https://www.shutterstock.com/image-photo/hand-holding-red-poppy-flowers-remembrance-1534456736

THE *OTHER* PANDEMIC

Dr Richard Wassall
Consultant in Anaesthetics and Chronic Pain Medicine
17/09/25

Death Toll

- Wars and Pandemics represent the two highest causes of death throughout history

- An EPIDEMIC is a disease that affects a large number of people within a community, population, or region
- A PANDEMIC is an epidemic that is spread over multiple countries or continents

https://www.sciencephoto.com/media/634017/view/us-army-influenza-ward-1918-pandemic

DEATHS IN WORLD WARS

WW1: Total of ~ 20 million people died

- Military: ~ 10 million
- Civilian: ~ 10 million

WW2: Total of ~ 60 million people died

- Military: ~ 15 million
- Civilian: ~ 45 million

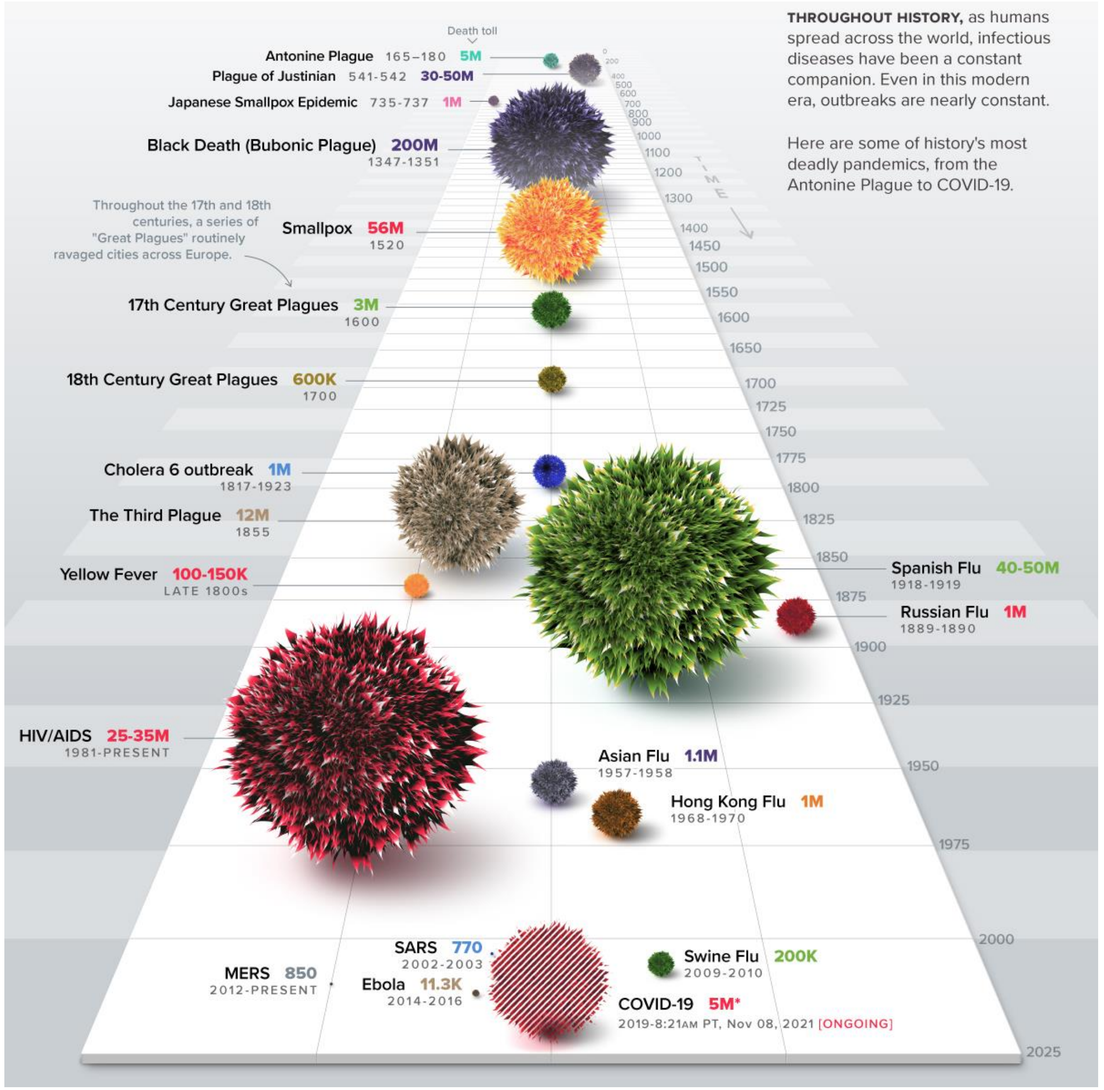
Total ~ 100 million deaths

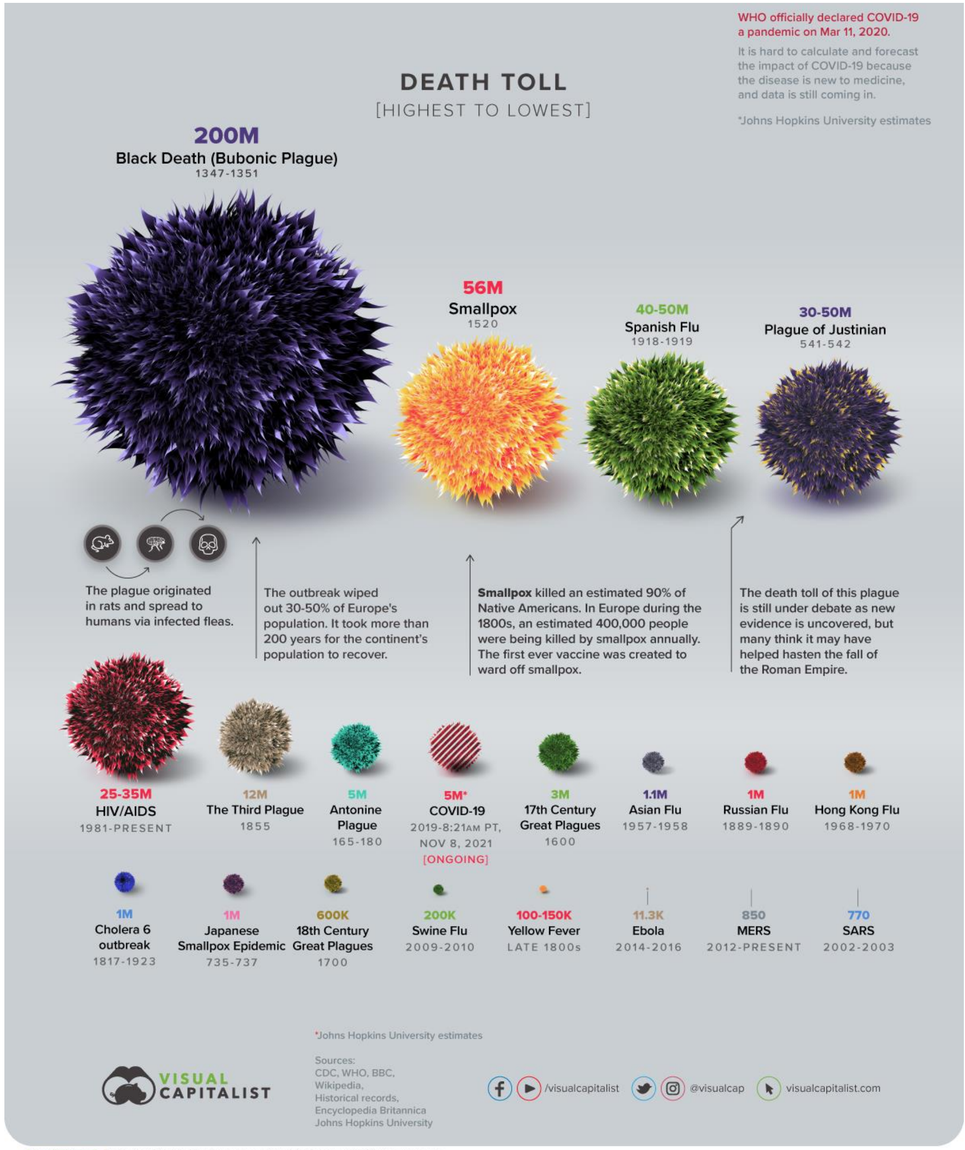
http://www.centre-robert-schuman.org/userfiles/files/REPERES%20–%20module%201-1-1%20-%20explanatory%20notes%20–%20World%20War%20I%20casualties%20–%20EN.pdf

https://www.nationalww2museum.org/students-teachers/student-resources/research-starters/research-starters-worldwide-deaths-world-war

https://www.bayeuxmuseum.com/en/memorial-museum-battle-of-normandy/historic-sites/normandy-ww2-cemeteries/

DEATHS FROM PANDEMICS



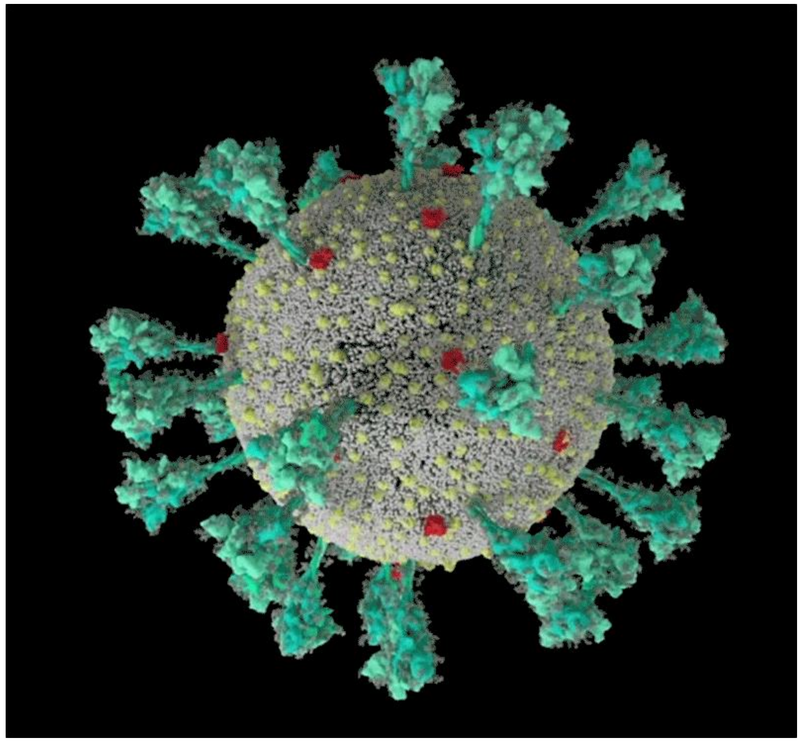


https://www.visualcapitalist.com/history-of-pandemics-deadliest/

Deaths From SARS-CoV-2

- Total of 779 million cases of infection
- Total deaths from COVID ~ 7.10 million

7% of the WWs



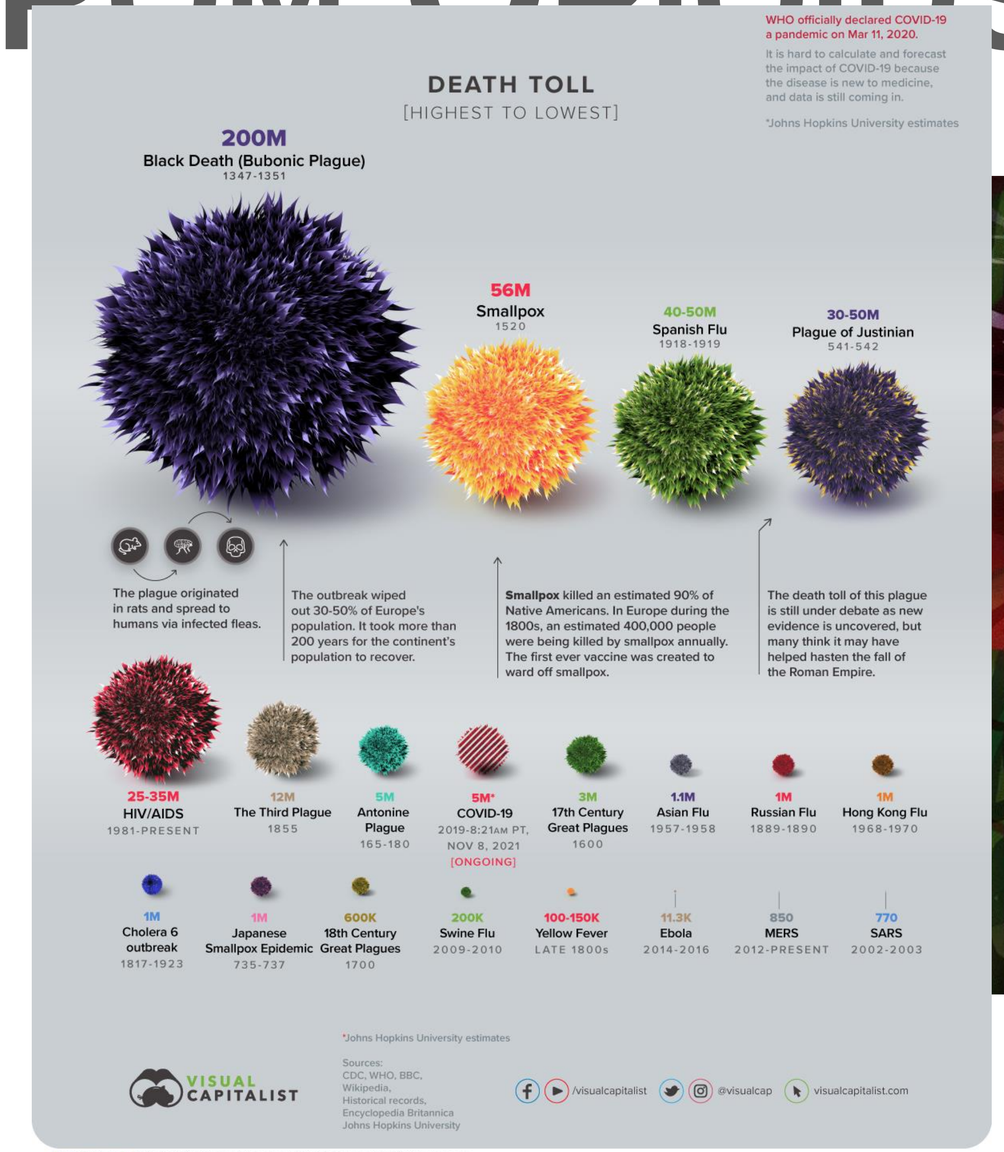
- Economic Costs:
  - 240% of GDP debt post WW2
  - Currently running at 96.1% GDP debt

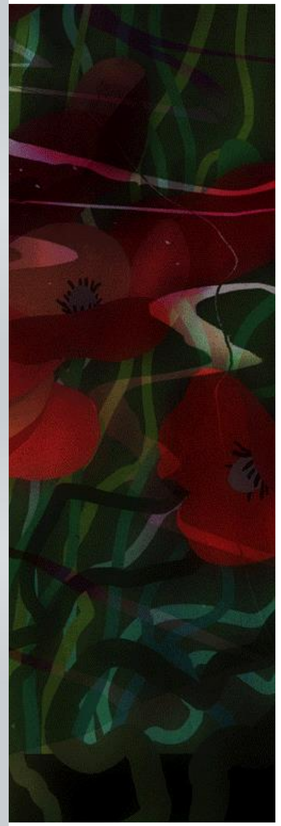
https://www.worldometers.info/coronavirus/
https://medicine.utah.edu/biochemistry/news/2021/07/bravoiwasalab.php
https://www.economicshelp.org/blog/2455/economics/uk-debt-post-war/

Deaths From Opioids

- Half a million a year
- Total deaths from opioids ~ 25 million

3.5X that of SARS-CoV-2





https://www.who.int/news-room/fact-sheets/detail/opioid-overdose
https://fpm.ac.uk/opioids-aware-clinical-use-opioids/current-uk-data-opioid-misuse
https://fivethirtyeight.com/features/what-science-says-to-do-if-your-loved-one-has-an-opioid-addiction/

Deaths From Opioids

- Half a million a year
- Total deaths from opioids ~ 25 million

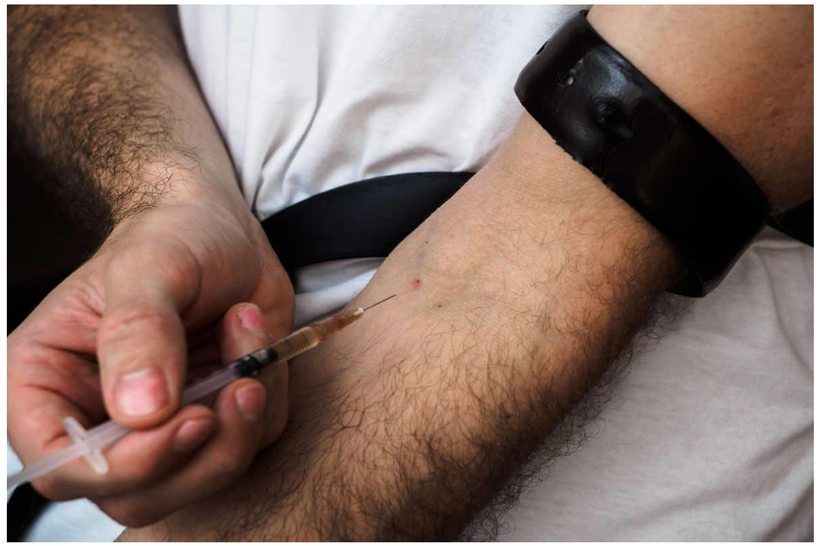
3.5X that of SARS-CoV-2

- Estimates from WHO: 62 million people using prescribed opioids
- Does not include illicit use, and people using non-prescribed opioids (UK ~5%)
- Increasing because of the pandemic

https://www.who.int/news-room/fact-sheets/detail/opioid-overdose
https://fpm.ac.uk/opioids-aware-clinical-use-opioids/current-uk-data-opioid-misuse
https://fivethirtyeight.com/features/what-science-says-to-do-if-your-loved-one-has-an-opioid-addiction/

Deaths From Opioids

- Under-represented?
- Under-reported?
- Deaths from
  - Drug Cartels
  - Murders
  - Crimes
  - Other Causes?

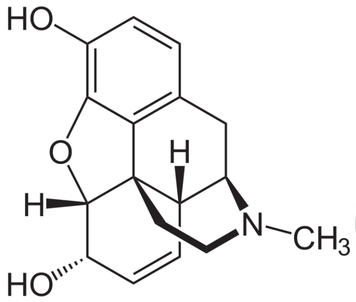


https://www.bbc.co.uk/news/world-latin-america-40480405
https://eu.the-dispatch.com/story/news/2021/05/13/deadly-consequences-drug-dealers-face-murder-charges-after-woman-dies-lexington-nc-overdose-laws/5060386001/
https://fountainhillsrecovery.com/blog/how-heroin-effects-body/
https://newsroom.ucla.edu/releases/prisons-databases-covid-19

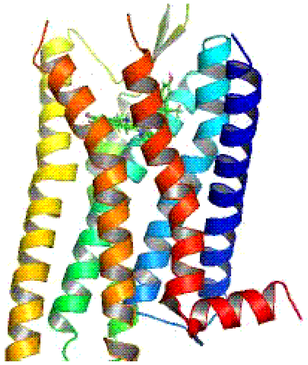
What Are Opioids?

- Red Poppies of Remembrance are “Flanders Poppies” aka *Papaver rhoeas*
  - Contains an alkaloid, Rhoeadine that is under investigation for morphine addiction
- **Opi*ates*** are natural alkaloids found in the poppy *Papaver somniferum,* aka Morphine and Codeine
  - Hydromorphone, Hydrocodone, Dihydrocodeine, Oxymorphol, Oxycodone, Oxymorphone, Metopon, Nostamorphine (Nostalgine), Skeuomorphine may be produced in trace amounts e.g. under the action of bacteria
- **Opi*oids*** are all the synthetic, semi-synthetic and naturally occurring agonists and antagonists that bind to opioid receptors

http://3cowsandacone.com/blog/2018/10/26/the-importance-of-remembrance-day
https://www.sarahraven.com/products/papaver-somniferum-dark-plum

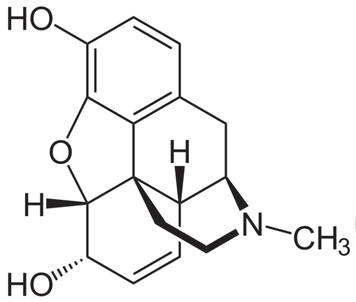


What Are Opioid Receptors?



- Oldest analgesics: used over 7000 years ago!
- Highly distributed group of G-protein coupled receptors (serpentine receptors) that have endogenous opioids including endorphins and enkephalins as their ligands
- Opioid receptors: μ, κ, δ and NOP receptors
- Named after the 1st letter of an association connected with the receptor; **m**orphine bound to Mu receptors, **k**etocyclazocine bound to kappa receptors, the delta receptor was first characterized in the mouse vas **d**eferens, and the **n op**ioid receptor binds **n**ociceptin, although the latter is considered 'opioid-related' rather than an opioid receptor, due to its distinct pharmacology

https://proteopedia.org/wiki/index.php/Image:Rec.gif
https://en.wikipedia.org/wiki/Morphine#/media/File:Morphin_-_Morphine.svg



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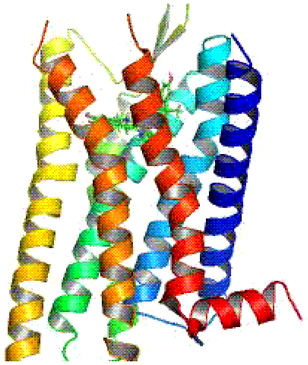

Receptor	Subtypes	G protein Subunits	Location	Function
Delta, DOR, OP1	δ1, δ2	$G_{\alpha i/o}$	Central Nervous System, Peripheral Sensory Neurons	Analgesia, Antidepression, Physical Dependence
Kappa, KOR, OP2	κ1, κ2, κ3	$G_{\alpha i/o}$	Central Nervous System, Peripheral Sensory Neurons	Analgesia, Depression, Hallucinogenesis, Miosis, Sedation
Mu, MOR, OP3	μ1	$G_{\alpha i/o}$	Central Nervous System, Peripheral Sensory Neurons, Peripheral Nervous Systems	Analgesia, Physical Dependence
	μ2	$G_{\alpha i/o}$		Mitosis, Euphoria, Respiratory Depression, Reduced GI Motility
	μ3	$G_{\alpha i/o}$		Vasodilation
Nociceptin, NOP, OP4	NOP	$G_{\alpha i/o}$	Central Nervous System	Anxiety, Depression, Appetite, Tolerance, Spinal Level Analgesia

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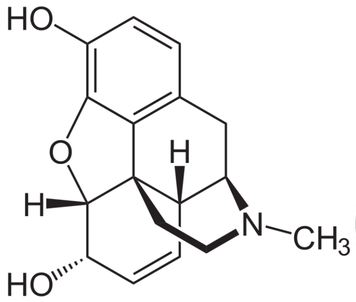

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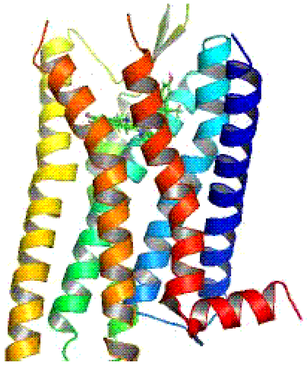

- Although pharmacological subtypes of each receptor exist, appear to be alternative splicing/signalling pathways rather than specific proteins
- Tendencies to create hetero-oligmers e.g. MOR1 isoform is responsible for morphine-induced analgesia, but MOR1D isoform, which is a heterodimer with the gastrin-releasing peptide G-protein coupled receptor, appears to be involved with morphine-induced itching
- High number of single nucleotide polymorphisms of the opioid receptor genes, probably explains the apparent clinical efficacy of different opioids observed between individuals

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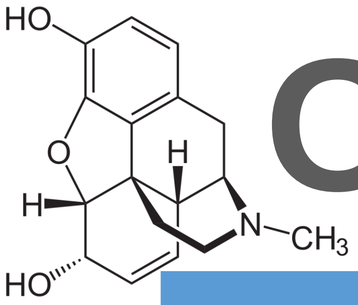
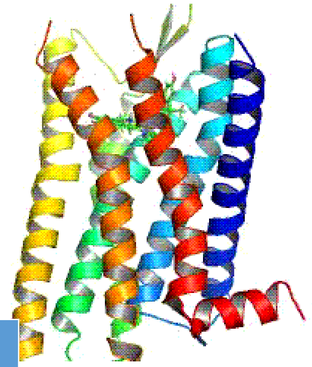


Opioid Equivalents



Drug	Dose	Approximate Oral Morphine Dose
Oral		
Codeine	30 mg	1.2-4.5 mg (3 mg)
Dihydrocodeine	30 mg	3 mg (3 mg)
Tramadol	50 mg	5-10 mg (5 mg)
Oxycodone	10 mg	15-20 mg (15 mg)
Pethidine	50 mg	5-6.25 mg
Tapentadol (Palexia SR)	100 mg	40 mg
Patches		
BuTrans 10 Patch	10 mcg/hr	12-28 mg /24 hours (24 mg)
Fentanyl 50 Patch	50 mcg/hr	110-224 mg /24 hours (120 mg)
Transtec 52.5 Patch	52.5 mcg/hr	94-145 mg /24 hours (120 mg)
Subcutaneous		
Diamorphine	10 mg	30 mg

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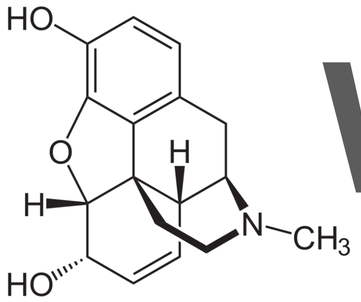
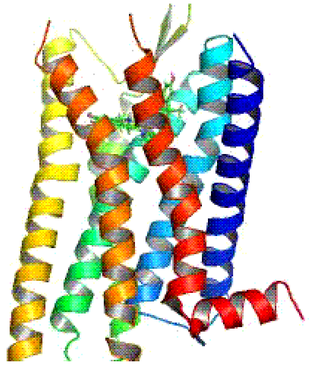
https://en.wikipedia.org/wiki/Morphine#/media/File:Morphin_-_Morphine.svg



WHY DO WE CARE?



FACULTY OF PAIN MEDICINE of the Royal College of Anaesthetists

- **Max dose of opioids in chronic pain is 120 mg of MST (oral morphine) equivalent**
- Anything above this suggests that opioids are not working and should be stopped
- *"The dose above which harms outweigh benefits is 120 mg oral morphine equivalent/24hours. Increasing opioid load above this dose is unlikely to yield further benefits but exposes the patient to increased harm" - Faculty of Pain Medicine*
- *https://fpm.ac.uk/opioids-aware-structured-approach-opioid-prescribing/tapering-and-stopping*

https://proteopedia.org/wiki/index.php/Image:Rec.gif
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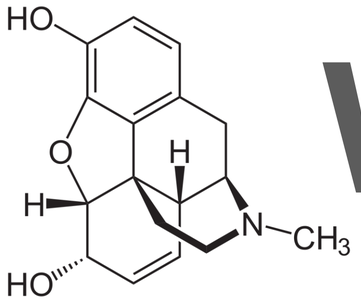
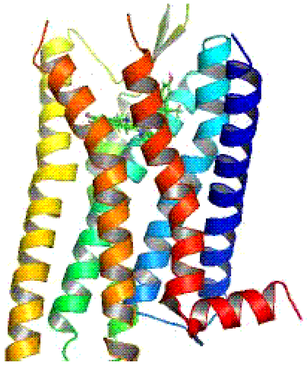


Why Do We Care?

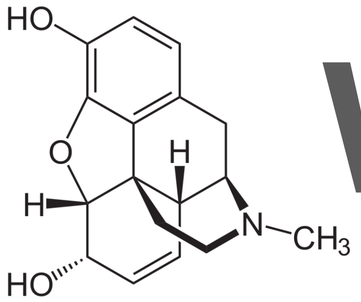
Side Effects of Opioids



- Acute use:
  - drowsiness
  - confusion
  - nausea
  - constipation
  - euphoria and analgesia
  - respiratory depression
- Chronic use:
  - fractures
  - breathing difficulties
  - hyperalgesia
  - immunosuppression
  - myocardial infarction
  - chronic constipation and bowel obstruction
  - tooth decay secondary to xerostomia
  - hormonal disruption (HPA effects)
  - depression/anxiety/personality changes
  - sexual dysfunction
  - obesity
  - increased risk of cancer/mets
  - withdrawal reactions
  - dependence, addiction, tolerance

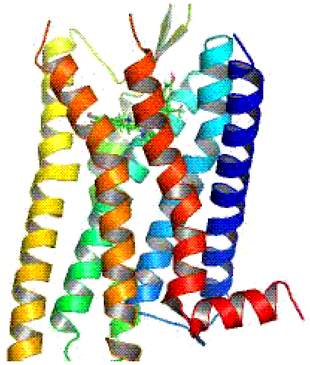
Etc.

https://proteopedia.org/wiki/index.php/Image:Rec.gif
https://en.wikipedia.org/wiki/Morphine#/media/File:Morphin_-_Morphine.svg



Why Do We Care?

Opioids in Chronic Pain



- Tolerance develops quickly
- Escalation happens quickly without thought
- Opioids stop working
- Opioid-induced hyperalgesia
- Hormonal Changes
- MR opioids prescribed for Acute Pain often get left on

Less Reliance on Drugs, More Reliance on the Body

Etc.

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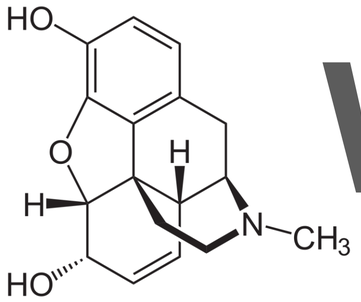
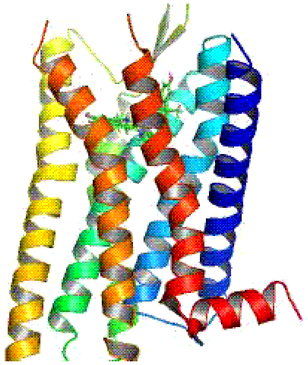
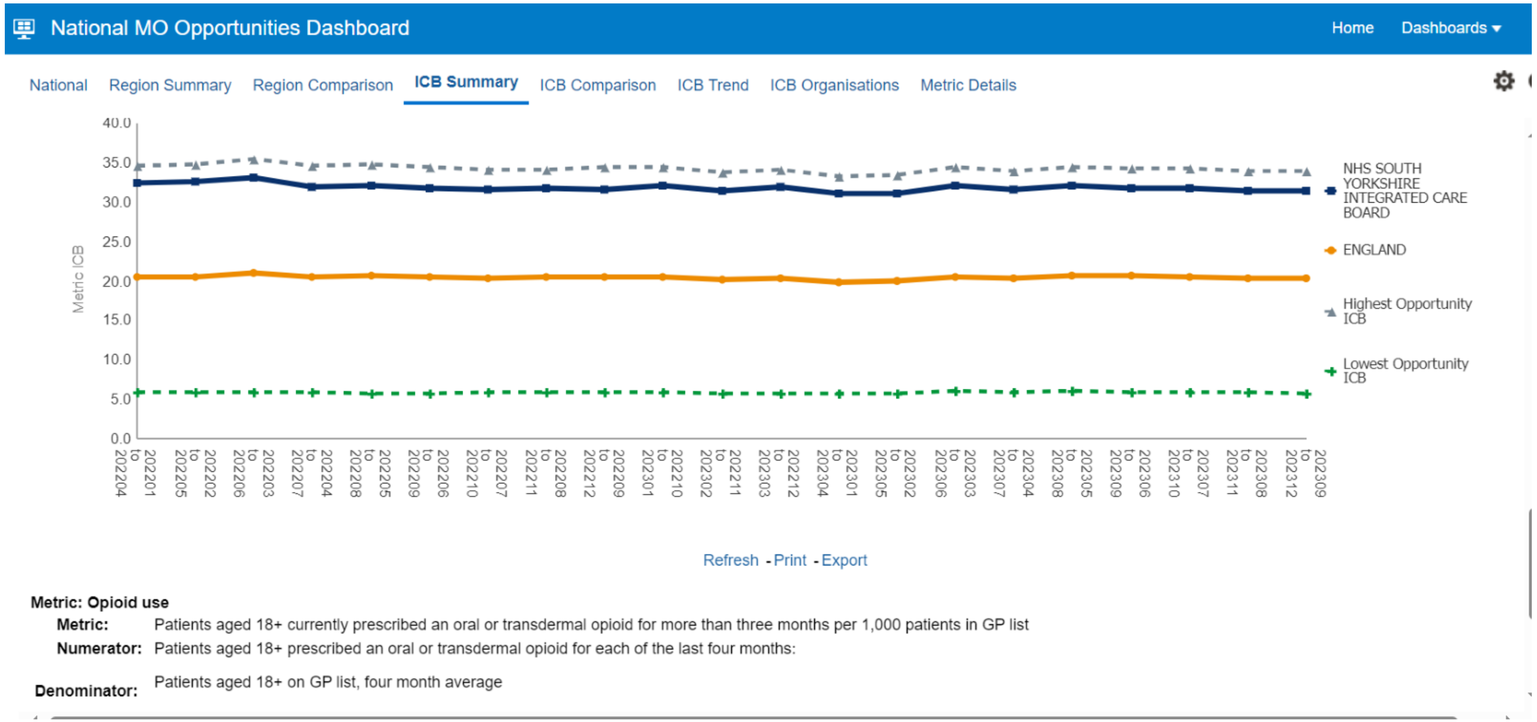
https://en.wikipedia.org/wiki/Morphine#/media/File:Morphin_-_Morphine.svg



WHY DO WE CARE?

WE'RE IN THE TOP 5!





- **South Yorkshire is in the top 5 Integrated Care Boards for Poor Opioid Stewardship**

- **Sheffield (and South Yorkshire) needs to reduce opioids by approximately 1/3 to bring us to national average opioid use**
- We are all going to be challenged to do this by the Integrated Care Board

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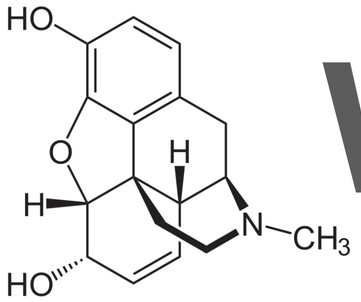

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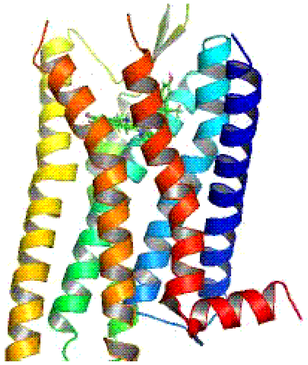
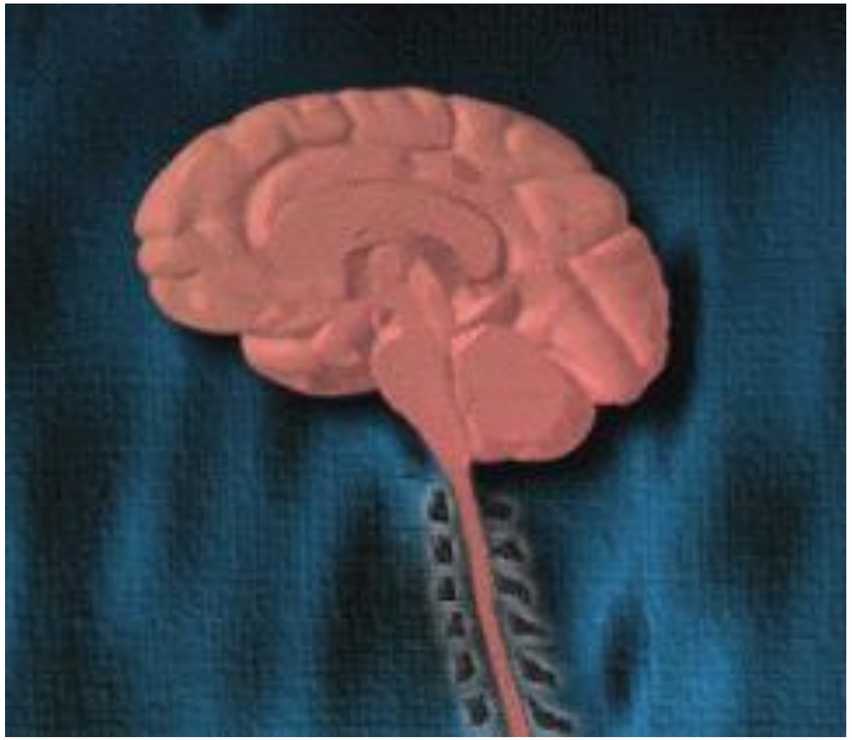


- Often see patients ***addicted*** to opioids on oral morphine equivalents above this
- Often see patients with ***tolerance*** to opioids on oral morphine equivalents above this
- Often see patients ***dependent*** on opioids on oral morphine equivalents above this



https://www.drugabuse.gov/publications/teaching-addiction-science/neurobiology-drug-addiction
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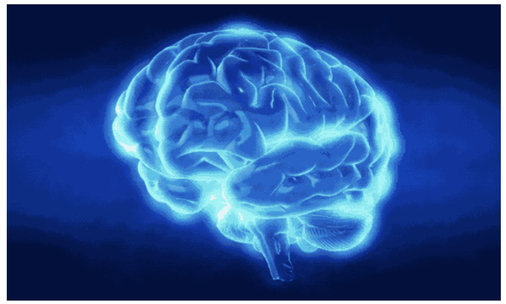
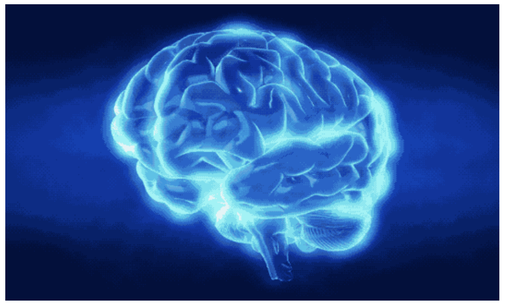
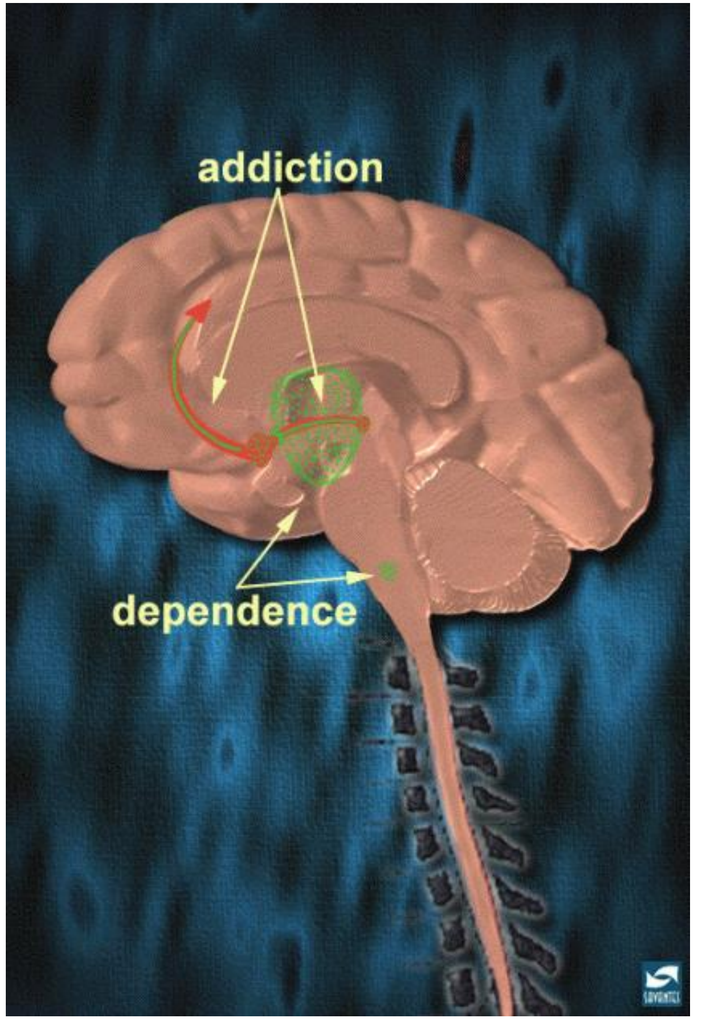


Addiction vs Dependence



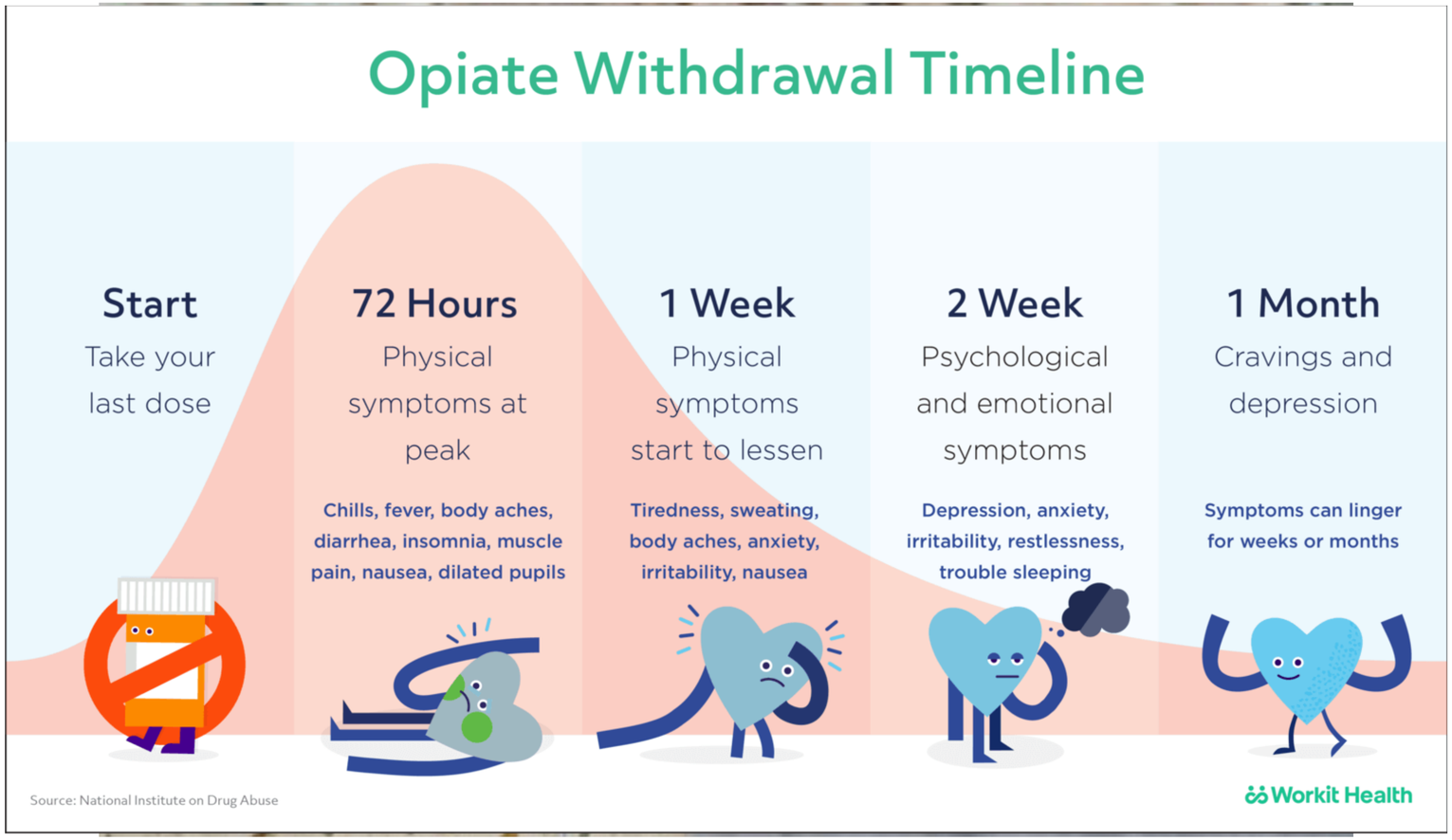
- Different areas of the brain are involved in addiction and dependence
- Possible to be dependent but not addicted e.g. using morphine chronically for terminal cancer pain (no compulsive behaviour)
- Possible to be addicted but not dependent e.g. addiction to pain killers after surgery



https://www.pbs.org/newshour/science/this-child-lost-a-sixth-of-his-brain-the-rest-learned-to-pick-up-the-slack
https://www.drugabuse.gov/publications/teaching-addiction-science/neurobiology-drug-addiction

WITHDRAWAL

- “Cold Turkey”
  - Runny nose, watery eyes and yawning
  - Restlessness or anxiety
  - Irritability or mood disturbances
  - Increased pain
  - Goose bumps, chills or sweating
  - Stomach cramps
  - Nausea, vomiting or diarrhoea
  - Muscle cramping or aches and joint pain
  - Tremors or muscle twitching
  - Tachycardia
  - Blood pressure changes
  - Trouble sleeping
  - Thoughts of suicide



https://cassioburycourt.com/2015/06/opiate-withdrawal-timeline-guide/
https://rightpathaddictioncenters.com/opiate-withdrawal/

FPM RECOMMENDATIONS

FACULTY OF PAIN MEDICINE of the Royal College of Anaesthetists

- There is an urgent need to:-
  - Screen and assess people on opioids particularly those over 3 months
  - Make clinical decisions about opioid reduction and optimal pain management where appropriate
  - Identify the best clinical approach and place (GP surgery, hospital clinic, community pharmacy) for this to occur
  - Ensure that there are resources to deal with those patients captured by any screening process
  - Employ a corporate approach to manage those who are non-compliant
- This should be proactively linked to interdisciplinary pain assessment and management to ensure best pain management through other strategies and treatments
- The required services need to be fully commissioned to support patients

FPM RECOMMENDATIONS

FACULTY OF PAIN MEDICINE of the Royal College of Anaesthetists

- I-WOTCH trial:
  - Trial looking at psychosocial intervention vs usual care
  - Reduction in 10% opioids per week to 30%, then 10%/week of the 30%
  - No side effects of withdrawal in either group, but did have higher rate of success in those undergoing a PMP
  - **Take Home:**
  - Psychosocial education is important in tapering
  - Can do quite a fast taper without issues - you can reassure patients

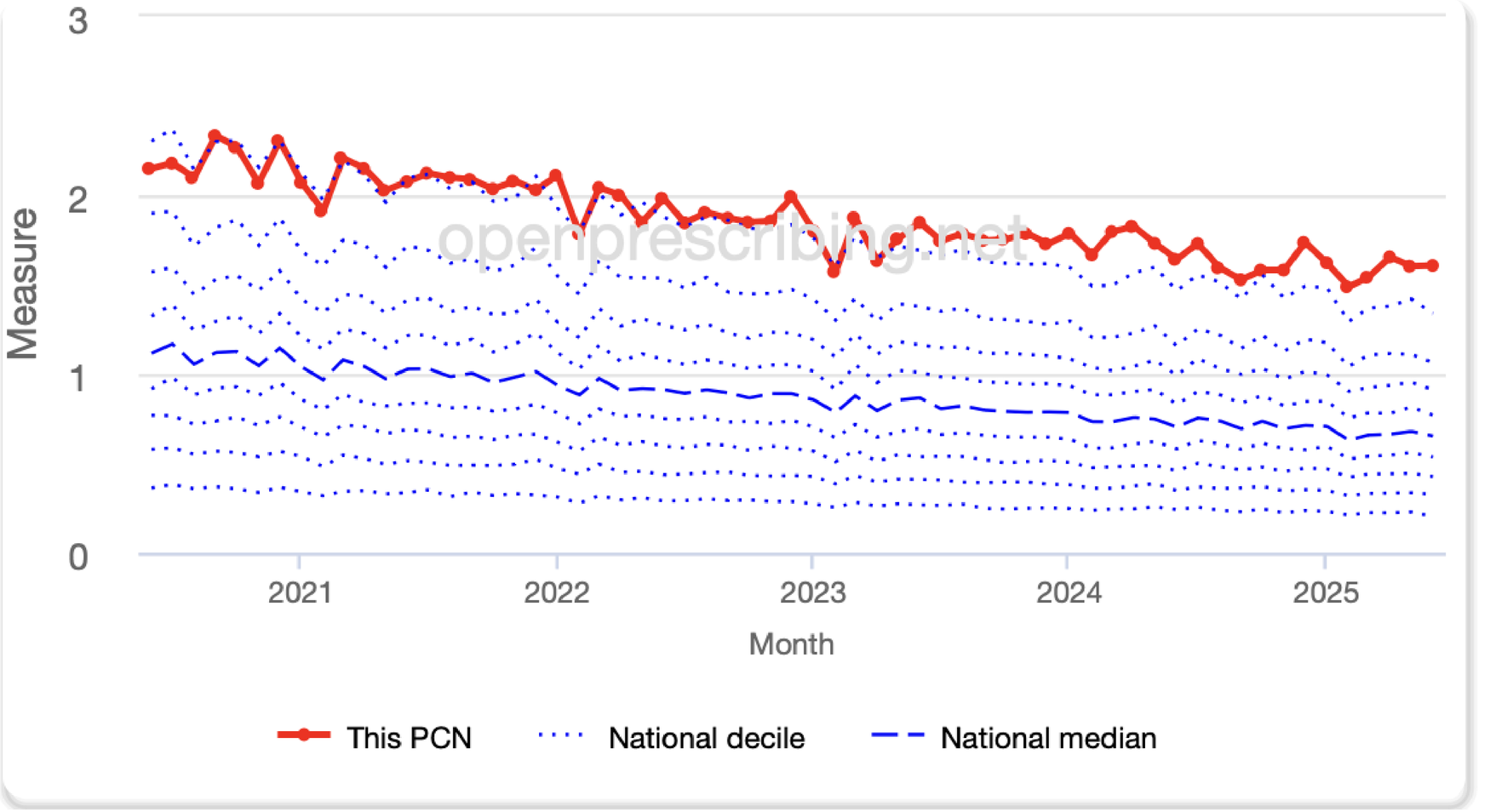
https://warwick.ac.uk/fac/sci/med/research/ctu/trials/iwotch/publications/

Opioids : PDA MO & Data

Chris Lawson – Programme Director Meds Opt
(Strategy & Delivery)
September 25 BEST

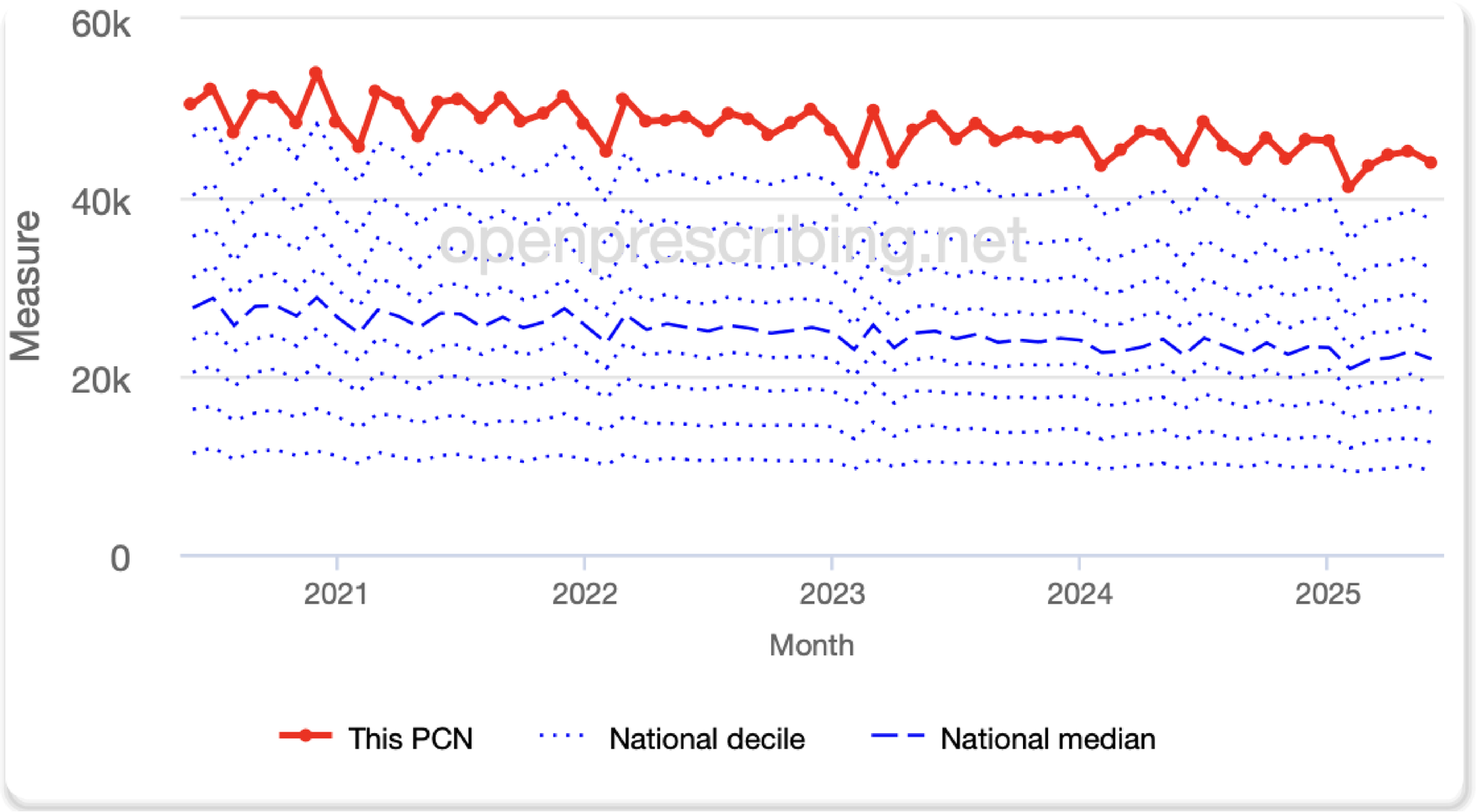
High dose opioids per 1000 patients

Opioids with likely daily dose of ≥120mg morphine equivalence per 1000 patients



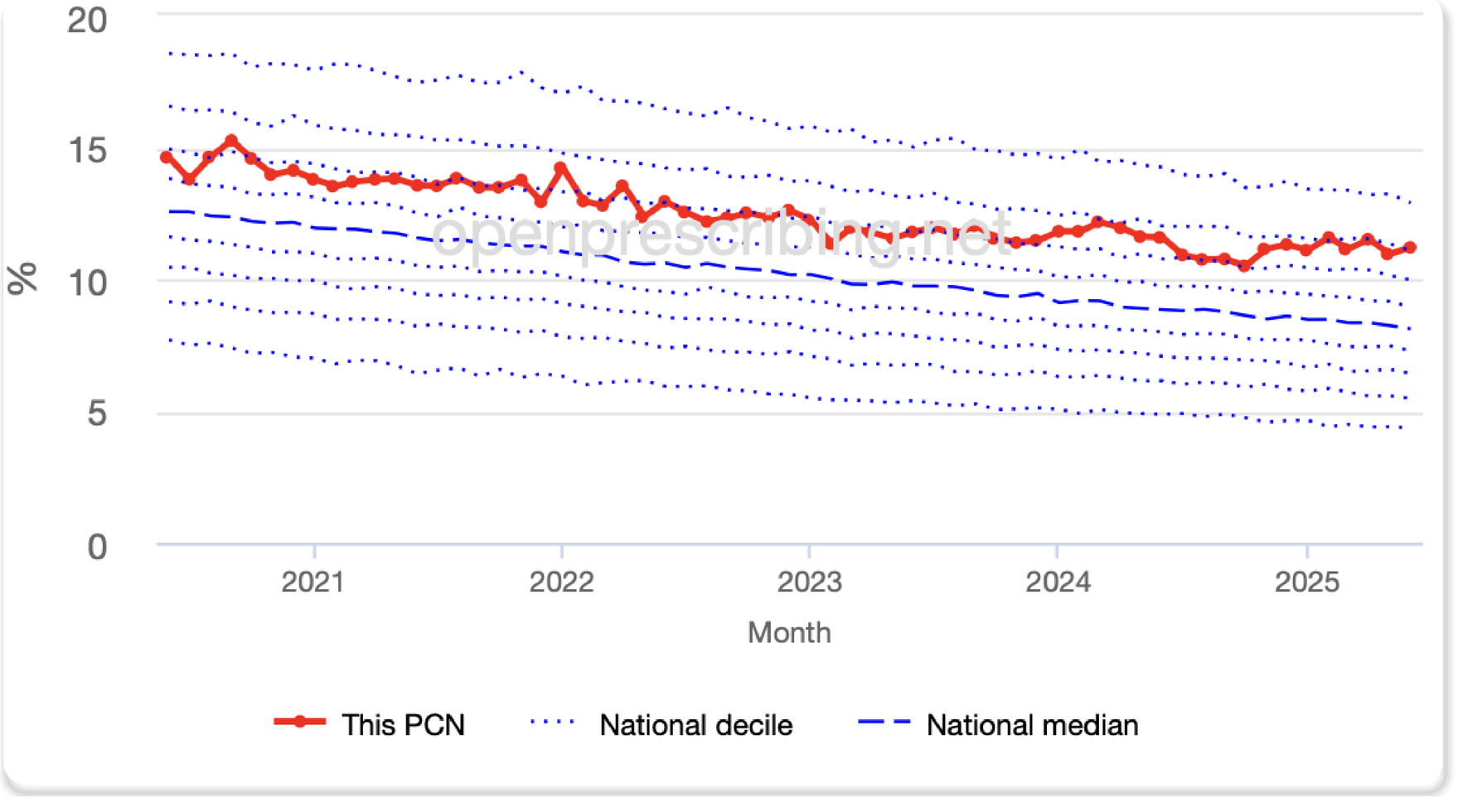
Prescribing of opioids (total oral morphine equivalence)

Total opioid prescribing (as oral morphine equivalence) per 1000 patients

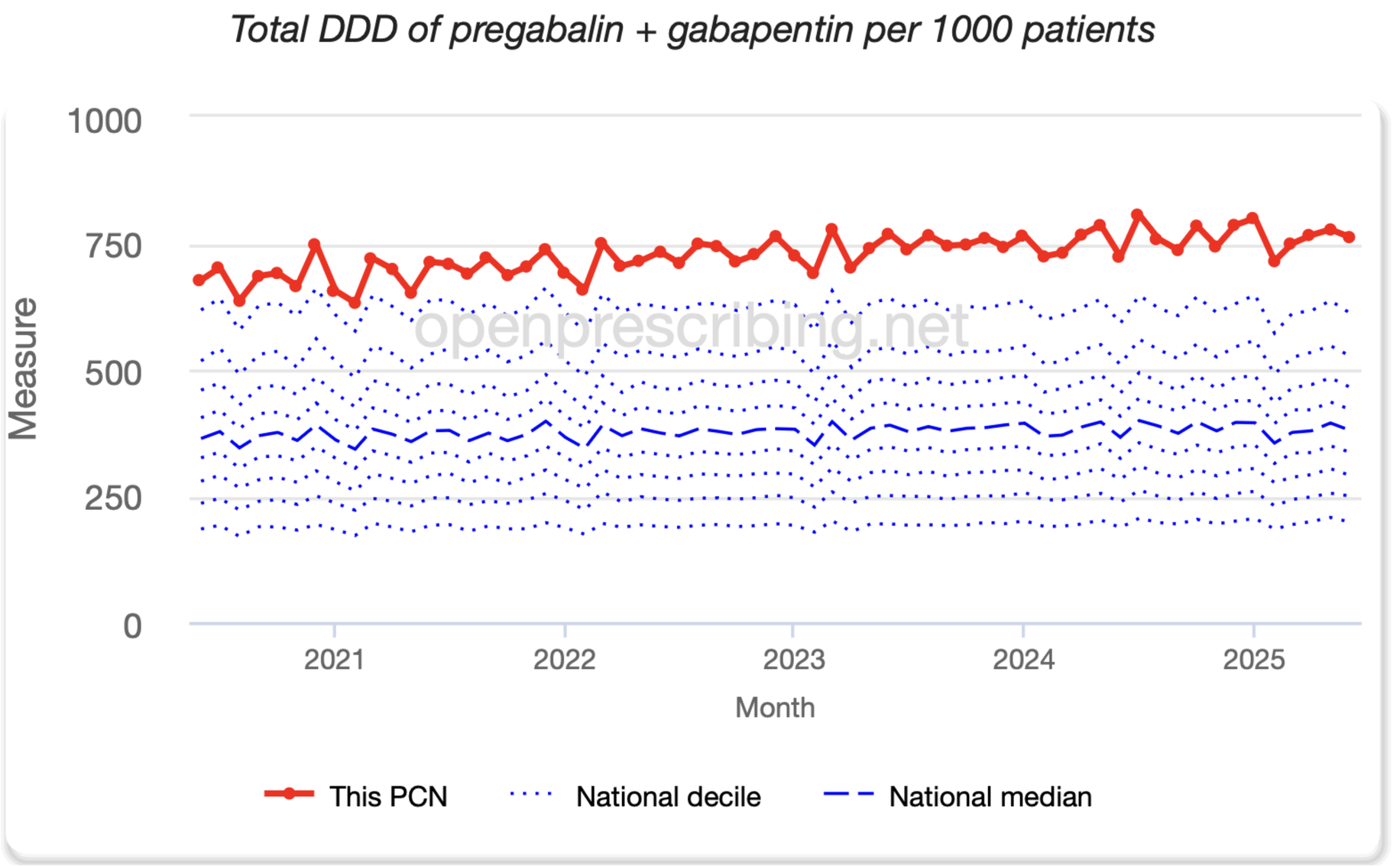


High dose opioid items as percentage regular opioids

Opioid items with likely daily dose of ≥120mg morphine equivalence compared with prescribing of all items of these opioids



Prescribing of gabapentin and pregabalin (DDD)



PRACTICE DELIVERY AGREEMENT AREAS 24/25 - OUTCOME

- **High dose opioid review for chronic pain**

Review as in previous years - collaborative area for opioid prescribing/national area. Expand to include other opioids inc >120mg/day Oral Morphine Equivalent. Aug – discussed with clinician, 8th Nov 24 monitor progress and 31st Jan 25 completion

ALL practices completed

- Pain management reviews - Review at least once every 6 months - Patients prescribed >120mg oral morphine equivalent, *excluding EOL*prescribed opioids <120mg/day of oral morphine or equivalent (including morphine sulphate 10mg/5ml oral solution and other liquid opioids) for chronic pain.* Patients who have ordered significant quantities of liquid opioids prioritised for review – small cohort identified. **ALL practices completed**
- **Co-codamol review – ALL practices completed**

PRACTICE DELIVERY AGREEMENT AREAS 25/26

a) Reduction in opioid prescribing in chronic pain

- The practice will reduce or maintain the proportion of patients prescribed one or more opioid medicines (excluding injectables and co-dydramol) for more than 3 months to either below the national baseline average (14.19 per 1000 patients) or a 5% reduction from the practice baseline (Oct to Dec 2025 or latest 3 months data available compared to January to March 2025).

b) Practice SOP

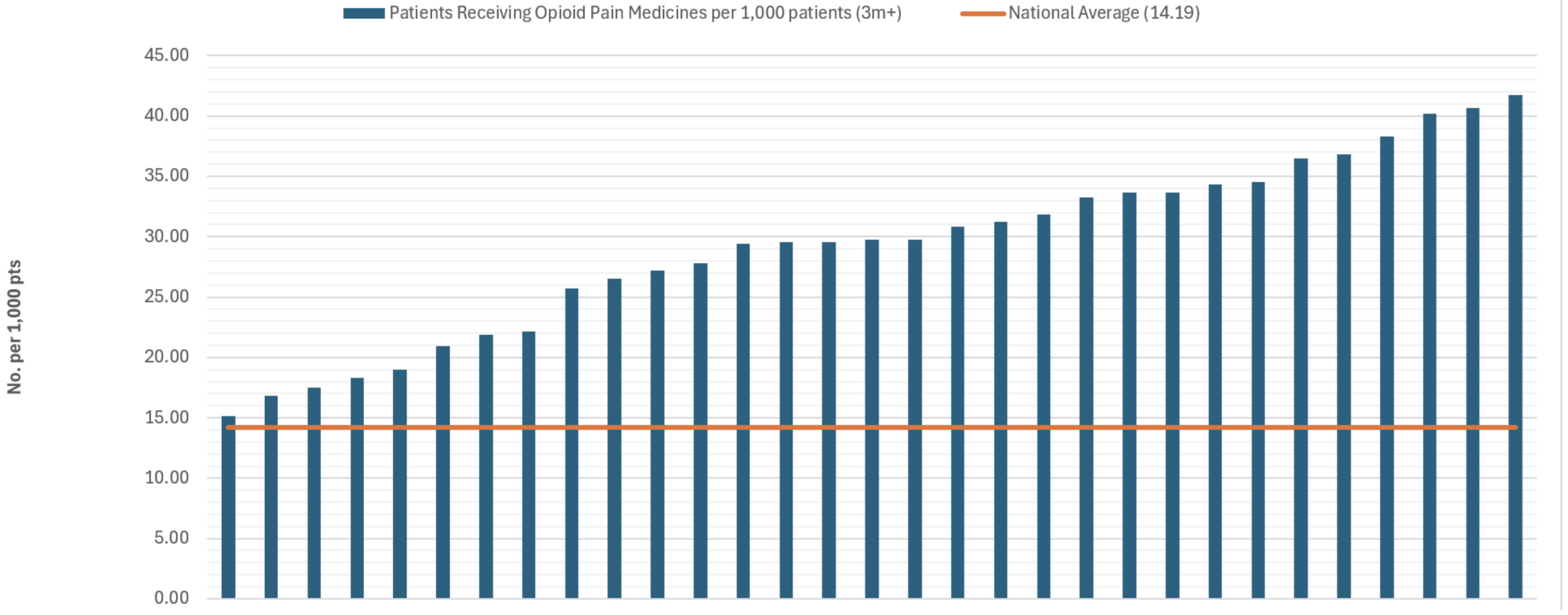
- The practice will ensure that they have an up-to-date SOP in place for initiating and reviewing opioids for non-cancer pain. A template SOP will be made available.

SOP to be emailed to syicb-barnsley.mosreporting@nhs.net by 31st March 2026.

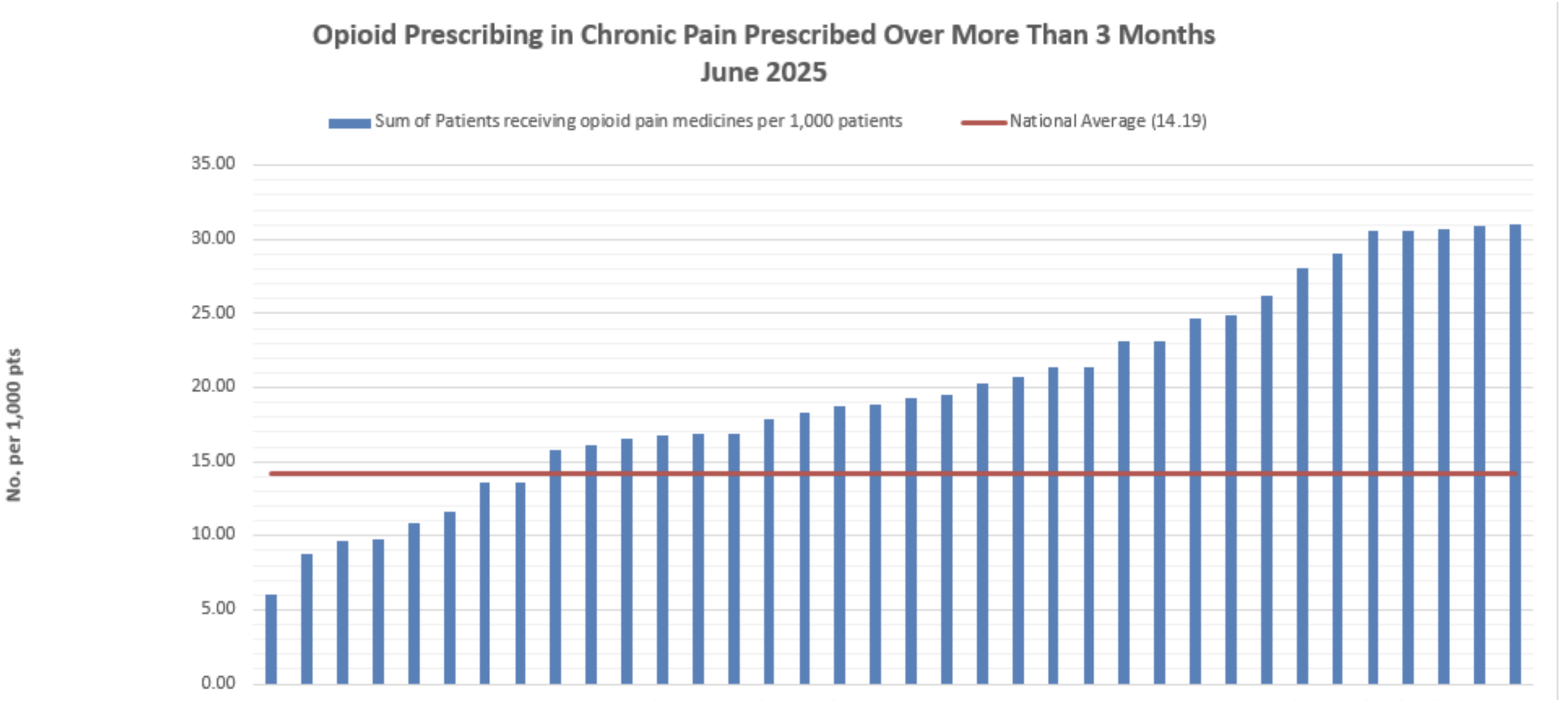
c) SYICB Opioid Safety Group actions

- The practice will undertake review or audit work around opioid prescribing as requested by the SYICB Opioid Safety Group to ensure that opioids are prescribed appropriately in line with local and national guidance.
- Audit will be based on template SOP

Opioid Prescribing in Chronic Pain Prescribed Over More Than 3 Months
March 2025



Opioid Prescribing in Chronic Pain Prescribed Over More Than 3 Months
June 2025



How Did We Help in Wales?

https://knowyourmeme.com/memes/uncle-sams-i-want-you-poster

Perioperative Opioids

GIG CYMRU NHS WALES
Bwrdd Iechyd Prifysgol Aneurin Bevan University Health Board

Aneurin Bevan University Health Board

Guidelines for Perioperative Pain Management in Patients on Long-Term Opioids

- Patients on long-term opioids:
  - Cancer patients
  - Chronic pain patients
  - Opioid replacement programs
  - Illicit drug use

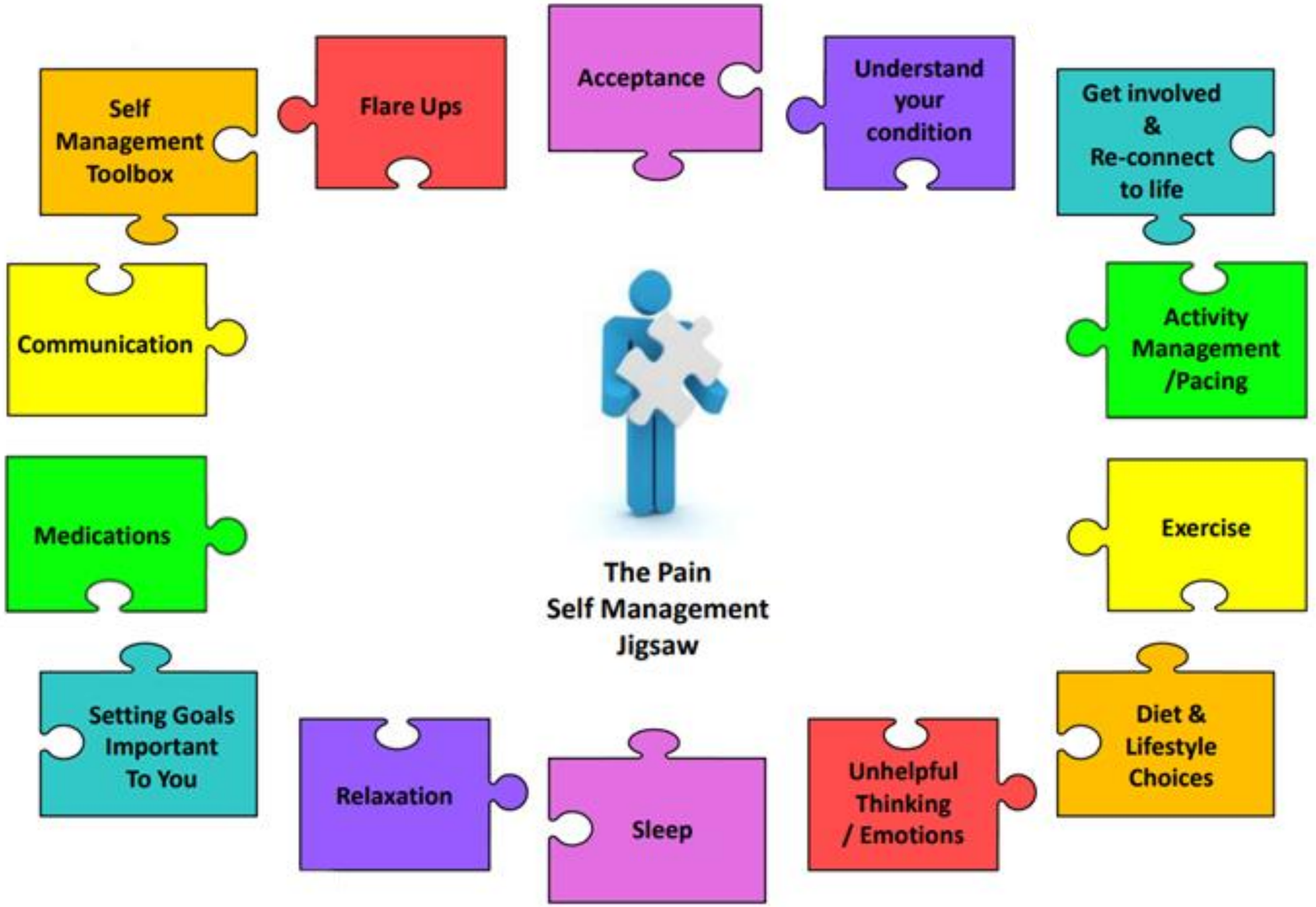
Perioperative Opioids

Grŵp Strategaeth Meddyginiaethau Cymru Gyfan
All Wales Medicines Strategy Group

All Wales Analgesic Stewardship Guidance

https://awttc.nhs.wales/files/guidelines-and-pils/all-wales-analgesic-stewardship-guidancepdf/

PERIOPERATIVE OPIOIDS



https://www.nhsfife.org/services/all-services/pain-management-service/

- **Search for "NHS FIFE PAIN MANAGEMENT"**

How Can YOU Help?

https://knowyourmeme.com/memes/uncle-sams-i-want-you-poster

Having the Conversation is Key

https://blog.amopportunities.org/2020/03/23/medical-terminology-vs-plain-language/

https://news.feinberg.northwestern.edu/2020/03/delivering-bad-news-patients-remember-these-conversations-forever/

https://www.123rf.com/photo_44775674_doctor-having-conversation-with-his-patient-and-holding-xray-in-medical-office.html

HAVING THE CONVERSATION IS KEY

"ASKING THE QUESTION"

- Barriers:
  - Patients are:
    - ***Frightened***
    - ***Dependent*** on their "opioid crutch" - ? Placebo ? Addiction
    - Concerned "left with nothing" - ***unable to cope***
  - Clinicians:
    - Lack of ***Time***
    - Lack of ***Awareness***
    - Lack of ***Empowerment***
    - Lack of ***Knowledge***

"HAVE YOU THOUGHT ABOUT REDUCING YOUR OPIOIDS?"

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https://www.beaucare.com/interiors-and-furniture/signage/vinyl-stickers/caution/no-smoking-sign-options-available

Having the Conversation is Key

- BUT WE ALREADY KNOW ALL THESE THINGS IN CHRONIC PAIN AND GP SERVICES!
  - Having the conversation is the start, next patients must want to do this.
  - Precontemplation (Not yet acknowledging that there is a problem behaviour that needs to be changed)
  - Contemplation (Acknowledging that there is a problem but not yet ready, sure of wanting, or lacks confidence to make a change)
  - Preparation/Determination (Getting ready to change)
  - Action/Willpower (Changing behaviour)
  - Maintenance (Maintaining the behaviour change)

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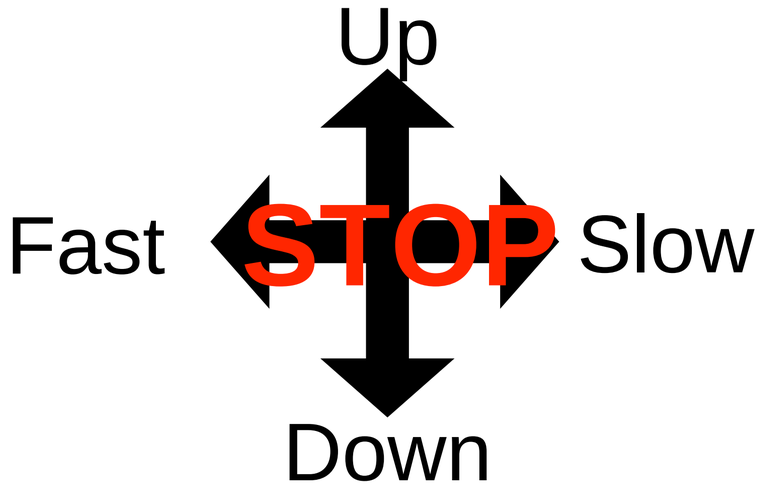
Having the Conversation is Key

- Setting Up Opioid Deprescribing Clinics
- “Medication Optimization” Clinics - but embed this into your daily practice
- Education, Prescribing, Signposting
- Importance of the Consultant/GP review if required - “the stethoscope effect”
- Negotiation is key - not one way deprescribing and not one way downwards titrations - dynamic processes with bespoke individualized plan
- Reduction Plans where possible



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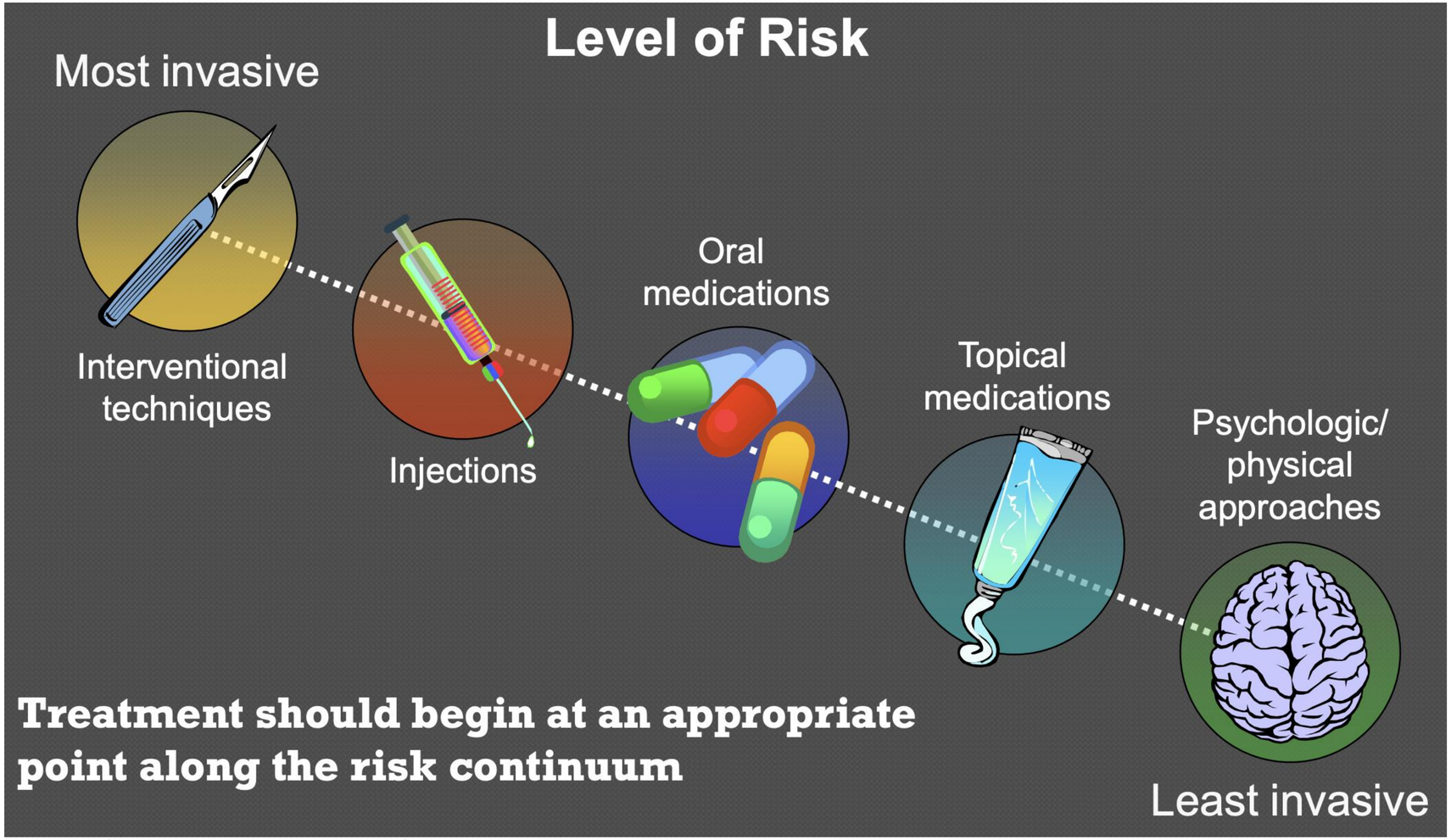
How Do We Do It? Chronic Pain Clinics



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How Do We Do It? Chronic Pain Clinics

- Tertiary Centre – Mainly MSK
- Other Chronic Pain: Orthopaedics, Rheumatology, Diabetic Neurology, Facial Pain, Neurology, Community Pain (Connect Health), Drugs and Addiction
- 4 Consultants, 5 Nurses, 2 Physios, 1 OT, 0.2 Psychiatrist, 0.8 Psychologist, 0.8 Support Worker + Admin Team – held at RHH/Graves Medical Centre
- 15 minutes, 30 minutes, 1 hour appointments
- MDT every Thursday
- PMP every Tuesday (9 week rotations – Graves Medical Centre)
- Range of Treatments

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How Do We Do It? Chronic Pain Clinics

- Referral

Triaged to Department – must have a diagnosis and no other treatment

Triaged by Department:

Chronic Pain: Triaged to MEDIC, NURSE, PHYSIO, COMMUNITY, REJECT/REDIRECT

Back Pain (Shoulder Pain) – Physio

Complex PMP/Fibro/Medication Review – Nurse

Previous Involvement – Nurse/Physio

Focal Injection/Complex/Complex Medication/Cancer – Medic

Straightforward – Connect Health

Nothing More – Reject/Redirect

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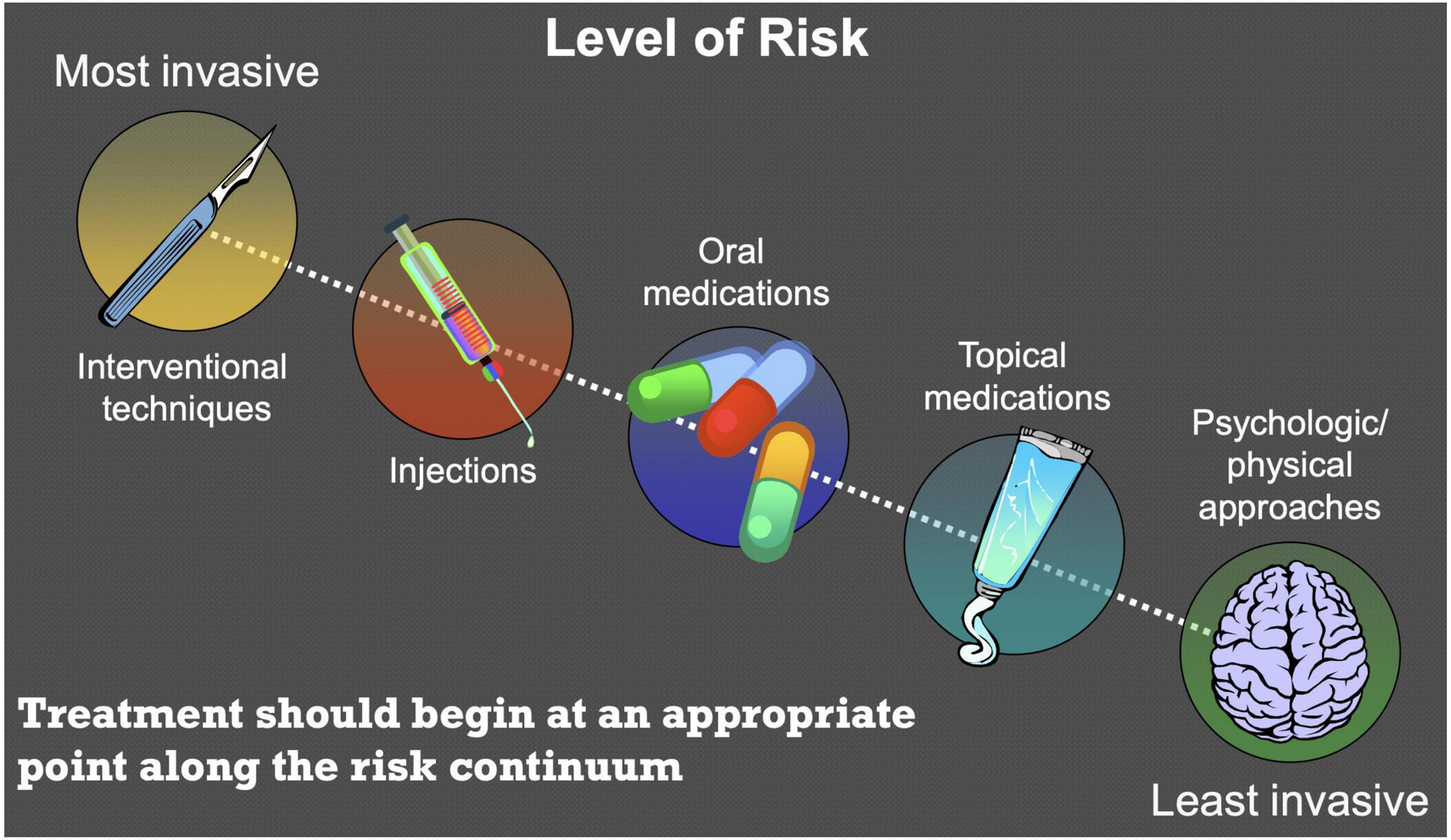
How Do We Do It? Chronic Pain Clinics



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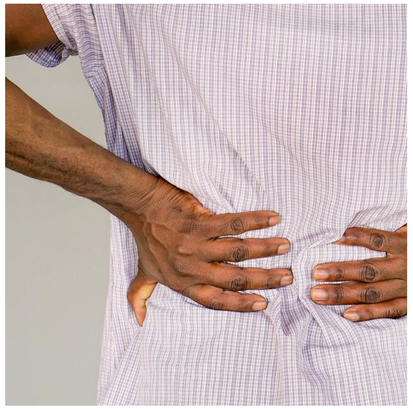

How Do I Do It?

1. *Listen*
2. *Empathy/Validation*
3. *Reassurance*
4. *Intervention*

1. *Injections*
2. *Pharmacology*
3. *Psychology*
4. *Physical Therapies*
5. *PMP*

- Acute Pain: Red flags = A+E/Urgent Referral, no red flags = give Paracetamol, NSAID (ensure after food/with PPI if over 55), Physio, Lifestyle advice, Tai Chi, Magnesium, Social Prescribing
- If really stuck: low dose opioid for no more than 12 weeks: explain that they stop working after this time
- **NO MR OPIOIDS**
- Chronic Pain: Red flags = A+E/Urgent Referral, no red flags = the same +/- antidepressant
- If really stuck: opioid IR in lowest dose whilst awaiting physio/OT assessment
- MR opioids should only be prescribed by a GP with specialist interest in pain/suitable specialist, or as part of opioid reduction regime

Create Self-Reliance, Not Reliance on Drugs

https://www.nccih.nih.gov/health/low-back-pain-and-complementary-health-approaches-what-you-need-to-know

What Can You Do?

- Listen to the person in front of you: they will usually be telling you the answer
- There may never be a found reason for the pain (“cause and cure” do not apply in chronic pain)
- Take time to understand myofascial pain syndromes - iliopsoas syndrome, trapezius syndrome, piriformis syndrome – these will not show up on scans
- NO MR OPIOIDS
- Consider Mindfulness/CBT, Oral Magnesium, Tonic Water, Tai Chi, Acupuncture, TENS, Graded Exercise for **any** pain
- Depression? Consider an antidepressant.
- Don’t be afraid to be creative WITH the patient (be bespoke!)
- Don’t be afraid to ask for help/2nd opinion (you are never alone!)

https://pcar.org/blog/what-can-you-do-end-sexual-violence

What Can We Do?

- Delivering a package of incentives to help galvanize awareness
- Opioid Tapering Plans
- Patient Leaflets
- Videos
- Education
- QI ideas
- Sharing Best Practice
- Link Up Services

NHS
South Yorkshire
Integrated Care Board

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What Can We Do?

NHS South Yorkshire Integrated Care Board

Opioid Prescribing Resource in

Chronic Non-Cancer Pain - Including Tapering Advice

This resource has been developed to aid primary care clinicians when reviewing opioid prescribing for non-cancer pain in adults; and provide guidance on how opioid tapering can be carried out safely taking into consideration national guidance.[1]

NHS South Yorkshire ICB is the 4th highest ICB in England (and 54% above the England average) for adult patients currently prescribed an oral or transdermal opioid for greater than 3 months per 1,000 patients (data via Opioid Dashboard NHSBSA Nov 2023 to Feb 2024).[2]

Contents

Integrated Care Board

Example of Morphine Tapering Plan

Agreed dose reduction interval: weekly, fortnightly, monthly (it is recommended to aim for a fortnightly dose reduction, but this can be slower or faster depending on patient factors and choice).

- This is a suggested 'slow' tapering plan. Some patients may tolerate or prefer a larger dose reduction at each change.
- Enter the table at the appropriate dose level.
- Zomorph® MR capsules are the preferred brand across South Yorkshire ICB and are available in the following strengths: 10 mg, 30 mg, 60 mg, and 100 mg. Doses should be at regular 12 hourly intervals.
- Prescriptions should state the brand. Refer to local formulary.

Change (e.g., minimum weekly, fortnightly or monthly)	Morning morphine MR dose	Evening morphine MR dose	Total morphine dose/24 hours	Reduction in mg of the total daily dose of morphine at each change
1	190 mg	190 mg	380 mg	Reduce the total daily dose by 20 mg at each change.
2	180 mg	180 mg	360 mg	
3	170 mg	170 mg	340 mg	
4	160 mg	160 mg	320 mg	
5	150 mg	150 mg	300 mg	
6	140 mg	140 mg	280 mg	
7	130 mg	130 mg	260 mg	
8	120 mg	120 mg	240 mg	
9	110 mg	110 mg	220 mg	
10	100 mg	100 mg	200 mg	
11	90 mg	100 mg	190 mg	Reduce the total daily dose by 10 mg at each change.
12	90 mg	90 mg	180 mg	
13	80 mg	90 mg	170 mg	
14	80 mg	80 mg	160 mg	
15	70 mg	80 mg	150 mg	
16	70 mg	70 mg	140 mg	
17	60 mg	70 mg	130 mg	

https://pcar.org/blog/what-can-you-do-end-sexual-violence

What Can We Do?

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NHS
South Yorkshire
Integrated Care Board

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WHAT CAN WE DO?

- Don’t start people on opioids unless there is no other choice: consider alternatives
  - Never prescribe Modified Release for Acute Pain
    - (MR opioids should be reserved for those on a weaning program, and should only be prescribed by a specialist/those with an interest in pain and should be regularly reviewed)
  - Use the smallest amount for the shortest time
    - **If it doesn’t work, get rid of it**
    - **Teach people to rely on their bodies, not on the drugs**

https://pcar.org/blog/what-can-you-do-end-sexual-violence

What Can We Do?

Chronic primary pain (ICD-11 includes fibromyalgia, chronic primary headache and orofacial pain, chronic primary visceral pain, and chronic primary musculoskeletal pain) (NG193)	**Do not initiate paracetamol, opioids, NSAIDs**, benzodiazepines and gabapentinoids* to manage chronic primary pain (for full list of medicines see NG193). *Unless gabapentinoid is offered as part of a clinical trial for complex regional pain syndrome. Consider an antidepressant, either amitriptyline, citalopram, duloxetine, fluoxetine, paroxetine, or sertraline after a full discussion of the benefits and harms. See NICE visual summary
Low back pain (NG59)	**Consider weak opioids (with or without paracetamol) for managing acute low back pain only if an NSAID is contraindicated, not tolerated, or has been ineffective.** **Do not routinely offer opioids for managing acute low back pain.** **Do not offer opioids for managing chronic low back pain**. Do not offer paracetamol alone for managing low back pain. Do not offer paracetamol, gabapentinoids, antiepileptics or selective serotonin reuptake inhibitors, serotonin–norepinephrine reuptake inhibitors or tricyclic antidepressants for managing low back pain.
Sciatica (NG59)	Do not offer gabapentinoids, other antiepileptics, oral corticosteroids or benzodiazepines for managing sciatica as there is no overall evidence of benefit and there is evidence of harm. **Do not offer opioids for managing chronic sciatica**.
Osteoarthritis (NG226)	**Do not routinely offer paracetamol or weak opioids** unless: •they are only used infrequently for short-term pain relief and •all other pharmacological treatments are contraindicated, not tolerated or ineffective. Do not offer strong opioids to people to manage osteoarthritis. Explain the risks of strong opioids outweigh the benefits.
Headaches (CG150)	**Do not offer opioids** for the acute treatment of tension-type headache or for the acute treatment of migraine or cluster headache.
Neuropathic pain (CG173)	**Do not use morphine or tramadol unless recommended by a specialist.** **Exception: tramadol may be used only if acute rescue therapy is needed**. Offer a choice of amitriptyline, duloxetine, gabapentin or pregabalin as initial treatment for neuropathic pain (except trigeminal neuralgia – use carbamazepine).

https://pcar.org/blog/what-can-you-do-end-sexual-violence

What Can We Do?
(Alternatives to Opioids)

- Listen
- Empathy
- Validation
- Intervention

"What is the <u>REAL</u> Worry?"

- Consider holistic techniques to distract from pain and life stressors to improve pain. These may include:
  - Mindfulness
  - Relaxation
  - CBT and other Psychological Support
  - Tai Chi
  - Exercise
  - Physiotherapy
  - OTC Magnesium and Palmitoylethanolamide
  - Pacing
  - Acupuncture

Can you Reassure?
If not, then phone a friend

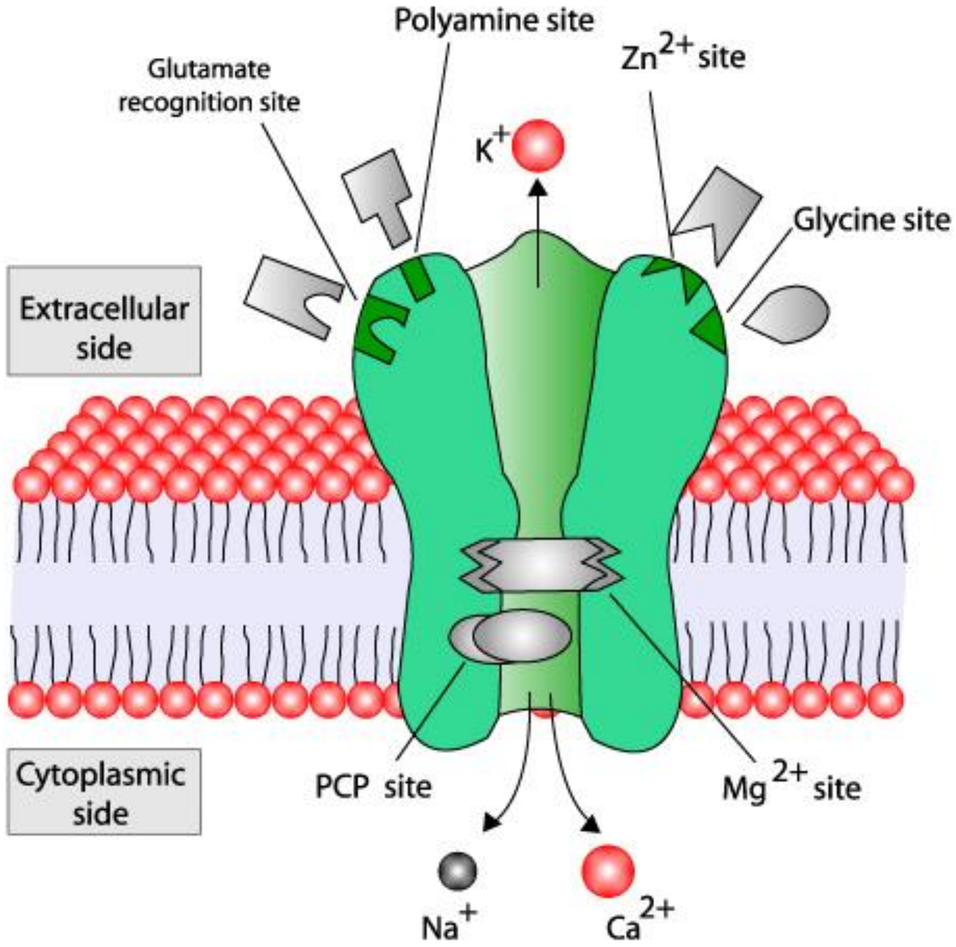
"Do More Of What You Love"

https://blog.amopportunities.org/2020/03/23/medical-terminology-vs-plain-language/

https://pcar.org/blog/what-can-you-do-end-sexual-violence

What Can We Do?

How Does Magnesium Work?



- Anti-inflammatory
- Muscle relaxant
- Lines Stomach
- Smooth Muscle (Vasodilator/Bronchodilator)
- Calcium Antagonist
- Anti-arrhythmic
- Helps Sleep
- Promotes Energy Release
- Laxative

Etc.

https://humanphysiology.academy/Neurosciences%202015/Chapter%201/P.1.3p%20Glutamatergic%20Transmission.html

https://pcar.org/blog/what-can-you-do-end-sexual-violence

HELP AND RESOURCES

- Online
  - ***Opioids Aware*** Faculty of Pain Medicine: https://www.fpm.ac.uk/opioids-aware-sitemap
  - ***PainTrainer:*** https://www.paintrainer.org/login-to-paintrainer/
  - ***Flippin' Pain***: https://www.flippinpain.co.uk

painTRAINER

FLIPPIN' PAIN®

Engage | Educate | Empower

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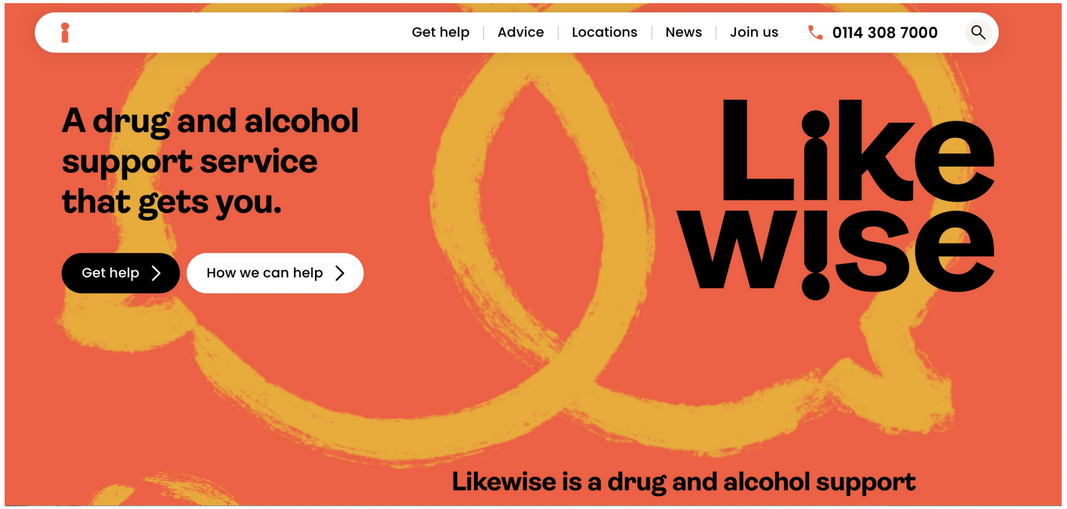
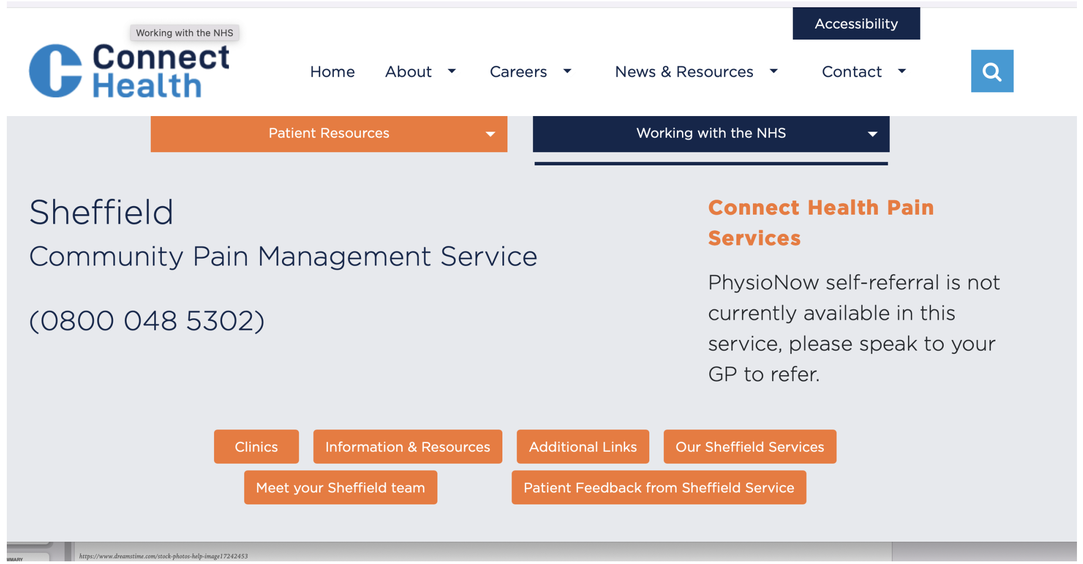
HELP AND RESOURCES



- In Person
  - Acute Pain Service/On Call Anaesthetist
  - Palliative Care
  - Allied Healthcare Professionals e.g. Physio, OT, Pastoral Care
- Out Patient
  - Chronic Pain
  - Likewise
  - Connect Health



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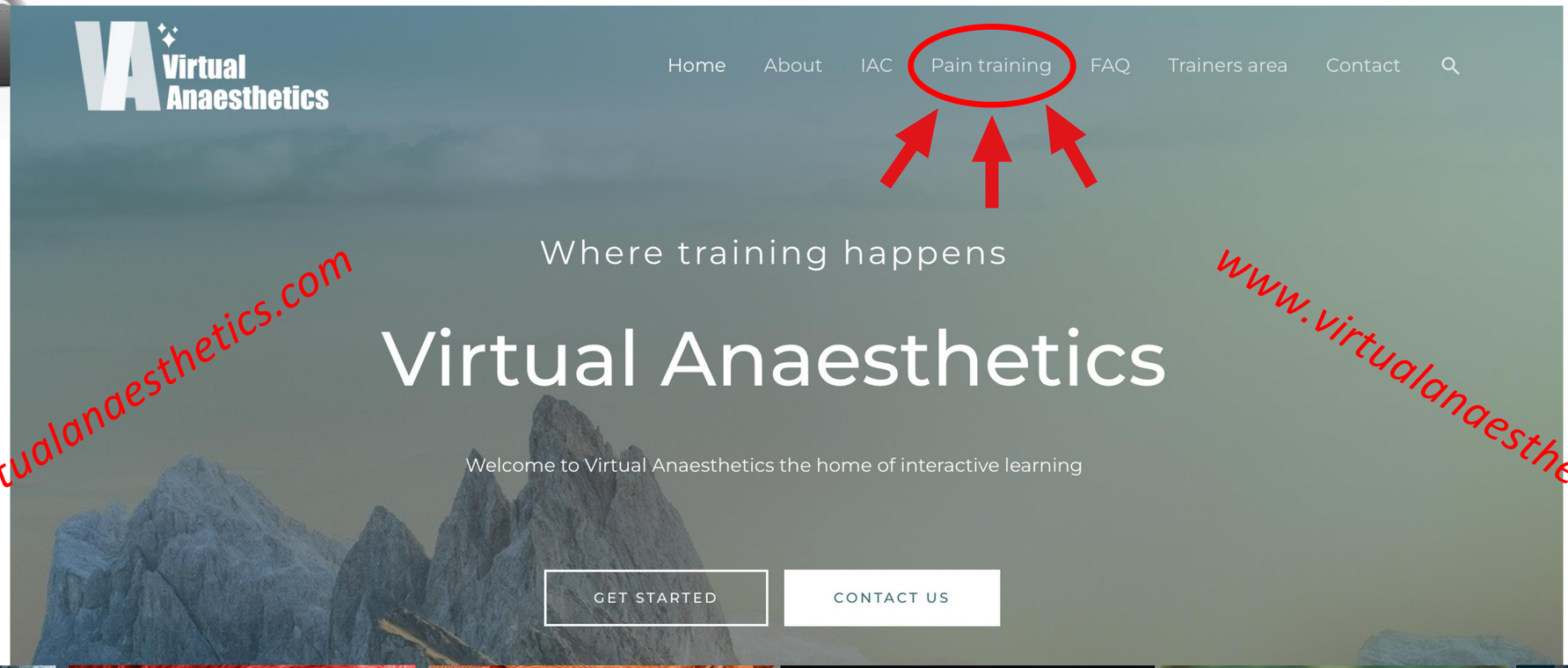
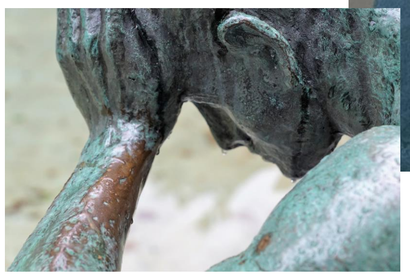
HELP AND RESOURCES

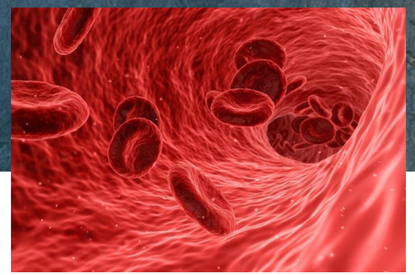


www.virtualanaesthetics.com

www.virtualanaesthetics.com



Intro to PMP
LBP



Acute Pain WR
Sickle Cell
Rib #

CRPS

Fibromyalgia
Biopsychosocial

Opioid Overuse

Cancer Pain
Coeliac Plexus

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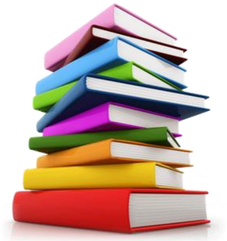
SUMMARY

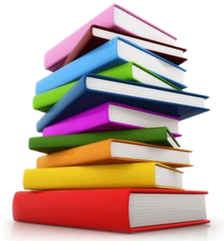
(I KNOW YOU KNOW AND DO ALL THIS ALREADY)

- Significant Mortality and Morbidity associated with opioids
- Chronic opioid use tends towards harm rather than benefit
- Multimodal analgesia for all
- Consider non drug techniques
- Seek specialist help when necessary - no right or wrong way
- Be Creative (read “Bespoke”) with your patient

https://www.blendspace.com/lessons/uOxTQi0cfnw3bA/copy-of-summarizing



REFERENCES

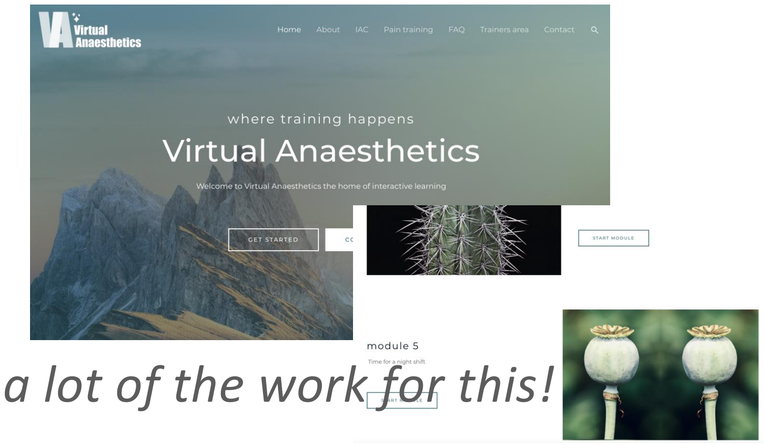


- Textbooks:
  - Rang and Dale's Pharmacology 9th Edition, Ritter J, Flower R, Henderson G, Loke YK, MacEwan D, Rang H
  - Goodman and Gilman's The Pharmacological Basis of Therapeutics 13th Edition, Brunton L, Hilal-Dandan R, Knollmann B
  - NICE & BNF. Pain management with opioids [Online]. BNF. 2014.

- Paper Reviews:
  - McDonald J, Lambert D (2014). Opioid Receptors. Continuing Education in Anaesthesia, Critical Care & Pain. https://bjaed.org/article/S2058-5349(17)30129-4/pdf
  - Sobczak M *et al.* (2014). Physiology, Signaling, and Pharmacology of Opioid Receptors and their Ligands in the Gastrointestinal Tract: Current Concepts and Future Perspectives. J Gastroenterol 49, 24–45
  - Wang S (2019). Historical Review: Opiate Addiction and Opioid Receptors. Cell Transplant 28(3): 233-238
  - Valentino, R, Volkow, N (2018). Untangling the Complexity of Opioid Receptor Function. Neuropsychopharmacol 43, 2514–2520
  - Bryson, E (2014). The perioperative management of patients maintained on medications used to manage opioid addiction. Curr Opin Anaesthesiol, 27, 359-64.
  - Australian and New Zealand College of Anaesthetists and Faculty of Pain Medicine (2010). Acute Pain Management: Scientific Evidence.

- Websites:
  - https://www.guidetopharmacology.org - IUPHAR Homepage
  - https://fpm.ac.uk/opioids-aware - FPM opioids information
  - NAPP Pharmaceuticals 2013. Your questions answered [Online]. 2014

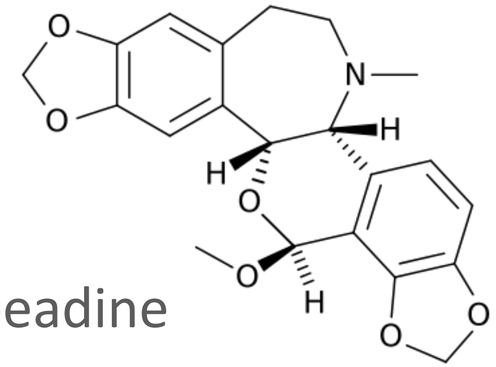
- www.virtualanaesthetics.com - pain trainer modules



Big Thanks to Dr Stoilova and the Pain Team at STH and ABUH for doing a lot of the work for this!

https://shopappy.com/sandpit/fraga/book-test-with-multi-photos-child-book-sku-1355/

To Finish



Rhoeadine

- Anti-stress
- Anti-withdrawal
- Mild Analgesic

?

www.virtualanaesthetics.com

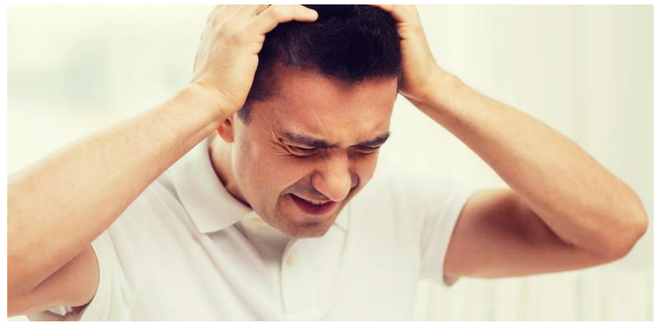
"Have You Thought About Reducing Your Opioids?"

https://en.wikipedia.org/wiki/Rhoeadine#/media/File:Rhoeadine.svg
http://3cowsandacone.com/blog/2018/10/26/the-importance-of-remembrance-day
https://www.poetryfoundation.org/poems/47380/in-flanders-fields

Cases

- 45 year old with Trigeminal Neuralgia
- Brain Stimulator *in situ* (put in in 1980s). On Fentanyl patches 200 mcg/hr
- Multiple attempts to reduce opioids but had two phase withdrawal reactions
- Significant Input from Psychology and Education. Started to reduce opioids. Self reduced patches slowly.
- Managed Suicidal Attempts with Psychological and Family Support
- Before operation on 25 microg/hr Fentanyl patch and reducing slowly whilst awaiting lap chole. Ketamine infusion (high dose). Had option of PCA (did not use). Left hospital on 12 microg/hr Fentanyl patch. Reducing down in community.
- Helps with EPP and Flippin' Pain in her area

https://premierneurologycenter.com/conditions-treatment/neuralgias-and-facial-pain/



CASES

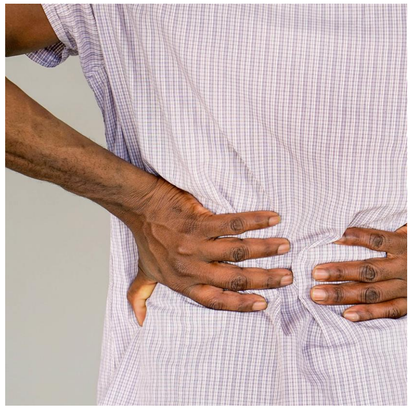
- 36 year old with atrophic trigeminal neuralgia syndrome
- Been on opioids for 10 years + - in excess of 300 mg MST equivalent/day
- Managed with regional peripheral blocks and pulsed radiofrequency
- Taught to undertake sphenopalatine block at home
- Psychological Input
- Multiple Opioid rotations - not working
- Adjuvants
- Immediate Tapentadol Reduction (counselled as to a slow reduction) - went into withdrawal but stuck it out
- OSA now much better, sleeping better
- ? Acupuncture or Gasserian Ganglion Ablation

https://arizonapain.com/trigeminal-neuralgia-suicide-disease/

CASES

- 23 year old with Crohn's Disease, previous body builder
- Multiple opioids and rotations - not working - in excess of 400 mg MST/day
- ODs and Suicidal Attempts - getting drugs illegally for "pain"
- Started on antidepressants, clonidine, magnesium infusions, found optimism. Offered other drugs. Ketamine and lidocaine infusion under GA. Regional Techniques used also.
- Reduced Oramorph/MST quickly whilst in patient
- Came down to 30 mg MST/day - plan to see in outpatients
- Regressed as developed Multiple Cutaneous Lesions (TB) - went up to 30 mg BD MST.
- Plan for Drugs and Alcohol Service on discharge

https://www.medicinenet.com/crohns_disease/article.htm



CASES

- 57 year old, chronic low back pain
- On opioids for 30 + years with multiple rotations - fentanyl patch 50 microg/hr
- Reduced by 12 microg/hr every 8 weeks - went into withdrawal so slowed to every 12-16 weeks with oramorph cover
- Psychological and Education input
- 1 year later off opioids, pain better (still has “off days”) and now not taking laxatives. Mood much better. Now going on EPP.

https://www.nccih.nih.gov/health/low-back-pain-and-complementary-health-approaches-what-you-need-to-know

CASES

- 74 year old, chronic knee pain
- On opioids for 30 + years MST 140 mg /day
- Reduced by 5 mg every 2 weeks
- Declined Psychological Input, but did self educate
- Genicular Nerve Block and consideration of TKR
- Now off opioids. PMP completed. Pain about the same but can manage it better. Off laxatives. Mood better.

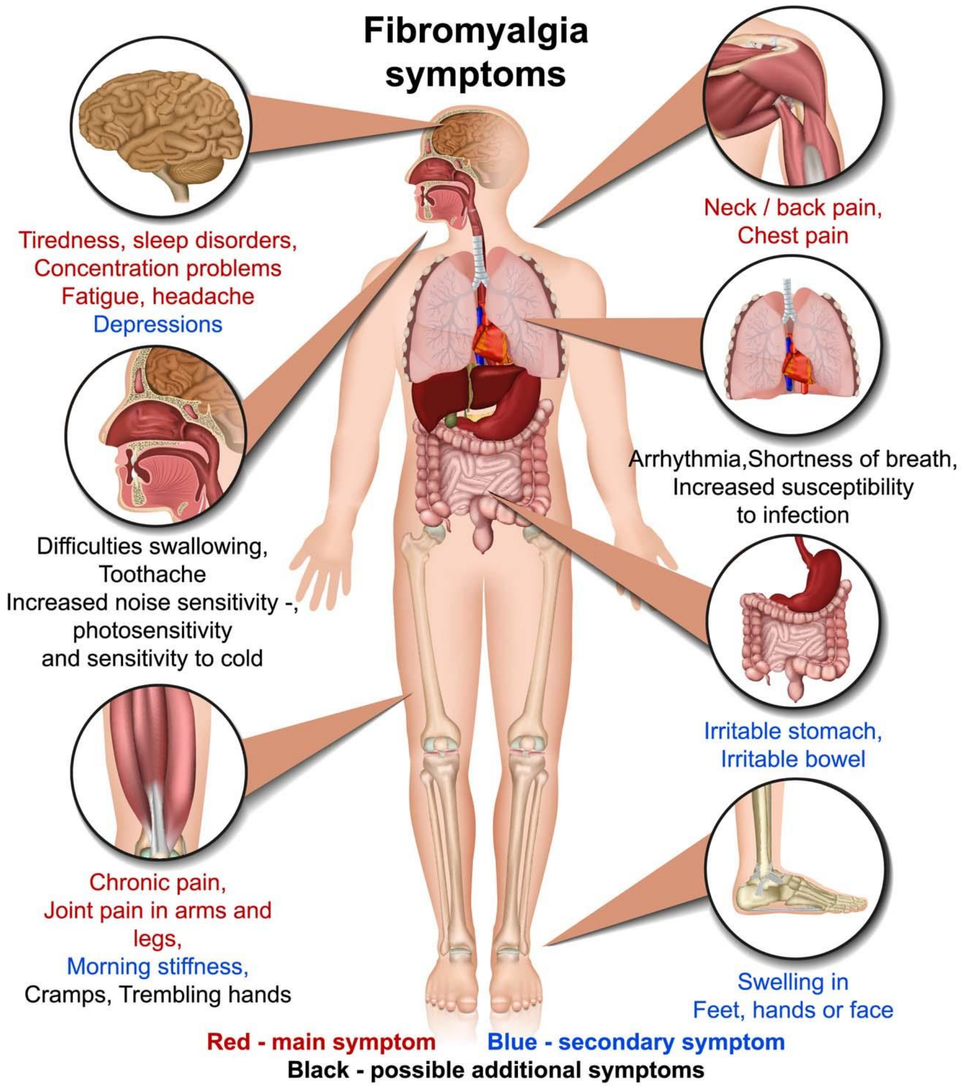
https://www.verywellhealth.com/knee-pain-side-of-knee-5105270

CASES

- 62 year old lady, with fibromyalgia, schizophrenia, raised BMI, T2DM, Charcot
- On opioids for 30 + years: Oxycodone 230 mg/day, Tramadol 400 mg, Pregabalin 600 mg, Amitriptyline 40 mg, Nefopam 180 mg, Paroxetine
- Not for operation – managed conservatively
- Ketamine infusion: stopped Tramadol and reduced Oxycodone by 1/3. Continued to reduce Oxycodone by 5-10 mg every 2 weeks. Reducing Pregabalin.
- Tai Chi, Diet, Magnesium, Vitamin D, Cast for Foot
- Menthol Cream, Clonidine, Nifedipine, TENS. Switch from Amitriptyline and Paroxetine to Duloxetine.
- Surgery given under spinal with regional blocks. Genicular nerve block to opposite side.
- Developed obstruction and perforation (opioids) – hemicolectomy. Ketamine again.
- Now on 10 mg BD of Oxycodone, Duloxetine 90 mg, Pregabalin 150 mg BD, Tai Chi, TENS, Lidocaine Plaster – considering losing further weight to have other leg done.

https://www.istockphoto.com/photos/crying-fetal-position

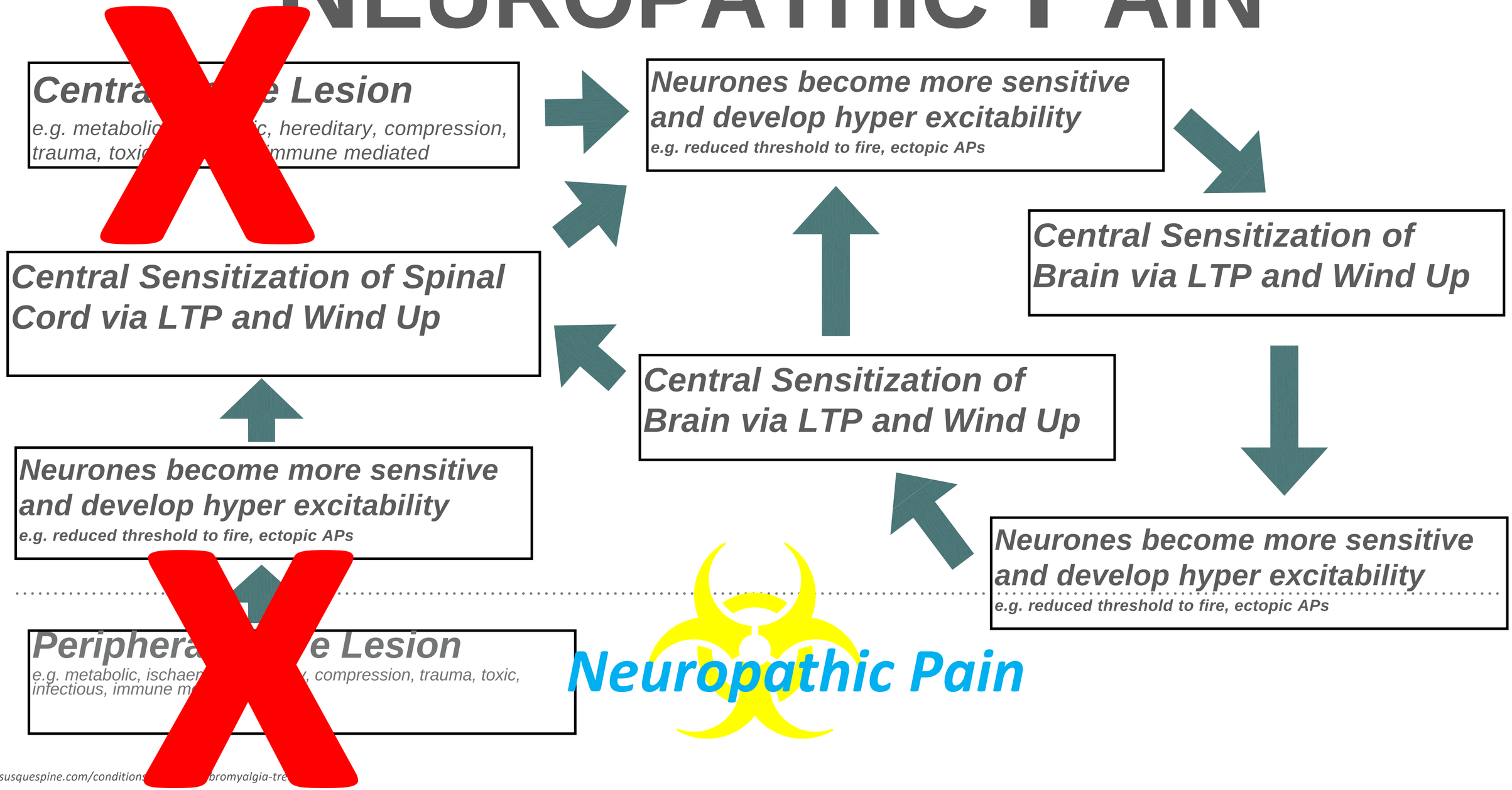
FIBROMYALGIA



- Primary Pain Syndrome
- Nociplastic Pain

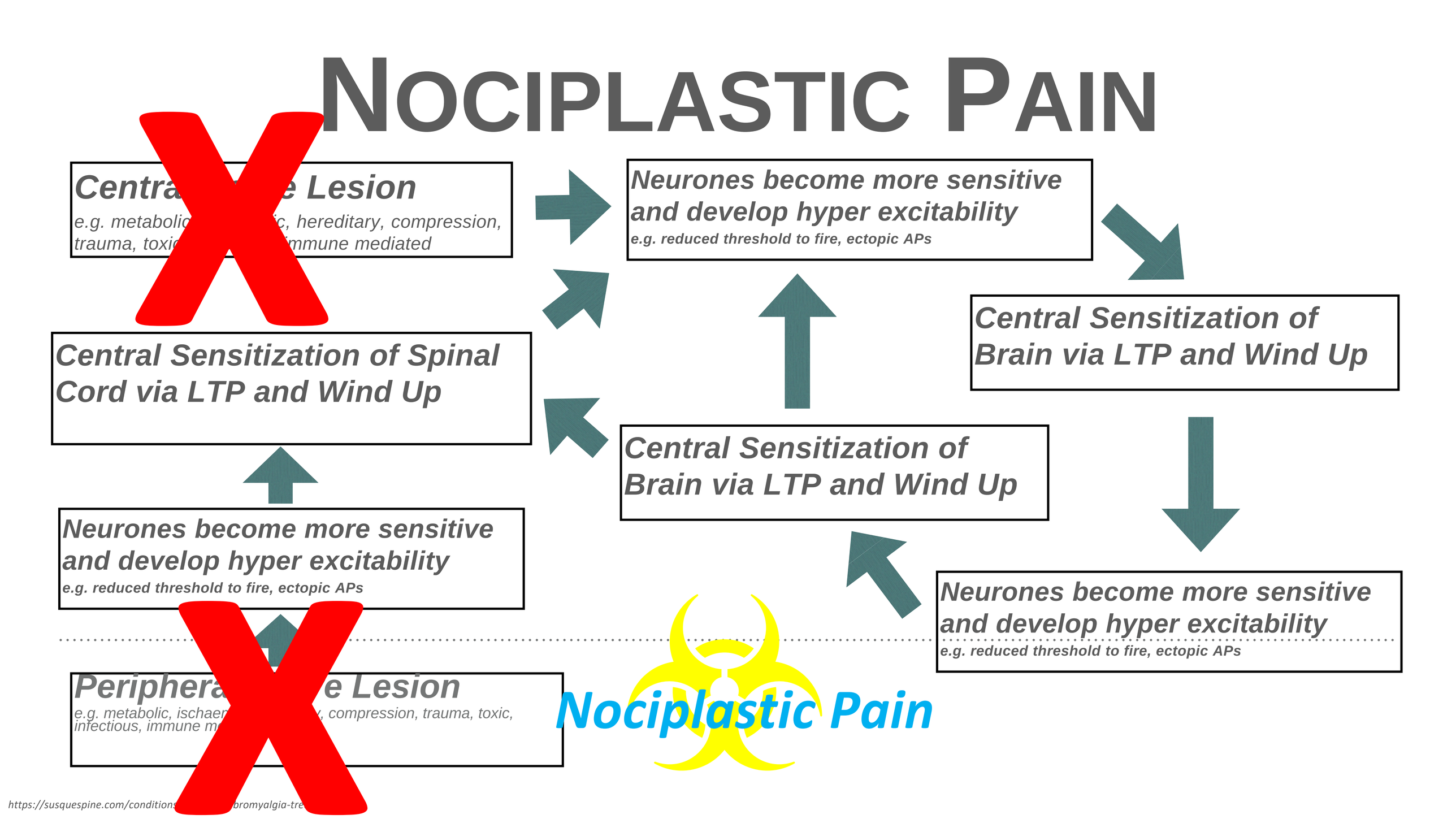
https://susquespine.com/conditions-we-treat/fibromyalgia-treatment/

Neuropathic Pain



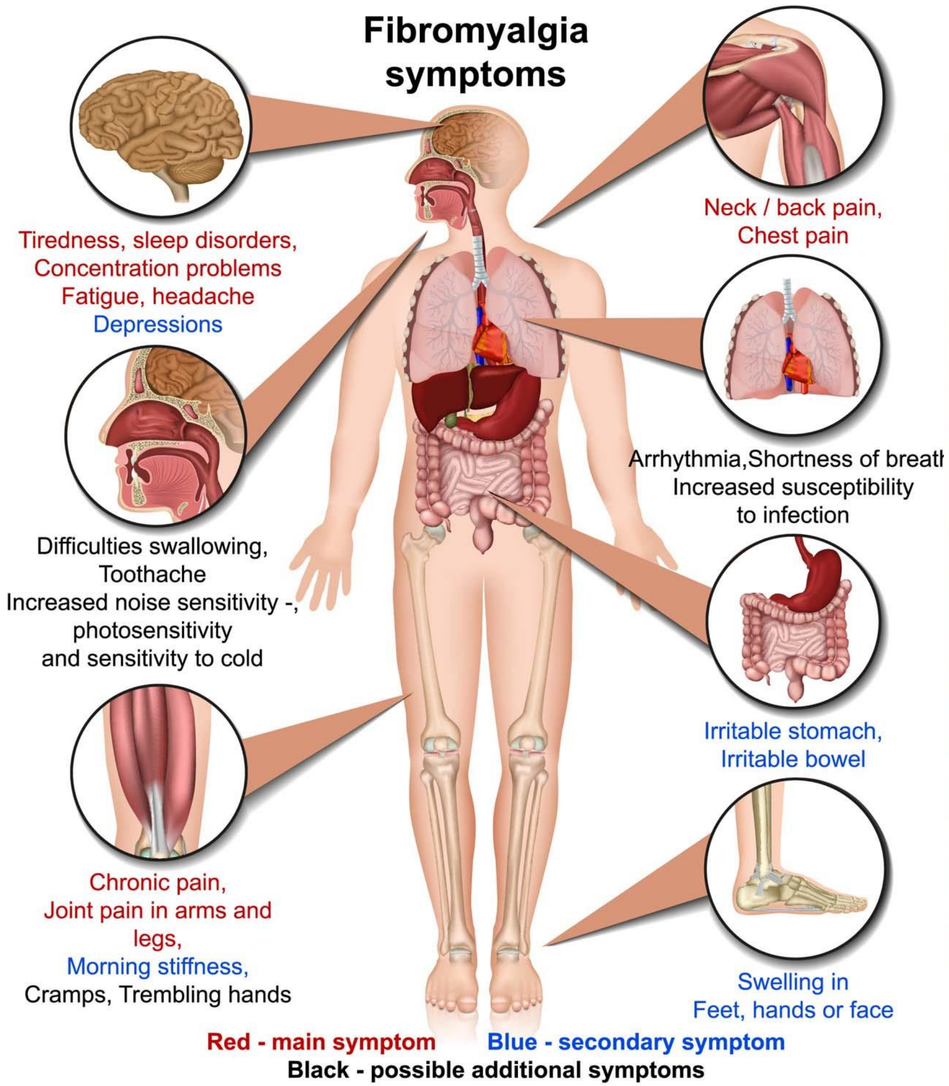
https://susquespine.com/conditions/fibromyalgia-tre

Nociplastic Pain



https://susquespine.com/conditions/fibromyalgia-tre

FIBROMYALGIA



- Primary Pain Syndrome

Other somatic symptoms

❑ Muscle pain	❑ Depression	❑ Itching	❑ Dry eyes
❑ Irritable bowel syndrome	❑ Constipation	❑ Wheezing	❑ Shortness of breath
❑ Fatigue/tiredness	❑ Pain in upper abdomen	❑ Raynaud's	❑ Loss of appetite
❑ Thinking or memory problem	❑ Nausea	❑ Hives/welts	❑ Rash
❑ Muscle weakness	❑ Nervousness	❑ Ringing in ears	❑ Sun sensitivity
❑ Headache	❑ Chest pain	❑ Vomiting	❑ Hearing difficulties
❑ Pain/cramps in abdomen	❑ Blurred vision	❑ Heartburn	❑ Easy bruising
❑ Numbness/tingling	❑ Fever	❑ Oral ulcers	❑ Hair loss
❑ Dizziness	❑ Diarrhea	❑ Loss/change in taste	❑ Frequent urination
❑ Insomnia	❑ Dry mouth	❑ Seizures	❑ Bladder spasms

Based on the quantity of symptoms, the patient's score is:

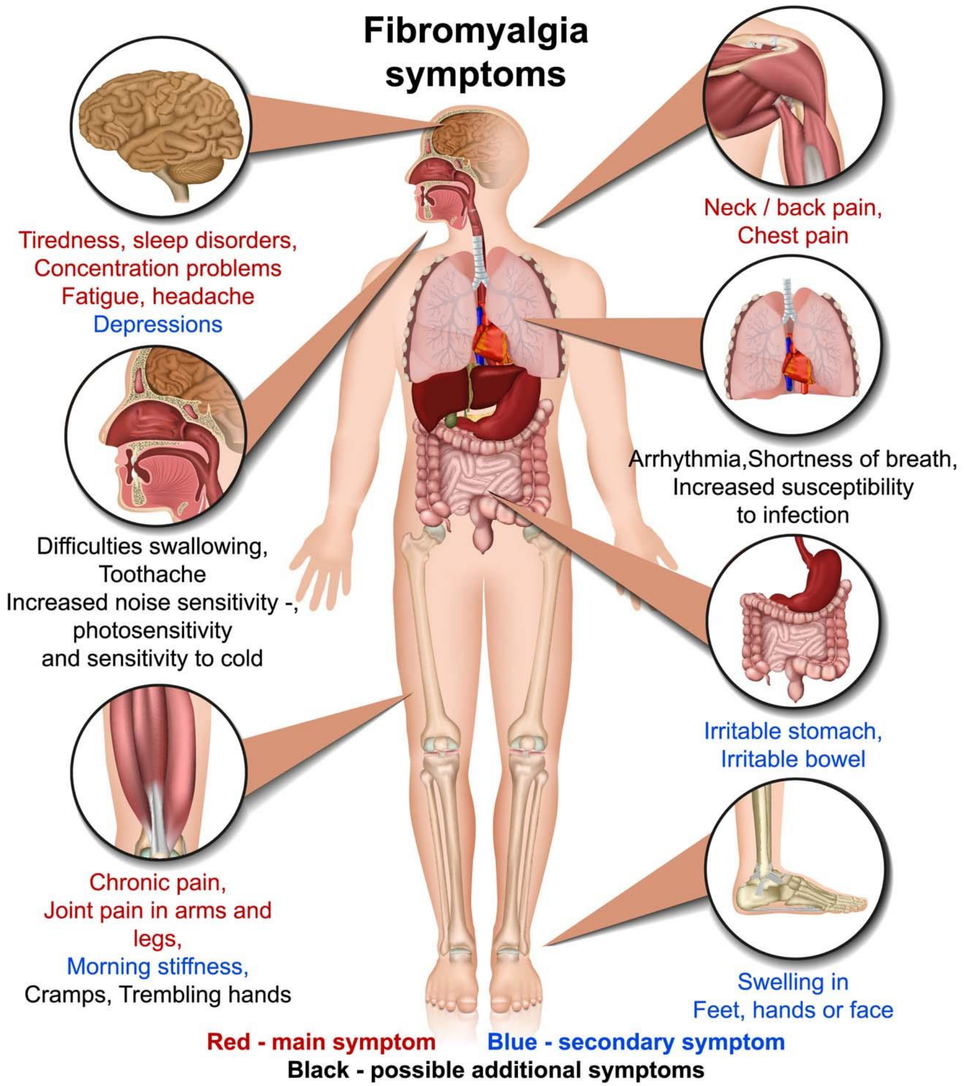
❑ 0 = No symptoms	❑ 2 = A moderate number of symptoms
❑ 1 = Few symptoms	❑ 3 = A great deal of symptoms

[the chronic pain insula](). *Pain*. 2016 Sep;157(9):1933–1945.

Geobel A, Krock E et al. 2021. Passive transfer of fibromyalgia symptoms from patients to mice. J Clin Invest. 2021;131(13):e144201. https://doi.org/10.1172/JCI144201.

https://susquespine.com/conditions-we-treat/fibromyalgia-treatment/

FIBROMYALGIA



- Primary Pain Syndrome
- Nociplastic Pain
- fMRI changes
- Blood Changes
- Reduced Skin small fibres

- Widespread Pain Index of ≥ 7 + Symptom Severity of ≥ 5
- OR WPI 3-6 and SS ≥ 9
- https://www.umassmed.edu/globalassets/office-of-continuing-medical-education/pdfs/cme-primary-care-days/c1-handout-fibromyalgia.pdf

López-Solà M, Woo CW, Pujol J, et al. **Towards a neurophysiological signature for fibromyalgia**. *Pain*. [2016 Aug 31, Epub ahead of print] 2017 Jan;158(1):34–47.

Harte SE, Ichesco E, Hampson JP, et al. **Pharmacologic attenuation of cross-modal sensory augmentation within the chronic pain insula**. *Pain*. 2016 Sep;157(9):1933–1945.

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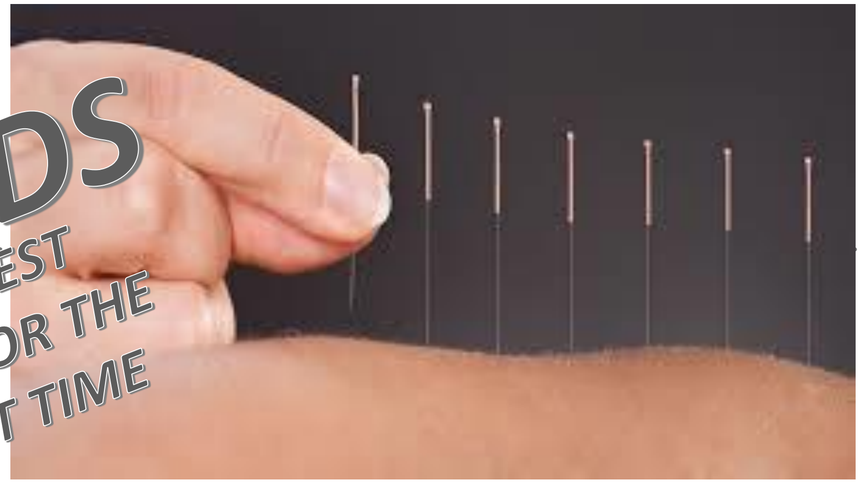
https://susquespine.com/conditions-we-treat/fibromyalgia-treatment/

FIBROMYALGIA

- Blood Tests: Anaesthetics Fibromyalgia (Order Set)
  - FBC, CRP, ESR, U+Es, TFTs, LFTs, HbA1c, Creatine Kinase, Magnesium, Calcium, (Vitamin D), Rheumatoid Factor, (Lupus Screen), Clotting.
- **Reassurance** – do they want the label? Psychology Support?
- **Reduce** CNS stimulation:
  - Duloxetine and OTC Magnesium
- **Relearn how to MOVE**:
  - Graded Exercise Program
    - Tai Chi
    - Acupuncture
- **Relearn how to LIVE:**
  - PMP



NO OPIOIDS
OR SMALLEST AMOUNT FOR THE SHORTEST TIME

https://www.acubody.net/how-to-find-your-next-acupuncture-practitioner/
https://www.health.harvard.edu/staying-healthy/tai-chi-or-yoga-4-important-differences