Non-Malignant Pain Formulary - Also see Chronic Pain Guide

Relevant NICE guidance and other resources relating to pain

Dosage Equivalences

BNF 70 Spetember 2015 - used for all doses and dosage equivalences within the formulary. All dosage equivalences are determined in relation to the available products and available strengths. Information also avaialble at: **Opiods Aware Link**

The British Pain Society's - Professional publications

Professional publications on pain management

Faculty of pain Medicine Resources (Supported by NHS England Funding)

Opioids Aware: A resource for patients and healthcare professionals to support prescribing of opioid medicines for pain

Clinical Use of Opioids

A Structured Approach to Opioid Prescribing

Opioids - Information for Patients

SIGN Guide 136 - Management of Chronic Pain. Issued December 2013

SIGN 136

Reducing dosing errors with opioid medicines. National Patient Safety Agency (2008)

National Patient Safety Agency 2008 guide

Formulary Key

1st line formulary choice	Encouraged
Alternative formulary choice	On Formulary
2nd line formulary choice	2nd Line
Shared Care (TAG Amber)	Shared Care Agreement

BNF 4.7 Analgesics

See Pain ladder for use of simple analgesia and opiods for persistent non-malignant pain - Appendix One

4.7.1 Non-opioid analgesics

PARACETAMOL		T/C 500mg S: 120mg/5ml, 250mg/5ml.	1g four times daily	Highly effective analgesic Ensure this is prescribed at maximum dose before escalating analgesia. Effervescent tablets have high Na+ 18.6mmol / tablet . Total of 8g of sodium per day when taking the maximum dose.
IBUPROFEN		T: 200, 400, 600mg L: 100mg/5ml	1.2g daily in 3-4 divided doses	In line with MHRA guidance - prescribe at the lowest possible dose for the shortest period of time. See NSAIDs Formulary for full guidance and BNF section 10.1.1 Lowest GI risk of standard NSAIDs. Doses less than 1200mg are not associated with increased thrombotic risk. Use omeprazole 20mg capsules once daily or lansoprazole 15mg capsules once daily for GI prophylaxis in all long-term users. CKS guidelines for use of PPIs in Gastroprotection Can also be used for migraine and dysmenorrhoea. Where possible, co-prescribing with full dose paracetamol is advised before proceeding to step two of the pain ladder.
NAPROXEN		T:250, 500mg	0.5-1g daily in 1-2 divided doses	Doses of less than 1g daily are not associated with increased thrombotic risk. Longer duration of action than Ibuprofen. For use in mild to moderate pain - Can also be used in dysmenorrhoea. Use omeprazole 20mg capsules once daily or lansoprazole 15mg capsules once daily for GI prophylaxis in all long-term users. CKS guidelines for use of PPIs in Gastroprotection Where possible co-prescribing with full dose paracetamol is advised before proceeding to step two of the pain ladder. See NSAIDs Formulary for full advice and BNF section 10.1.1. MHRA NSAID guidance

4.7.2 Opioid analgesics

Opioids Aware: **A resource for patients and healthcare professionals to support prescribing of opioid medicines for pain**

Reducing dosing errors with opioid medicines. National Patient Safety Agency (2008)

http://www.npsa.nhs.uk/nrls/alerts-and-directives/rapidrr/reducing-dosing-errors-with-opioid-medicines/

Oral weak opioid

The oral weak opioids are useful in step TWO of the pain ladder. During titration/adjustment to the most effective dose to relieve pain it is useful to prescribe the chosen oral weak opioid separately to paracetamol - conversion to a combination product with paracetamol may encourage adherence once an effective dose is established. The most cost effective option though remains with prescribing oral weak opioids separately to paracetamol.

First Choice

DIHYDROCODEINE (DHC)		T: 30mg	**Adult:** 30mg every four to six hours when necessary.	Limit maximum dose to 120mg to 180mg daily. Higher doses offer some additional pain relief but may cause more nausea and vomiting. 120mg to 180mg daily is equivalent to 12mg to 18mg oral morphine daily. If paracetamol and dihydrocodeine combinations are needed use 10/500mg as the cost effective option. CKS - Mild to Moderate Pain

Second Choice

CODEINE		T: 15mg, 30mg L: 25mg/5ml	**Adult:** 30 - 60mg every four hours when necessary to a max of 240mg daily.	**Variation in metabolism: The capacity to metabolise codeine can vary considerably leading to either reduced therapeutic effect or marked increase in effect and side effects.** **Causes constipation** **Acute moderate pain in children - ONLY for use in children OLDER than 12 years and ONLY if it cannot be relieved by Paracetamol or Ibuprofen alone. MHRA June 2013.** MHRA Codeine restrictions

COMPOUND ANALGESICS

Combination analgesics should be avoided as first-line treatment. Prescribing single constituent analgesics allows independent titration of each drug. (CKS)

Use cost effective preparations where possible - 15/500 Co-codamol and all strength effervescent preparations are not cost effective choices.

Co-codamol tablets 8/500		T: 8mg codeine, 500mg paracetamol	**Adult:** One or two tablets to be taken up to four times daily as required.	**All opioid** combination products will cause constipation.
Co-codamol tablets 30/500		T: 30mg codeine, 500mg paracetamol		
Co-dydramol tablets 10/500		T: 10mg dihydrocodeine, 500mg paracetamol		

Oral strong opioid

NOTE: Good Practice in MOST circumstances is to prescribe the most cost effective brand. PALLIATIVE CARE PRESCRIBING - prescribe generically to allow pharmacy to supply a stocked brand to prevent delays in providing analgesia to the patient.

CONTROLLED DRUG PRESCRIBING - Department of Health Guidance 2006 - in general prescriptions for Controlled Drugs in Schedule 2, 3 and 4 to be limited to a supply of up to 30 days' treatment, exceptionally, to cover a justifiable clinical need and after consideration of any risk, a prescription can be issued for a longer period, but the reasons for the decision should be recorded on the patient's notes.

INSTALMENT PRESCRIBING - A total of 14 days' treatment by instalments of any drug listed in Schedule 2 of the Misuse of Drugs Regulations, buprenorphine, and diazepam may be prescribed in England via FP10(MDA) (blue) and FP10H (MDA) (blue) should be used. The amount of instalments and the intervals to be observed must be specified.

First Choice

MORPHINE		T: (immediate release **tablets**) 10mg, 20mg & 50mg	See notes and Chronic Pain Guidance	**STOP weak opioids prior to addition of strong opioid as the effect of taking together is unlikely to be additive. Patients who have received oral 120mg to 180mg DHC OR Codeine daily can be initiated on twice daily modified release capsules - 10mg twice daily.**
		C: (**twice daily** modified release **capsules**) - 10mg, 30mg, 60mg, 100mg & 200mg	See notes and Chronic Pain Guidance	**Opioid naïve patients** must be started on low dose oral liquid 2.5mg up to six times daily to allow titration of dose required before being converted to the capsules.
		Oral liquid 10mg / 5 ml	See notes and Chronic Pain Guidance	**Maintain paracetamol / NSAIDs at maximum dose as per pain ladder guidance.** **Prescribe most cost effective brand.** **Titration** must be slow with regular review For persistent non-malignant pain a total daily dose of 60mg of morphine with **NO** response suggests pain is unlikely to be opioid responsive. For persistent non-malignant pain it is recommended **NOT to exceed** 120 - 180mg oral morphine daily without referral to Specialist service - **See Chronic Pain - Guidance.** **The patient should be closely monitored for pain relief as well as for side effects especially respiratory depression and constipation.**

Second Choice				
CQC Newsletter - Safer use of controlled drugs - Preventing harm from oral Oxycodone.				
OXYCODONE		C: immediate release - 5 mg, 10 mg, 20 mg. T: twice daily modified release - 5 mg, 10 mg 20 mg, 40 mg & 80 mg	initially 5 mg every 4–6 hours initially, 5-10 mg every 12 hours	Oxycodone is approximately twice as potent as oral morphine. Oxycodone is two to four times more expensive than oral morphine. **Prescribe most cost effective brand.** **ONLY prescribe for patients who have developed tolerance to morphine.** For persistent non-malignant pain it is recommended to NOT exceed 80mg oral oxycodone daily without referral to Specialist service. Equivalent to 160mg oral morphine daily - **see guideline Appendix One** **Targinact (TAG Double Red) - contains oxycodone and naloxone.**
Alternative to First Choice Opioid				
Tramadol now Schedule 3 Controlled drug but is exempt from Safe Custody requirements. Please adhere to the Controlled Drug Prescription writing requirements: *The prescriptions must:* *• Be indelible* *• Be signed by the prescriber* *• Be dated* *• Specify the prescriber's address* *• State the name and address of patient* *• In the case of a preparation, state the form (e.g. tablet) and where appropriate, the strength* *• State either the total quantity (in both words and figures) of the preparation, or the number (in both words and figures) of dosage units to be supplied, e.g. 20 (twenty) tablets* *• State the dose* *• Note "as directed" is not legally considered to be a dose. The dose must be stated. Best practice is to avoid using "One as directed" and to give clear directions, e.g. "One to be taken twice a day"*				
TRAMADOL		C: 50 mg	**Adults**: 50–100 mg not more often than every 4 hours - Maximum 400 mg in 24 hours	**For ACUTE prescribing only - NICE NOVEMBER 2013.** 200mg daily dose of tramadol is approximately equivalent to 20mg of oral morphine. **ONCE DAILY** sustained release tramadol preparations are not a cost effective option as not listed in the Drug tariff - will be charged as a "special" **Ensure Paracetamol is titrated to maximum dose before Tramadol is considered for additional pain relief.** **Combination products are not recommended - Please prescribe paracetamol and tramadol separately to allow flexible dosing. Tramacet ® contains a low dose of paracetamol .** **For persistent non-malignant pain it is recommend NOT to exceed 400mg oral tramadol daily (equivalent to 40mg oral morphine) without referral to Specialist service.**
OPIOID PATCH PRESCRIBING				
Transdermal patches are considerably more expensive than oral therapy.				
General transdermal opioid patch information - Transdermal administration is an alternative, (not necessarily better), method of drug administration. After the application of any patch there is a delay of 24-96 hours before therapeutic levels of a drug are reached. Also, after removal of a patch, there is a delay of 24-96 hours before circulating levels of a drug drop to a subtherapeutic level, i.e. there is a SLOW ONSET and SLOW OFFSET of analgesia and of side effects.				
Patch Moderate Opioid effect in low dose.				
Safer Controlled Drug Use - Preventing Harms From Fentanyl and Buprenorphine Transdermal Patches				
BUPRENORPHINE PATCHES		**As BuTrans® 7 day patch**		
Buprenorphine patches - A useful alternative to oral opioids in step two of the ladder for chronic pain management. Use buprenorphine patches ONLY when no oral route or severe renal impairment/ dialysis. **Never** titrate using patches.				
BUPRENORPHINE PATCHES As 7 day patch		'5' - 5 micrograms/hour '10' - 10 micrograms/hour	Initially **one** '5 microgram patch -then dose titrated no more quickly than three days. Use a patch of next strength or a combination of two patches (applied at the same time) **Maximum** 2 patches applied at the same time.	A 5 microgram buprenorphine patch is approximately equivalent to 5-10mg of oral morphine daily or 50-100mg DHC / codeine daily. A 10 microgram buprenorphine patch is approximately equivalent to 10-20mg of oral morphine daily or 100-200mg DHC / codeine daily. Use "5" and "10" patches ONLY - higher dose patches are not recommended for moderate pain relief. When starting, analgesic effect should **not** be evaluated until the system has been worn for **72 hours.** Combination use with oral low dose opioids is illogical and expensive. Patch to be changed every 7 days - siting of replacement patch on a different area (avoid same area for at **least 3 weeks**)

FENTANYL PATCHES				
Fentanyl patches - A useful alternative to oral opioids in step FOUR of the pain ladder for chronic pain management, when no oral route, or if there is poor compliance or safety concerns with tablets. Dose to be reduced in severe renal impairment. **Never** titrate using patches.				
Transdermal fentanyl is VERY POTENT and needs to be used with great CAUTION.				
FENTANYL PATCHES		'12' patch (releasing approx. 12 micrograms/hour for 72 hours), net '25' patch (releasing approx. 25 micrograms/hour for 72 hours)	**Dose is based on previous 24 hour opioid requirement - NOT FOR OPIOID NAIVE PATIENTS**	Please use only for patients whose pain is stable - dose titration is difficult and MUST be achieved initially by the addition of oramorph liquid. "Doubling" patch dose without using oramorph to assess total opioid requirements provides too high an increment, is dangerous and will not manage acute pain quickly. A 12 microgram patch is approximately equivalent to 45mg of oral morphine daily and allows for dose comparison to available oral morphine preparations. A 25 microgram patch is approximately equivalent to 90mg of oral morphine daily and allows for dose comparison to available oral morphine preparations. For persistent non-malignant pain the recommend dose should **NOT** exceed the 25 microgram patch without referral to Specialist service. **Please do not use "weak opioids" as listed above in combination with fentanyl patches - this will provide no therapeutic benefit.** **Avoid combination with Tramadol or buprenorphine patches.**
				Prescribe most cost effective brand
	Fever or external heat - Monitor patients using patches for increased side effects if fever present (increased absorption possible); avoid exposing application site to external heat, for example a hot bath or sauna (may also increase absorption)			
	Respiratory depression - Risk of fatal respiratory depression, particularly in patients not previously treated with a strong opioid analgesic or too rapid dose escalation ; manufacturer recommends use only in opioid tolerant patients.			

MHRA warning - potential for serotonin syndrome to occur when (Fentanyl) Durogesic DTrans Transdermal Patches are used concurrently with other serotonergic drugs.

Durogesic® DTrans® Transdermal Patch (fentanyl): Introduction of new warning serotonin syndrome may occur under co-administration with serotonergic drugs

Guide to use of simple analgesics and opioids for persistent non-malignant pain

This document is designed to guide the rational use of simple analgesics and opioids for nociceptive pain. However, distinction between nociceptive pain and neuropathic pain is not always possible, with a mixed picture being common. Always consider the possibility of a neuropathic component and use the primary care neuropathic pain guidelines for advice on early use of co-analgesics such as TCA's and Gabapentin prior to the use of opioids.

A recent good practice review[1] makes the point that opioid use is now common for persistent non-malignant pain but safety of long-term opioids in this setting is not established. The balance of risks and benefits for these patients is different from acute post-operative care or palliative care.

Guidance emphasises the need to keep pain management as simple and rational as possible. Above all, patient and prescriber need to have realistic (and ideally measurable) expectations of what can be achieved with analgesics from the outset:

- A thirty to fifty per-cent reduction in an objective pain score (such as a visual analogue scale or 10 point scale) is good, (as used in trials) with pain being manageable for the patient, the patient being able to function as normally as possible and medication side effects being managed and tolerable.

Pain free status is rarely achievable; aiming for such can result in over-complicated regimes, at too higher doses with side-effects starting to dominant - with no further reduction in pain.

Other key points are:

- Careful dosage titration and early and pro-active attention to side effects helps.
- Be clear you know what the patient is actually taking.
- Regular review of patients' analgesic requirements is important with consideration being given to stepping analgesics down once pain is successfully managed.
- Be conscious of the possibility of dependence, withdrawal symptoms and diversion. Evidence of developing tolerance should prompt referral to a multidisxiplinary pain management service.
- Dose escalation without measureable improvement and increased side effects and serious adverse effects must be avoided.
- If a total daily dose of 60mg oral morphine (or equivalent) is reached without demonstrable benefit, the pain is unlikely to be opioid responsive.
- Maximum doses used in chronic pain management trials have rarely exceeded a total of 120mg oral morphine daily (or equivalent) – we recommend not exceeding this dose without referral.
- Suggested maximum total daily doses for other agents for this indication are:

DHC/Codeine 120-180mg daily	- (equivalent to 12 to 18mg oral morphine daily)
Buprenorphine patch 10mcg	- (equivalent to 10-20mg oral morphine daily)
*****Oxycodone 80mg daily	- (equivalent to 160mg oral morphine daily)
*****Fentanyl patch 25mcg	- (equivalent to 90mg oral morphine daily)

- Locally – we specifically do not support the use of Targinact® (naloxone and oxycodone) or Tramacet ®(tramadol and paracetamol).

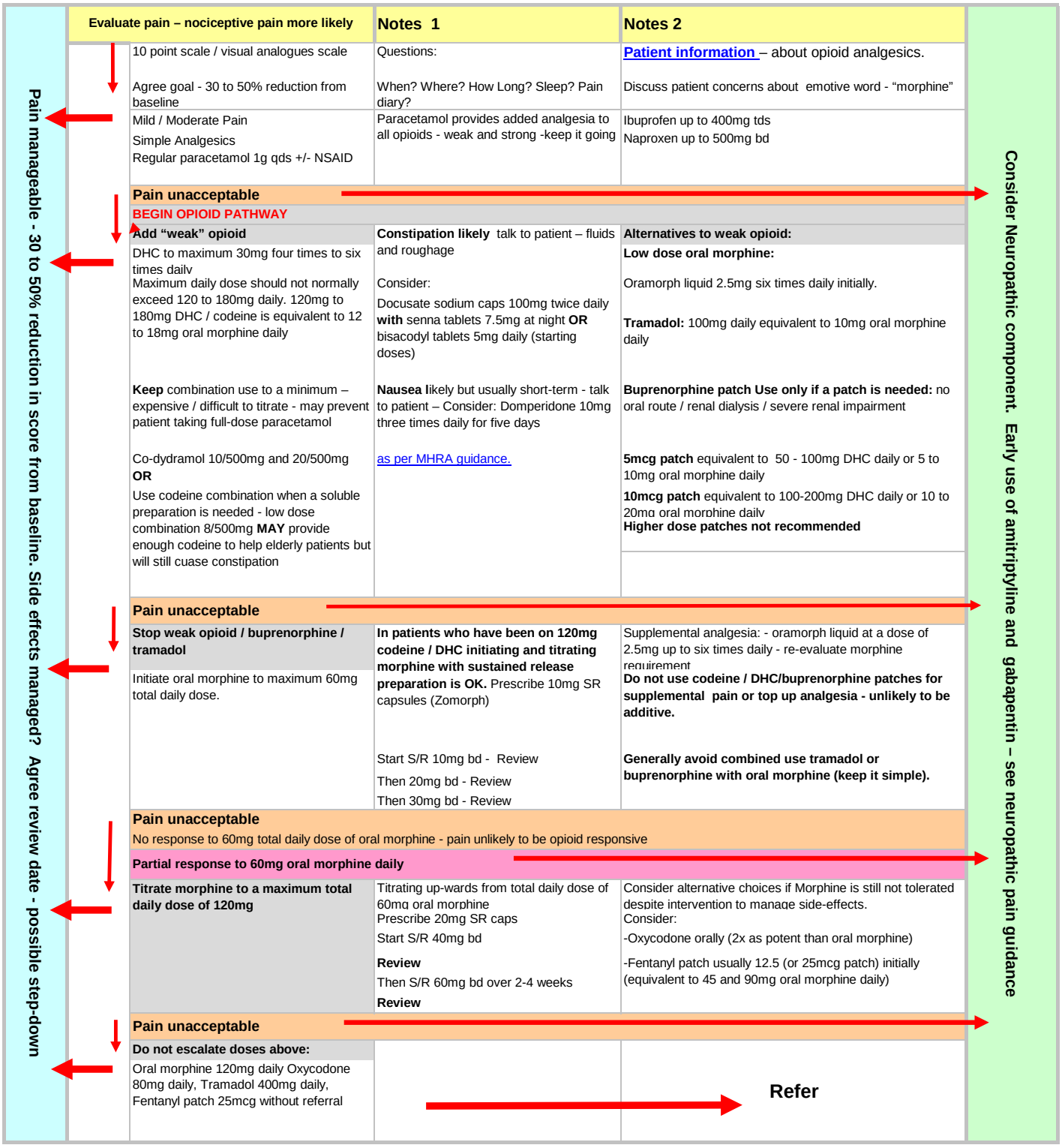
*****Not equivalent doses- based on nearest practical doses to oral morphine .

N.B. Dose equivalences are always approximate. Patients will vary in their response to different agents. Always be cautious in frail and elderly patients.

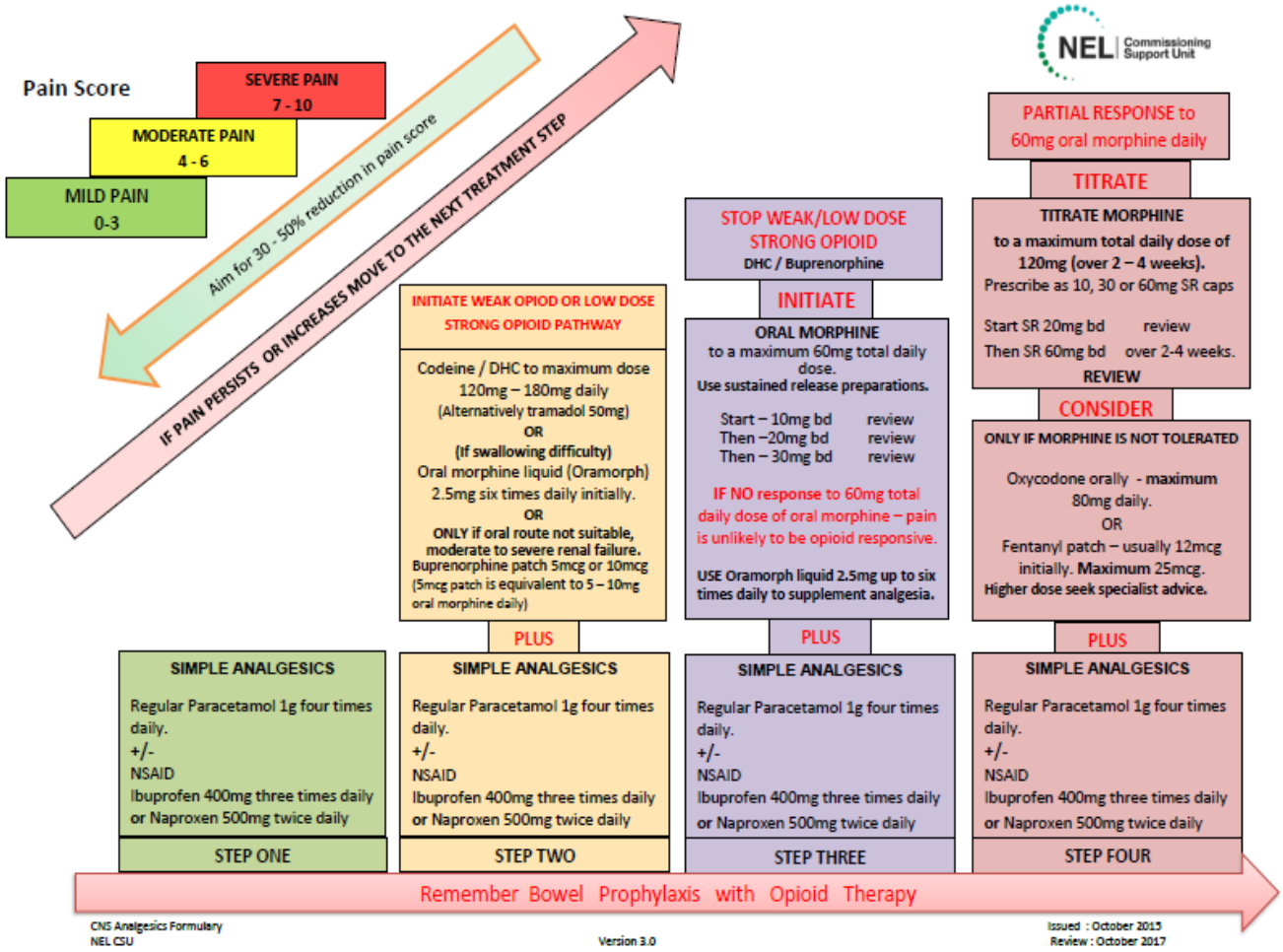
Guide to the use of opioids – Opioids for persistent pain – Good Practice. Pain Society June 2010

Pain Society February 2014 Update: The review and update of this publication will be encompassed in a new publication addressing all aspects of opioid use and misuse. In the interim the current content of Opioids for Persistent Pain has been reviewed and remains accurate.

Guide to use of simple analgesics and opioids for persistent non-malignant pain



Appendix One

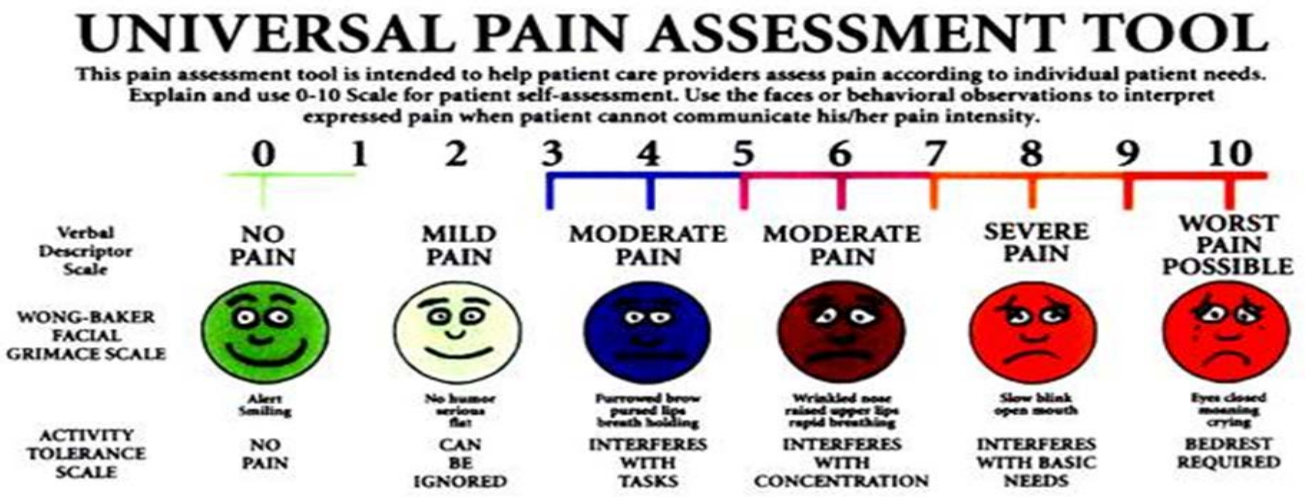


Pain Assessment Scale - British Pain Society can be found at the following link and can be printed for use.

Assessment scale - English

Assessment Scale - Other languages

Pain Score: Wong-Baker Scale. www.anes.ucla.edu/pain/FacesScale.jpg



Mild Pain – *Nagging, annoying, but doesn't really interfere with daily living activities.*

1 – Pain is very mild, barely noticeable. Most of the time you don't think about it.

2 – Minor pain. Annoying and may have occasional stronger twinges.

3 – Pain is noticeable and distracting, however, you can get used to it and adapt.

Moderate Pain – *Interferes significantly with daily living activities.*

4 – Moderate pain. If you are deeply involved in an activity, it can be ignored for a period of time, but is still distracting.

5 – Moderately strong pain. It can't be ignored for more than a few minutes, but with effort you still can manage to work or participate in some social activities.

6 – Moderately strong pain that interferes with normal daily activities. Difficulty concentrating.

Severe Pain – *Disabling; unable to perform daily living activities.*

7 – Severe pain that dominates your senses and significantly limits your ability to perform normal daily activities or maintain social relationships. Interferes with sleep.

8 – Intense pain. Physical activity is severely limited. Conversing requires great effort.

9 – Excruciating pain. Unable to converse. Crying out and/or moaning uncontrollably.

10 – Unspeakable pain. Bedridden and possibly delirious. Very few people will ever experience this level of pain.

Management of Neuropathic Pain Formulary- Also see Neuropathic Pain Guide

Neuropathic pain: the pharmacological management of neuropathic pain in adults in non-specialist settings - CG173 - November 2013

CG 173

NICE BITES - Neuropathic pain: the pharmacological management of neuropathic pain in adults in non-specialist settings - CG173 - November 2013.

NICE Bites : Dec 2013

PresQIPP- Template Guidance on the management of neuropathic pain (Adults)

PrescQIPP - Downloads - Pregabalin in neuropathic pain

Formulary Key

1st line formulary choice	Encouraged
Alternative formulary choice	On Formulary
2nd line formulary choice	2nd Line
Shared Care (TAG Amber)	Shared Care Agreement

First Choice - NICE GUIDE states Offer a choice of Amitriptyline or Duloxetine or Gabapentin or Pregabalin as choices for initial treatment of Neuropathic pain(except trigeminal neuralgia)

FIRST LINE

Tricyclics

AMITRIPTYLINE		T: 10mg, 25mg	Usual starting dose is 10mg at night. Maintenance dose to achieve 50 - 75mg at night. **Maximum dose** 75 - 150mg at night.	Use of Amitriptyline doses above 75mg daily is usually under specialist supervision. May have antidepressant effect at upper end of dose range. **Tricyclics and Duloxetine should not routinely be co-prescribed. Addition of Tramadol should be done cautiously -risk of Serotonin Syndrome.**
Try Nortriptyline **ONLY** if sedation occurs with Amitriptyline. Consider in patients who are working, driving or operating machinery where sedation with amitriptyline may cause a problem. Dose - start at 10mg for two weeks and then titrate to 20mg for two weeks. If no improvement then STOP.				

SECOND LINE- An alternative choice to Tricyclics

Anticonvulsants

GABAPENTIN		C: 300mg T: 600mg	Usual starting dose is 300mg nocte - titrate to achieve target dose of 1800 - 2700mg daily in divided doses - **Max 3600mg daily.**	**Adjust dose in renal impairment** - see BNF for full guidance. **Avoid abrupt withdrawal** if treatment not tolerated.

OR THIRD LINE - An alternative choice to Tricyclics

Antidepressant

DULOXETINE		C: 30mg, 60mg	Usual starting dose is 30-60mg daily - **Max dose 120mg daily**	

OR FOURTH LINE - An alternative choice to Tricyclics

Anticonvulsants

PREGABALIN		C: 50mg, 75mg, 100mg, 150mg, 200mg, 225mg, 300mg.	Usual starting dose is 150mg/day (in two divided doses) with **maximum dose** 600mg/day (in two divided doses)	A lower starting dose may be more appropriate for some people. All strengths are the same price - please dose optimise where possible and use a twice daily dosing schedule. See Key Message for full details. **For current patients please review prescribing and consider a change to Gabapentin as more cost effective option. See PresQIPP bulletin 50 for further details of switching.** PresQIPP Bulletin 50 - Neuropathic pain: Pregabalin and gabapentin prescribing.

Additional Therapy

Opioids

TRAMADOL		C: 50mg	Usual dose 50-100mg not more often than every four hours - total of more than 400mg daily not usually required.	**Consider ONLY for acute rescue therapy.** **NOT for long term use.**

Trigeminal Neuralgia

Anticonvulsants

CARBAMAZEPINE		T: 100mg , 200mg, 400mg.	Initially 100mg 1-2 times daily, increased gradually according to response. Usual dose 200mg 3-4 times daily	**To be offered as initial treatment for trigeminal neuralgia.** If initial treatment is not tolerated or is contraindicated seek specialist advice.

Lidocaine Plaster 5% as Monotherapy

Lidocaine Plasters 5% may be used in patients with localised neuropathic pain where first line systemic therapies are ineffective or not tolerated. Treatment is to be used as a last resort, This is classified as Green (GP prescribable following Consultant/Specialist initiation).

Specialist Pain Consultant option for Focal Neuropathic Pain

LIDOCAINE 5% PLASTER		Patch: 10 cm x 14 cm 700 mg (5% w/w) lidocaine	To be applied for 12 hours per 24 hour interval	**All oral treatment** for neuropathic pain managent is to be stopped prior to **initialtion** of Lidocaine plaster treatment.
			Most patients will require only **one or two plasters** at a time. For some people part of one plaster will suffice.	Specialist consultant only to **initiate** and **provide** the **first 4 weeks** of treatment.
				Effectiveness to be assessed at 2 - 4 weeks and continued ONLY if effective. i.e 30% reduction in pain scale.
			Plasters can be **cut into smaller** segments	**GP** may continue precribing **IF** proven effectiveness, reviewing **every 3 months**.
				Not more than three plasters should be used at the same time. (SPC)
				Hairs in the affected area must be cut off with a pair of scissors (not shaved).

Neuropathic Pain Management

This document is to enable practitioners to manage neuropathic pain according to the recently published NICE Guidelines.

NICE recommends Amitriptyline, OR Duloxetine, OR Gabapentin, OR Pregabalin

The guideline excludes Imipramine as a treatment option as there is an absence of effectiveness evidence. Nortriptyline did not have sufficient evidence to enable the guidance development group to recommend that it should **not** be used and therefore no explicit recommendation was made [1].

Neuropathic pain is very challenging to manage because of the heterogeneity of its aetiologies, symptoms and underlying mechanisms. It results from damage to or dysfunction of the peripheral or central nervous system. Peripherally it can arise as a result of trauma, surgery, post herpetic neuralgia, trigeminal neuralgia or painful diabetic neuropathy[1]. Centrally from stroke, spinal cord injury, and multiple sclerosis.

Identification of Suspected Neuropathic Pain includes description of:

- Burning, stabbing, shooting, tingling, pins and needles, electric shocks.
- Pain often worse towards the end of the day
- Pain may be spontaneous (intermittent or continuous)
- Stimulus Evoked — Allodynia - pain from noon-painful stimuli eg. Light touch , clothes contact.
- Other — Hyperalgesia - increased sensitivity to normal pain stimuli.
  Autonomic Signs - skin changes: oedema, sweating, shininess
  Motor signs - Dystonia, weakness and paralysis, fasiculations.

Screening tools can be a useful guide to diagnosis and assessment of response to treatment. The Leeds Assessment of Neuropathic Symptoms and Signs (LANSS)[2] can be a useful tool for diagnosis and the Neuropathic pain Scale (NPS) [3] may be useful for detecting change in pain after treatment.

Refer - (at any stage of treatment)	•	**Identification of Complex Regional Pain Syndrome (reflex sympathetic dystrophy) acute is treatable however in delayed treatment or chronic condition it becomes untreatable.**
	•	**patients with severe pain.**
	•	**pain significantly limiting lifestyle, daily activities and participation.**
	•	**Underlying health condition has deteriorated.**

NICE Guideline 173 - Key principles of care [1]:

In addition to Pharmacological treatment, patient's beliefs and perceptions of pain and it's cause require to be considered. This includes it's cause, mood changes, coping strategies, anxiety and disturbed sleep and should be addressed as part of the patient's management. The patient's expectations of treatment and pain reduction also requires to be discussed and to note that it is not usually possible to achieve a completely pain free status. A clinically significant 30% reduction in pain is achievable for some patients.

When agreeing a treatment plan with the person, take into account their concerns and expectations and discuss [1]:

- the severity of the pain and its impact on lifestyle, daily activities (including sleep disturbance) and participation.
- the underlying cause of the pain and whether this condition has deteriorated.
- why a particular pharmacological treatment is being offered.
- the benefits and possible adverse effects of pharmacological treatments.
- coping strategies for pain and for possible adverse effects.
- non-pharmacological treatments.

Review

Patients treated for neuropathic pain require regular clinical review to ensure effective dose titration and optimal drug therapy

- At least monthly in the early stages
- Periodically thereafter

Monitoring should include:

- Pain reduction
- Tolerability and adverse effects of medication
- Ability to participate in daily activities
- Mood - especially anxiety and depression
- Overall improvement as described by the patient

References:

1. NICE clinical guideline 173, Neuropathic pain - pharmacological management: Available at http://guidance.nice.org.uk/CG173
2. Leeds Assessment of Neuropathic Symptoms and Signs (LANSS). [Accessed March2014]

Neuropathic Pain Flow Chart

Consider use of background simple analgesia

Paracetamol or NSAIDs, have minimal analgesic effect in neuropathic pain but may be effective in reducing any concomitant nociceptive pain and/or inflammation.

Assess for anxiety or depression

- Analgesia can be reduced with effective management of pain associated anxiety /depression.
- Tricyclic antidepressants (TCAs) may have antidepressant effect at the upper end of dosage range.
- Consider SSRI for treatment of depression if TCAs not tolerated or contraindicated.

Prescribing Notes:

- Doses should be started low and titrated up to and effective or highest tolerated dose (Not exceeding the max dose)
- Target doses stated are the likely effective dose. Patients may respond to lower doses.
- If the target dose is reached with NO or partial response move to the next step in the pathway.

Referral Considerations

- Suspected complex regional pain syndrome – immediate referral.
- No significant improvement in pain after adequate trial of drug treatments in algorithm.
- The patient does not want drug therapy.
- Further advice is needed or diagnosis on presenting set of clinical symptoms.

Neuropathic Component to Pain Likely

REVIEW PATIENT / DIAGNOSIS/ TREATMENT AT LEAST MONTHLY

FIRST LINE Amitriptyline *
Usual starting dose 10mg nocte
Target dose 50-75mg [max. 75mg-150mg] daily

Contraindicated, not tolerated or ineffective

OR Gabapentin
Usual starting dose 300mg nocte
Target dose 1800-2700mg
Maximum dose 3600mg daily

Contraindicated, not tolerated or ineffective

OR Duloxetine
Usual starting dose 30-60mg daily
Maximum dose 120mg daily
Stop TCA and/or SSRI if prescribed

Contraindicated, not tolerated or ineffective

OR Pregabalin **
Consider this option ONLY if Gabapentin has been tried first and was effective but not tolerated
Usual starting dose is 150mg/day in two divided doses
Maximum dose 600mg/day in two divided doses

Insufficient pain relief

Add Tramadol $
Acute prescribing only-
Must NOT be used long term

Specialist Pain Consultant option for Focal Neuropathic Pain:
Stop the above–listed treatment options
Consider monotherapy with LIDOCAINE 5% PLASTERS

- To be applied for 12 hours per 24 hour interval.
- Consultant to prescribe the first 4 weeks of treatment
- Effectiveness of application to be reviewed after 2 to 4 weeks, and ONLY continued if pain scores improve by a minimum of 30% on a verbal rating scale.
- GP may continue prescribing for proven effective cases.
- Review every 3 months to assess whether ongoing application is required.
- Most patients will require only one or two plasters at a time. For some people part of one plaster will suffice.
- Plasters can be cut into smaller segments.
- Supported for use only as monotherapy for neuropathic pain which is localised to a small area.

- * Use of Amitriptyline doses above 75mg daily is usually recommended only under specialist supervision.
- ** Pregabalin may be used as an alternative anticonvulsant for the treatment of neuropathic pain where gabapentin is effective but not tolerated or titration of gabapentin to an effective dose is not possible due to intolerance.
- $ Morphine may be used as an alternative opioid if tramadol not tolerated.

Serotonin Syndrome: Tricyclic antidepressants, SSRIs, duloxetine and tramadol all have serotonergic actions and therefore, combination therapy increases the risk of **serotonergic syndrome. Tricyclics and duloxetine should not routinely be co-prescribed and tramadol should be used in caution in patients taking TCAs or duloxetine. Tramadol should only be prescribed as rescue treatment for short term only.**

Neuropathic Pain Flow Chart
NEL CSU

Version 2.1
Issued: February 2016
Review: February 2018

NSAIDs Formulary - See also NSAIDs Guide.

Relevant NICE guidance and other resources relating to NSAIDs.

CKS NSAIDs - prescribing issues Last revised in July 2015

CKS NSAIDs

Management of Osteoarthritis - CKS guidelines

CKS Osteoarthritis

NICE Osteoarthritis: care and management - Clinical Guideline 177 February 2014

CG 177

The management of Rheumatoid Arthritis in adults NICE Clinical Guideline 79 - updated December 2015

NICE Clinical Guideline 79

Non-steroidal anti-inflammatory drugs - NICE advice KTT13 January 2015

NICE Advice KTT13

High-dose ibuprofen (≥2400mg/day): small increase in cardiovascular risk - MHRA June 2105. EU review confirms that the cardiovascular risk of high-dose ibuprofen (≥2400mg/day) is similar to COX 2 inhibitors and diclofenac.

MHRA June 2015

Formulary Key

1st line formulary choice	Encouraged
Alternative formulary choice	On Formulary
2nd line formulary choice	2nd Line
Shared Care (TAG Amber)	Shared Care Agreement

10. Musculoskeletal & Joint Disease

10.1 Drugs Used in Rheumatic Diseases and Gout

10.1.1 Non-Steroidal Anti-inflammatory Drugs

First Line

IBUPROFEN		T: 200, 400, 600mg L: 100mg/5ml S/F	1.2g daily in 3-4 divided doses	In line with MHRA guidance - prescribe at the lowest possible dose for the shortest period of time. Lowest GI risk of standard NSAIDs. Doses less than 1200mg are not associated with increased thrombotic risk. Use omeprazole 20mg capsules once daily or lansoprazole 15mg capsules once daily for **GI prophylaxis in all long-term users**. Where possible co-prescribing with full dose paracetamol is advised before proceeding to step two of the pain ladder Can also be used for migraine and dysmenorrhoea.
NAPROXEN		T:250, 500mg	0.5-1g daily in 1-2 divided doses	Doses of less than 1g daily are not associated with increased thrombotic risk. **375mg tablets are NOT cost effective** Longer duration of action than Ibuprofen. For use in mild to moderate pain - Can also be used in dysmenorrhoea. Use omeprazole 20mg capsules once daily or lansoprazole 15mg capsules once daily for **GI prophylaxis in all long-term users**. Where possible co-prescribing with full dose paracetamol is advised before proceeding to step two of the pain ladder See BNF section 10.1.1.

10.3 Drugs for the Relief of Soft-Tissue Inflammation

BNF Chapter 10.3.2 Rubefacients and Topical Antirheumatics

All are licensed for short-term use only

For acute, self-limiting conditions please advise patient to buy **Over The Counter (OTC)**

Topical NSAIDs

Caution : To be applied with gentle massage only. Not for use with occlusive dressings.

Please encourage self-care. If prescribing ensure appropriate quantity is provided: Topical application of large amounts can result in systemic effects: including hypersensitivity and asthma.

IBUPROFEN		Gel 5% & 10%	Three times daily	PRESCRIBE BY MOST COST EFECTIVE BRAND **e.g. Fenbid 100g**
ALGESAL		Diethylamine salicylate 10%	Three times daily	

Prescribing guidelines for NSAIDs (including COX II selective inhibitors)

Oral NSAIDs

The potential for reduced pain and inflammation with NSAIDs must be weighed against the well established multiple risks of treatment. They include: hypersensitivity reactions e.g. asthma. Severe dyspepsia, GI bleeds and ulceration, precipitating and enhancing hypertension & heart failure, functional and intrinsic renal toxicity and thrombosis are all well established risks. These adverse effects lead to a wide range of absolute and relative contraindications. Side effects, in combination with a range of drug interactions; makes oral NSAIDs difficult to prescribe safely in accordance with National guidance.

Osteoarthritis is probably a reasonable model for the long-term prescription of NSAIDs in primary care (as distinct from acute strains and sprains). Recent NICE OA Guidance[1] has recognised the shifting balance of evidence between toxicity and efficacy of long-term oral NSAIDs and recommends them fourth line to non-drug interventions, high dose regular paracetamol & topical NSAIDs (for which there is now more evidence to support their use).

The Prescribing Reference Group at NHS Anglia CSU suggests a cautious and conservative approach to the prescribing of oral NSAIDs – see below.

GI side effects

All NSAIDs (including COX-IIs) increase the risk of serious GI bleeds. NICE OA[1] and RA Guidance[2] advocate co-prescription (usually a PPI - to reduce risk of GI damage) in ALL patients IF an NSAID has to be prescribed. This applies to all NSAIDs including COX-II inhibitors.

Ibuprofen up to 1200mg daily carries the lowest risk of GI injury followed by diclofenac and naproxen.

COX-II NSAIDs have a marginally lower risk of GI damage **BUT evidence does not support the advantage of COX-IIs being maintained when either a COX-II or "standard NSAID" are co-prescribed with a PPI[3].**

Cox-II NSAIDs should not be prescribed with aspirin.

Cardiovascular toxicity

Thrombotic risk is slightly increased with COX-II inhibitors and diclofenac (especially at doses of 150mg daily). This small increased risk is shared with ibuprofen at doses above 1200mg daily.

Low dose ibuprofen – less than 1200mg daily and Naproxen up to 1000mg daily have a minimal risk.

Whilst the absolute increase in risk is small, the very widespread use of NSAIDs in the UK, means, for example that **high dose diclofenac alone may result in 2000 premature or additional thrombotic events annually.**

Renal toxicity

All NSAIDs can precipitate functional renal insufficiency, especially in patients with existing renal impairment; this is usually dose dependent. NSAIDs are also directly reno-toxic, causing (rarely) renal papillary necrosis and interstitial fibrosis leading to renal failure (which may be irreversible)[4].

Topical NSAIDs and Rubifacients

Topical NSAIDs must be systemically absorbed to have an effect. They cause similar systemic adverse effects to oral NSAIDs but only rarely and usually when used to excess.

Hypersensitivity reactions e.g. asthma do occur with topical NSAIDs

Photosensitivity reactions can occur with all topical NSAIDs – being more common with ketoprofen - occurring in between 1-2 cases per 10,000 patients. Patients should be advised against excessive exposure to direct sunlight[5,6].

There is more evidence to support the effectiveness of topical NSAIDs for chronic pain conditions when compared to rubifacients e.g. Algesal. There are very few data to support the use of capsaicin (which is expensive) [6].

The order of preference for efficacy in chronic conditions such as OA is thus – topical NSAIDs, then rubifacients then capsaicin[6].

Summary - Formulary Choices:

The majority of patients who MUST be prescribed an ORAL NSAID (including those where enhanced CV risk is a concern), should first be tried with ibuprofen (up to 1200mg daily). Naproxen (up to 1000mg daily) is the next logical choice.

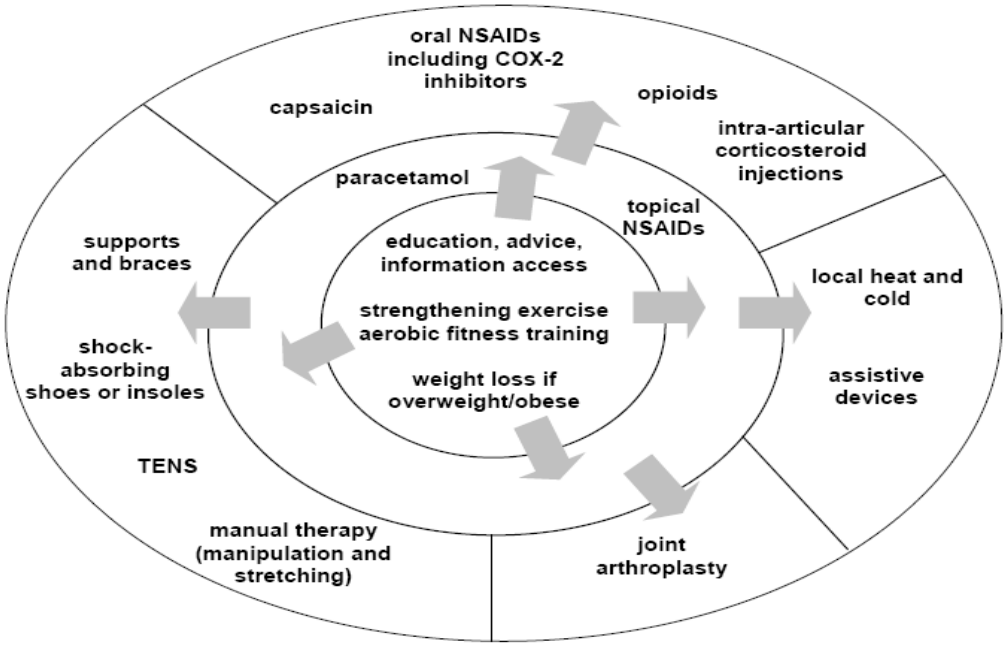
Prescribing of a low dose PPI to reduce GI damage is required IF an NSAID is to be taken regularly.

Diclofenac and COX IIs have been removed from the formulary, due to their increased cardiovascular risk over other NSAIDs and the lack of proven advantage of COX-IIs when prescribed with a PPI to reduce GI damage.

To avoid oral NSAIDs first try non-drug interventions, then high dose regular paracetamol, then topical ketoprofen or piroxicam gel, then a rubifacient e.g. Algesal, then Capsaicin (which is expensive).

1. NICE Osteoarthritis Care and Management CG 177 - February 2014
2. NICE Rheumatoid Arthritis Clinical Guideline CG079 February 2009 - updated December 2015.
5. MHRA Drug Safety Up-date 2009;2(11):5
6. Bandolier Extra. Topical Analgesics. A Review of Reviews and a bit of Perspective. March 2005.

NICE Clinical Guideline 59: Osteoarthritis, Feb 2008



Guidelines for prescribing NSAIDs

1. Don't use them unless you have to

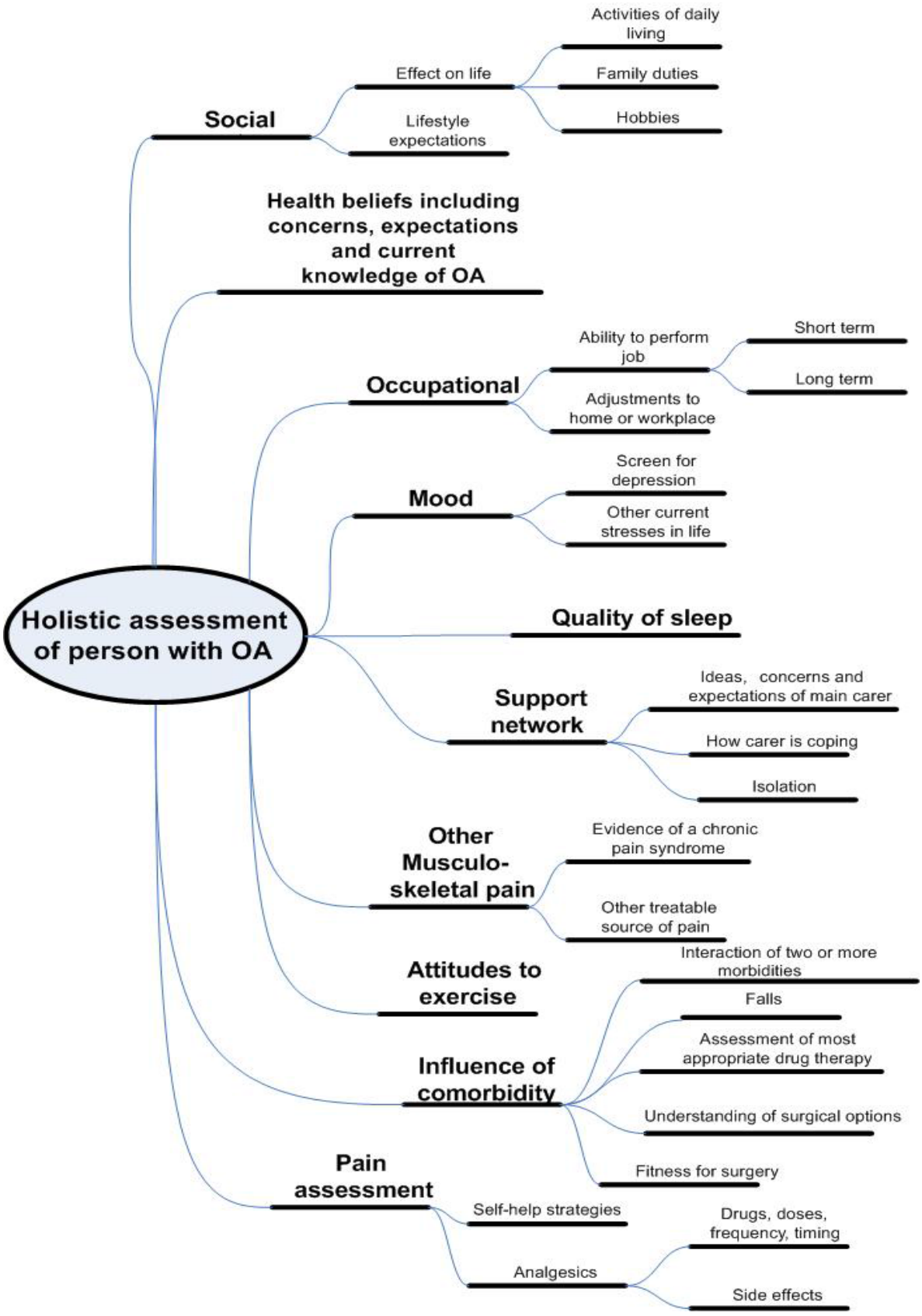
- The only way to avoid NSAID side effects is not to use them
- Paracetamol works for many - use regular dosing
- Employ non-drug interventions routinely - as above
- Consider topical NSAIDs ahead of oral NSAIDs for OA

2. If you have to use them, use them wisely

- The balance of benefits and risks needs to be carefully assessed; think about CV, GI and renal issues routinely
- Use a *safer* drug (Ibuprofen, then Naproxen) in the **lowest** effective dose for the **shortest** period
- NSAID users should be a high priority for medication review: are all NSAIDs still needed and effective? Consider Drug holidays? Don't issue repeat prescriptions without review

3. Consider gastroprotection in those taking regular oral NSAIDs of any type

- PPIs are the treatment of choice
- Double-dose H2RAs (less evidence) or misoprostol (effective but poorly tolerated) are alternatives


Holistic assessment of person with OA
Social
Effect on life
Activities of daily living
Family duties
Hobbies
Lifestyle expectations
Health beliefs including concerns, expectations and current knowledge of OA
Occupational
Ability to perform job
Short term
Long term
Adjustments to home or workplace
Mood
Screen for depression
Other current stresses in life
Quality of sleep
Support network
Ideas, concerns and expectations of main carer
How carer is coping
Isolation
Other Musculo-skeletal pain
Evidence of a chronic pain syndrome
Other treatable source of pain
Attitudes to exercise
Influence of comorbidity
Interaction of two or more morbidities
Falls
Assessment of most appropriate drug therapy
Understanding of surgical options
Fitness for surgery
Pain assessment
Self-help strategies
Analgesics
Drugs, doses, frequency, timing
Side effects

Version Control

Version	Date	Author	Contact	Status	Comment
1.0	Jun-04	NHS Anglia CSU Prescribing and Medicines Management Team	Ian Small, Director of Prescribing & Medicine Management	Final at PRG	D&T - not ratified and requires more information on DHC and Codeine addctive potential as single entities.
1.1	Jul-14	NHS Anglia CSU Prescribing and Medicines Management Team	Ian Small, Director of Prescribing & Medicine Management	Final	Full and Final copy of Chronic, Neuro and NSAID.
2.1	Oct-15	NHS Anglia CSU Prescribing and Medicines Management Team	Ian Small, Director of Prescribing & Medicine Management. Update MS	minor amendments	update wording on the pain ladder to highlight place in treatment for buprenorphine patch. Changed titles of formularies to remove "guidelines" and replaced with Guide - tabs at bottom renamed and links added to make navigation easier.
3.0	Mar-16	NEL CSU MMT	Ian Small, Director of Prescribing & Medicine Management. Update MS.	Chronic pain	Amended links, added opiod aware informaiton , general info around patch use, tidied up the flow diagram. No new products added/ changed.
				Neuropathic	Amended links, added Lidocaine 5% plasters as requested by TAG, updated flow diagram to relect this. Added link to Key message (pregabalin)
				NSAID	Updated the NICE and oter guidance, added new MHRA information, Added price information re Naproxen 375mg - expensive choice, Updated the guide with more recent guide links and information. Added holistic flow diagram from NICE CG 177.