence of individual benefits and risks when considering increasing dosage to ≥ 50 morphine milligram equivalents (MME)/day, and should avoid increasing dosage to ≥ 90 MME/day or carefully justify a decision to titrate dosage to ≥ 90 MME/day.
- 6 Long-term opioid use often begins with treatment of acute pain. When opioids are used for acute pain, clinicians should prescribe the lowest effective dose of immediate-release opioids and should prescribe no greater quantity than needed for the expected duration of pain severe enough to require opioids. Three days or less will often be sufficient; more than seven days will rarely be needed.
- 7 Clinicians should evaluate benefits and harms with patients within 1 to 4 weeks of starting opioid therapy for chronic pain or of dose escalation. Clinicians should evaluate benefits and harms of continued therapy with patients every 3 months or more frequently. If benefits do not outweigh harms of continued opioid therapy, clinicians should optimize other therapies and work with patients to taper opioids to lower dosages or to taper and discontinue opioids.

ASSESSING RISK AND ADDRESSING HARMS OF OPIOID USE

- 8 Before starting and periodically during continuation of opioid therapy, clinicians should evaluate risk factors for opioid-related harms. Clinicians should incorporate into the management plan strategies to mitigate risk, including considering offering naloxone when factors that increase risk for opioid overdose, such as history of overdose, history of substance use disorder, higher opioid dosages (≥ 50 MME/day), or concurrent benzodiazepine use, are present.
- 9 Clinicians should review the patient's history of controlled substance prescriptions using state prescription drug monitoring program (PMP) data to determine whether the patient is receiving opioid dosages or dangerous combinations that put him or her at high risk for overdose. Clinicians should review PMP data when starting opioid therapy for chronic pain and periodically during opioid therapy for chronic pain, ranging from every prescription to every 3 months.
- 10 When prescribing opioids for chronic pain, clinicians should use urine drug testing before starting opioid therapy and consider urine drug testing at least annually to assess for prescribed medications as well as other controlled prescription drugs and illicit drugs.
- 11 Clinicians should avoid prescribing opioid pain medication and benzodiazepines concurrently whenever possible.
- 12 Clinicians should offer or arrange evidence-based treatment (usually medication-assisted treatment with buprenorphine or methadone in combination with behavioral therapies) for patients with opioid use disorder.

CLINICAL REMINDERS

- Evaluate risk factors for opioid-related harms
- Check PMP for high dosages and prescriptions from other providers
- Use urine drug testing to identify prescribed substances and undisclosed use
- Avoid concurrent benzodiazepine and opioid prescribing
- Arrange treatment for opioid use disorder if needed

LEARN MORE | www.cdc.gov/drugoverdose/prescribing/guideline.html



Guideline Misinterpretation

Solving the prescribing problem is essential, but incomplete

1:400 chance of overdose death v. 1:20 chance of pain improvement

Regulatory discipline for maintaining morphine equivalents daily (not stated in the CDC guideline)

Torture

Suicidal ideation

Despair

Depression (cognitively arrested alternatives)

Joint Commission Enhances Pain Assessment and Management Requirements for Accredited Hospitals

The Joint Commission announces the implementation of new and revised pain assessment and management standards, effective January 1, 2018, for its accredited hospitals. These new and revised requirements were developed through a rigorous research, evaluation, and review process.

In early 2016, The Joint Commission began conducting an extensive literature review on contemporary clinical guidelines and best practices for pain assessment and management, including safe opioid prescribing, in order to identify disparities between its current accreditation requirements and contemporary guidance. Following the literature review, staff convened a technical advisory panel of experts to discuss developments in the field of pain assessment and management. Staff's next step was to conduct learning visits to research leading practices in pain assessment and management and the safe use of opioids.

The Joint Commission then convened a standards review panel to review draft pain assessment and management standards. (Standards review panel members, who are nominated from Joint Commission-accredited organizations or professional associations, are individuals who can provide a "boots-on-the-ground" point of view and give insights into the practical application of proposed standards.) Finally, the draft pain assessment and management standards were released for public comment in January 2017.



The enhanced pain assessment and management standards include the following new requirements:

- Identifying a leader or leadership team that is responsible for pain management and safe opioid prescribing
- Involving patients in developing their treatment plans and setting realistic expectations and measurable goals
- Promoting safe opioid use by identifying high-risk patients

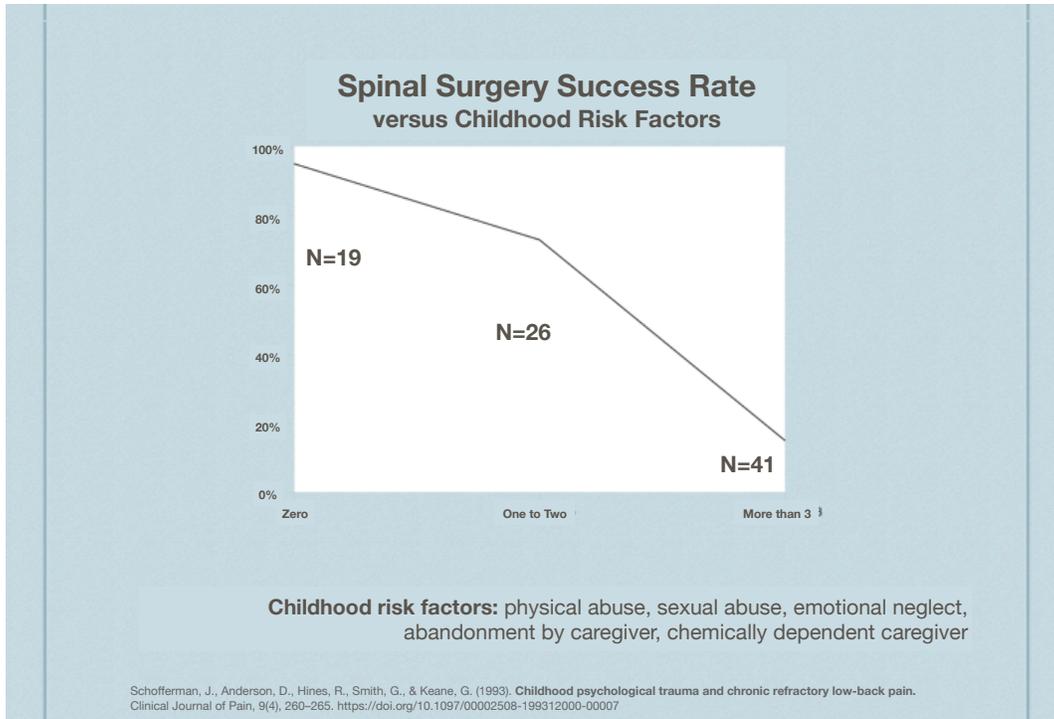
Continued on page 3

<http://www.jointcommission.org>

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4. Stratify a patient's risk of developing chronic LBP by utilizing an evidence-based approach



The **STarT Back** Tool for facilitating risk factor assessment within primary care

Subgroups for **Tar**geted **T**reatment **Back Screening Tool**

Prognostic screening tool used to quantify risk factor profiles

Intended population: primary care patients with LBP

Stratifies patients into risk levels

Repeatedly validated for initial decision making

Risk-stratified care has better outcomes and is more cost-effective than current best practice (Hill et al. 2011)

Comparison of stratified primary care management for low back pain with current best practice (STarT Back): a randomised controlled trial

Jonathan C Hill, David G T Whitehurst, Martyn Lewis, Stirling Bryan, Kate M Dunn, Nadine E Foster, Kika Konstantinou, Chris J Main, Elizabeth Mason, Simon Somerville, Gail Sowden, Kanchan Vohora, Elaine M Hay

Summary

Background Back pain remains a challenge for primary care internationally. One model that has not been tested is stratification of the management according to the patient's prognosis (low, medium, or high risk). We compared the clinical effectiveness and cost-effectiveness of stratified primary care (intervention) with non-stratified current best practice (control).

Methods 1573 adults (aged ≥18 years) with back pain (with or without radiculopathy) consultations at ten general practices in England responded to invitations to attend an assessment clinic. Eligible participants were randomly assigned by use of computer-generated stratified blocks with a 2:1 ratio to intervention or control group. Primary outcome was the effect of treatment on the Roland Morris Disability Questionnaire (RMDQ) score at 12 months. In the economic evaluation, we focused on estimating incremental quality-adjusted life years (QALYs) and health-care costs related to back pain. Analysis was by intention to treat. This study is registered, number ISRCTN37113406.

Findings 851 patients were assigned to the intervention (n=568) and control groups (n=283). Overall, adjusted mean changes in RMDQ scores were significantly higher in the intervention group than in the control group at 4 months (4.7 [SD 5.9] vs 3.0 [5.9], between-group difference 1.81 [95% CI 1.06–2.57]) and at 12 months (4.3 [6.4] vs 3.3 [6.2], 1.06 [0.25–1.86]), equating to effect sizes of 0.32 (0.19–0.45) and 0.19 (0.04–0.33), respectively. At 12 months, stratified care was associated with a mean increase in generic health benefit (0.039 additional QALYs) and cost savings (£240.01 vs £274.40) compared with the control group.

Interpretation The results show that a stratified approach, by use of prognostic screening with matched pathways, will have important implications for the future management of back pain in primary care.

Funding Arthritis Research UK.



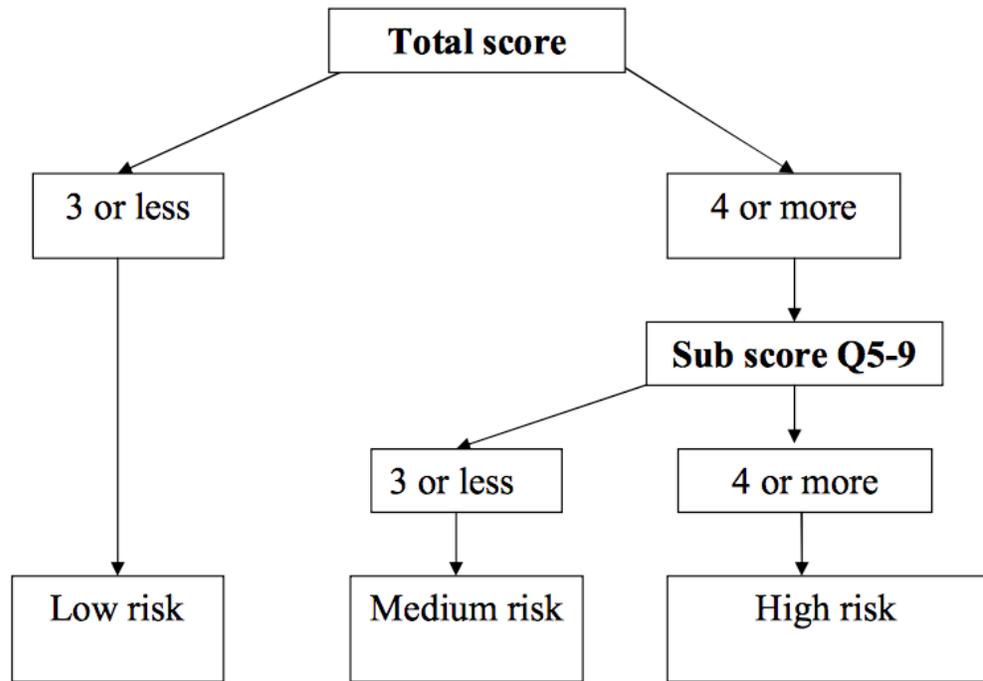
Thinking about the **last 2 weeks** tick your response to the following questions:

	Disagree 0	Agree 1
1 My pain has spread at some time in the past 2 weeks	<input type="checkbox"/>	<input type="checkbox"/>
2 In addition to my main pain, I have had pain elsewhere in the last 2 weeks	<input type="checkbox"/>	<input type="checkbox"/>
3 In the last 2 weeks, I have only walked short distances because of my pain	<input type="checkbox"/>	<input type="checkbox"/>
4 In the last 2 weeks, I have dressed more slowly than usual because of my pain	<input type="checkbox"/>	<input type="checkbox"/>
5 It's really not safe for a person with a condition like mine to be physically active	<input type="checkbox"/>	<input type="checkbox"/>
6 Worrying thoughts have been going through my mind a lot of the time in the last 2 weeks	<input type="checkbox"/>	<input type="checkbox"/>
7 I feel that my pain is terrible and that and that it's never going to get any better	<input type="checkbox"/>	<input type="checkbox"/>
8 In general in the last 2 weeks, I have not enjoyed all the things I used to enjoy	<input type="checkbox"/>	<input type="checkbox"/>
9. Overall, how bothersome has your pain been in the last 2 weeks?		
	Not at all 0	Slightly 0
	Moderately 0	Very much 1
		Extremely 1

Total score (all 9): _____ **Sub Score (Q5-9):** _____

The STarT Back Tool

Scoring



Subgrouping & targeting for primary care low back pain

Targeted Treatments

Psychological obstacles to recovery
Enhanced package of care (complex)

Physical obstacles to recovery
Face to face 'conservative' treatment

Low risk of chronicity
Advice, reassurance & medication

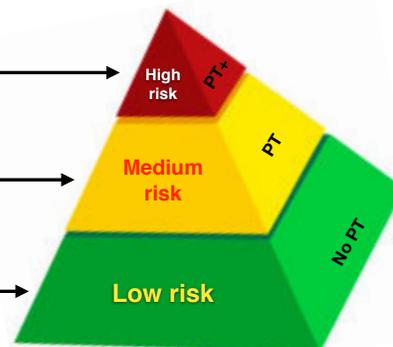
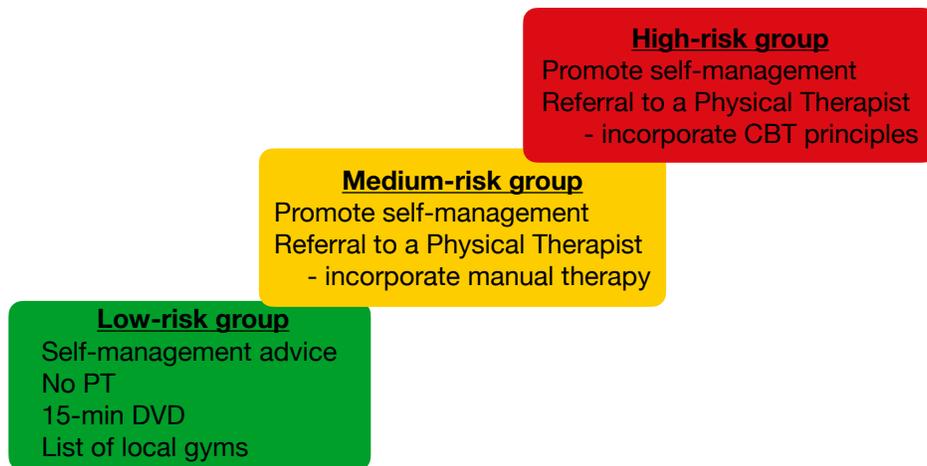


Figure adapted from: www.keele.ac.uk/sbst/

STarT Back Treatment Summary



Advantages of Risk Stratification

Chronic pain is very difficult to treat

Early identification of patients helps to prevent the development of prolonged pain and disability

Bridges the gap between acute and chronic care

Screening is very quick and appropriate for primary care

Patients are **matched** to their most appropriate intervention

Can we make a difference?

We're starting to make progress in keeping people opioid-naïve

Can we prevent new patients from transitioning to chronic pain?

Or will those suffering from OUDs become a lost segment of the population?

Screening for Substance Use Disorders

GOALS:

To identify individuals who have or are at risk for developing alcohol- or drug-related problems

To identify patients within that group who require further assessment:

- to diagnose their substance use disorders

- to develop plans to treat them

Screening for Substance Use Disorders

RECOMMENDATION: All primary care clinicians should periodically and routinely screen all patients for substance use disorders.

Visual examination alone cannot detect intoxication, much less more subtle signs of alcohol- and drug-affected behavior.

Deciding to screen some patients and not others opens the door for bias that may result in missed opportunities to intervene with or prevent the development of alcohol- or drug-related problems.

Negative screen results also warrant discussion

Screening should be performed as a part of a general health screening within the context of preventive health care

It is important to use a screening tool that is sensitive rather than specific - we are not trying to diagnose substance use disorders

Screening for Opioid Use Disorders

Although providing counseling regarding medication use is outside the PT scope of practice, we can certainly:

reinforce that medication should be used as prescribed by the physician

recommend that the patient initiate discussion with the prescriber

document patterns of usage

communicate with the prescriber and other team members

Screening for Opioid Use Disorders

BENEFITS:

Opens a dialog regarding the use of prescription opioids and other substances

Facilitates disclosure

Reinforces that the inappropriate use of opioids is a significant concern

Provides the opportunity for the clinician to provide a list of resources for additional help

CAGE-AID Substance Abuse Screening Tool

Patient Name _____ Date of Visit _____

When thinking about drug use, include illegal drug use and the use of prescription drug use other than prescribed.

Questions:	YES	NO
1. Have you ever felt that you ought to cut down on your drinking or drug use?	<input type="checkbox"/>	<input type="checkbox"/>
2. Have people annoyed you by criticizing your drinking or drug use?	<input type="checkbox"/>	<input type="checkbox"/>
3. Have you ever felt bad or guilty about your drinking or drug use?	<input type="checkbox"/>	<input type="checkbox"/>
4. Have you ever had a drink or used drugs first thing in the morning to steady your nerves or to get rid of a hangover?	<input type="checkbox"/>	<input type="checkbox"/>

Brown RL, Rounds, LA. **Conjoint screening questionnaires for alcohol and other drug abuse: criterion validity in a primary care practice.** *Wisconsin Medical Journal.* 1995;94(3) 135-140.

Ewing, J.A. **Detecting alcoholism: The CAGE Questionnaire.** *Journal of the American Medical Association.* 1984; 252:1905-1907.

CAGE-AID

Substance Abuse Screening Tool

Clinical Utility

Potential advantage is to screen for alcohol and drug problems conjointly rather than separately.

Scoring

Regard one or more positive responses to the CAGE-AID as a positive screen.

Psychometric Properties

The CAGE-AID exhibited ¹ :	Sensitivity	Specificity
One or more Yes responses	0.79	0.77
Two or more Yes responses	0.70	0.85

Brown RL, Rounds, LA. **Conjoint screening questionnaires for alcohol and other drug abuse: criterion validity in a primary care practice.** *Wisconsin Medical Journal.* 1995;94(3) 135-140.

5. Understand the strength of evidence regarding various nonpharmacological pain management approaches



Occam's Razor

William of Occam (1287-1347)



“When two hypotheses explain phenomena equally well, the simplest explanation should be assumed to be correct”



Hitchens' Razor

Christopher Hitchens (1949-2011)

“What can be asserted without evidence can be dismissed without evidence”

The burden of proof in a debate lies with the claim-maker

Roy J. Film, PT, DPT, OCS, FAAOMPT

The Life Cycle of Translational Research for Medical Interventions

Contopoulos-loannidis D, et al. *Science*, 2008; 321:1298–9.

49 papers of medical interventions with >1K citations were included

Median development time from initial discovery to prominence in the literature was **24 years**

Evidence supporting claims of large benefits for older treatments is likely to be exaggerated

Many refuted treatments had long history of clinical use

Disproving ineffective treatments is more challenging due to:

- difficulty getting negative findings published
- going against predominant beliefs amongst clinicians
- lack of scientific rigor of clinical studies during first usage

Median time from initial discovery to being disproved was...

44 years!



Invalidated Therapies

Invalidated Therapies Thoroughly-studied treatment approaches



Craniosacral Therapy

- There is no craniosacral pulse
- Positional changes of the cranial bones do not affect CSF flow
- Minor changes in CSF flow does not affect human health in any way
- CST has **no face validity or coherent rationale**

Myofascial Release (a.k.a. “indirect myofascial release”, a.k.a. “myofascial unwinding”)

- 5g pressure held until tissue creep
- Somatoemotional release

Kinesiotaping

- There is **no clinical benefit** for the use of kinesiotape for MSK conditions
- Conflicting evidence for lymphedema

Hartman SE and Norton JM. Craniosacral Therapy Is Not Medicine. Physical Therapy, November 2002, vol. 82, no. 11, 1146-7.

Vanti C, Bertozzi L, Gardenghi I, et al. Effect of taping on spinal pain and disability: systematic review and meta-analysis of randomized trials. Phys Ther. 2015;95:493-506.

Parreira PC et al. Current evidence does not support the use of Kinesiotaping in clinical practice: a systematic review. J Physiother. 2014;60(1):31-9.

ABSTRACT**Background**

Chronic non-specific low-back pain (LBP) has become one of the main causes of disability in the adult population around the world. Therapeutic ultrasound is frequently used by physiotherapists in the treatment of LBP and is one of the most widely used electro-physical agents in clinical practice.

Objectives

The objective of this review is to determine the effectiveness of therapeutic ultrasound in the management of chronic non-specific LBP.

Search methods

Electronic searches were performed using CENTRAL, MEDLINE, EMBASE, PEDro, and PsycLIT databases in October 2013. Reference lists of eligible studies and relevant systematic reviews were checked and forward citation searching was also performed.

Selection criteria

Randomised controlled trials on therapeutic ultrasound for non-specific chronic LBP were included.

Data collection and analysis

Two review authors independently assessed the risk of bias of each trial and extracted the data. When sufficient clinical and statistical homogeneity existed, a meta-analysis was performed. The quality of the evidence for each comparison was determined using the GRADE approach.

Main results

Seven small randomised controlled trials involving a total of 362 participants with chronic LBP were included. Two of the studies had a low risk of bias, meeting six or more of the 12 criteria used for assessing risk of bias. All studies were carried out in secondary care settings and most applied therapeutic ultrasound in addition to exercise therapy, at various intensities for six to 18 treatment sessions. There was moderate quality evidence that therapeutic ultrasound improves back-specific function (standardised mean difference (SMD) [95%CI] -0.45 [-0.84 to -0.05]) compared with placebo in the short term. There was low quality evidence that therapeutic ultrasound is no better than placebo for short-term pain improvement (mean difference (MD) [95%CI] -7.12 [-17.99 to 3.75]; zero to 100-point scale). There was low quality evidence that therapeutic ultrasound plus exercise is no better than exercise alone for short-term pain improvement (MD [95%CI] -2.16 [-4.66 to 0.34]; zero to 50-point scale), or functional disability (MD [95%CI] -0.41 [-3.14 to 2.32]; per cent). The studies comparing therapeutic ultrasound versus placebo or versus exercise alone did not report on overall satisfaction with treatment, or quality of life. There was low quality evidence that spinal manipulation reduces pain and functional disability more than ultrasound over the short to medium term. There is also very low quality evidence that there is no clear benefit on any outcome measure between electrical stimulation and therapeutic ultrasound; and that phonophoresis results in improved SF-36 scores compared to therapeutic ultrasound. None of the included studies reported on adverse events related to the application of therapeutic ultrasound.

Authors' conclusions

No high quality evidence was found to support the use of ultrasound for improving pain or quality of life in patients with non-specific chronic LBP. There is some evidence that therapeutic ultrasound has a small effect on improving low-back function in the short term, but this benefit is unlikely to be clinically important. Evidence from comparisons between other treatments and therapeutic ultrasound for chronic LBP were indeterminate and generally of low quality. Since there are few high quality randomised trials and the available trials are very small, future large trials with valid methodology are likely to have an important impact on our confidence in the estimate of effect and may change the estimate.

[Pain](#) 1999 Jun;81(3):257-71.

Ultrasound therapy for musculoskeletal disorders: a systematic review.

van der Windt DA¹, van der Heijden GJ, van den Berg SG, ter Riet G, de Winter AF, Bouter LM.

Author information**Abstract**

BACKGROUND: Ultrasound therapy is used frequently to reduce pain and related disability, mainly by physiotherapists. The objective of this review was to evaluate the effectiveness of ultrasound therapy in the treatment of musculoskeletal disorders.

METHODS: Published reports of randomized clinical trials investigating the effects of ultrasound therapy on pain, disability or range of motion were identified by a systematic search of MEDLINE, EMBASE and the Cochrane databases, supplemented with citation tracking. The quality of methods of all selected publications was assessed systematically by two independent and 'blinded' reviewers, using ten validity criteria. Data from the original publications were used to calculate the differences between groups for success rate, pain, disability and range of motion. Statistical pooling was performed if studies were homogeneous with respect to study populations, interventions, outcome measures and timing of follow-up.

RESULTS: 38 Studies were included in the review, evaluating the effects of ultrasound therapy for lateral epicondylitis (n = 6), shoulder pain (n = 7), degenerative rheumatic disorders (n = 10), ankle distortions (n = 4), temporomandibular pain or myofascial pain (n = 4) and a variety of other disorders (n = 7). In 11 out of 13 placebo-controlled trials with validity scores of at least five out of ten points, no evidence of clinically important or statistically significant results was found. Statistical pooling was only feasible for placebo-controlled trials on lateral epicondylitis, and produced a pooled estimate for the difference in success rate of 15% (95% confidence interval -8%-38%).

CONCLUSIONS: As yet, there seems to be little evidence to support the use of ultrasound therapy in the treatment of musculoskeletal disorders. The large majority of 13 randomized placebo-controlled trials with adequate methods did not support the existence of clinically important or statistically significant differences in favour of ultrasound therapy. Nevertheless, our findings for lateral epicondylitis may warrant further investigation.

PMID: 10431713



Emerging Therapies

Roy J. Film, PT, DPT, OCS, FAAOMPT

[RESEARCH REPORT]

ERIC GATTIE, PT, DPT¹ • JOSHUA A. CLELAND, PT, PhD² • SUZANNE SNODGRASS, PT, PhD³

The Effectiveness of Trigger Point Dry Needling for Musculoskeletal Conditions by Physical Therapists: A Systematic Review and Meta-analysis

Gattie E, Cleland JA, Snodgrass S. **The Effectiveness of Trigger Point Dry Needling for Musculoskeletal Conditions by Physical Therapists: A Systematic Review and Meta-analysis.** JOSP. 2017 Mar;47(3):133-149.

0 to 12-week follow-up - DN is more effective than no treatment, sham DN, and other treatments for reducing pain and improving pressure pain threshold for MSK pain (Very low to moderate-quality evidence)

Evidence of long-term benefit of DN is currently lacking

DN results in superior functional outcomes compared to no treatment or sham. (Low-quality evidence)

No difference in functional outcomes exists when compared to other PT treatments

Low-Level LASER Therapy



Cochrane review performed of 7 RCTs:

- 1 RCT found LLLT superior to sham at reducing disability in the short term
- 3 RCTs found LLLT + exercise no better than exercise alone at reducing pain or disability
- 2 RCTs found LLLT not to be more effective than exercise at reducing pain or disability in the short term

Evidence is unclear, but appears to suggest that it is no better than placebo for proposed indications

APTA: There is moderate evidence both for and against the use of low-level laser therapy for the management of acute ankle sprains.

(Recommendation based on conflicting evidence)

Yousefi-Nooraie R, Schonstein E, Heidari K, Rashidian A, Pennick V, Akbari-Kamrani M, Irani S, Shakiba B, Mortaz Hejri S, Jonaidi AR, Mortaz-Hedjri S. Low level laser therapy for nonspecific low-back pain. Cochrane Database of Systematic Reviews 2008, Issue 2. Art. No.: CD005107. DOI: 10.1002/14651858.CD005107.pub4.

Martin RL, Davenport T, Paulseth S, Wukich DK, Godges JJ. Ankle Stability and Movement Coordination Impairments: Ankle Ligament Sprains. Clinical Practice Guidelines Linked to the International Classification of Functioning, Disability, and Health from the Orthopaedic Section of the American Physical Therapy Association. J Orthop Sports Phys Ther, 2013;43(9):A1-A40.

**WE HAVE AN ONGOING PROBLEM WITH A
LACK OF STANDARDIZATION IN PT PRACTICE**

WHY?

**WE HAVE A RELATIVELY SUPERFICIAL UNDERSTANDING
OF EVIDENCE AND A LOW BAR FOR INCORPORATING
INTERVENTIONS INTO CLINICAL PRACTICE**

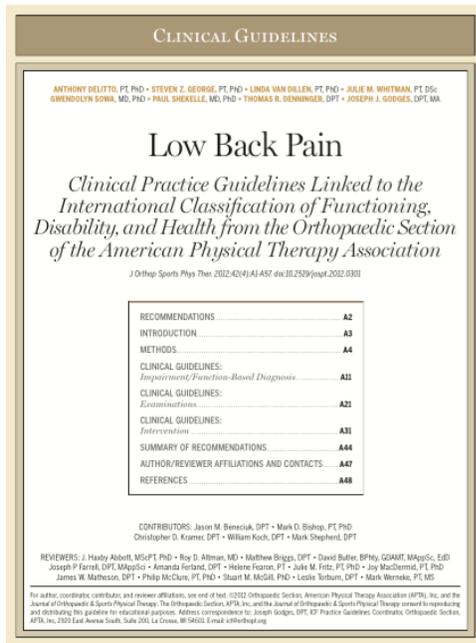


Validated



Providing Hope,
Creating Change

Evidence-Based Care
for People with Chronic Back Pain
with or without Sciatica



Outcome Measures: Similar to other CPGs

Grade V: Clinicians should consider utilizing thrust manipulative procedures to reduce pain and disability in patients with mobility deficits and **acute** LBP and back-related buttock or thigh pain.

Thrust and non-thrust mobilization procedures can also be used to improve spine and hip mobility and reduce pain and disability in patients with:

- **subacute** LBP Recommendations based on strong evidence
- **chronic** LBP
- back-related lower extremity pain

Education & Counseling: Clinicians should not increase the perceived threat or fear associated with LBP by:

- promoting extended bedrest
- providing in-depth, pathoanatomical explanations for the specific cause of the patient's LBP

Recommendations based on moderate evidence



CLINICAL GUIDELINES

Diagnosis and Treatment of Low Back Pain: A Joint Clinical Practice Guideline from the American College of Physicians and the American Pain Society

Roger Chou, MD; Amir Qaseem, MD, PhD, MHA; Vincenza Snow, MD; Donald Casey, MD, MPH, MBA; J. Thomas Cross Jr., MD, MPH; Paul Shekelle, MD, PhD; and Douglas K. Owens, MD, MS, for the Clinical Efficacy Assessment Subcommittee of the American College of Physicians and the American College of Physicians/American Pain Society Low Back Pain Guidelines Panel*

Strong recommendations based on moderate-quality evidence

- 1) Clinicians should conduct a focused history and physical examination, include assessment of psychosocial risk factors, which predict risk for chronic disabling back pain, to help place patients with LBP into 1 of 3 broad categories:

Non-specific

Potentially associated with radiculopathy or spinal stenosis

Potentially associated with another specific spinal cause

- 2) Clinicians should **NOT** routinely obtain imaging or other diagnostic tests in patients with nonspecific LBP.
- 3) Clinicians **SHOULD** perform diagnostic imaging and testing for patients with LBP:
 - when severe or progressive neurologic deficits are present, or
 - when serious underlying conditions are suspected

Diagnosis and Treatment of Low Back Pain: A Joint Clinical Practice Guideline from the American College of Physicians and the American Pain Society

Roger Chou, MD; Amir Qaseem, MD, PhD, MHA; Vincenza Snow, MD; Donald Casey, MD, MPH, MBA; J. Thomas Cross Jr., MD, MPH; Paul Shekelle, MD, PhD; and Douglas K. Owens, MD, MS, for the Clinical Efficacy Assessment Subcommittee of the American College of Physicians and the American College of Physicians/American Pain Society Low Back Pain Guidelines Panel*

Strong recommendations based on moderate-quality evidence

- 4) Clinicians should evaluate patients with persistent LBP and s/sx of radiculopathy or spinal stenosis with MRI or CT **only** if they are potential candidates for surgery or epidural steroid injection.
- 5) Clinicians should provide patients with evidence-based information regarding their expected course of LBP, advice to remain active, and effective self-care options.
- 6) For patients with LBP, clinicians should consider **medications with proven benefits** in conjunction with back care information and self-care (i.e. acetaminophen or NSAIDs)



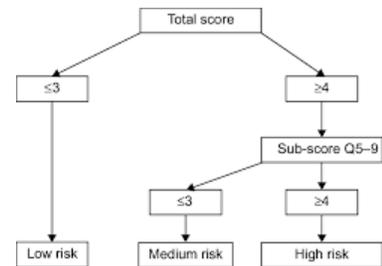
National Institute for Health and Care Excellence

Guidelines for Low Back Pain and Sciatica

Published November 2016

Risk assessment and risk stratification tools

Consider risk stratification such as the *STarT Back tool* for each new LBP episode



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Funded by Arthritis Research UK

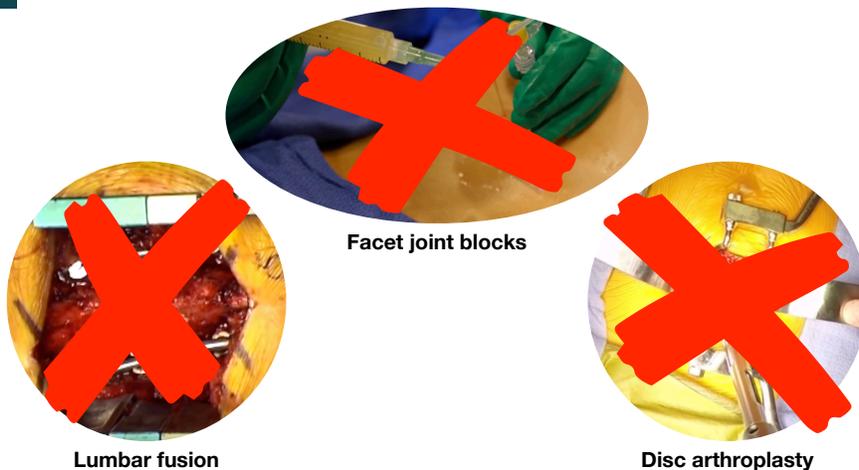


Imaging

Do NOT routinely offer imaging in a non-specialist setting
Explain that they may not need imaging if they are referred to a specialist
Consider imaging in specialist settings only if the result is likely to change management



National Institute for Health and Care Excellence
Invasive treatments for LBP and sciatica



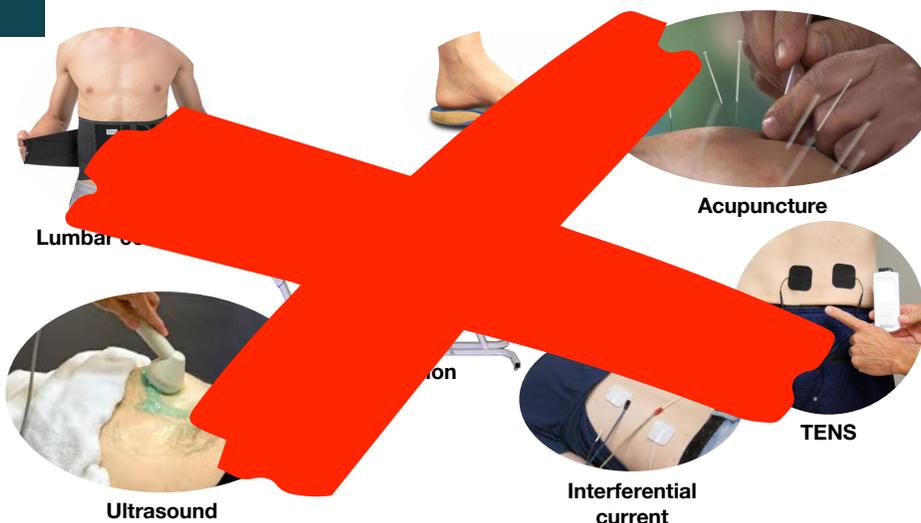
Lumbar fusion

Facet joint blocks

Disc arthroplasty



National Institute for Health and Care Excellence
Non-pharmacological interventions



Lumbar corset

Acupuncture

Ultrasound

Interferential current

TENS



NICE

National Institute for Health and Care Excellence

Non-pharmacological interventions

Self-management

Advice/information tailored to needs/capabilities

Include information on the nature of LBP and sciatica

Encouragement to continue normal activity

OMPT

But **only** as part of a treatment package that includes exercise

Exercise

Any type, if specific needs/capabilities/preferences are considered

Return-to-work programs

Promote/facilitate RTW or normal ADLs for people with LBP



NICE

National Institute for Health and Care Excellence

Non-pharmacological interventions

Psychological therapy

Use a cognitive behavioral approach but only as **part** of a treatment package that includes exercise, with or without OMPT

Combined physical and psychological programs

Consider a combined physical + psychological program when:

- they have significant psychosocial obstacles to recovery, **or**
- previous treatments have not been effective

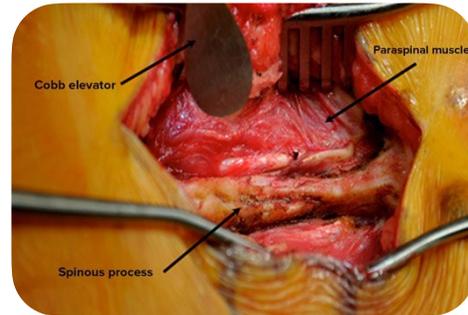
NICE

National Institute for Health and Care Excellence
Invasive treatments for LBP and sciatica

Epidurals



Spinal Decompression



Discectomy
Laminotomy
Laminectomy
Foraminotomy
Osteophyte removal

**Discarding
Behaviors**

Unnecessary imaging studies

Obtaining numeric pain ratings at every visit

Using the NPRS for chronic pain

Stigmatizing language

Advising to take meds prior to PT

Pathoanatomical explanations

Passive treatments for chronic pain

Stop scaring patients

New Behaviors

- Identify yellow & orange flags
- Use the VAS or verbal descriptors
- Explain that pain \neq damage
- Emphasize movement over pain
- Emphasize self-management
- Scales: Self-Efficacy, Readiness for Change
- Incorporate basic psychological principles
- Maintain a non-judgmental attitude
- Follow clinical practice guidelines
- Keep naloxone in the clinic
- Help people find hope



Official Position from the House of Delegates

NALOXONE AVAILABILITY WHERE PHYSICAL THERAPIST SERVICES ARE PROVIDED

The American Physical Therapy Association supports physical therapy services having naloxone accessible to be administered to reverse the effects of an opioid overdose occurring on or around locations where physical therapist services are provided, in accordance with recommendations from the Surgeon General of the United States.



Why isn't PT more broadly utilized?



Evidence supporting opioids is:

- strong in the short term
- poor in the long term

Moderate evidence that PT can be used as an:

- opioid-sparing approach
- pharmaceutical-sparing approach
- pre-surgical rehabilitation approach
- education decreases pain similarly to natural childbirth



Patients are 75%-90% less likely
to have **ANY** exposure to opioids
if the first provider seen for new onset back pain
is a physical therapist

– David Elton, Sr. VP of Clinical Programs, Optum Inc.
UnitedHealth Group's Opioid Task Force and Pain Management Work Group

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