NHS
Oxfordshire
Clinical Commissioning Group

Prescribing Rationalisation Clinical Tool

This tool is aimed to be used by prescribers as a practical decision aid in conjunction with other relevant patient-specific data when reviewing older patients.

The suggestions provided within the tool for consideration are intended to optimise medicines use. Further advice, where appropriate, is provided to assist in stopping/discontinuing and withdrawing medicines

If a medicine is no longer considered appropriate and is to be stopped the prescriber should discuss this with the patient

If a medicine is considered appropriate it should be continued. Where there is a significant clinical risk these areas are highlighted as areas to focus on

Clinical risk classifies the risk of continuing treatment based on maintenance doses.

This tool is largely based on the PrescQIPP IMPACT (Improving Medicines and Polypharmacy Appropriateness Clinical Tool) and has been amended by the Oxfordshire CCG Medicines Optimisation for use locally within Oxfordshire.

BNF class	Drug	Considerations to rationalise medicines use after checking for valid indication	Clinical risk
Gastrointestinal system	Antispasmodics	How long have they been prescribed? Avoid long term use, highly anticholinergic preparations, uncertain effectiveness[1] Anticholinergics are commonly associated with adverse effects if discontinued suddenly and require slow withdrawal[2]	
	H2 blockers/PPIs	Is an NSAID still being taken?[3] No proven peptic ulcer, GI bleeding or dyspepsia for 1 year[4]	Amber
		For patients experiencing persistent symptoms, step down the PPI dose to stop, otherwise PPIs can be stopped abruptly[5]	PPI : Red
Cardiovascular system	Nitrates	The patient has not had chest pain for six months.[3] The patient has reduced mobility[16] Antianginal medications are commonly associated with adverse effects if discontinued suddenly and require slow withdrawal[2]	
	Omega 3 fatty acid supplements	Not recommended by NICE for a variety of conditions – MI secondary prevention, sleep problems in autism, primary prevention of cardiovascular disease in type 2 diabetes, preventing hypertensive disorders in pregnancy or treating familial hypercholesterolemia[7]	
	Antihypertensives • ACE inhibitors • Alpha 1 blockers • Alpha agonists • Angiotensin II receptor blockers	Is the BP at a normal level or too low?[8] Do the known possible adverse drug reactions outweigh the possible benefits e.g. orthostatic hypotension, CNS effects, risk of falls; loop diuretics for ankle oedema – would compression hosiery be more appropriate?[1,8] Thiazide diuretic with significant hypokalaemia; ACE inhibitor or A2RB with hyperkalaemia; loop diuretic for hypertension with concurrent urinary incontinence	

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	• Beta blockers • Calcium channel blockers • Diuretics	may exacerbate incontinence[9] There is no good evidence of benefit with doxazosin MR over immediate release doxazosin. There is no benefit of perindopril arginine over generic perindopril erbumine. Insufficient evidence of effectiveness of aliskiren to recommend use[7] If more than one antihypertensive is used, stop one at a time, maintaining the dose of the others without change. Restart antihypertensives if BP increases above 90mm Hg diastolic and/or 150mm Hg systolic (160mm Hg if no organ damage).[3] Withdraw alpha agonists gradually to avoid severe rebound hypertension. ACE inhibitors, beta blockers and diuretics commonly associated with adverse effects if discontinued suddenly and require slow withdrawal[2]	
	Statins Lipid lowering drugs	Re-evaluate the patient's risk profile for primary and secondary prevention of cardiovascular disease.[10] Consider need for and intensity of treatment with respect to life expectancy and ADR risk[11] Stop in metastatic disease[12,14] or other contraindications as per the SPCs e.g. liver disease	
	Aspirin	Re-evaluate the patient's risk profile for primary prevention.[9] Do the known possible adverse drug reactions outweigh the possible benefits?[3] Is a dose of >150mg/day being used for a cardiovascular indication?[8] Length of concomitant use with clopidogrel for maximum of 12 months post ACS[11] Is aspirin being used for dizziness that is not clearly attributable to cerebrovascular disease?[9]	Amber
	Anticoagulants – oral and injected	Are LMWHs/oral anticoagulants prescribed following hip/knee replacement surgery still required?[15] Does patient have concurrent significant bleeding risk?[9] Stop warfarin if the risk of falls outweighs the benefits.[16] Long term warfarin use (>6	Amber

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		months) is not recommended when the VTE was provoked by surgery, non-surgical trigger factors or the VTE occurred in the calf only.[9,17] If the patient can't take warfarin for cognitive reasons, NOACs may not be indicated either[11]	
	Peripheral vasodilators	Clinical effectiveness often not established[11,15] Do the known possible adverse drug reactions outweigh the possible benefits?[3] Rarely indicated for long term use[11]	
Respiratory system	Cough and cold remedies	Treatments with limited clinical value/evidence, purchase cough mixtures, decongestants , inhalations, lozenges over the counter (OTC)[7]	
	Inhaled corticosteroids	In asthma – review every 3 months, has control been achieved? If yes: reduce dose slowly (by 50% every 3 months)[15] In COPD – if an inhaled corticosteroid is not appropriate, a long acting antimuscarinic bronchodilator can be used with a long acting β2 agonist[18] Corticosteroids are commonly associated with adverse effects if discontinued suddenly and require slow reduction[2]	Amber
	Antihistamines	1st generation are highly anticholinergic, clearance is reduced with advanced age, tolerance develops when used as a hypnotic, greater risk of confusion, dry mouth, constipation[1] Hayfever symptoms should be self-treated[7]	
Central Nervous system	Chloral hydrate	No convincing evidence that useful; avoid use/prolonged use, do not withdraw abruptly[15]	Amber
	Meprobamate	High rate of physical dependence, very sedating, avoid use, avoid prolonged use, abrupt withdrawal may precipitate convulsions[1] EMA recommend the suspension of marketing authorisations in Jan 2012 as the risks of serious CNS effects outweigh the benefits[15]	Amber
	Barbiturates	Intermediate acting preparations should only be used in severe intractable	Amber

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		insomnia, avoid use in the elderly[15] High rate of physical dependence, tolerance to sleep benefits, risk of overdose at low doses[1]	
	Benzodiazepines (including 'Z' drugs)	Is use required if physical and psychological health and personal circumstances are stable? If the patient is willing, committed and compliant, and has adequate social support, withdrawal possible in primary care[19] If taken for >2 weeks, withdrawal should be gradual to avoid confusion, toxic psychosis and convulsions.[9,20] With long term use, risk of adverse effects including falls, exceeds the therapeutic benefit of continued use.[2,9,15,21] Drug withdrawal may take 3 months to a year or longer[11] Switch to diazepam to aid withdrawal if necessary. Use practical info in BNF, CKS & Scottish Polypharmacy document[11,15,19]	Amber
	Antiepileptic drugs	Assess effectiveness/dose if used for pain management[11] Reduce dose of gabapentin and pregabalin if creatinine clearance <60ml/min[1]	
	Drugs for dementia	If MMSE <10, medicines may be continued if they help with behaviour.[16] NICE recommends memantine if MMSE <10. Review benefit, use should only continue if the MMSE score is ≥10 and treatment has an effect on the global, functional or behavioural symptoms[22]	
	Levodopa – carbidopa	Do the known possible adverse drug reactions outweigh the possible benefits?[3] No evidence of efficacy for benign essential tremor.[9] Antiparkinsonian agents are commonly associated with adverse effects if discontinued suddenly and require slow withdrawal[2]	

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	Antidepressants • Selective serotonin reuptake inhibitors (SSRIs) • Tricyclic antidepressants (TCADs) • Others: MAOIs, agomelatine, duloxetine, reboxetine, venlafaxine, mirtazapine	For a single episode of depression treat for 6-9 months; for multiple episodes, treat for at least 2 years, no upper duration of treatment has been identified[23] Dosulepin should not be prescribed[15] Do the known possible adverse drug reactions outweigh the possible benefits? E.g. TCADs can worsen dementia, glaucoma, constipation, urinary retention; SSRIs may induce clinically significant hyponatraemia.[3,9] Are TCADs being taken with other medicines that have anticholinergic activity and can increase risk of cognitive impairment e.g. chlorpromazine, oxybutynin, chlorphenamine?[6] Reduce dose of antidepressants gradually to avoid withdrawal effects.[2,15] Speed of withdrawal is dependent on length of treatment: <4 weeks therapy, reduce over 1-2 weeks; >8 weeks, reduce over 4 weeks; long term maintenance therapy, reduce over 6 months Exception is fluoxetine (long half-life), a 20mg dose can be stopped immediately[29]	Amber
	Antipsychotics	Do the known possible adverse drug reactions outweigh the possible benefits?[3] In dementia patients with behavioural and psychological symptoms, review and discontinue, particularly if there has been no response and symptoms are mild, unless there is extreme risk or distress for the patient[24,25] Standardized symptom evaluations and drug cessation attempts should be undertaken at regular intervals[26,27] Are chlorpromazine or trifluoperazine being taken with other medicines that have anticholinergic activity and increase risk of cognitive impairment e.g. TCADs, oxybutynin, chlorphenamine?[6] Withdrawal after long term therapy (1-2 years) should be gradual (start with 10-25% dose reduction), review weekly, then monthly, closely monitor for 2 years after drug withdrawal to avoid relapse[2,15]	Amber
	Metoclopramide	How long has it been prescribed?	

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		Can cause extrapyramidal effects including tardive dyskinesia, risk greater in older adults with frailty[1]	
	Analgesics	Purchase short courses of analgesics OTC[7]	
	Opioid analgesics	Is a regular opioid still needed? The risk of falls/constipation can outweigh the benefits. Consider non-drug options, switch to regular paracetamol[30] Review laxatives. Opioids are commonly associated with adverse effects if discontinued suddenly, slow weaning required[2,28] Potential safety problems with fentanyl immediate release formulations which provide relatively high doses of a potent opioid and have complicated titration/maintenance instructions Oxycodone/naloxone combination not cost effective. Co-proxamol withdrawn from market in 2005 due to safety concerns. Tramadol/paracetamol combination not more effective than established analgesics[7]	Red
Endocrine system	Bisphosphonates	Has treatment been taken for 5 years or more?[31] Decision needed on an individual basis – for patients who are not at high risk or those whose femoral neck T score is greater than -2.5, it is reasonable to discontinue bisphosphonates after 3-5 years[33] Women at high fracture risk may benefit from continued use[11] Do the known possible adverse drug reactions outweigh the possible benefits?[3] If the patient is at low risk of falls are these still needed?[9] Risk factors for low BMD include prolonged immobility, rheumatoid arthritis, BMI <22km/m^2 [11,32]	

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Obstetrics, gynaecology & urinary tract disorders	Alpha blockers	Use is generally not indicated if patient has long term (>2 months) catheter in situ[9] Commonly associated with adverse effects if discontinued suddenly and require slow withdrawal[2]	
	Antimuscarinics (for bladder/urinary tract symptoms)	Review effectiveness every 4-6 weeks until symptoms stabilise, and then every 6-12 months[15] Do the known possible adverse drug reactions outweigh the possible benefits?[3] E.g. postural hypotension, urinary retention, constipation Check if continence pads are also used, is concomitant use necessary?[34] Oxybutynin will decrease MMSE score in patients with dementia[9,16] Are antimuscarinics being taken with other medicines that have anticholinergic activity and can increase risk of cognitive impairment e.g. chlorpromazine, TCADs, chlorphenamine?[6] Anticholinergics are commonly associated with adverse effects if discontinued suddenly and require slow withdrawal[2]	
	Finasteride	Not indicated if patient has a long term catheter. Discuss stopping with urology specialist[11]	
Nutrition & blood	Sodium, potassium and iron supplements	Do the known possible adverse drug reactions outweigh the possible benefits?[3] No evidence of enhanced iron absorption at elemental iron doses >200mg daily[9] or with vitamin C	
	Vitamins	Does the patient have a disorder which requires vitamin and mineral supplements?[3,15] Dietary supplements/'pick me ups' should be purchases as self-care[7]	
	Lutein and antioxidant	Evidence base does not show that lutein and other eye vitamins are beneficial. If	

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	vitamins	required, they should be purchased as self-care[7]	
	Calcium & vitamin D	Does the patient have adequate levels through diet/sunlight exposure? If the patient is not mobile, is this still needed?[30]	
	Sip feeds	Does the patient have specific nutritional requirements that cannot be met by a fortified diet? Does the patient have limited mobility and using sip feeds instead of a normal diet?[30] Has a dietitian recently reviewed the patient? Does the patient meet all 5 criteria below? a) At high risk of malnutrition b) Remains at high risk after one month of a fortified diet c) Meets the ACBS criteria d) Where a dietitian has requested ONS have they provided adequate justification as to why an ONS is preferable rather than a modified diet e) Patient/carer unable to prepare homemade or purchased OTC supplements or there is documented evidence that suggests the patient is more likely to take a therapeutic dose of prescribed ONS compared with homemade or OTC supplements. Is the patient resident in a care home and not given boluses of sip feeds via a feeding tube, does not have MND or Head and Neck cancer? If so refer to Care Home Support Service for nutritional support. Sip feeds are black listed for this patient group.	
Musculoskeletal & joint diseases	NSAIDs	Is an NSAID still needed/appropriate? E.g. long term treatment of gout but no prophylaxis prescribed[9] Do the known possible adverse drug reactions outweigh the possible benefits? E.g. >3 months use for symptom relief in mild osteoarthritis, use in patients with severe hypertension/heart failure/chronic renal failure[3,9] Has PPI prophylaxis been prescribed if also taking concurrent	Amber

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		antiplatelet/anticoagulant treatment?[9] If topical NSAIDs are continued indefinitely, review the need for use; short courses are generally advised for piroxicam, felbinac, diclofenac and ketoprofen[15] NSAIDs are commonly associated with adverse effects if discontinued suddenly and require slow withdrawal[2]	
	Glucosamine	Not recommended by NICE for treatment of OA. Purchase OTC if required[7]	
	Rubefacients	The evidence available does not support the use of topical rubefacients in acute or chronic musculoskeletal pain Rubefacients should not be offered to treat OA Stop any prescribing of rubefacients NICE states state capsaicin patches should not be used for neuropathic pain in non-specialist settings, unless advised by a specialist[7]	
	Quinine	Not recommended for routine treatment because of potential toxicity. Should not be used unless cramps are very painful or frequent; when other treatable causes have been excluded; when non-pharmacological treatments have not worked (e.g. passive stretching exercises) and there is a regular disruption to sleep. Interrupt treatment at intervals of approximately 3 months to assess the need to continue. In patients taking quinine long term, a trial discontinuation may be tried[15]	
	Skeletal muscle relaxants	Often poorly tolerated because of anticholinergic adverse effects, sedation, risk of fracture, avoid use[1] Baclofen is commonly associated with adverse effects if discontinued suddenly and requires slow withdrawal[2]	Amber
Anaesthesia	Lidocaine plasters	NICE CG173 on neuropathic pain does not recommend the use of lidocaine patches as a treatment option due to limited clinical evidence to support use[7]	

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Wound management	Dressings	Wounds should be reviewed before prescribing to ensure correct dressing chosen. Chronic wounds change/reduce in size over time – refer difficult to treat wounds to tissue viability nurse Address underlying problems e.g. soiling from incontinence, wrong choice of dressing etc. Larger dressings are more expensive then the smaller ones. Query large size dressings on repeat prescriptions. Query quantities over 10 units per month, most dressings can stay in place for 3-5 days except on infected wounds, although some patients may have multiple wound sites Avoid waste – prescribe actual number of dressings required rather than "1OP"[35]	

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