

**PETERBOROUGH PRIMARY CARE TRUST
DRUG FORMULARY
August 2008
Version 1.6**

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FORMULARY BACKGROUND

This formulary has been developed through the Prescribing Assurance Group as part of Peterborough PCT's (PPCT) strategic approach to prescribing and medicines management.

It is designed to help us work consistently to promote evidence-based, effective and affordable prescribing across the PCT.

Evidence indicates that the implementation of a formulary helps medical and non-medical prescribers (and others who influence prescribing) to focus on those drugs in each therapeutic class that offer a good balance between proven effectiveness and value for money.

This formulary has been written for use by all primary care prescribers in PPCT; it reflects the primary care and hospital formularies that have previously been developed for the PCTs and hospitals in Cambridgeshire and Peterborough.

What's included?

- The formulary lists first- and second-line treatments that are evidence-based and good value for money.
- The formulary is intended to cover the majority of primary care prescribing instances and is expected to provide clinically appropriate options for treating at least 70% to 80% of patients.
- Medicines in the formulary are listed in therapeutic groups as in the BNF.
- Non-formulary medicines may be needed for some patients who have tried first and second-line formulary choices, or for whom they are unsuitable.
- It is a primary care formulary and as such not all areas are covered. This is to keep the formulary concise and easier to follow.
- If specialists recommend the use of a non-formulary medicine to primary care colleagues, they should provide information regarding why the medicine was chosen in preference to a formulary alternative, and any additional information necessary to ensure continuing treatment. This is similar to arrangements for the exceptional use of Red List drugs.

Future Developments

This formulary is an evolving document and will be reviewed and updated regularly. All enquiries, comments and suggestions relating to the formulary are welcomed and should be sent to Harriet Murch, Clinical Pharmacy Lead, Peterborough PCT harriet.murch@peterboroughpct.nhs.uk

The Formulary

BNF Class	Drug Group	1 st Line Formulary Choice	2 nd Line Formulary Choices	Prescribing notes / Links
1.	Gastrointestinal system			
1.1	Antacids	Peptac® Mucogel® (<i>low Na+</i>)	Magnesium Trisil. Co. Tabs	
1.2	Antispasmodics	Mebeverine	Domperidone Metoclopramide Hyoscine-butylbromide	Mebeverine has some selectivity vs. hyoscine so fewer anticholinergic adverse effects. Mebeverine M/R more cost-effective than normal release, at the moment. http://www.nice.org.uk/nicemedia/pdf/CG061NICEGuideline.pdf
1.3	Ulcer healing drugs			
1.3.1	H ₂ Receptor Antagonist	Ranitidine	Cimetidine	
1.3.4	Prostaglandin Analogue	Misoprostol		Shown to reduce perforations, ulcers and bleeds. However, trial dose was much higher (800mcg) than that contained in Arthrotec®

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1.3.5	Proton Pump Inhibitors	Omeprazole Capsules	Lansoprazole Capsules Lansoprazole Fastabs For patients unable to swallow	NICE Clinical Guidelines on Dyspepsia (CG17, August 04). (Quick reference guide) http://www.nice.org.uk/nicemedia/pdf/CG017quickrefguide.pdf Lansoprazole Fastabs can be dissolved in water and given down feeding tubes where oral route is unavailable. For patients who have a functioning bowel and can tolerate sip feeds, the fastab can dissolve in mouth and be absorbed enterally; note that no absorption occurs via oral mucosa.
1.4	Acute Diarrhoea	Oral rehydration	Loperamide Codeine Phosphate 30mg	Codeine - Addictive properties, reserve for short courses only; except for patients with inflammatory bowel disease.
1.5	Chronic Bowel Disorders	Mesalazine <i>(prescribe by brand)</i>	Prednisolone Sulfasalazine Tabs,Susp	Mesalazine has different release characteristics dependant on brand used. Asacol – colitis (acts on terminal ileum) Pentasa – released time-dependently along gut (beneficial in terminal ileal disease with no colitis)
1.6	Laxatives			
1.6.1	Bulk Forming	Ispaghula husk	Methylcellulose	Preparations that swell in contact with liquid should always be taken carefully and swallowed with plenty of water. They should not be taken immediately before going to bed.

BNF Class	Drug Group	1 st Line Formulary Choice	2 nd Line Formulary Choices	Prescribing notes / Links
1.6.2	Stimulant	Senna Docusate Sodium	Bisacodyl (suppositories) Glycerol (suppositories)	Stimulant laxatives, with prolonged use, can precipitate the onset of an atonic non-functioning colon and hypokalaemia
1.6.4	Osmotic Laxatives	Lactulose	Movicol Micolette enema Relaxit enema Fletcher's phosphate enema	Lactulose takes up to 48 hours to work and needs to be given regularly to work. Should not be prescribed on a prn basis.
1.7.1	Soothing Haemorrhoidal Preparations	Anusol		Provide short-term symptomatic relief only.
1.7.2	Compound Haemorrhoidal Preparations	Anusol HC	Xyloproct Scheriproct Suppositories	
1.7.4	Anal Fissures	Glyceryl trinitrate 0.4% oint (Rectogesic)		Apply 2.5cm of ointment to anal canal every 12 hours until pain stops. Maximum duration of use 8 weeks.

BNF Class	Drug Group	1 st Line Formulary Choice	2 nd Line Formulary Choices	Prescribing notes / Links
2.	CARDIOVASCULAR			<p>Hypertension: management of hypertension in adults in primary care (CG34, June 2006) http://www.nice.org.uk/nicemedia/pdf/CG034NICEguideline.pdf</p> <p>Management of chronic heart failure in adults in primary and secondary care (CG5, July 2003) http://www.nice.org.uk/nicemedia/pdf/CG5NICEguideline.pdf</p> <p>Secondary prevention in primary and secondary care for patients following a myocardial infarction (CG48, May 2007) http://www.nice.org.uk/nicemedia/pdf/CG48NICEGuidance.pdf</p> <p>The management of atrial fibrillation (CG36, June 2006) http://www.nice.org.uk/nicemedia/pdf/CG036quickrefguide.pdf</p>
2.1	Cardiac Glycosides	Digoxin		<p>Monitoring:</p> <ul style="list-style-type: none"> ▪ Monitoring of plasma levels may be useful when adjusting dose, checking compliance or investigating toxicity. ▪ If normal renal function – check one week after initiation or dose adjustment. Measure at least SIX hours after dose. If impaired renal function – perform another check a week later as will take longer to reach steady state

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2.2.1	Thiazide diuretics	Bendroflumethiazide	Metolazone	Bendroflumethiazide dose in hypertension should not exceed 2.5mg daily. It is ineffective when creatinine clearance is < 20ml/min. Indapamide (particularly M/R version) is more expensive than bendroflumethiazide but there is no reason to suppose it is any more effective.
2.2.2	Loop diuretics	Furosemide.	Bumetanide.	Bumetanide no advantage over furosemide in majority of cases. May be of benefit to some patients who appear resistant to furosemide.
2.2.3	Potassium Sparing Diuretics	Amiloride		
	Aldosterone antagonists	Spironolactone		25mg daily (heart failure). 100 to 400mg daily (other indications).
2.2.4	Potassium sparing diuretics with other diuretics	Co-amilofruse		There is limited need for the use of combination diuretics. The majority of patients receiving low dose loop diuretics do not require an additional potassium-sparing diuretic. Most products are expensive. Where a combination is essential, generic co-amilofruse is the preferred choice.
2.3	Anti-arrhythmic drugs	Amiodarone		BNF recommends 6 monthly thyroid function tests and liver function tests.

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2.4	Beta-adrenoreceptor blocking drugs	Atenolol - Hypertension and IHD Bisoprolol - Heart failure	Metoprolol – Hypertension and IHD Bisoprolol – Hypertension Carvedilol - Heart failure	Atenolol is cardio-selective and water-soluble and less likely to cause central effects, thus first-line beta-blocker for hypertension and angina . In hypertension doses higher than 50mg are no more effective. Bisoprolol is highly cardio-selective. Heart failure - 1.25mg once daily (in the morning) for one week then, if well tolerated, increase to 2.5mg once daily for 1 week, then 3.75mg once daily for 1 week, then 5mg once daily for 4 weeks, then 7.5mg once daily for 4 weeks, then 10mg once daily. Maximum 10mg daily. Hypertension - Reserve for patients who can not tolerate atenolol. It is more lipid soluble than atenolol so greater tendency towards nightmares and sleep disturbances .
2.5.1	Vasodilator Antihypertensive drugs	Hydralazine		
2.5.2	Centrally acting antihypertensives	Methyldopa	Moxonidine	Moxonidine – should only be considered if thiazides, CCBs, ACE inhibitors and b-blockers are not appropriate or have failed to control BP.
2.5.4	Alpha-adrenoreceptor blocking drugs	Doxazosin (standard preparations) - fourth line		

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2.5.5.1	ACE inhibitors	Lisinopril Ramipril (capsules only)		<p>Only lisinopril and ramipril are included as others have less evidence supporting their use.</p> <p>ACEIs should always be used first line as evidence shows that</p> <p>ACEI probably give better outcomes (such as reduction in MI) compared with AIIRAs (sartans).</p>
2.5.5.2	Angiotensin II receptor antagonists	Candesartan – hypertension and heart failure.	Irbesartan – hypertension.	<p>Only use as alternative in patients cannot tolerate ACE inhibitors.</p> <p>In patients with heart failure the cough is likely to be a symptom of the disease rather than a side effect of a drug. If changing to an AIIRA does not stop the cough, change back to an ACEI as ACEI produce better outcomes in patients with Heart Failure.</p> <p>Differences between all these are very small and probably clinically insignificant.</p>

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2.6.1	Nitrates	Glyceryl Trinitrate tabs 500mcg , spray Isosorbide Mononitrate	Isosorbide Mononitrate 60mg XL tablets.	Isosorbide mononitrate (generic, standard release) administered twice daily (second dose circa 2pm) is the preferred choice for maintenance therapy. If the patient suffers from nocturnal angina the nitrate free period should be during the day. Modified release (once daily) preparations are expensive and no more effective than twice daily doses of standard release isosorbide mononitrate. Most cost effective M/R preparation, currently Monomil 60 XL tablets.
2.6.2	Calcium Channel Blockers	Amlodipine NB beta-blocker is first choice in angina.	Felodipine Diltiazem (Viazem XL) Verapamil (arrythmias)	Direct comparative studies have shown that amlodipine has a longer duration of antihypertensive action than either diltiazem or nifedipine LA.
2.6.3	Other anti-anginal drugs	Nicorandil		Patients being started on nicorandil should be warned not to drive or operate machinery until it is established that their performance is unimpaired. No advantages over other agents. Consider only for patients already on triple anti-anginal therapy and still having symptoms.

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2.6.4	Peripheral vasodilators and related drugs	Of limited clinical value.		These preparations are considered to be less suitable for prescribing - of limited clinical value. (could be used in exceptional cases as alternative to surgery- discontinue if no benefit)
2.8.2	Oral Anticoagulants	Warfarin	-	
2.9	Anti-platelet drugs	Aspirin	Clopidogrel Asasantin Retard (post stroke for 2 years then back to aspirin only)	NICE TA 80: Clopidogrel in the treatment of non-ST-segment elevation acute coronary syndrome(July 2004) http://www.nice.org.uk/nicemedia/pdf/TA080fullguidance.pdf Clopidogrel and modified-release dipyridamole in the prevention of occlusive vascular events (May 2005) http://www.nice.org.uk/nicemedia/pdf/TA090guidance.pdf Clopidogrel should not be used as an alternative to aspirin in patients with GI or history of GI complications. Use only if true allergy i.e. rash, bronchospasm or ACS. At least as effective as aspirin, but similar no. of ADRs
2.11	Anti-fibrinolytic and haemostatics	Tranexamic acid		

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3.	RESPIRATORY SYSTEM			<p>BTS/SIGN guidelines on asthma. (Updated May 2008) http://sign.ac.uk/pdf/sign101.pdf NICE Clinical Guideline (CG12) Chronic obstructive pulmonary disease. http://www.nice.org.uk/nicemedia/pdf/CG012_niceguideline.pdf Corticosteroids for the treatment of chronic asthma in adults and children aged 12 years and over (TA138, March 2008). http://www.nice.org.uk/nicemedia/pdf/TA138Guidance.pdf NICE guidance: inhaler devices for children with chronic asthma. children under 5 years, August 2000: http://www.nice.org.uk/nicemedia/pdf/NiceINHALERguidance.pdf children 6-15 years, March 2002: http://www.nice.org.uk/nicemedia/pdf/Niceinhalers_IdC38GUIDA.pdf</p>
3.1.1	Adrenoceptor agonist bronchodilators	Salbutamol (standard MDI) In severe attacks 2 puffs, via a spacer half-hourly is as effective as nebuliser.	Terbutaline <i>alternative in patients who cannot tolerate salbutamol</i>	Step 1: mild intermittent therapy. If need more than 3 times a week, go to step 2.

BNF Class	Drug Group	1 st Line Formulary Choice	2 nd Line Formulary Choices	Prescribing notes / Links
3.1.1	Long-acting beta agonists (Step 3 – BTS asthma guidelines)	Salmeterol Formoterol		<p>The <u>current advice</u> from the Commission on Human Medicines (<u>CHM</u>) is that salmeterol and formoterol should:</p> <ul style="list-style-type: none"> • be added to therapy only if regular use of standard-dose inhaled steroids has failed to control asthma adequately • not be initiated in patients with rapidly deteriorating asthma • be introduced at a low dose and the effect properly monitored before an increase in dose is considered • be discontinued in the absence of benefit • be reviewed as clinically appropriate: stepping down therapy should be considered when good long term asthma control has been achieved <p>Patients should be asked to report any deterioration in symptoms following initiation of a LABA.</p>
3.1.2	Anti-muscarinic bronchodilators	Ipratropium (standard MDI)	Tiotropium	Tiotropium – initiate if symptomatic on max. dose of ipratropium. Spiriva respimat - only if dexterity issues with normal Spiriva inhaler.
3.1.3	Theophyllines	Aminophylline (prescribe by brand)		

BNF Class	Drug Group	1 st Line Formulary Choice	2 nd Line Formulary Choices	Prescribing notes / Links
3.2	Inhaled corticosteroids (Step 2 – BTS asthma guidelines)	Beclometasone CFC free	Budesonide	BDP CFC-free inhalers (Qvar & Clenil Modulate) are not interchangeable and should be prescribed by brand name. Changing from a CFC containing inhaler to Qvar will require dose adjustment (see BNF for details) whereas this is not usually required when changing to Clenil Modulate.
	Compound preparations (see NICE guidelines and BTS guidance)	Budesonide+formoterol Fluticasone+salmeterol		Not for routine use in asthma. No difference in efficacy vs. separate inhalers. May be of benefit in patients stabilized on same proportion of individual components i.e. guarantees LABA not taken without steroid. For COPD (and where inhaled corticosteroids are indicated) combined preparations are preferable – trial if symptomatic with regular bronchodilator therapy.
3.3.1	Cromoglicate and related therapy	Sodium cromoglicate		May be of value if allergic basis and possibly also in exercised-induced asthma. Due to lack of evidence BTS guidelines do not recommend sodium cromoglicate for children under 5
3.3.2	Leukotriene receptor antagonist	Montelukast		Refer to BTS guidelines http://sign.ac.uk/pdf/sign101.pdf
3.4.1	Antihistamines	Chlorphenamine Cetirizine Loratadine		
3.7	Mucolytics	Carbocisteine		Continue treatment post 4 week trial only if there is symptomatic improvement e.g. reduction in sputum production and cough frequency.

BNF Class	Drug Group	1 st Line Formulary Choice	2 nd Line Formulary Choices	Prescribing notes / Links
				<p>The majority of asthmatics can be managed with a salbutamol metered dose inhaler (mdi) and a beclometasone mdi. Dry powder or breath-actuated mdi if patient unable to coordinate inspiration with actuation of mdi or unwilling or unable to use mdi and a spacer. Peak flow meter – only to be used as a part of a written action plan or when monitoring response to dose changes/treatment.</p> <p>Spacer devices</p> <ul style="list-style-type: none"> • Useful if poor inhaler technique, large doses required or if prone to candidiasis with inhaled corticosteroids. • Administer one puff at a time into the spacer, rather than administering the entire required dose at once. • Do not rinse (leads to static build up) wash in warm soapy water and leave to air dry. The mouthpiece should be wiped before use to get rid of any residue. • Spacer devices should be replaced every 6-12 months.
4.	CENTRAL NERVOUS SYSTEM			
4.1.1	Hypnotics	Temazepam Zopiclone		<p>www.nice.org.uk/nicemedia/pdf/TA077fullguidance.pdf Short courses up to 14 days only; do not add to repeat prescribing systems/screen.</p>

BNF Class	Drug Group	1 st Line Formulary Choice	2 nd Line Formulary Choices	Prescribing notes / Links
				<p>Before prescribing a hypnotic agent, the causes of the insomnia should be investigated and treated. These include psychiatric conditions such as anxiety or depression, other physical illnesses, dependence on medication or even over-consumption of alcohol.</p> <p>Hypnotics should be avoided in the elderly, who are at risk of becoming ataxic or confused, and so liable to fall and injure themselves.</p> <p>Drugs initiated for insomnia in hospital should not normally be continued on discharge.</p> <p>Switching from one hypnotic to another is only appropriate if a patient is experiencing adverse effects directly related to a specific agent.</p> <p>If a patient does not respond to one hypnotic drug he/she should not be changed to another hypnotic drug.</p> <p>Benzodiazepines should be used to treat insomnia only when it is severe, disabling or subjecting the individual to extreme distress</p>

BNF Class	Drug Group	1 st Line Formulary Choice	2 nd Line Formulary Choices	Prescribing notes / Links
4.1.2	Anxiolytics	Diazepam As per BNF guidance	Buspirone Propranolol Flupenthixol (low dose)	Use propranolol if mainly somatic symptoms. Flupenthixol can have alerting effect so last dose before 4pm. Benzodiazepines are indicated for the short-term relief (two to four weeks only) of anxiety that is severe, disabling or subjecting the individual to unacceptable distress, occurring alone or in association with insomnia or short-term psychosomatic, organic or psychotic illness. • The use of benzodiazepines to treat short-term 'mild' anxiety is inappropriate and unsuitable.
4.2.1	Anti-psychotic drugs, Typical	Chlorpromazine, Haloperidol Sulpiride	Flupenthixol Fluphenazine Levomopromazine Trifluoperazine Zuclopenthixol	
	Anti-psychotic drugs, Atypical	Risperidone	Amisulpride Aripiprazole, Olanzapine Quetiapine,	NICE guidance: Atypical antipsychotics for schizophrenia TA43 (June 2002) http://www.nice.org.uk/nicemedia/pdf/ANTIPSYCHOTICfinalguidance.pdf
4.2.3	Anti-manic drugs	Lithium Prescribe by brand.	Semi-sodium valproate	

BNF Class	Drug Group	1 st Line Formulary Choice	2 nd Line Formulary Choices	Prescribing notes / Links
4.3.1	Tricyclic and related antidepressant drugs	Amitriptyline Included for the (unlicensed) treatment of neuropathic pain. Lofepramine	Clomipramine Imipramine Trazodone	Lofepramine - relatively less cardiotoxic than other TCAs. Hence safer in overdose. Imipramine - Used for enuresis. Trazodone - where sedation is required. Also licensed for anxiety.
				NICE guideline: Depression: management of depression in primary and secondary care (CG23, amended April 2007) http://www.nice.org.uk/nicemedia/pdf/CG23NICEguidelineamended.pdf NICE guideline: Depression in children and young people: identification and management in primary, community and secondary care (CG28, September 2005) http://www.nice.org.uk/nicemedia/pdf/CG028NICEguideline.pdf
4.3.2	Monoamine Oxidase Inhibitors	Not to be initiated in primary care.		
4.3.3	Selective serotonin reuptake inhibitors	Fluoxetine Citalopram	Sertraline	Citalopram licensed for panic disorder. Sertraline of use if patient has had a recent MI or unstable angina.
4.3.4	Other antidepressant drugs	Not first line choice for depression.	Venlafaxine Mirtazapine	Venlafaxine – monitor BP. Mirtazapine - few antimuscarinic effects but sedation may be a problem at initiation of treatment

BNF Class	Drug Group	1 st Line Formulary Choice	2 nd Line Formulary Choices	Prescribing notes / Links
4.4	Central nervous stimulants	Methylphenidate (shared care for ADHD)	Dexamfetamine (shared care for ADHD)	NICE guidance: Methylphenidate, atomoxetine and dexamfetamine for attention deficit hyperactivity disorder TA98 (March 2006) http://www.nice.org.uk/nicemedia/pdf/TA098guidance.pdf
4.5	Obesity drugs	See NICE: First line treatment is lifestyle change i.e. diet/exercise.	Orlistat Sibutramine	Orlistat - Treatment should be continued beyond six months only if at least 10% weight has been lost since treatment initiated. Treatment with orlistat should be discontinued after 12 weeks if patients have been unable to lose at least 5 % of the body weight as measured at the start of drug therapy. Patients may reduce their fat intake to avoid severe gastrointestinal side effects including steatorrhea Sibutramine - Maximum period of treatment is ONE year. A small number of users will have a rise in blood pressure which should be checked every two weeks in the first month. Arterial disease, uncontrolled hypertension, arrhythmias and concomitant use of anti-depressants are contra-indications.
4.6	Drugs used in nausea and vertigo	Prochlorperazine Metoclopramide	Cinnarazine Cyclizine Betahistine Domperidone	Cinnarazine – travel, Menieres Cyclizine - pregnancy Betahistine – Meniere’s Domperidone – 1 st line for use in Parkinson’s disease.

BNF Class	Drug Group	1 st Line Formulary Choice	2 nd Line Formulary Choices	Prescribing notes / Links
4.7	Analgesics			<p>Avoid effervescent/soluble analgesics formulation (high sodium content) in patients with cardiovascular disease.</p> <p>http://www.mrc-hnr.cam.ac.uk/downloads/J5702_Why6_AW_02.pdf</p>
4.7.1	Non-opioid analgesics	Paracetamol	Aspirin	
	Compound analgesic preparations	Not recommended		<p>The evidence base for the superior efficacy of co-codamol 8/500 and co-dydramol 10/500 over paracetamol in acute pain is inadequate.</p> <p>The amounts of codeine and dihydrocodeine in these preparations are sub-therapeutic, but likely to lead to opioid adverse effects.</p> <p>Co-codamol 30/500 contains a therapeutic dose of codeine but when maximum doses of paracetamol are given the dose of codeine is likely to be excessive for some patients. For this reason consideration should be given to providing the codeine as a separate item.</p>
4.7.2	Opioid analgesics	Codeine Dihydrocodeine	Tramadol	Tramadol (not modified-release preparations)
	Palliative Care	Codeine	Morphine Fentanyl Buprenorphine	<p>Link to useful palliative care guidelines</p> <p>http://www.birminghampalliativecare.com/linked_files/WMP_C_GUI.PDF</p>

BNF Class	Drug Group	1 st Line Formulary Choice	2 nd Line Formulary Choices	Prescribing notes / Links
4.7.3	Neuropathic pain	Amitriptyline	Carbamazepine Gabapentin Dexamethasone	
4.7.4.1	Acute migraine	Paracetamol Aspirin soluble 300mg Ibuprofen Soluble forms may act quicker. (Avoid opioids)	Metoclopramide Domperidone Sumatriptan tablets Rizatriptan orodispersible	Rizatriptan orodispersible in cases of severe nausea and/or vomiting
4.7.4.2	Prophylaxis of migraine	Propranolol	Pizotifen	Preventative treatment should be considered for patients who – <ul style="list-style-type: none"> • Suffer at least 2 attacks per month • Suffer an increasing frequency of headaches • Suffer significant disability despite suitable treatment • Cannot take suitable treatment
4.8.1	Control of epilepsy	Carbamazepine Phenytoin capsules Sodium Valproate	Gabapentin Lamotrigine	NICE: Epilepsy in adults and children. http://www.nice.org.uk/nicemedia/pdf/CG020NICEguideline.pdf

BNF Class	Drug Group	1 st Line Formulary Choice	2 nd Line Formulary Choices	Prescribing notes / Links
4.9	Drugs used in Parkinsonism and related disorders.	Refer to specialist Co-Beneldopa Co-Careldopa		NICE: Parkinson's disease: diagnosis and management in primary and secondary care. http://www.nice.org.uk/nicemedia/pdf/cg035niceguideline.pdf
4.9.2	Antimuscarinic drugs in Parkinsonism	Procyclidine	Trihexyphenidyl Benzatropine	
4.10	Drugs used in substance dependence - opioid	Methadone Buprenorphine	Naltrexone Lofexidine	To be prescribed only in conjunction with specialist team.
	Drugs used in substance dependence – cigarette	NRT as per NICE guidance.	Bupropion Varenicline	Prescribe only in conjunction with referral to PQS.
	Drugs used in substance dependence - alcohol	Disulfiram Acamprosate		Both prevent relapse. Disulfiram – severe reaction can occur if large quantities of alcohol consumed. Acamprosate – suppresses the urge to drink.

BNF Class	Drug Group	1 st Line Formulary Choice	2 nd Line Formulary Choices	Prescribing notes / Links
4.11	Drugs for dementia	Donepezil Galantamine Rivastigmine	Restricted use only, in line with NICE guidance.	NICE guideline: Donepezil, galantamine, rivastigmine (review) and memantine for the treatment of Alzheimer's disease. (TA111, September 2007) http://www.nice.org.uk/nicemedia/pdf/TA111NICEguidance.pdf http://www.cambsphn.nhs.uk/default.asp?id=110
5.	INFECTIONS			Link to latest antibiotic guidelines: http://www.peterborough.nhs.uk/documents/Freedom_of_Information/Policies_and_procedures/Clinical_Policies_A__M/Antibiotic_Guidelines_2007.pdf?preventCache=04%2F09%2F2007+14%3A56
6.	ENDOCRINE SYSTEM			http://www.nice.org.uk/guidance/index.jsp?action=byTopic&o=7239
6.1.1	Drugs used in diabetes - insulin			Refer to diabetes team recommendations

BNF Class	Drug Group	1 st Line Formulary Choice	2 nd Line Formulary Choices	Prescribing notes / Links
6.1.1.3	Hypodermic Equipment			Routine use of blood glucose monitoring strips is not recommended in non-insulin using diabetics unless the results will affect the management of their diabetes. Please refer to PPCT guidelines for further advice. http://www.peterborough.nhs.uk/documents/Freedom_of_Information/Policies_and_procedures/Clinical_Policies_A_M/Diabetes%20-%20Type_2_Diabetes_Self_Monitoring_of_Blood_Glucose_Levels_Sept_2006.pdf?preventCache=21%2F06%2F2007+11%3A29
6.1.2	Drugs used in diabetes – oral antidiabetics	Metformin Gliclazide	Tolbutamide Glimepiride Glipizide Pioglitazone	Metformin - Titrate up to max. dose tolerated. Not modified release preparations. Gliclazide - not modified release preparations. Tolbutamide - useful in renal impairment. Pioglitazone - Add on if metformin or sulphonylurea (SU) contra-indicated or if combination of metformin & sulphonylurea not tolerated. Using third line after metformin + SU would be of little benefit as normally there is failing insulin release, and insulin therapy would be preferred.
6.1.2.3	Other oral antidiabetics		Acarbose	GI side-effects usually transient

BNF Class	Drug Group	1 st Line Formulary Choice	2 nd Line Formulary Choices	Prescribing notes / Links
6.1.4	Treatment of hypoglycaemia	Dextrose Gel	Glucagon	
6.2.1	Thyroid hormones	Levothyroxine	Liothyronine	
6.2.2	Anti-thyroid drugs	Carbimazole	Propylthiouracil	
6.3.1	Corticosteroids – replacement therapy	Hydrocortisone	Fludrocortisone	
6.3.2	Corticosteroids - glucocorticoids	Prednisolone	Dexamethasone	
6.4	Sex Hormones – Oestrogens and HRT			Elleste range generally more cost effective.
	Sequential combined	Tablets(cyclical standard strength): Elleste Duet Femoston Prempak-C	Patches: Evorel Sequi Femseven Sequi Femapak	Include 10 – 14 days progestogen to produce a withdrawal bleed. Incur 2 prescription charges.
	Continuous combined	Tablets: Kliovance 1mg Kliofem 2mg Elleste duet conti 1+2mg	Patches: Evorel Conti Femseven Conti	Patch – avoids first pass effect so useful if renal impairment or raised triglycerides
	Unopposed estrogen	Tablets: Elleste Solo Premarin	Patches: Evorel Estradot Elleste solo mx	

BNF Class	Drug Group	1 st Line Formulary Choice	2 nd Line Formulary Choices	Prescribing notes / Links
	Topical Estrogens	Conjugated oestrogens cream 625mcg/g Estriol 0.01% cream Estradiol 25 mcg vaginal tabs	Estradiol 0.1% gel Estriol 0.1% cream Estring Vaginal Ring	
	Estrogen deficiency	Tibolone	-	
6.4.1.2	Progestogens	Norethisterone	Progesterone pessaries	
6.4.2	Anti-androgens	Finasteride	Cyproterone acetate	
6.6.2	Bisphosphonates	Alendronate WEEKLY	Risedronate WEEKLY	If alendronate not tolerated, consider risedronate.
7.	OBSTETRICS, GYNAECOLOGY, AND URINARY TRACT DISORDERS			
7.2.1	Preparations for vaginal atrophy	Estradiol 25 mcg vaginal tabs	Conjugated oestrogens cream 625mcg/g Estriol 0.01% cream Estriol 500mcg pessaries Estriol 0.1% cream	

BNF Class	Drug Group	1 st Line Formulary Choice	2 nd Line Formulary Choices	Prescribing notes / Links
7.2.2	Preparations for vulval and vaginal candidiasis	Clotrimazole		If recurrent, swab first and refer to antibiotic guidelines.
	Preparations for other vaginal infections	Swab first and refer to antibiotic guidelines		Swab first and refer to antibiotic guidelines
7.3.1	Combined contraceptives (COC) <u>Most effective oral contraceptives</u> for general use.	Ethinylestradiol/ norethisterone type: Loestrin 20 Brevinor		Use first line unless major contraindication. Taken at about the same time each day as protection may be lost if interval between tablets > 36hrs. Loestrin 20 - lower strength more suitable for younger patients. http://cks.library.nhs.uk/contraception/management/prescribing_information/progestogen_only_contraceptives_pills_implant_injectables/progestogen_only_pills_pops/which_to_offer_first_line#-281639
	Ethinylestradiol/ levonorgestrel type:	Ovranette Microgynon 30		Ovranette identical to Microgynon 30, but lower acquisition cost.
	Ethinylestradiol/ desogestrel type:		Marvelon	Not first choice - Associated with an increased risk of venous thromboembolism.

BNF Class	Drug Group	1 st Line Formulary Choice	2 nd Line Formulary Choices	Prescribing notes / Links
	Ethinylestradiol/ gestodene type:		Femodette	Not first choice - Associated with an increased risk of venous thromboembolism.
	Ethinylestradiol/ norgestimate type:	Cilest		
	Ethinylestradiol/ drospirinone type:	Yasmin		
	Mestranol/norethisterone type:	Norinyl-1		
	Biphasic and triphasic combined oral contraceptives	Ethinylestradiol/ norethisterone type: Binovum	Trinovum	No evidence supports the use of bi- and triphasic over monophasic.
		Ethinylestradiol/ levonorgestrel type: Logynon	Trinordiol	
		Ethinylestradiol/ gestodene type:	Tri-minulet Triadene	
	Emergency contraception	Levonelle 1500		Ensure OTC pack (one step) is not prescribed on FP10.

BNF Class	Drug Group	1 st Line Formulary Choice	2 nd Line Formulary Choices	Prescribing notes / Links
7.3.2.1	<p>Oral progesterone only contraceptives (POP) alternatives if cautions or contraindications to COCs e.g. >35 years, breastfeeding mothers, heavy smokers, migraine sufferers, hypertension, valvular heart disease, history of, or risk factors for, thrombo-embolism.</p>	<p>Norethisterone 350mcg :</p> <p>Micronor</p> <p>Cerazette (where compliance may be an issue or patient weighs more than 70kg)</p>	<p>Noriday (same as micronor, use if micronor unavailable)</p>	<p>POPs – Higher failure rate than COCs, also rendered less reliable by enzyme inducing drugs. Higher incidence of menstrual irregularities.</p> <p>Caution: Protection may be lost if a tablet is delayed by more than 3hrs with Micronor and more than 12 hours with Cerazette. Continue normal pill-taking but, must also use another method, for the next 2 days.</p> <p>http://cks.library.nhs.uk/contraception/management/prescribing_information/progestogen_only_contraceptives_pills_implant_injectables/progestogen_only_pills_pops/which_to_offer_first_line</p>
7.3.2.2	Parenteral progestogen only contraceptives	Depo-provera Implanon		
7.3.2.3	Intrauterine progestogen only system	Mirena		
7.4.1	Drugs used for urinary retention	Tamsulosin capsules	Alfuzosin	

BNF Class	Drug Group	1 st Line Formulary Choice	2 nd Line Formulary Choices	Prescribing notes / Links
7.4.2	Drugs for urinary frequency, enuresis and incontinence	Oxybutinin	Tolterodine Desmopressin Amitriptyline	Desmopressin and Amitriptyline (nocturnal enuresis)
7.4.3	Drugs used in urological pain	Potassium Citrate Mixture		Potassium citrate – women with LUTI, who are prescribed nitrofurantoin, should not take alkalinising agents.
7.4.5	Drugs for erectile dysfunction	Sildenafil	Tadalafil Alprostadil	As per SLS guidance
8.	MALIGNANT DISEASE AND IMMUNOSUPPRESSION			
	Hospital initiated.			
9.	NUTRITION AND BLOOD			
9.1.1	Oral iron	Ferrous fumarate 210mg tablet (68mg elemental iron per tablet)	Ferrous Sulphate (65mg elemental iron) Ferrous gluconate (35mg elemental iron) Pregaday	Modified release preparations are likely to carry the iron past the area for optimum absorption.
9.1.2	Drugs used in megaloblastic anaemia	Folic acid Hydroxocobalamin		Treatment dependent on deficiency.

BNF Class	Drug Group	1st Line Formulary Choice	2nd Line Formulary Choices	Prescribing notes / Links
9.2	Fluids and Electrolytes	Rapolyte	Electrolade	
9.4	Oral Nutrition			
9.4.1	Foods for special diets			NB May only be prescribed at NHS expense in line with guidance from Advisory Committee on Borderline Substances; see Appendix 7 BNF for limitations on NHS prescribing
9.4.2	Enteral nutrition	Fortisip (variants), Calogen		
9.6.2	Vitamin B	Thiamine (alcoholism)	Vitamin B Compound Strong	
9.6.4	Vitamin D (with calcium)	Adcal-D3 chewable Calceos	Calcichew D3 Forte Calfovit D3 Sachets	If patient develops nausea & vomiting stop drug and check for hypercalcaemia. Adcal-D3 chewable - Contains correct proportions of calcium and vitamin D found to be of benefit in trials.

BNF Class	Drug Group	1 st Line Formulary Choice	2 nd Line Formulary Choices	Prescribing notes / Links
9.6.6	Vitamin K	Follow local guidelines on use to reverse effect of oral anticoagulants. Konakion® MM injection	Menadiol (oral) – if fat malabsorption	
10.	MUSCULOSKELETAL AND JOINT DISEASES			
10.1.1	Non-steroidal anti-inflammatory drugs	Ibuprofen (standard release) Naproxen (standard release)	Diclofenac E/C tablets (standard release)	First line treatment option is: Ibuprofen up to 1200 mg per day or naproxen up to 1000 mg per day. http://www.mhra.gov.uk/home/idcplg?IdcService=GET_FILE&dDocName=CON2025036&RevisionSelectionMethod=LatestReleased
10.1.2	Corticosteroids	Prednisolone tablets (oral) Dexametasone	Prednisolone e/c tablets	
10.1.3	Drugs which suppress the rheumatic disease process	Should only be used following Consultant advice.		Should only be used following Consultant advice.

BNF Class	Drug Group	1 st Line Formulary Choice	2 nd Line Formulary Choices	Prescribing notes / Links
10.1.4	Drugs to treat gout	Allopurinol - for long term prophylaxis	Acute episodes Colchicine NSAIDS – see section 10.1.1	Allopurinol - NSAID or colchicine co-prescribed for first 3 months whilst allopurinol introduced. Start at low dose and build up over 4 to 6 weeks, less likely to precipitate acute attack. Colchicine if on anticoagulant therapy, history of peptic ulcer, CVD
10.2.2	Skeletal muscle relaxants	Baclofen	Diazepam	Diazepam – 2-4mg tds for 3-7 days.
10.3.2	Rubefacients and other topical antirheumatics	Topical NSAIDs: Piroxicam gel (100g) Ketoprofen gel (100g)	Rubefacients (if local rubbing provides relief): Algesal (OTC) Transvasin cream (OTC)	Topical NSAIDs – have place in osteoarthritis (OA) therapy ahead of oral NSAIDs and opioids. http://www.nice.org.uk/nicemedia/pdf/CG59NICEguideline.pdf May be useful in OA for acute flare up, or where oral NSAIDs are contra-indicated. Rubefacients – not recommended as limited evidence to support their efficacy, and may be large placebo response due simply to rubbing/massage of the affected area. http://www.medicine.ox.ac.uk/bandolier/Extraforbando/Topeextra3.pdf
11.	EYE			

BNF Class	Drug Group	1 st Line Formulary Choice	2 nd Line Formulary Choices	Prescribing notes / Links
11.3.1	Anti-infective eye preparations - antibacterial	Chloramphenicol eye drops and ointment Fusidic acid eyedrop 1%		Infective conjunctivitis normally resolves spontaneously. Offering no treatment has a similar outcome to treatment. http://cks.library.nhs.uk/conjunctivitis_infective/management/quick_answers/scenario_persistent_infective_conjunctivitis/clinical_summary_persistent_infective_conjunctivitis#-304649 Only use for persistent (> 2 weeks) conjunctivitis (see CKS guidance).
11.3.3	Anti-infective eye preparations - antiviral	Aciclovir Eye Ointment	-	
11.4	Corticosteroids and other anti-inflammatory preparations	Should normally only be used under expert supervision		Should normally only be used under expert supervision
11.4.2	Other anti-inflammatory preparations	Sodium cromoglicate	Antazoline (Otrivine-Antistin)	
11.6	Treatment of glaucoma	HOSPITAL INITIATED		HOSPITAL INITIATED
11.8.1	Preparations for tear deficiency	Hypromellose 0.3%	Carbomer 980 liquid gel: 0.2% Lacrilube	
12.	EAR NOSE AND OROPHARYNX			

BNF Class	Drug Group	1 st Line Formulary Choice	2 nd Line Formulary Choices	Prescribing notes / Links
12.1.1	Otitis externa	Locorten-Vioform ear drops Betnesol N ear drops	Gentamicin HC ear drops Aluminium acetate ear drops Clotrimazole 1% Solution	
12.1.2	Otitis media	For acute attacks where there are no systemic features: paracetamol for pain.		BNF: "For acute attacks with no systemic features: treat systemically after 72hours or earlier if there is deterioration or no improvement". Delayed prescription?
12.1.3	Removal of ear wax	Sodium bicarbonate 5%	Exterol, Olive Oil	Sodium bicarbonate 5% for 10 days effective.
12.2.1	Drugs used in nasal allergy	Beclometasone spray	Mometasone furoate spray	
12.2.2	Topical Nasal decongestants	If considered: Recommend OTC.	Sodium Chloride nose drops 0.9%	
12.2.3	Anti-infective nasal preparations	Naseptin	Mupirocin 2%	Mupirocin 2% only to be used if MRSA has been identified.
12.3.1	Drugs for oral ulceration and inflammation	Hydrocortisone pellets Triamcinolone 0.1% oral paste	Benzydamine	Benzydamine – not shown to affect the course, but useful if analgesia necessary

BNF Class	Drug Group	1 st Line Formulary Choice	2 nd Line Formulary Choices	Prescribing notes / Links
12.3.2	Oropharyngeal anti-infective drugs	Miconazole oral gel Nystatin suspension, pastilles	Amphotericin Oral fluconazole	Oral fluconazole is 2 nd line for severe candidiasis.
12.3.4	Mouthwashes, gargles and dentifrices	Recommend OTC	Chlorhexidine Povidone-iodine	
12.3.5	Treatment for dry mouth	Self care	SST tablets Luborant	Self care e.g. sip fluid, ice cubes, sugar free pastilles/gum
13.	DRUGS ACTING ON THE SKIN			<p>NICE guidance: Frequency of application of topical corticosteroids for eczema (TA81, August 2004) http://www.nice.org.uk/nicemedia/pdf/ta081guidance.pdf</p> <p>NICE guidance: Management of atopic eczema in children from birth up to the age of 12 years. (CG57, December 2007) http://www.nice.org.uk/nicemedia/pdf/CG057NICEguideline.pdf</p> <p>NICE guidance: Tacrolimus and pimecrolimus for atopic eczema (TA82, August 2004) http://www.nice.org.uk/nicemedia/pdf/TA082guidance.pdf</p> <p>British Association of Dermatologist guidance: Advice to dermatologists re topical tacrolimus. http://www.bad.org.uk/healthcare/guidelines/Advice_re_topical_tacrolimus.doc</p>

BNF Class	Drug Group	1 st Line Formulary Choice	2 nd Line Formulary Choices	Prescribing notes / Links
13.2.1	Emollients	Aqueous cream Emulsifying Ointment	Diprobase Doublebase Aquadrade (with urea) Dermol 500 (with antimicrobial) Balneum Plus Cream (with anti-pruritic) Oilatum cream	
13.2.1.1	Emollient bath preps	Oilatum emollient bath additive	Dermalo Balneum bath oil	
	Emollient bath preps – with antimicrobials	Oilatum Plus	Emulsiderm	
13.2.2	Barrier preparations	Zinc and castor oil ointment	Metanium Conotrane	
13.3	Topical local anaesthetics and antipruritics	Where used: Calamine Lotion(OTC) Lidocaine Gel	Crotamiton cream (OTC)	
13.4	Topical corticosteroids	MILD: hydrocortisone 0.5 - 1% cream/ointment		

BNF Class	Drug Group	1 st Line Formulary Choice	2 nd Line Formulary Choices	Prescribing notes / Links
		MODERATE: Betamethasone 0.025% (1 in 4 diluted) cream/ ointment	Clobetasone 0.05% cream/ ointment	
		POTENT: Betamethasone 0.1% cream/ointment	Hydrocortisone butyrate 0.1% ointment	
		VERY POTENT: Clobetasol 0.05% cream/ointment	-	
	Topical Corticosteroid plus Anti-Infective Agent	Fucidin H Daktacort, Canesten HC	Fucibet	
13.5.2	Topical preparations for psoriasis	Alphosyl HC Calcipotriol Polytar emollient Dithranol	Talcalcitol Dovobet	Dithranol – gold standard for well motivated patients, but staining and high incidence of irritation make it less popular.
13.6.1	Topical preparations for acne	Benzyl peroxide cream/gel	Azelaic acid 20% cream Erythromycin 4% Gel Clindamycin Solution 1%	Clindamycin Solution 1% - Best to reserve for patients who cannot tolerate oral antibiotics.

BNF Class	Drug Group	1 st Line Formulary Choice	2 nd Line Formulary Choices	Prescribing notes / Links
	Topical retinoids and related preparations for acne	Tretinoin	Adapalene	
13.6.2	Oral preparations for acne	Co-cyprindiol (<u>prescribe generically</u>) Oxytetracycline Erythromycin	Lymecycline	Erythromycin - Treatment may fail due to poor compliance in this age group – some evidence suggests 1g once daily dose can be tolerated and effective.
13.7	Warts and calluses	Salactol (12%) Verrugon (50%)		Viral warts, including verrucas on the soles of the feet, will disappear spontaneously. Only use where warts painful, persistent, unsightly or cause distress.
13.9	Shampoos and scalp preparations	Ketoconazole 2% Coal tar extract 2% shampoo	Polytar Capasal	
13.10.1	Antibacterial preparations only used topically	Mupirocin 2% (use max. 10 days)		
13.10.1.2	Antibacterial preparations also used systemically	Fusidic acid Metronidazole gel		Metronidazole gel: Acea gel brand for rosacea Anabact/Metrotop for wounds

BNF Class	Drug Group	1 st Line Formulary Choice	2 nd Line Formulary Choices	Prescribing notes / Links
13.10.2	Topical Anti-Fungals	Clotrimazole 1% Miconazole 2%	Nystatin cream/ointment	
13.10.3	Antiviral preparations	Aciclovir		
13.10.4	Parasiticial Preparations	Malathion Permethrin	Carbaryl	Scabies - Permethrin is first-line treatment. (malathion preferred if pregnant) Head lice – Malathion lotion first-line.
13.11	Disinfectants and Cleansers	Luke warm tap water [Stericlens]	Povidone-iodine solution Chlorhexidine solution	Luke warm tap water first choice: an effective wound irrigator/cleanser.
13.12	Antiperspirants	Aluminium chloride solution: 20%	-	Aluminium chloride solution: 20% is Anhydrol Forte
13.13	Topical circulatory preparations	Avoidance of exposure to cold. (this works)	Heparinoid 0.3% (Limited clinical value).	
15.2	Local anaesthetics	Tetracaine (Ametop) Lidocaine gel Emla cream		

This formulary only covers conditions and associated drugs that would be routinely prescribed in Primary Care.

Appendix A