











The Interface Formulary For Adults

An introduction

Double Yellow

The purpose of the formulary is to promote rational, safe and cost-effective prescribing and to help promote seamless care at the primary-secondary care interface. This formulary has been developed by the Formulary Working Group, which has medical and pharmaceutical representation from Heart of England NHS Foundation Trust, Birmingham Cross City CCG, Solihull CCG and South East Staffordshire and Seisdon Peninsula Clinical Commissioning Group.

Prescribers can nominate a preparation for consideration by the Formulary Working Group via

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The content of the formulary reflects **nationally recognised evidence** or consensus opinion at the time of compilation. Evidence or opinion may change over time and it is the responsibility of the prescriber to ensure that new evidence or national guidelines are taken into account in their prescribing. The individual prescriber remains responsible for the patient's care and the prescription written.

The formulary will be updated to reflect additions, removals or other changes approximately every 3 months. Any changes will be documented from page 3 for easy reference.

The Traffic Light System The medicines included in the formulary have been classified using a traffic light system.

Green These preparations are prescribable within primary and secondary care and are considered first line

Yellow These preparations are prescribable within primary and secondary care and are considered as either second line or they are restricted in some

other way e.g. the use may be unlicensed/off label. Where a restriction applies, it is stated in the additional information section.

These preparations are prescribable within primary and secondary care and however their use is **further restricted**. – Restrictions are stated in the additional information section. In addition to the restrictions, medicines in this column may require an **ESCA** (Effective Shared Care

Agreement) or a **RICaD** (Rationale for Initiation, Continuation and Discontinuation) to be completed before prescribing can be undertaken in Primary care. ESCAs and RICaDs are developed via collaboration between the Formulary Working Group and the relevant specialists.

These drugs are for specialist use only. They should not be prescribed in primary care unless by a "GP with special interest"

Funding in Primary Care

Inclusion within the green, yellow or double yellow columns implies that funding from primary care prescribing budgets has been agreed, provided prescribing lies within any stated restrictions (e.g. within documented shared care agreements)

Additional Information

Where £, ££ or £££ is shown, this indicates a greater cost when compared to similar medicines used for identical indications.

Some preparations have been assessed by the Formulary Working Group as suitable for prescribing in primary care following

Specialist initiation Preparation deemed appropriate for the patient by the specialist, for which the patient receives an initial prescription from the

specialist.

Specialist recommendation Preparation deemed appropriate for the patient by the specialist. The specialist provides the GP with a formal letter in support of

the recommendation. Provision of a "HEFT pink recommendation slip" alone is not acceptable.

Links

The formulary has many links to online resources throughout the document; these can be accessed by either clicking on the link OR clicking on the link whilst holding down your control (ctrl) key.

Searches

You can search for text by selecting *Find* from the *Formulary* menu in the menu bar above and typing what you want to search for

This formulary should be used in conjunction with the BNF and additional prescribing information should be obtained from the Summary of Product Characteristics.

Recent Changes to the formulary

This section details the outcome of applications made to the Formulary Working Group (FWG) over an approximate rolling two year period.

Consideration	Outcome
	APPENDIX– for women already established on Logynon ® or who wish to return to
33	Logynin® following a break from OCP
	New Patients should not be offered Logynin ®
Pravastatin	MOVED – now YELLOW was previously Double yellow
Saxagliptin	YELLOW - Saxagliptin is the first "gliptin" to have gained a licence for the management of
	type 2 diabetes in patients with moderate to severe renal impairment,
Vildagliptin	MOVED TO APPENDIX – existing patients only
Tapentadol	DECLINED
	 It is not appropriate for primary care to initiate tapentadol. Switching therapy to
	tapentadol is not straightforward
	 The level of detail in studies is not sufficient to assess the comparative use of
	laxatives across the treatment arms, making it difficult to assess the overall
	balance of pain relief and adverse effects, and any additional costs associated with
	laxative prescribing
	GPs have experience of using oxycodone (originating in Palliative care) and are
	familiar with its pros and cons
Midodrine (unlicensed)	RED – For initiation and maintenance in secondary care only. GPs must not be asked to
	prescribe midodrine
Elleste and Evorel range	Green - Approved as 1 st line options for women when started by HEFT immediately post
	hysterectomy.
<u> </u>	Double Yellow – with ESCA
Nuvaring ®	APPENDIX – for women already established on Nuvaring ® or who wish to return to
	Nuvaring® following a break from OCP.
Oloiro ®	New patients should not be offered Nuvaring ®
Qiaira®	APPENDIX— for women already established on Qlaira® or who wish to return to Qlaira®
Danazol	· · · · · · · · · · · · · · · · · · ·
Danazoi	
I	horoupado brodot diodeou flot reoportaing to other trodutiont.
Danazol	following a break from OCP New Patients should not be offered Qlaira® RED – Hereditary angioedema - off label as an unlicensed indication Double yellow – specialist recommendation -Severe pain and tenderness in benign fibrocystic breast disease not responding to other treatment.
	Saxagliptin Vildagliptin Tapentadol Midodrine (unlicensed) Elleste and Evorel range Dapsone Nuvaring ® Qlaira ®

Date	Consideration	Outcome	
June 2011	Stanozolol	RED – Hereditary angioedema - this is an unlicensed product. GPs must not be asked to	
		prescribe this product	
June 2011	Aluminium acetate 13% ear drops	RED – Unlicensed product for use by ENT only. GPs must not be asked to prescribe this	
		product.	
June 2011	TauroLock 500 ®	RED – This is a CE marked medical device. For use in home TPN patients only, GPs	
		must not be asked to prescribe this product	
June 2011	Trichloroacetic acid 90%	RED – Dermatology directorate only for the treatment of xanthelasma	
June 2011	Emla cream	Green	
June 2011	Ametop gel	Green	
June 2011	Clomipramine	APPENDIX – Existing patients only	
June 2011	Acamprosate	Double Yellow – Specialist initiation	
June 2011	Testosterone undecanoate capsules	Double Yellow – specialist initiation. Dr Dyer's team only	
June 2011	Flutamide	Double yellow with ESCA	
June 2011	Otovent balloons	Double Yellow – Spec recommendation	
June 2011	Lacosamide	Double yellow – Specialist initiation and stabilization with ESCA	
June 2011	Hyoscine patch	Yellow	
June 2011	Hyoscine hydrobromide tablets	Yellow	
June 2011	Roflumilast	DECLINED – SMC = The manufacturer did not present a sufficiently robust economic	
		analysis to gain acceptance by SMC. MTRAC = can not be recommended for prescribing	
		because of inadequate evidence of efficacy and /or safety.	
June 2011	Sodium hyaluronate	DECLINED – 1.4.4.2 NICE CG 59 intra-articular injections of hyaluranon injections are	
		not recommended for the treatment of osteoarthritis.	
June 2011	Combodart ®	DECLINED – The Interface Formulary places finasteride as the first line treatment. The	
		Interface Formulary rarely includes combination oral products. Combodart ® is less cost	
		effective than using first line treatment and tamsulosin as separate agents.	
June 2011	Capsaicin 8% patch	RED – For prescribing to a maximum of 10 patients by the Pain Team only for use strictly	
		in accordance with licence.	
June 2011	Romiplostim	RED – For use in Oncology and Haematology strictly in accordance with NICE TA 221	
June 2011	Corticorelin	RED – For use as a diagnostic agent	
July 2011	Tapentadol	DECLINED – The level of detail in studies is not sufficient to assess the comparative use	
		of laxatives across the treatment arms, making it difficult to assess the overall balance of	
		pain relief and adverse effects, and any additional costs associated with laxative	
		prescribing	

Date	Consideration	Outcome	
July 2011	Indacaterol	DECLINED - Available evidence proves non inferiority only, Long term patient follow up data is not "good". The quicker onset of action of indacaterol is not thought to be advantageous as this is a maintenance therapy. There is a narrow licence for indacaterol as COPD only. FWG aim to keep the formulary simple. To this end having multiple options in each drug class is not desirable.	
July 2011	Sativex	DECLINED - The balance of evidence between benefits and side effects does not support its introduction to the formulary. MTRAC verdict = cannot be recommended for prescribing because of inadequate evidence for efficacy and/or safety. SMC = Not Recommended	
July 2011	Fesoterodine	DECLINED - The side effects of fesoterodine fumarate are similar to those of related medicines; it is as effective and costs the same as Tolterodine. The patent on Tolterodine will shortly expire. Continued use of Tolterodine after this point will offer a cost saving.	
July 2011	Lacosamide	Double Yellow – Specialist recommendation (Usually from UHB)	
August 2011	Phlexy-Vits sachets	RED - To be used for adult patients, in accordance with NICE CG 32 and HEFT Guidelines for the Prevention & Management of Refeeding Syndrome (March 2008) on the recommendation of HEFT Clinical Nutrition team	
August 2011	Artesunate	RED - Treatment of severe falciparium malaria, an alternative to i/v quinine.	
September 2011	Rivaroxaban	RED - Prophylaxis of VTE following total knee or hip replacement as per NICE TA 170. As GPs should not be asked to prescribe, sufficient medication to complete the full course of treatment is to be supplied at discharge.	
September 2011	Dabigatran	RED - Prophylaxis of VTE following total knee or hip replacement as per NICE TA 157. As GPs should not be asked to prescribe, sufficient medication to complete the full course of treatment is to be supplied at discharge.	
September 2011	Diazoxide	DOUBLE YELLOW – Treatment of chronic intractable hypoglycemia	
October 2011	Dexamethasone intravitreal implant	RED – For the treatment of macular oedema secondary to retinal vein occlusion as per NICE TAG 229 only.	
October 2011	Golimumab	RED - As per NICE guidelines within licence and for those patients identified as suitable below. Patients receiving warfarin (and in particular requiring maintenance of a higher INR) that are prone to bruising an bleeding, patients required to travel for periods greater than 2 weeks at a time, patients with a genuine fear of injections.	

Date	Consideration	Outcome	
October 2011	Dexrazoxane	RED – To be used in strict accordance with HEFT protocols for suspected anthracycline extravasation. It must only be used as per licence and must be prescribed in the same way as any other cytotoxic drug. Only one pack per Trust will be stocked at any one time. FWG must be notified of every occasion that it is used and provided with a summary of the event from the discovery of the potential/actual extravasation due to anthracycline administration, to the eventual outcome for the patient.	
November 2011	Abatacept	RED – For use within licence in accordance with NICE TA 195	
November 2011	Fosfomycin infusion	RED - to treat severe respiratory infections due to multiresistant gram negative organism especially Pseudomonas aeruginosa in CF patients. All prescribing must de bone via HEFT. GPs must not be asked to prescribe this	
		medication.	
November 2011	Lignocaine, adrenaline and tetracaine Gel (LAT Gel)	RED - for use in A & E as recommended in the Association of paediatric anaesthetists – Good practice in post operative and procedural pain guidelines.	
November 2011	Nevirapine Prolonged release	RED - For use within licence only. All prescribing to remain the responsibility of HEFT. The formulary status of nevirapine prolonged release will be reviewed in December 2012 when generic alternatives may be available.	
December 2011	Ranolazine	Double – Yellow with a RICaD - for use as per NICE guidance within licence. The use of ranolazine will be audited in 6 months time	
December 2011	Scheriproct®	Green – Replaces Xyloproct®	
January 2012	LMX 4 gel	RED – For use in Paediatrics	
February 2012	Ethylenediaminetetraacetic Acid (EDTA) 0.37% drops	RED – For use in Ophthalmology only for chelation of calcium deposited on corneal surface (Band keratopathy) as per Moorfields Handbook. This is an unlicensed product.	
February 2012	Linagliptin	Yellow - All for use as per licence and in line with NICE guidance. Saxagliptin to move to the appendix for continued use in patients established on therapy	

Date	Consideration	Outcome	
February 2012	Testosterone 2% gel (Tostran ® 10mg metered application 60g multidose dispenser)	Green – For use within licence only	
February 2012	Fluticasone furoate nasal spray (Avamys®)	Yellow – For use within licence. This preparation replaces fluticasone propionate (Flixonase ® and Nasofan®) which will move to the appendix for use in existing patients only.	
February 2012	Hyaluronidase 1,500 units	RED – For use in ophthalmology	
March 2012	Aquadeks liquid/softgels and chewable tablets	Declined - This is a multivitamin preparation specifically formulated for cystic fibrosis patients • This is an unlicensed product in the UK and would be classified as a "special" if prescribed in Primary Care.	
		 The cost of specials in Primary care is largely unregulated and much work is underway to reduce its financial burden to the local health economy. FWG could not add Aquadeks to the formulary as it is inappropriate for prescribing in Primary care (Unlicensed) and impractical for HEFT to maintain the prescribing responsibility as would be required by a red classification. 	
March 2012	Moviprep orange/ lemon flavoured sachets	RED - For use in line with licence. Prescribing by HEFT staff only.	
March 2012	Optison (Protein-type A injectable microspheres suspension)	RED - For use within cardiology directorate only under the direct supervision of suitably trained medical staff	
March 2012	Dovobet Gel	GREEN – for use within licence for scalp and body use	
April 2012	VSL#3 Sachets	Double Yellow with the support of a RICaD.	
		The initial prescription MUST be provided by HEFT.	
		Prescribing data will be audited to ensure that clinicians are complying with formulary restrictions and to determine the continued appropriateness of VSL#3 position on the formulary	
April 2012	Indacaterol maleate (Onbrez Breezhaler ®)	DECLINED The evidence provided failed to add anything to what has already been considered in the 2 previous submissions.	
	,	Indacaterol will not be considered again by FWG unless there is NICE guidance and or NEW evidence.	

Date	Consideration	Outcome	
April 2012	Temocillin (Negaban®)	RED - For use within licence on recommendation of ID or Microbiology only. Temocillin	
		must only be prescribed by HEFT clinicians	
April 2012	Fultium – D3	Green - Each capsule of Fultium - D3 contains colecalciferol 800IU, which is equivalent	
	to 20 microgram vitamin D ₃ .		
April 2012	Rifaximin	PENDING – awaiting input from the Directorate Manager	
May 2012	Boceprevir	RED - For use within licence and in direct concordance with NICE TAG 253	
May 2012	Telaprevir	RED - For use within licence and in direct concordance with NICE TAG 252	
May 2012	Dabigatran etexilate (for the treatment of AF)	Double Yellow - For use within licence for AF and within the scope of NICE TAG 249.	
		The Birmingham and Solihull NHS Cluster has developed guidance and patient	
		discussion aids etc to support the implementation of TAG 249.	
		The initial prescription for dabigatran must be provided by a clinician who routinely initiates warfarin.	
		This may be the GP (in some instances) but more frequently will be a secondary	
		care specialist. In these circumstances on-going prescribing will be the undertaken	
		by the GP with the aid of a RICaD	
May 2012	Rifapentine (Priftin ®)	RED - Treatment of latent TB in specific circumstances where directly observed therapy	
		(DOTS) is needed on the recommendation of a TB consultant only. (Unlicensed medicine)	
May 2012	Exenatide MR injectin (Bydureon®)	DOUBLE YELLOW – For use within license and as per HEFT GLP-1 flow chart. Specialist	
		initiation with support of RICaD ongoing treatment can be prescribed by GP.	
June 2012	Ferric Carboxy maltoside (Ferinject®)	PENDING – awaiting combined input from Gastroenterology and Renal directorates	
June 2012	RespeRate ®	DECLINED – The quality of evidence for the Medical Device, RespeRate is poor therefore	
		it will not be added to the Interface Formulary	
June 2012	Nicorette quickmist ® single mouth spray	GREEN – for use within licence and with the support of local "Stop Smoking Services"	
June 2012	Nicotinell patches ®	GREEN – for use within licence and with the support of local "Stop Smoking Services	
June 2012	Nicorette inhalator ® 10mg	GREEN – for use within licence and with the support of local "Stop Smoking Services	
July 2012	Indacaterol inhaler	PENDING – awaiting the publication of new evidence	
	Phlexy-vits ®	RED - For patients at risk of re-feeding syndrome who are unable to tolerate or	
		swallow Forceval capsules or who are enterally fed.	
		 For post bariatric surgery patients (that as a result of complications or delays in 	
		progression from liquid diet require a soluble vitamin supplement beyond 10 days	
		and possibly for the duration of the inpatient stay.	

Date	Consideration	Outcome	
July 2012	Ciclosporin	ESCA s are no longer required for this preparation.	
August 2012	Ulipristal acetate (Esmya®)	DOUBLE YELLOW – For use within licence for the pre-operative treatment of fibroids. HEFT to supply initial prescription with an ESCA, GPs will prescribe for the remaining 2 months of treatment.	
August 2012	Lofexidine	RED – for use as per licence as part of the SAFE project	
September 2012	Grazax ®	RED – for use within licence to treat adults meeting the Directorates criteria for treatment. All prescribing will remain the responsibility of HEFT clinicians.	
Sept ember 2012	Rivaroxaban for AF	DOUBLE YELLOW – For use within licence for AF and within the scope of NICE TAG 256 The Birmingham and Solihull NHS Cluster has developed guidance and patient discussion aids etc to support the implementation of TAG. The initial prescription for rivaroxaban must be provided by a clinician who routinely initiates warfarin.	
		This may be the GP (in some instances) but more frequently will be a secondary care specialist. In these circumstances on-going prescribing will be the undertaken by the GP with the aid of a RICaD	
October 2012	Rivaroxaban for DVT	DOUBLE YELLOW – For use within licence as per NICE TAG 261 in line with approved HEFT pathway	
October 2012	Bicalutamide	ESCA s are no longer required for this preparation	
November 2012	Icatibant	RED- For use in line with licence by Immunology Department.	
		Patients that have had more than 1 attack (requiring treatment with icatibant/C1 inh) in a 12 month period may be offered icatibant for self administration	
November 2012	C1-esterase inhibitor (Cinryze®)	RED - For use in line with licence by immunology department.	
November 2012	Palonosetron	RED - For use as a single dose prior to chemotherapy in secondary care only	
November 2012	Peristeen anal irrigation	DOUBLE YELLOW - For initiation, assessment and stabilization in secondary care under the expert guidance of the colorectal team before transferring ongoing prescribing responsibility to GP	
December 2012	Ticagrelor	DOUBLE YELLOW with a RICaD- In line with TA 236	

Date	Consideration	Outcome
December 2012	Rotigotine	 MOVED from RED to DOUBLE YELLOW WITH RICaD - In patients who cannot swallow or their gut is not working. Patients with poor overnight control of PD. Rotigotine can be considered after CR L dopa preparations and long half life oral DAs (e.g. ropinirole and pramipexole) Patients with erratic motor control during the daytime despite using oral long acting DAs, e.g. ropinirole or pramipexole either as standard TDS regimes or once daily SR preparations. In this setting rotigotine patch can be useful before considering sc apomorphine infusion of enteral duodopa infusion. The latter two treatment options are much more invasive and expensive. Patients intolerant of current first line DAs (ropinirole and pramipexole) should be considered for rotigotine before abandoning the DA class of drugs.
December 2012	Collagenase Clostridium histolyticum injection (Xiapex®)	PENDING
December 2012	Colesevelam	DECLINED - Colesevelam is more costly than existing treatment options. In the absence of any head to head trial, the application was declined
December 2012	Fidaxomicin	RED - for patients with first relapse of C-diff and requiring concomitant antibiotic therapy. Restricted to Infectious Diseases, Microbiology Consultants only.
December 2012	Mucous clearing device (Flutter®)	RED - To be prescribed and supplied by Secondary Care for appropriate patients. GPs must not be asked to prescribe this item. Patients may purchase this OTC, however the cost is likely to be in the region of £70.
December 2012	Glycopyrronium inhaler (▼Seebri Breezhaler ®)	YELLOW - For use in line with licence and MTRAC recommendations. The addition of glycopyrronium to the formulary prompted a review of section 3.1.2. No further applications for medications in this section will be considered for a minimum of 12 months (unless NICE approved). The Respiratory Directorate is aware of this and the implications for other products such as aclidinium inhaler.
December 2012 (revised Feb 2013)	Flutiform ▼® (Fluticasone propionate/formoterol fumarate aerosol inhaler)	GREEN = Moved from YELLOW - For use in clinically appropriate situations. FWG acknowledge that this may include off label use of Flutiform in COPD patients
February 2013	Apixaban	RED – In line with NICE TA 245

Date	Consideration	Outcome	
February 2013	Denosumab (Xgeva®)	RED – In line with NICE TA 265	
February 2013	Bivalirudin	RED – In line with NICE TA 230	
February 2013	Retigabine	RED – In line with NICE TA 232	
February 2013	Tapentadol (for neuropathic pain)	DECLINED – insufficient evidence to consider adding to the formulary at the present time	
February 2013	Trospium XL	YELLOW – in line with draft NICE guidance. Solifenacin will be moved to the appendix as this does not currently feature in the draft NICE guidance. This decision will be reviewed once a TA is published.	
February 2013	Loteprednol Etabonate 0.5% Eye Drops, suspension	RED – to replace rimexolone.	
February 2013	Sevikar ®	DECLINED - This is a combination product which includes olmesartan, which is non-formulary The Interface Formulary for Adults has a preference to avoid combination products unless there is an overwhelming advantage. FWG did not judge there to be such an advantage in this instance	
February 2013	Fampridine	DECLINED – UHB declined the addition of the drug onto the formulary due to the limited trial data available at present and the marginal efficacy of the drug. FWG support this decision and fampridine will not be added to the interface formulary for adults	
February 2013	Insuman®	APPENDIX – EXISTING PATIENTS ONLY. NOT FOR INITIATION	
March 2013	The Interface Formulary for Adults has been updated to include "hyperlinks" to active NICE TAs. If the TA is applicable to an area of practice represented in the local health economy and specific preparations are recommended within it; these preparations are also listed in the formulary.		
April 2013	Actikerall (0.5% fluorouracil, 10% salicylic acid solution)	GREEN – As an alternative to 5% fluorouracil cream for patients that have a layer of thick hyperkeratotic skin over the actinic keratosis lesions.	
April 2013	Desunin ® (Colcalcifeol 800 IU)	GREEN	
May 2013	Fumaric esters	RED - (unlicensed)- For use in Dermatology Directorate only.	
May 2013	Fostair ®	GREEN – Moved from yellow to green in line with local COPD diagnosis and management guidelines	
May 2013	Gelaspan	RED	
May 2013	Geloplasma	RED	

Date	Consideration	Outcome	
May 2013	Dimeticone	GREEN – replaces permethrin which is active against head lice but the formulations and licensed methods of application of the current products make them unsuitable for the treatment of head lice.	
May 2013	Quinagolide	DOUBLE YELLOW – for specialist initiation	
June 2013	Dapagliflozin	RED – temporary formulary position. For use in line with NICE TA 288. For review at July FWG	
June 2013	Ferrinject ® (feric carboxymaltose)	RED – For use in the renal department only	
June 2013	Forceval ® Soluble	RED - Forceval soluble – (replaces Phlexy-vits) prevention of re-feeding syndrome as per HEFT guidelines on recommendation of clinical nutrition team. Also post bariatric surgery patients (that as a result of complications or delays in progression from liquid diet cannot tolerate vitamin supplementation tablets/capsules form and will need a soluble vitamin supplement beyond 10 days and possibly for the duration of their inpatient stay).	
June 2013	Phlexyvits	REMOVED from the formulary and replaced with Forceval soluble	
June 2013	Capsaicin cream	YELLOW – moved from red to yellow in line with UHB formulary	
June 2013	Proflavine cream	RED – Theatres only	
June 2013	Dehydroepiandosterone	RED – Endocrinology only	
June 2013	Rifaximin	RED (Via specialized commissioning PbR included) - Gastroenterology Directorate only – for recurrent hepatic encephalopathy despite lactulose and optimal medical management. Not for GP prescribing.	

Gastro Intestinal System

1.1 Dyspepsia and gastro-oesophageal reflux disease

- Liquid preparations are generally more effective than solid dosage forms
- Antacids commonly interact with other drugs, particularly enteric coated drugs
- Magnesium salts can be laxative whilst aluminium salts tend to constipate
- Alginate preps should only be used for reflux -they are relatively poor neutralizers and have a relatively high electrolyte content
- Efficacy may be reduced in patients with very low levels of gastric acid production (e.g. due to PPI)

Green	Yellow	Double Yellow	Red
Antacids			
Magnesium trisilicate mixture	Co-magaldrox suspension A		Antacid and oxetacaine –
_	When a lower sodium content is		specialist only, post head and neck
	required		radiotherapy
Alginates			
Peptac ® - for reflux only	Gaviscon Advance ^B £ - for		
(same components as	reflux only (primary care only)		
Gaviscon ®)			
	Gastrocote ® £ - When a lower		
	sodium content is required		

Additional information		
Drug specific notes	Combination of aluminium and magnesium salts may reduce GI side effects Gaviscon liquid (not Advance ®) is now only available as an OTC preparation and should not be prescribed (£)	
NICE guidance	NICE CG 17: Managing dyspepsia in adults	
MTRAC / Prodigy / other	Prodigy: Dyspepsia with ulcer; Prodigy: Dyspepsia GORD; Prodigy: Dyspepsia without ulcer	
guidance	Prodigy: Dyspepsia symptoms; Prodigy: NSAIDs	
PCT information	Drug Tariff	

1.2 Antispasmodics and other drugs altering gut motility

- Antimuscarinics tend to have more side effects than the 'other antispasmodics'
- 'Other antispasmodics' directly relax intestinal smooth muscle and are therefore useful in IBD and diverticular disease; there are no serious side effects

Green	Yellow	Double Yellow	Red
Antimuscarinics			
Hyoscine butylbromide injection			Hyoscine butylbromide tablets
(Buscopan ®) - For treatment of			(for ureteric colic)
excessive bronchial secretions			
in end of life care			
Dicycloverine			
Hyoscine butylbromide tablets			
(dysmenorrhoea, and palliative			
care)			
Other antispasmodics			
Mebeverine	Alverine citrate (for		Peppermint B.P. water
	dysmenorrhoea)		
	Peppermint oil capsules		
Motility stimulants (Section 4.6	BNF)		
Metoclopramide A	Domperidone (when		
	metoclopramide is		
	inappropriate)		

Additional information	
Drug specific notes	A Not effective in postoperative nausea and vomiting and not 1 st choice in patients under 20 years of
	age.
NICE guidance	
MTRAC / Prodigy / other	Prodigy: Irritable Bowel Syndrome
guidance	
PCT information	<u>Drug Tariff</u>

Ulcer Healing Drugs 1.3

- Treatment doses are rarely needed for longer than two months (NICE) and should be stepped down
- Avoid prescribing treatment doses on repeat prescriptions

 Consider step down from PPI to H2 antagonist to ensure cost effective prescribing
- For gastro-protection with NSAID, omeprazole is recommended

Green	Yellow	Double Yellow	Red
1.3.1 H2 antagonists			
Ranitidine D	Cimetidine ^A		
1.3.4 Prostoglandin analogues			
			Misoprostol –Obs and Gynae (off-
			label)
1.3.5 Proton Pump Inhibitors			
Omeprazole capsules ^E	Lansoprazole FasTabs ® £ B		Omeprazole injection F
Lansoprazole capsules ^E	Omeprazole MUPS ®£ C		Sucralfate – specialists in oncology , gastroenterology and haematology

Additional information	
Drug specific notes	Do not use effervescent preparations. Avoid when patient taking phenytoin, warfarin or theophylline Patients with naso-gastric tube, who are dysphagic or nil by mouth only. Paediatrics only Do not use effervescent preparations Tablet preparations are considerably more expensive than capsule formulations Reserved for gastroenterologists, GI surgeons, critical care and oncology
NICE guidance	NICE CG 17: Managing dyspepsia in adults
MTRAC / Prodigy / other	Prodigy: Dyspepsia with ulcer; Prodigy: Dyspepsia GORD; Prodigy: Dyspepsia without ulcer
guidance	Prodigy: Dyspepsia symptoms; Prodigy: NSAIDs
PCT information	Drug Tariff

1.4 Acute diarrhoea

- First line treatment for acute diarrhoea is rehydration therapy
- Antibiotics are rarely indicated for the treatment of infective diarrhoea as it is usually viral in the UK

Green	Yellow	Double Yellow	Red
Oral rehydration salts	Specialist recommendation		Co-phenotrope ^B
Loperamide ^A	St Mark's solution ^C (unlicensed)		
Codeine phosphate			

Additional information	
Drug specific notes	 1. Also available as OTC 2. Do NOT prescribe loperamide where <i>C.diff</i> infection is a potential diagnosis GU medicine patients only Available as a special from BCM specials – 0800 952 1010
NICE guidance	
MTRAC / Prodigy / other	
guidance	
PCT information	Drug Tariff

1.5 Chronic Bowel Disorder

- Differential diagnosis includes irritable bowel syndrome, malabsorption syndromes, ulcerative colitis, Crohn's disease, diverticular disease and pseudomembranous colitis.
- Patients receiving aminosalicylates should be advised to report any unexplained bleeding, bruising, purpura, sore throat, fever and
 malaise that occur during treatment. A blood count should be performed and the drug stopped immediately if there is any suspicion
 of a blood dyscrasia.

Green	Yellow		W	Double Yellow	Red (as per NICE TAs)
	Consultant initiation		nitiation	Azathioprine - ESCA	Adalimumab
	Sulfasa	lazine ^A		Ciclosporin (cyclosporin)	Infliximab
	Mesalaz	zine ^B		Methotrexate - ESCA	
	Oral	1 st	Pentasa ®		
		choice			
		2 nd	Asacol®		
		choice			
		3 rd	Mezavant		
		choice	XL ^C ®		
	Rectal	1 st	suppositories		
		choice			
		2 nd	Enemas		
		choice			
		olone table	ets &	Balsalazide (specialist	
	suppositories			recommendation)	
	Hydrocortisone foam enema			Budesonide capsules	
	Prednisolone foam enema £££		n enema £££	Mercaptopurine ESCA	
	Prednisolone retention enema		ntion enema		

Additional information	
Drug specific notes	Many patients intolerant. Stains contact lenses. EC more expensive than standard tablets Should be prescribed by brand For use within licensed indications where compliance is an issue. Patients that are stable on effective prescriptions should not be changed to this preparation.
NICE guidance	NICE TA 40 – Infliximab in Crohn's disease NICE TA 140 Ulcerative colitis (subacute manifestations) - infliximab NICE TA 163 Infliximab for acute exacerbations of ulcerative colitis NICE TA 187 Crohn's disease - infliximab and adalimumab NICE 199 Psoriatic arthritis - etanercept, infliximab and adalimumab
MTRAC / Prodigy / other guidance	Prodigy: Irritable Bowel Syndrome Prodigy: Diverticular disease
PCT information	<u>Drug Tariff</u>

1.6 Laxatives

- Patients taking bulk forming laxatives should by advised to increase fluid intake
- Stimulant laxatives are unsuitable for long-term use. They can precipitate onset of an atonic non-functioning colon and significant electrolyte imbalance. However extended use may be justified to counter the constipating effects of other drugs (e.g. opioids, anticholinergics)
- Tolerance to osmotic laxatives may develop with prolonged use.
- Avoid stimulant laxatives in intestinal obstruction
- Use bulk and fluids first before using osmotic laxatives

Green	Yellow	Double Yellow	Red
1.6.1. Bulk forming laxatives			
Ispaghula sachets ^A			
1.6.2. Stimulant laxatives			
Glycerin suppositories	Bisacodyl		Sodium picosulfate (Dulcolax ®)
Senna	Co-danthramer (palliative care)		
Docusate sodium £ B			
1.6.3. Faecal softeners			
	Arachis oil enema		Liquid Paraffin – Palliative Care
			Team recommendation only for
_			patients with bowel obstruction
Green	Yellow	Double Yellow	Red
1.6.4. Osmotic laxatives			
Sodium citrate enema	Macrogol powders _		
	(Laxido®/Movicol®) ^E		
Phosphate enema	Lactulose (hepatic		
	encephalopathy and		
	paediatrics only) ^C		
1.6.4. Bowel cleansers			
			Sodium picosulfate (sodium
			picosulphate) – Picolax ®
			Klean-Prep ®
			Fleet Phospho-soda ®
			Moviprep ®

Green	Yellow	Double Yellow	Red
1.6.7 5HT ₄ -receptor agonists			
		Prucalopride - With a RICaD -	
		as per NICE TA 211	

Additional information		
Drug specific notes	Combination Ispaghula/senna combinations will be changed on admission to secondary care Slower onset 1-2 days Avoid 'prn' dosing Contraindicated in peanut allergy Movicol is recommended for use in faecal impaction, chronic idiopathic constipation and opioid induced constipation, not controlled by 1st line treatments individually or in combination	
NICE guidance		
MTRAC / Prodigy / other	Prodigy: Constipation	
guidance	NICE TA 211 Constipation (women) - prucalopride	
PCT information	SCT & HEFT laxative policy Request a copy from HEFT	
	Drug Tariff	

1.7 Local preparations for anal and rectal disorders

- Soothing agents should be considered first line and are freely available OTC
- Products containing corticosteroids may cause atrophy if use is prolonged: some products are available OTC
- Tolerance to osmotic laxatives may develop with prolonged use.
- Avoid stimulant laxatives in intestinal obstruction
- Use bulk and fluids first before using osmotics

Green	Yellow	Double Yellow	Red			
1.7.1 Soothing preparations						
Anusol ®						
1.7.2 Compound preparations						
Anusol-HC®	Uniroid-HC ® ^B £					
Scheriproct ®						
1.7.3 Rectal scleroscants	1.7.3 Rectal scleroscants					
			Oily phenol			
1.7.4. Treatment of anal fissure						
	GTN 0.4% ointment ££		Diltiazem 2% cream A ££			
	Rectogesic ®		(unlicensed) Specialist initiation			

Additional information		
Drug specific notes	Recommendation of colorectal surgeons for chronic anal fissure for patients unable to tolerate or with contra indications to GTN. Unlicensed formulations are generally made by "Specials" manufacturing units at considerable cost (usually above £70 per tube) and have only a four week shelf life B Uniroid-HC ® formulation is the same as that of Proctosedyl ®	
NICE guidance		
MTRAC / Prodigy / other	Prodigy: Anal fissure	
guidance		
PCT information	Drug Tariff	

1.8 Stoma Care

1.9 Drugs affecting intestinal secretions

Green	Yellow	Double Yellow	Red
	Specialist initiation		Ursodeoxycholic acid for cholestasis of pregnancy (off label)
	Pancreatin formulations £		
	Colestyramine (cholestyramine)		
	Ursodeoxycholic acid - for use in gastroenterology and cystic fibrosis patients only		

Miscellaneous

Green		Yellow	Double Yellow	Red
		treotide £££ – "off label" ecialist initiation in palliative re	VSL#3 Sachets – RICaD ^A	Octreotide £££ – "off label "use – Gastroenterologists and GI surgeons
			Peristeen anal irrigation – specialist initiation, assessment and stabilisation	Terlipressin – "off label" use – gastroenterologists and palliative care Phlexy-vits ® B
Additional information				
Drug specific notes	For the maintenance of remission of ileoanal pouchitis only in adults. For patients at risk of re-feeding syndrome who are unable to tolerate or swallow Forceval capsulor or who are enterally fed. For post bariatric surgery patients (that as a result of complications or delays in progression from liquid diet require a soluble vitamin supplement beyond 10 days and possibly for the duration of inpatient stay.		tolerate or swallow Forceval capsules tions or delays in progression from	
PCT information	Dr	ug Tariff		

2 CARDIOVASCULAR SYSTEM

2.1 Positive Inotropic Drugs

Notes on class

• Positive inotropic drugs increase the force of contraction of the myocardium.

Green	Yellow	Double Yellow	Red	
2.1.1 Cardiac Glycosides				
Digoxin ^A			Digibind®	
2.1.2 Phosphodiesterase Inhibitiors				
			Enoximone ^B	

Additional information			
Drug specific notes	city, but need taking at least 6 hours of guide to dose eximone exerts most of its effect on	the myocardium. Sustained haemodynamic benefit has there is no evidence of any beneficial effect on survival.	
NICE guidance	NICE clinical guideline 5: Chronic Heart Failure		
MTRAC / Prodigy / other	Prodigy: Heart Failure Prodigy: All cardiovascular topics MEREC: Diagnosis and drug treatment of		
guidance	ailure (2001)		
PCT information	ariff		

2.2 Diuretics

Notes on class

- Thiazide type diuretics are first line treatments for hypertension in the majority of cases
- Act within 1-2 hours of oral administration and most have duration of 12-24 hours
- Administer early in the day to avoid interference with sleep
- Diuretics aggravate gout

Green	Yellow	Double Yellow	Red
2.2.1 Thiazides and related diure	etics		
Bendroflumethiazide (bendrofluazide) A	Indapamide £££ ^A	Indapamide M/R ££	
Chlortalidone £	Metolazone – Specialist recommendation (unlicensed)		
2.2.2 Loop diuretics			
Furosemide (Frusemide) B			
Bumetanide ££ B			
2.2.3 Potassium-sparing diuretic	cs		
Amiloride ^C			
2.2.3 Aldosterone antagonists			
Spironolactone ^D		Eplerenone – RICaD In line with NICE CG 48 ^E	
2.2.4 Potassium-sparing diuretic	cs with other diuretics		
Co-amilofruse			
2.2.5 Osmotic diuretics			
			Mannitol (cerebral oedema, glaucoma)
2.2.6 Carbonic anhydrase inhibi	tors		
2.2.7 0smotic diuretics			
			Acetazolamide Ophthalmology and ITU

Additional information				
	ΙA	O Francisco de la Chimban de la casa de la	tin dia ata dia la mantana isan' Mantana	tionto de not devolos
Drug specific notes	B C D	2.5mg dose (higher doses not indicated in hypertension) Most patients do not develop hypokalaemia. Suggest check potassium level one month after initiation and annually thereafter. (MeReC 10/94) Monitor potassium level. Indicated in pulmonary oedema. Need large doses in renal failure Caution with ACE inhibitors. A weak diuretic. Retains potassium Useful in liver cirrhosis and congestive heart failure usually with loop diuretic. Monitor potassium levels carefully For initiation in secondary care during the immediate post MI period in direct concordance with NICE CG48. Primary Care may continue prescribing under a RICaD and transfer suitable patients to spironolactone (in accordance with its licence) after 6 months treatment. Eplerenone may be used in place of spironolactone in extremis		
NICE guidance		NICE CG 05 Chronic Heart Failure NICE CG 34 Hypertension NICE CG48 Secondary prevention in primary and secondary care		
MTRAC / Prodigy / other guidance		Prodigy: Hypertension; Prodigy: A	Il cardiovascular topics	
PCT information		Combination diuretics should be avissue.	voided unless compliance is an	

2.3 Anti-arrhythmics

Notes on class

• Anti-arrhythmics are generally initiated in hospital

Green	Yellow	Double Yellow	Red
	Specialist initiation	Specialist initiation	Adenosine
	Amiodarone ^A	Dronedarone ESCA ^B - NICE TA 197	Lidocaine hydrochloride (lignocaine hydrochloride)
	Flecainide		
	Disopyramide		
	Propafenone hydrochloride		
	Procainamide hydrochloride		
	Quinidine (unlicensed)		
	Mexiletine hydrochloride		

Additional information		
Drug specific notes	LFTs and TFTs need baseline and 6 monthly monitoring. Observe for other side effects e.g. micro corneal deposits, photosensitivity and lung disorders	
	For use within the parameters of the NICE TAG 197, the option to use dronedarone should be exercised only for the following groups of patients: • patients with both left ventricular hypertrophy and hypertension (requiring antihypertensive medication from two different classes), who do not have structural heart disease. • patients meeting the NICE criteria who have thyroid disease and who would otherwise require amiodarone An ESCA must be used when transferring prescribing and clinical responsibility to the GP	
NICE guidance	NICE TA 197 Atrial fibrillation - dronedarone	
MTRAC / Prodigy / other	Prodigy: All cardiovascular topics	
guidance		
PCT information	Drug Tariff	

2.4 Beta blockers

- Beta blockers are not recommended for initiation as first line therapy for patients with hypertension
- Significant morbidity and mortality benefits have been demonstrated with beta blockers post MI and for licenced beta blockers in CHF
- Beta blockers also retain an important role in the management of angina
- Beta blockers tend to be less effective (as monotherapy) in black patients due to suppressed renin-angiotensin system
- Reduce dose gradually if beta blocker is to be stopped

Green	Yellow	Double Yellow	Red
Atenolol ^A	Labetalol (specialist initiation in		Esmolol
	pregnancy)		
Propranolol ^B	Nebivolol – specialist		Labetolol injection
	recommendation for		
	hypertension in those with		
	concomitant LVD or with co-		
	morbidity of CAD		
Metoprolol	Sotalol (arrhythmia) – Specialist		
	initiation		
	Timolol -Specialist initiation post		
	MI		
	Carvedilol – for heart failure.		
	Specialist initiation or initiation		
	by GP following approved local		
	protocol		
	Bisoprolol (heart failure –		
	Specialist initiation or initiation		
	by GP following approved local		
	protocol) ^C		

Additional information	
Drug specific notes	Hypertension up to 50mg, 100mg may be justified in angina LA preparations ££ has a restricted use verdict from MTRAC and should be initiated by GPwSI in HF (or on the recommendation of specialist cardiac nurses under local protocol) or by consultants and subsequently managed in primary care.
NICE guidance	NICE CG 34 Hypertension NICE CG 5 Chronic Heart Failure
MTRAC / Prodigy / other guidance	Bisoprolol has a restricted use verdict from MTRAC and should be initiated by GPwSI in HF (or on the recommendation of specialist cardiac nurses under local protocol) or by consultants and subsequently managed in primary care. Prodigy: All cardiovascular topics; Prodigy: Hypertension
PCT information	Drug Tariff

2.5 Hypertension and heart failure

- Vasodilators are very potent drugs, especially when used in combination with a beta blocker and a thiazide
- ACE inhibitors are indicated for all grades of heart failure and post MI with systolic LVD/HF
- ACE inhibitors/ARBs may be less effective in black patients due to suppressed renin-angiotensin system
- ACE/ARBs require renal function tests before and after initiation (and at dose changes)
- ARBs should only be used where ACE induced cough is a problem and other hypertensives are poorly tolerated. In clinical trials incidence of cough with ACE was only 4-6% greater than in placebo arm. In HF cough may indicate worsening pulmonary oedema.
- ACE/ARBs are foetotoxic
- There is no evidence of any specific agent offering advantages use most cost effective choice

Green	Yellow	Double Yellow	Red		
2.5.1 Vasodilators					
	Specialist recommendation		Sodium nitroprusside (hypertensive crisis)		
	Hydralazine tablets		Diazoxide injection		
	Minoxidil		Hydralazine		
2.5.2 Centrally acting antihype	ertensives				
	Methyldopa – specialist recommendation in pregnancy		Clonidine		
	Moxonidine – specialist recommendation				
Green	Yellow	Double Yellow	Red		
2.5.3 Adrenergic neurone bloo	ckers				
			Guanethidine		
2.5.4 Alpha blockers					
Doxazosin ^{A B}	Phenoxybenzamine – specialist initiation	Doxazosin M/R £ - for patients for whom there is no alternative antihypertensive and for whom the hypotensive adverse effects are intolerable	Phentolamine mesilate		
2.5.5.1 ACE inhibitors					
Ramipril ^C capsules	Perindopril erbumine ^D £				
Lisinopril					
Enalapril					
2.5.5.2 Angiotensin Receptor					
Irbesartan – if micro/macro albuminuria in T2DM	Valsartan ^F				
Losartan ^G £					
Candesartan ^E					
2.5.5.3 Renin Inhibitors					
		Aliskiren ^H RICaD			
2.5.6 Ganglion – blocking dru	gs		T = .		
			Trimetaphan camsilate		
2.5.7 Tyrosine hydroxylase in	hibitors				
			Metirosine		

Additional information				
Drug specific notes	A B C D E F G H	Alpha blockers are usually fourth/fifth line unless there is co-existing benign prostatic hypertrophy Doxazosin may induce first dose hypotension Ramipril has a solid evidence base and should be considered first line Perindopril has no evidence of superiority over other ACEs. Candesartan is only ARB licensed for heart failure; first line choice Valsartan is licensed for use in LVF/LVSD post MI Losartan is licensed in diabetic nephropathy and heart failure (Irbesartan is licensed for renal disease with hypertension) For treatment of hypertension in step four of the ACD algorithm in patients with BP >140/90 despite previous treatment with 3 or more antihypertensive agents. A RICaD is required for prescribing in primary care.		
NICE guidance NICE CG 05 Chronic Heart Failure NICE CG 34 Hypertension				
MTRAC / Prodigy / other Prodigy: Hypertension; Prodigy: All cardiovascular topics MEREC 2002: Place of ARBs in therapy				

2.6 Nitrates, calcium-channel blockers & potassium-channel activators

Notes on class

NItrates

- Glyceryl trinitrate sprays are more cost effective for infrequent users, patches are expensive and need to be removed overnight Calcium channel blockers
- There are important differences between diltiazem and verapamil and dihydropyridine calcium channel blockers
- Prescribe nifedipine and diltiazem sustained release preparations by brand (for bioavailability reasons). Once a brand is selected, exclusive use should be maintained.
- Use diltiazem cautiously with beta blockers
- Sudden withdrawal can exacerbate angina

Green	Yellow	Double Yellow	Red
2.6.1 Nitrates			
Glyceryl Trinitrate (Spray / tablets SL)	Glyceryl trinitrate patches £ – for pts unable to take/tolerate oral/sublingual preparations		GTN injection
Isosorbide mononitrate tablets S/R ^A			Isosorbide dinitrate injection
			Glyceryl trinitrate buccal tablets

2.6.2 Calcium channel blocke	ers		
Nifedipine SR ^C	Felodipine	Nifedipine capsules –"off label Palliative Care Team recommendation for tenesmus	Nimodipine
Amlodipine maleate BD			
Verapamil £			
Diltiazem oral preparations			
2.6.3 Potassium channel acti	ivators		
Nicorandil		Ivabradine – specialist recommendation for angina	
		Ivabradine – specialist initiation and RICaD for heart failure-NICE TA 267	
		Ranolazine – RICaD	
2.6.4 Peripheral vasodilators		1	
•			Temazoline
			Naftidrofuryl oxalate
Additional information			
Drug specific notes	release. Isosorb Prescribe as 'am Nifedipine prescr	nitrate may be given as twice a day asymmetro de XL / MR preparations should be prescribed odipine' or 'amlodipine maleate' bed as Adalat is generally more expensive where CCB indicated for hypertension in patien	d by brand
NICE guidance	NICE CG 34 Hypert NICE TA 223 Periph nicotinate		
MTRAC / Prodigy / other guidance		n ; Prodigy: All cardiovascular topics	
PCT information	In Primary Care, either GTN sprays or S/L tablets should be used. Use Monomil® tablets as first choice. If another brand has been chosen by the practice, there is need to change		
	Preferred brands Felodipine Diltiazem Nifedipine	Cardioplen Angitil/Slozem od: Adipine LA, Coracten XL, bd: Adipin	ne SR, Coracten SR

2.7 Sympathomimetics

Green	Yellow	Double Yellow	Red
			Dobutamine, dopamine,
			ephedrine, metaraminol (named
			patient) phenylephrine,
			noradrenaline,
			adrenaline/epinephrine

Unlicensed

Green	Yellow	Double Yellow	Red
			Midodrine – Unlicensed
			Endocrinology only

2.8 Anticoagulants & Protamine

Green	Yellow	Double Yellow	Red
2.8.1 Parenteral anticoagulants			
		Enoxaparin ^A (specialist initiation) ESCA	Epoprostenol
			Danaparoid
			Fondaparinux
			Heparin (specialist initiation)
			Tinzaparin (within licence for renal dialysis patients only)
2.8.2 Oral anticoagulants			
Warfarin		Phenindione (specialist initiation)	Rivaroxaban – NICE TA170 VTE prophylaxis only
		Dabigatran – with a RICaD NICE TA 249	Dabigatran – NICE TA 157 VTE prophylaxis only
		Rivaroxaban – with a RICaD NICE TA 261 and TA 256	Protamine sulphate
			Apixaban - NICE TA 245
			Bivalirudin – NICE TA 230
			Rivaroxaban – TA 287
			Temporary Formulary position

2.8.3 Protamines	
	Protamine sulfate

Green	Yellow	Double Yellow	Red
(medical device)			
			TauroLock
			TauroLock - HEP 500

Additional information		
Drug specific notes	A ESCA available for the treatment of and prevention of Venous Thromboembolism in general	
	medical patients.	
NICE guidance	NICE TA 157 Venous thromboembolism - dabigatran	
	NICE TA 170 Venous thromboembolism - rivaroxaban	
	NICE TA 230 Myocardial infarction (persistent ST-segment elevation) - bivalirudin	
	NICE TA 245 Venous thromboembolism - apixaban (hip and knee surgery)	
	NICE TA 249 Atrial fibrillation - dabigatran etexilate	
	NICE TA 256 Atrial fibrillation (stroke prevention) - rivaroxaban	
	NICE TA 261 Venous thromboembolism (treatment and long term secondary prevention) - rivaroxaban	
	NICE TA 275 Stroke and systemic embolism (prevention, non-valvular atrial fibrillation) - apixaban	
	NICE TA 287 Rivaroxaban for treating pulmonary embolism and preventing recurrent venous	
	<u>thromboembolism</u>	
MTRAC / Prodigy / other	Prodigy: Atrial fibrillation; Prodigy: All cardiovascular topics	
guidance	MEREC 2001: Atrial Fibrillation in Primary Care	
PCT information	Drug Tariff	

2.9 Antiplatelet drugs

Green	Yellow	Double Yellow	Red as per NICE TAs
Aspirin dispersible A	Clopidogrel ^C £	Prasugrel – Specialist initiation	Tirofiban
		RICaD D	
Dipyridamole MR ^B		Ticagrelor – Specialist initiation	Abciximab
		RICaD - NICE TA 236	
Asasantin Retard ® B C			Eptifibatide E -

Additional information	
Drug specific notes	In acute severe dyspepsia don't forget to counsel pc dosing, If pc dosing fails, try aspirin plus omeprazole before clopidogrel Dipyridamole indicated in combination with aspirin for 2 years post Occlusive (neurological) Vascular Event, then revert to aspirin Clopidogrel indicated as monotherapy if patient has a documented hypersensitivity to aspirin or has severe acute dyspepsia associated with aspirin. Combination therapy with aspirin post ACS, PCI or CABG for maximum 12 months, then revert to aspirin. There are no proven benefits to using enteric coated aspirin For specialist initiation with a RICaD in patients who suffer a stent thrombosis receive stent angioplasty following STEMI (for patients under 75, weighing more than 60kg and never having had a stoke) Prasugrel is not available for any other indication
NICE guidance	1)Prevention of early myocardial infarction in patients with unstable angina or non-ST segment elevation myocardial infarction and with last episode of chest pain within 24 hours (use under specialist supervision) this is a licensed indication 2) an adjunct to primary PCI for patients with STEMI (this is an unlicensed indication) NICE TA 47 Acute coronary syndromes - eptifibatide and tirofiban NICE TA 80 Acute coronary syndromes - clopidogrel
	NICE TA 182 Acute coronary syndrome - prasugrel NICE TA 210 Vascular disease - clopidogrel and dipyridamole NICE TA 236 Acute coronary syndromes - ticagrelor

	NICE CG 94 unstable angina and NSTEMI
MTRAC / Prodigy / other	Guidance on clopidogrel, dipyridamole. Prodigy: Aspirin for the prevention of CV events; Prodigy: TIA
guidance	(not in AF); Prodigy: All cardiovascular topics
PCT information	Drug Tariff

2.10 Fibrinolytic Drugs

Notes on class

Green	Yellow	Double Yellow	Red
			Alteplase
			Reteplase
			Streptokinase
			Urokinase (off licence)
			Tenectoplase

2.11 Anti- Fibrinolytic Drugs & Haemostatics

Green	Yellow	Double Yellow	Red
Tranexamic acid (oral)			Tranexamic acid injection
			Etamsylate
			Factor VII

Additional information			
Drug specific notes			
NICE guidance	NICE TA 52 - Myocardial infarction - thrombolysis (alteplase, reteplase, streptokinase and		
	tenecteplase)		
	NICE TA 84 (withdrawn) Sepsis (severe) - drotrecogin		
	NICE TA 264 alteplase for treating acute ischaemic stroke		
MTRAC / Prodigy / other			
guidance			
PCT information	Drug Tariff		

2.12 Lipid-regulating drugs

- Current National Service Framework guidance recommends treating cholesterol to a target of 5mmol/litre or a 30% reduction from baseline, whichever is greater
- NICE guidance (Jan 2006) recommends considering primary prevention statin treatment for all patients with a 10year CVD risk of 20% or greater

Green	Yellow	Double Yellow	Red
Simvastatin ^A	Atorvastatin ££	Ezetimibe ^B NICE TA 132	
Bezafibrate	Colestyramine (cholestyramine)	Rosuvastatin (specialist	
		initiation lipid clinic only)	
	Fenofibrate	Fluvastatin (specialist	
		recommendation in renal	
		patients only)	
	Omacor ® as second line agent	Tredaptive M/R – specialist	
	in hypertriglyceridemia or	recommendation only	
	secondary prevention in post MI		
	patients intolerant of oily fish.		
	Nicotinic acid		
	Pravastatin		

Additional information	
Drug specific notes	Evidence base suggests 40mg starting dose When prescribed in accordance with NICE TA 132 Clinical Guidelines. Specialist initiation when used as monotherapy.
NICE guidance	NICE TA 94 Cardiovascular disease - statins NICE TA 132 Hypercholesterolaemia - ezetimibe NICE CG 48: MI - Secondary Prevention
MTRAC / Prodigy / other guidance	Prodigy: All cardiovascular topics; Prodigy: Hyperlipidaemia MEREC: Lifestyle measures to reduce CV risk MEREC: Update on statins
PCT information	Simvastatin 40mg should be used in preference to atorvastatin 10mg

2.13 Local sclerosants

Notes on class

Green	Yellow	Double Yellow	Red
			Sodium tetradecyl sulphate
			Ethanolamine oleate

Additional information	
Drug specific notes	
NICE guidance	
MTRAC / Prodigy / other	
guidance	
PCT information	Drug Tariff

<u>Miscellaneous</u>

Green	Yellow	Double Yellow	Red
			Optison ® for use within cardiology directorate only under direct supervision of
			suitably trained staff

3 RESPIRATORY SYSTEM

3.1 Bronchodilators

3.1.1 Beta adrenoceptor agonists

- NICE guidance: All inhalers should be prescribed as MDI / MDI plus spacer unless co-ordination / compliance is a problem. Spacer devices now available as AeroChamber ® adult (blue) with or without mask, infant (orange) or child (yellow).
- GSK have announced the re-introduction of the Volumatic device from February 06 following Committee on Human Medicines (formerly CSM) advice that AeroChamber ® is not suitable for GSK inhalers (*Ventolin, Becotide, Serevent, Flixotide, Seretide*)
- Avoid use of dry powder formulations if MDIs are suitable (diskhalers, accuhalers etc)
- Long Acting beta Agonists (LABAs) should be trialled for four weeks and withdrawn if no benefit observed
- Committee on Human Medicines (formerly CSM) has issued a reminder that in asthma, LABAs should only be used in conjunction with inhaled corticosteroids
- Salbutamol: High doses in severe asthma does warrant regular checking of Us & Es, especially if prescribed with theophylline

Green	Yellow	Double Yellow	Red
3.1.1.1 Adrenoceptor agonists			
Short acting			
Salbutamol	Terbutaline £		
Salbutamol (nebulised) A			
Long acting			
Salmeterol £			
Formoterol £ (eformoterol) B			
Additional information			
Drug specific notes	recommendation of specialist	ncy use in primary care. Regular ut. Salbutamol and spacer should bohaler. New MDI formulation requ	be used before resorting to nebuliser
NICE guidance	NICE TA 10 (Asthma - children u NICE TA 38 (Asthma - older child		
MTRAC / Prodigy / other	SIGN Guideline No. 63: British (Guideline on the Management of A	sthma; Prodigy: Asthma; Prodigy:
guidance	COPD; MEREC: Management of	of COPD	
PCT information	<u>Drug Tariff</u>		

3.1.2 Antimuscarinic bronchodilators

- NICE guidance: All inhalers should be prescribed as MDI / MDI plus spacer unless co-ordination / compliance is a problem. Spacer devices now available as AeroChamber adult (blue) with or without mask, infant (orange) or child (yellow).
- GSK have announced the re-introduction of the Volumatic device from February 06 following Committee on Human Medicines (formerly CSM) advice that AeroChamber is not suitable for GSK inhalers (*Ventolin, Becotide, Serevent, Flixotide, Seretide*)

Green	Yellow	Double Yellow	Red
Short acting			
Ipratropium	Glycopyrronium ^B		
Ipratropium (nebulised) A			
Long acting			
	Tiotropium ££ C		

Additional inform	ation
Drug specific	A Secondary care and emergency use in primary care. Regular use in primary care on recommendation of specialist
notes	As per licence and MTRAC recommendations
	Safety concerns have been expressed around the Respimat device.
	NELM Systematic review and meta analysis questions safety of tiotropium Respimat inhaler in COPD
NICE guidance	Clinical guideline 12: Chronic Obstructive Pulmonary Disease
MTRAC / Prodigy	Prodigy: COPD; MEREC: Management of COPD
/ other guidance	MTRAC summary Glycopyrronium
PCT information	Launch of CFC free formulations does not require change to prescription <u>Drug Tariff</u>

3.1.3 Theophylline

- Xanthines have a narrow therapeutic index so measuring plasma levels is recommended.
- Theophylline levels may rise when patient stops smoking,
- Modified release products should be prescribed by brand
- Xanthine naive patients should be initiated on theophylline

Green	Yellow	Double Yellow	Red
Theophylline ^A			
Aminophylline ^B			

Additional information	
Drug specific notes	A At appropriate stage of relevant guideline.
	B At appropriate stage of relevant guideline.
NICE guidance	NICE CG 12: Chronic Obstructive Pulmonary Disease
MTRAC / Prodigy / other	; SIGN Guideline No. 63: British Guideline on the Management of Asthma; Prodigy: Asthma; Prodigy:
guidance	COPD; MEREC: Management of COPD
PCT information	Drug Tariff

3.1.4 Compound bronchodilators

Notes on class

Green	Yellow	Double Yellow	Red
	Combivent ® A		

Additional information	
Drug specific notes	A Nebuliser solution only available
NICE guidance	NICE CG 12: Chronic Obstructive Pulmonary Disease
MTRAC / Prodigy / other	; SIGN Guideline No. 63: British Guideline on the Management of Asthma Prodigy: Asthma; Prodigy:
guidance	COPD; MEREC: Management of COPD
PCT information	Drug Tariff

3.1.5 Peak flow meters, inhaler devices and nebulisers

Notes on class

Peak flow meters were changed in 2004 to European standards. The older peak flow meters should be used with older charts as the old and new scales are not equivalent

Green	Yellow	Double Yellow	Red
Peak flow meters			
Spacers			

3.2 Corticosteroids

- As with bronchodilators, MDIs should be used first line in conjunction with a spacer. Spacers should be used for all inhaled steroids, especially high dose steroids (above 800 micrograms)
- AeroChamber ® Spacer devices: adult (blue) with or without mask, infant (orange) or child (yellow). Not suitable for GSK inhalers (*Ventolin, Becotide, Serevent, Flixotide, Seretide*) use Volumatic. Not suitable for Bricanyl/Pulmicort
- Oral hygiene should be emphasised to reduce risk of oral thrush
- Committee on Human Medicines (formerly CSM) Guidance for high dose fluticasone <u>Current problems in pharmacovigilance</u> August 2001 High dose fluticasone and on <u>risk of adrenal suppression in children Oct 2002</u>
- Committee on Human Medicines (formerly CSM) guidance that LABA should only be used in conjunction with an inhaled steroid MHRA updates on LABAs in asthma
- CFC free beclometasone preparations are not interchangeable and should be prescribed by brand (MHRA August 2006)

Green	Yellow	Double Yellow	Red
Beclometasone	Fluticasone £		
(beclomethasone)			
	Budesonide £		
3.2.1.1.Combination Corticoste	roid Inhalers - if compliance is	a problem	
Flutiform ® B	Symbicort ®		
Fostair ®	Low dose Seretide ® £		
	High dose Seretide ® £ A		
Additional information			
Drug specific notes	For use in clinically appropriation include off label use of Flutiform on the I		
NICE guidance	NICE CG 12: Chronic Obstructive Pulmonary Disease NICE TA 131 Inhaled corticosteroids for the treatment of chronic asthma in children under 12 years NICE TA 138 Asthma (in adults) - corticosteroids (TA138)		
MTRAC / Prodigy / other guidance		Guideline on the Management of A	sthma Prodigy: Asthma; Prodigy:

3.3 Cromoglicate, related therapy and leukotriene receptor antagonists

Green	Yellow	Double Yellow	Red
Montelukast ^A			Zafirlukast (off label in GU
			medicine)
Zafirlukast			

Additional information		
Drug specific notes	A For addition to therapy only at appropriate step	
NICE guidance	NICE TA 244 Chronic obstructive pulmonary disease - roflumilast	
MTRAC / Prodigy / other	SIGN Guideline No. 63: British Guideline on the Management of Asthma; Prodigy: Asthma;	
guidance		
PCT information	Drug Tariff	

3.4 Antihistamines, hyposensitisation and allergic emergencies

Green	Yellow	Double Yellow	Red
3.4.1 Antihistimines	·		
Non-sedating antihistamines			
Loratadine	Fexofenadine £		
Cetirizine £			
Sedating antihistimines			
Chlorphenamine (chlorpheniramine)	Alimemazine (trimeprazine)		
(omorphermarmie)	Hydroxyzine ^A		
	Promethazine ^B		
3.4.2 Hyposensitisation			
,			Pharmalgen (treatment of Bee & wasp allergy)
			Grass & tree pollen extracts
			Grazax ® D
			Omalizumab – NICE TA 278
3.4.3 Allergic emergencies			
Adrenaline injections (Jext ® and Epipen®)			Icatibant ^C For the treatment of hereditary angio-oedema patients
			C1 esterase inhibitor (Cinryze ®and Berinert®)
			Conestat alpha (Ruconest®) (Via specialized commissioning)
Additional information			
Drug specific notes	period may be offered icatiba		ent with icatibant/C1 inh) in a 12 month rate criteria for treatment

NICE guidance	NICE TA 278 Omalizumab for treating severe persistent allergic asthma (review of technology appraisal
	guidance 133 and 201)
	NICE TA 246 Venom anaphylaxis - immunotherapy pharmalgen

3.5 Respiratory stimulants and pulmonary surfactants

Green	Yellow	Double Yellow	Red	
3.5.1 Respiratory stimulants	3.5.1 Respiratory stimulants			
			Caffeine (unlicensed) A	
			Doxapram	
3.5.2 Pulmonary surfactants	3.5.2 Pulmonary surfactants			
			Poractant alpha	

Additional information		
Drug specific notes	Α	Neonates only – unlicensed use
NICE guidance		
MTRAC / Prodigy / other		
guidance		
PCT information	D	rug Tariff

3.6 Oxygen

Green	Yellow	Double Yellow	Red
Oxygen			

3.7 Mucolytics

Green	Yellow	Double Yellow	Red
	Carbocisteine ^A specialist recommendation	Dornase alfa Patients established on therapy prior to 31/3/13 will continue to receive treatment under an ESCA	Dornase alfa Patients starting therapy on 1/04/13 or later will receive treatment at HEF (via specialised commissioning
		Acetylcysteine sachets – off label use –specialist recommendation for the treatment of distal intestinal obstruction syndrome in cystic fibrosis	Acetylcysteine – other off label use
			Erdosteine. Respiratory Directorate only. For inpatients and TTO only. Not for GP prescribing.

Devices

Green	Yellow	Double Yellow	Red
			Flutter ® Mucous clearing
			device

Additional information	
Drug specific notes	A NICE CG 12: Chronic Obstructive Pulmonary Disease
NICE guidance	NICE CG 12: Chronic Obstructive Pulmonary Disease
MTRAC / Prodigy / other guidance	
PCT information	Drug Tariff

3.8 Aromatic inhalations

Green	Yellow	Double Yellow	Red
Menthol & eucalyptus			

3.9 Cough preparations

Notes on class

Green	Yellow	Double Yellow	Red
Simple linctus	Pholcodine linctus – limited role	Methadone linctus 2mg/5ml A	
		Palliative care only	

3.10 Systemic nasal decongestants

Green	Yellow	Double Yellow	Red

3.11 Antifibrotics

Green	Yellow	Double Yellow	Red
			Pirfenidone – NICE TA 282
			(via specialised commissioning)

Miscellaneous

Green	Yellow	Double Yellow	Red
Nebusal ® (Sodium chloride 7%			Inhaled mannitol
nebuliser solution) for CF			
patients			

Additional information	
Drug specific notes	A Specialists in palliative care only
NICE guidance	NICE TA 266 Cystic fibrosis - mannitol dry powder for inhalation
	NICE TA 282 Pirfenidone for treating idiopathic pulmonary fibrosis
MTRAC / Prodigy / other	
guidance	
PCT information	Drug Tariff Pseudoephedrine (Drugs of limited Clinical Value) is of limited use; available OTC

4 CENTRAL NERVOUS SYSTEM

4.1 Hypnotics and Anxiolytics

Notes

Committee on Human Medicines (formerly CSM)

- 1. 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.
- 2. The use of benzodiazepines to treat short-term "mild" anxiety is inappropriate and unsuitable.
- 3. Benzodiazepines should be used to treat insomnia only when it is severe, disabling, or subjecting the individual to extreme distress.
- Z-drugs should be used for a maximum of two to four weeks in line with their product licence and are not superior to benzodiazepines

General notes

No hypnotic is licensed for more than 28 days use

Prescribers should routinely provide information on promotion of good sleep habits ("sleep hygiene") Link to Prodigy PIL <u>Prevention</u> of insomnia

Green	Yellow	Double Yellow	Red
Hypnotics			
Temazepam	Zolpidem – NICE TA 77		Chloral hydrate syrup -
			paediatrics
	Zopiclone £ - NICE TA 77		Triclofos - Paediatrics
	Promethazine – for		
	hyperemesis		
	Zaleplon – NICE TA 77		

Anxiolytics			
Diazepam ^A	Chlordiazepoxide ^B	Lorazepam injection	
	Lorazepam	Diazepam injection	
Additional information			
Drug specific notes	 A Not recommended due to long dura B For alcohol withdrawal 	Not recommended due to long duration of action compared to temazepam For alcohol withdrawal	
NICE guidance	NICE TA 51 Depression and anxiety - computerised cognitive behavioural therapy; NICE TA 77 -Insomnia newer hypnotic drugs		
MTRAC / Prodigy / other guidance	Prodigy: Hypnotic and anxiolytic dependence; Prodigy: Insomnia		

4.2 Drugs used in psychoses and related disorders

Notes on class

The Committee on Human Medicines (formerly The Committee on the Safety of Medicines) has advised that:

- Risperidone or olanzapine should not be used for the treatment of behavioural symptoms of dementia
- Use of risperidone for the management of acute psychotic conditions in elderly patients who also have dementia should be limited to the short-term and should be under specialist advice (olanzapine is not licensed for management of acute psychoses)
- Prescribers should consider carefully the risk of cerebrovascular events before treating any patient with a previous history of stroke or TIA.
- Consideration should also be given to other risk factors for cerebrovascular disease including hypertension, diabetes, current smoking and AF
- Increased risk of cerebrovascular events when antipsychotics used to treat behavioural or psychotic symptoms of dementia. See
 NICE Clinical Guideline
- The NICE Clinical guideline on Dementia states that antipsychotics should only be considered for patients with severe non-cognitive symptoms (psychosis &/or agitated behaviour causing significant distress), after very careful assessment of risks and benefits. The dose must be carefully titrated, and use should under close supervision on a time-limited basis with changes in target symptoms regularly assessed and recorded. <u>CG42 Dementia</u>: <u>NICE guideline (Word)</u> see section 1.7.2 p34

Furthermore, the CHM notes that although there is currently insufficient evidence to include other antipsychotics in these recommendations, prescribers should bear in mind that a risk of stroke cannot be excluded, pending the availability of further evidence. Patients with dementia who are currently treated with an atypical antipsychotic drug should have their treatment reviewed.

Green	Yellow	Double Yellow	Red
4.2.1 Antipsychotic drugs			
Chlorpromazine B	Olanzapine ^C -Consultant	Aripiprazole -Consultant	Clozapine (Mental Health Trust)
	initiation	recommendation	

Haloperidol	Risperidone - Consultant initiation		
	Amisulpride -Consultant recommendation		
	Quetiapine -Consultant recommendation		
Green	Yellow	Double Yellow	Red
4.2.2		Consultant initiation	
		Zuclopenthixol	
		Flupentixol (flupenthixol)	
		Fluphenazine	
4.2.3 Antimanic drugs			
		Lithium ^A	
		Valproate acid (BSMHFT)	

Additional information		
Drug specific notes	Must state brand as different formulations / salts are not interchangeable Not for use in the management of agitation in dementia or delirium Oro-dispersible can be considered for compliance issues	
NICE guidance	NICE CG 1 Clinical Guidance on Schizophrenia; NICE CG 38 bipolar disorder NICE CG 82 schizophrenia NICE CG42 Dementia NICE TA 66 Bipolar disorder - newer drugs NICE TA 213 Schizophrenia - aripiprazole	
MTRAC / Prodigy / other	Olanzapine and Risperidone initiation in secondary care – GPs can continue prescribing	
guidance	Olanzapine for bipolar disorder - initiation in secondary care. GPs can continue prescribing Lithium ESCA is being developed by B&S MHT Prodigy: Schizophrenia	
PCT information	Birmingham and Solihull Mental Health Trust guidelines on antipsychotics (http://nww.pctnet.wmids.nhs.uk/z_internet_hob/schz_guidelines/default.htm) Drug Tariff	

4.3 Antidepressants

Notes on class

All of the SSRI antidepressants are of similar efficacy to one another and slightly better than placebo SSRI antidepressants are not licensed for under 18s

Green	Yellow	Double Yellow	Red
SSRIs			
Fluoxetine	Citalopram		
Sertraline ^A			
Tricyclics			
Amitriptyline			
Lofepramine			
Other Antidepressants			
	Mirtazapine	Duloxetine –within licence as per NICE CG96 for diabetic peripheral neuropathic pain	
	Venlafaxine		

Additional information	
Drug specific notes	A Has most evidence in cardiovascular disease
NICE guidance	NICE guidance on mental health and behavioural conditions
	NICE CG 96 Neuropathic pain pharmacological management
MTRAC / Prodigy / other	Prodigy: Depression
guidance	
PCT information	Drug Tariff

4.4 CNS Stimulants and other Drugs used for attention deficit hyperactivity disorder

Green	Yellow	Double Yellow	Red
		Methylphenidate ESCA	Dexamfetamine
			(dexamphetamine)
		Atomoxetine ESCA A	
		Modafinil for narcolepy ESCA	Modafinil (as a consequence of sleep apnoea) ^C

Additional information		
Drug specific notes	The MHRA has announced that it is investigating the risks and benefits of atomoxetine (for ADHD), following research that has identified a possible increase in suicidal thoughts and behaviour in children treated with the drug. In the mean time the MHRA advises that children taking the drug should be monitored for signs of depression, suicidal thoughts or behaviour, and referred for appropriate treatment if necessary. Patients (and carers) should be advised to watch for relevant behaviours. Children who are taking atomoxetine who are feeling well should not be concerned and there is no need to stop it as the benefits will outweigh the risks for most children.	
	For treatment of narcolepsy only. Patients who are stable and being treated with modafinil for excessive daytime sleepiness (in relation to sleep apnea) may continue treatment under the ESCA. Following a Safety and Effectiveness review by the EMEA – Modafinil for the treatment of excessive daytime sleepiness as a consequence of sleep apnoea has been moved to the red section of the formulary. NEWLY diagnosed patients requiring treatment with modafinil will receive all of their medication from HEFT and GPs will not be asked to prescribe.	
NICE guidance	NICE TA 98 Attention deficit hyperactivity disorder (ADHD) NICE TA 139 Sleep apnoea - continuous positive airway pressure (CPAP)	
MTRAC / Prodigy / other	Guidance available for both atomoxetine and methylphenidate	
guidance	Prodigy: ADHD	
PCT information	ESCAs for both methylphenidate and atomoxetine are available.	
	<u>Drug Tariff</u>	

4.5 Drugs used in obesity

Notes on class

• Drugs in this class are subject to inclusion criteria based on patients current physical condition and progress with unassisted weight loss prior to commencing medication. Refer to BNF 4.5 Drugs used in the treatment of obesity: British National Formulary

Green	Yellow	Double Yellow	Red
Orlistat			

Additional information	
Drug specific notes	Rimonabant – The European Medicines Agency (EMEA) recommended the suspension of the marketing authorisation for Acomplia (rimonabant) from Sanofi-Aventis. The EMEA's Committee for Medicinal Products for Human Use (CHMP) has concluded that the benefits of Acomplia no longer outweigh its risks and the marketing authorisation should be suspended across the European Union (EU). EMEA information regarding rimonabant
NICE guidance	NICE CG 43 Obesity
MTRAC / Prodigy / other guidance	Prodigy: Obesity
PCT information	Practices should have a prescribing protocol in place Drug Tariff

4.6 Drugs used in nausea and vomiting

Green	Yellow	Double Yellow	Red
Betahistine	Hyoscine hydrobromide		Ondansetron (Hyperemesis /
			paeds)
Cinnarizine	Hyoscine hydrobromide patch		Granisetron
Cyclizine			Levomepromazine (Palliative
			Care)
Prochlorperazine			Aprepitant (Emend ®) B
Metoclopramide A			Droperidol injection ^C
Domperidone			Palonosetron

Additional information	
Drug specific notes	Not effective in postoperative nausea and vomiting and not 1 st choice in patients under 20 years of age For use as per Pan Birmingham Cancer Network guidelines Reserved for those patients in whom other agents have failed to control PONV or are otherwise unsuitable for treatment with other agents
NICE guidance	PBCN Anti Emetic Guidelines for Adults receiving chemotherapy
PCT information	Drug Tariff

4.7 Analgesics

- Where ever possible, avoid the use of combination products. Use paracetamol and codeine separately. All combination products of paracetamol and codeine / dihydrocdeine are deemed products less suitable for prescribing in the BNF
- Co-codamol 8/500 is similar in efficacy to paracetamol and should be avoided
- Most drugs in section 4.7.2 are subject to the Misuse of Drugs Act. Handwriting exemptions have recently been lifted to allow computer generated scripts. These prescriptions still require all of the previous details.
 - o Patients name and address
 - o Name of preparation. The form and where appropriate the strength of the preparation
 - o The total quantity of the preparation or the number of dose units in both words and figures
 - o The dose

Green	Yellow	Double Yellow	Red
4.7.1 Non-opioid anlgesics			
Paracetamol	Co-codamol 30/500 *		Paracetamol injection D
	Co-codamol 30/500		
	*effervescent (high sodium		
	content) £		
	Paracetamol soluble £ (high		
	sodium content)		
4.7.2 Opioid analgesics			
Morphine salts	Buprenorphine 200 microgram	Hydromorphone (palliative care	Papaveretum
	S/L tablets	recommendation only)	
Codeine phosphate	Fentanyl patch ^A £££	Oxycodone £££ - usually on	Meptazinol – obstetric pain and
		palliative care recommendation	renal colic only
	(D)		
Diamorphine salts	Tramadol ^{CB}		Pethidine
			Sublingual fentanyl –Palliative
			Pain Team Recommendation
			only - for the management of
			breakthrough pain in adults
			using opioid therapy for chronic
			cancer pain & who are
			unsuitable for other short acting
			opioids

4.7.2 Opioid analgesics cont	inued		
Dihydrocodeine		Methadone liquid - Palliative Care Team recommendation only	Transtec ® patches prescribing restricted to Dr Meystre - during end of life care only
			Fentanyl lozenge – Palliative Care Team recommendation only
4.7.3 Neuropathic pain			
Amitriptyline (off label use)	Carbamazepine – trigeminal neuralgia only	Pregabalin – specialist initiation and stablilisation	Capsaicin 8% patch - 10 patients only via Pain Team
	Gabapentin £££ Clonazepam – (off-label) palliative care only		
4.7.4 Antimigraine drugs			
4.7.4.1 Migraine treatment			
Sumatriptan	Rizatriptan £		
Migraleve ® pink	Sumatriptan injection ^A		
·	Naratriptan (Primary Care		
	only)		
	Zolmitriptan (Primary Care only)		
4.7.4.2 Migraine prophylaxis			
Propranolol (section 2.4)	Pizotifen		
Amitriptyline			
Additional information			
Drug specific notes	Post operatively or Pain Te Combination products con For use in patients that are Paracetamol injection is a	These products should only be used if oral treatments are not effective Post operatively or Pain Team advice only. Not to be used in conjunction with other regular opiate Combination products containing tramadol are NON-FORMULARY For use in patients that are unable to tolerate oral paracetamol and have established IV access. Paracetamol injection is a more cost effective option than paracetamol suppository Caution in elderly patients (over 69)	
MTRAC / Prodigy / other guidance		s; Prodigy: Migraine; Prodigy: Mus	
PCT information		o-codamol 8/500 and should be avoidose conversion charts for equivale	ded alone or as part of Migraleve due nt dosings and formulations

4.8 Antiepileptics

4.8.1 Control of epilepsy

Notes on class

Anti epileptic medications are prone to interactions; check with BNF

Green	Yellow	Double Yellow	Red
	Specialist recommendation		Retigabine – NICE TA 232
Carbamazepine	Clonazepam	Primidone (also for essential tremor – section 4.9.3)	
Sodium valproate	Lamotrigine	Zonisamide ESCA	
Diazepam rectal (section 4.1.2)	Gabapentin	Lacosamide ESCA	
	Levetiracetam		
	Phenytoin capsules		
	Topiramate		
	Phenobarbitone		
	Vigabatrin		

Additional information			
Drug specific notes	Phenytoin capsules cost 3p per 100mg phenytoin tablets cost £2.22 per 100mg		
NICE guidance	NICE CG 137- Diagnosis and management of the epilepsies in adults and children in primary and		
NOE galdanoo	secondary care		
	NICE TA 232 Epilepsy (partial) - retigabine (adjuvant)		
MTRAC / Prodigy / other	CSM statement regarding vigabatrin		
guidance	Phenobarbital (phenobarbitone) and primidone, whilst still used in primary care are rarely initiated		

4.8.2 Drugs used in status epilepticus

Green	Yellow	Double Yellow	Red
Diazepam rectal tubes		Midazolam buccal liquid – (unlicensed) Paediatric patients only	Diazepam injection (diazemuls)
			Paraldehyde (unlicensed)
			Lorazepam injection
			Phenytoin sodium injection
			Phenobarbital sodium injection

4.9 Drugs used in parkinsonism and related disorders

4.9.1 Dopaminergic drugs used in parkinsonism

Green	Yellow	Double Yellow	Red
Selegiline	Co-beneldopa (modified release)	Specialist initiation	
Co-beneldopa	Co-careldopa (modified release)	Entacapone ESCA - ^A	
Co-careldopa		Apomorphine (consultant initiation)	
		Stalevo ® ESCA - A	
		Pramipexole ESCA - A	
		Ropinirole ESCA - A	
		Rasagiline ESCA	
		Amantadine	
		Bromocriptine	
		Rotigotine patches B	

4.9.2 Antimuscarinic drugs used in parkinsonism

Green	Yellow	Double Yellow	Red
		Specialist initiation in	
		Parkinson's disease	
Procyclidine (for drug –induced parkinsonism/dystonia)		Benzatropine (benztropine)	
•		Orphenadrine	
		Trihexyphenidyl (benzhexol)	
		Procyclidine (Parkinsons	
		disease)	

Additional information	
Drug specific notes	 ESCA required if prescribed in primary care For use within licence in these specific circumstances In patients who cannot swallow or their gut is not working. Patients with poor overnight control of PD. Rotigotine can be considered after CR L dopa preparations and long half life oral DAs (e.g. ropinirole and pramipexole) Patients with erratic motor control during the daytime despite using oral long acting DAs, e.g. ropinirole or pramipexole either as standard TDS regimes or once daily SR preparations. In this setting rotigotine patch can be useful before considering sc apomorphine infusion of enteral duodopa infusion. The latter two treatment options are much more invasive and expensive. Patients intolerant of current first line DAs (ropinirole and pramipexole) should be considered for rotigotine before abandoning the DA class of drugs. NICE state that "newer drugs" should be used in patients refractory to treatment with older AEDs or for whom older drugs are contraindicated. Combination therapy should be used only when monotherapy has failed.
NICE guidance	NICE CG 137 Diagnosis and management of epilepsy in adults and children
MTRAC / Prodigy / other guidance	CSM statement regarding pergolide CSM statement regarding fibrotic reactions with pergolide and other ergot-derived dopamine receptor agonists

4.9.3 Drugs used in essential tremor, chorea, tics, and related disorders

Green	Yellow	Double Yellow	Red
Primidone	Haloperidol	Riluzole ESCA – NICE TA 20	Botulinum A toxin
Propranolol	Piracetam		
	Tetrabenazine		

Additional information	
Drug specific notes	
NICE guidance	NICE TA 20 Motor neurone disease - riluzole
	NICE TA 260 Migraine (chronic) - botulinum toxin type A
MTRAC / Prodigy / other	
guidance	

4.10 Drugs used in substance dependence

Green	Yellow	Double Yellow	Red
Nicotine replacement therapy	Bupropion	Methadone mixture 1mg/ml – A	Lofexidine - for use within licence
(Patch – considered first line)		on advice of substance misuse	as part of the SAFE project
		team only (NICE TA 114)	
	Varenicline £££– when NRT	Buprenorphine- On advice of	Naltrexone – substance misuse
	inappropriate or has failed.	substance misuse team only	team only
	One 12 week cycle only	(NICE TA 114)	-
		Acamprosate	

Additional information	
Drug specific notes	
NICE guidance	NICE TA 20 (Motor neurone disease - riluzole)
	NICE PH 10 Smoking cessation services
	NICE TA 114 Drug misuse - methadone and buprenorphine
	NICE TA 115 Drug misuse - naltrexone
	NICE TA 123 Smoking cessation - varenicline
MTRAC / Prodigy / other	
guidance	

4.11 Drugs for dementia

Green	Yellow	Double Yellow	Red As per NICE TAs
			Donepezil
			Galantamine
			Rivastigmine
			Memantine

Additional information	
Drug specific notes	
NICE guidance	NICE TA 217 Alzheimer's disease - donepezil, galantamine, rivastigmine and memantine
MTRAC / Prodigy / other	
guidance	
PCT information	Patients living within the Birmingham and Solihull areas are treated by the Birmingham and Solihull
	Mental Health Trust with all prescribing undertaken by the Mental Health Trust.

5. Infections

Guidance for the Management of Infection in Primary Care

Notes

- Prescribe an antibiotic only when there is likely to be a clear clinical benefit i.e. clinical indication of infection. Apply lower threshold for antibiotics in immunocompromised or those with multiple morbidities. Collect cultures where appropriate.
- A dose and duration for adults is suggested, but may need modification for age, weight or renal function. In severe or recurrent cases consider a larger dose or longer course. Please refer to BNF for further dosing and interaction information (e.g. interaction between macrolides and statins) if needed and please check for hypersensitivity
- Paediatric doses stated in BNFc may be found at Appendix 1. Refer to the BNF and BNFc for further dosing information.
- Consider a no, or delayed, antibiotic strategy for acute self-limiting upper respiratory tract infections. Avoid broad spectrum antibiotics (co-amoxiclav, 2nd and 3rd generation cephalosporins, quinolones) if possible as they increase risk of *Clostridium difficile*, MRSA (both not as much a concern for children) and UTIs caused by multi-drug-resistant organisms.
- Limit prescribing over the telephone to exceptional cases.
- In pregnancy AVOID tetracyclines, aminoglycosides, quinolones, and high dose metronidazole. Short term use of nitrofurantoin is unlikely to cause problems to the foetus; nor is trimethoprim unless poor dietary folate intake or taking another folate antagonist e.g. antiepileptic.
- Clarithromycin is an acceptable alternative in those who are unable to tolerate erythromycin because of side effects.
- Avoid widespread use of topical antibiotics, especially those agents also available as systemic preparations e.g. fusidic acid.
- Where a 'best guess' therapy has failed or special circumstances exist, microbiological advice can be obtained from 0121 424 2000 and ask for the duty microbiologist on call. Send appropriate specimens wherever indicated.
- The content of the formulary reflects evidence or consensus opinion at the time of compilation. Evidence or opinion may change over time and it is the responsibility of the prescriber to ensure that new evidence or national guidelines are taken into account in their prescribing. The individual prescriber remains responsible for the patient's care and the prescription written.
- There are useful resources on antibiotics including patient information leaflets, antibiotic posters, training programmes on antibiotics available at the following website TARGET antibiotics resources

Index of sections

Click on the link below:

- Meningitis, Emergency treatment for CAP in adults
- <u>Upper respiratory tract infections</u> <u>Common cold</u>, <u>Influenza</u>, <u>Acute sore throat</u>, <u>Acute Otitis Media</u>, <u>Acute Otitis Externa</u>,
 Rhinosinusitis,
- Lower respiratory tract infections Acute cough bronchitis, Acute exacerbation of COPD, Community Acquired Pneumonia
- <u>Urinary Tract Infections</u> <u>Uncomplicated UTI in men and non-pregnant women</u>, <u>Acute Prostatitis</u>, <u>UTI in pregnancy</u>, <u>UTI in Children</u>, <u>Acute pyelonephritis</u>, <u>Recurrent UTI in non pregnant women</u>
- Gastro-intestinal tract infections H. pylori, Clostridium difficile, Infectious diarrhoea, Traveller's Diarrhoea, Threadworm
- Genital Tract Infections Chlamydia, Vaginal candidiasis, Bacterial vaginosis, Trichomoniasis, PID,
- <u>Skin/Soft Tissue infections</u> <u>Impetigo</u>, <u>Eczema</u>, <u>Cellulitis</u>, <u>MRSA</u>, <u>PVL</u>, <u>Leg Ulcers</u>, <u>Diabetic Leg Ulcer</u>, <u>Conjunctivitis</u>, <u>Scabies</u>, <u>Fungal nail infection</u>, <u>Fungal skin infection</u>, <u>Acne</u>, <u>Chicken pox & shingles</u>
- Dental infections

Illness	Comments	First Line	Second Line
MENINGITIS			
Suspected meningococcal disease	Transfer all patients to hospital immediately.	IV [#] Benzylpenicillin Children <1 yr: 300 mg Children 1 - 9 yr: 600 mg	
<u>HPA</u>	If time before admission, and non-blanching rash give either IV benzylpenicillin or cefotaxime unless definite history of hypersensitivity. i.e. history of difficult breathing, collapse, loss of consciousness, or rash. If history of anaphylaxis with penicillins or cephalosporins, seek urgent advice from on-call	Other: 1200 mg IV [#] Cefotaxime ≥ 12yrs 1g < 12 yrs 50mg/kg (max 1g) # Give IM if vein cannot be found	
	microbiologist via BHH switchboard 0121 424 2000.		

Prevention of secondary case of meningitis:

Only prescribe following advice from a Public Health Doctor 0121 352 5345 or 5349.

Out of hours contact duty microbiologist via Heartlands switchboard 0121 424 2000.

EMERGENCY TREATMENT FOR COMMUNITY ACQUIRED PNEUMONIA IN ADULTS

Illness	Comments	First Line	Second Line	
Community acquired pneumonia	Use CRB65 score to help guide and review: Each scores 1: New Confusion (AMT<8); Respiratory rate >30/min; BP systolic <90 or diastolic ≤ 60 Age ≥ 65 years Score 3-4: urgent hospital admission	If delayed admission (> 6 hours) / life threatening Unless history of hypersensitivity Ω IM or iv Benzylpenicillin 1200 mg OR IM or iv Cefotaxime 1g OR Amoxicillin 1000mg by mouth Ω See under meningitis above		
UPPER RESPIRATORY TRACT INFECTIONS:				
Common Cold				
CKS Common Cold		Symptomatic treatment		

Illness	Comments	First Line	Second Line
Influenza HPA Influenza NICE TA 158 Influenza prophylaxis	Annual vaccination is essential for all those at risk of influenza. See DoH Guidance for definition of at risk groups and vaccination schedule including pandemic influenza vaccination where appropriate		If there is resistance to oseltamivir or if pregnant
<u>ргорпутахтя</u>	Treat 'at risk' patients only when influenza is circulating in the community as confirmed by the DoH, within 48 hours of onset.	Treatment Oseltamivir 75mg BD for 5 days * *Adult dose – for children see BNFc	Treatment Zanamivir 10mg BD (2 inhalations by diskhaler) for 5 days* *Adult dose – for children see BNFc
	Offer post-exposure prophylaxis only in line with NICE	Prophylaxis Oseltamivir 75mg OD for 10 days * *Adult dose – for children see BNFc	Prophylaxis Zanamivir 10mg OD (2 inhalations by diskhaler) for 10 days* *Adult dose – for children see BNFc
	During epidemic follow HPA or equivalent national/local guidance.		

Illness	Comments	First Line	Second Line
Acute Sore Throat	The majority of sore throats are viral;	Symptomatic treatment	
	most patients do not benefit from		
	antibiotics.	If antibiotics indicated, consider	
CKS Acute Sore Throat		delayed prescription, held in the	
	90% of acute sore throats will resolve	practice as per original study $^{\lambda}$	
SIGN Guideline 117 (2010)	in 7 days without antibiotics and pain is		
	only reduced by 16 hours	Phenoxymethylpenicillin	
NICE CG69 (2008)		500mg QDS for 10 days *	
	Antibiotics to prevent Quinsy	(Syrup has unpleasant taste – use	
	NNT>4000	tablets wherever possible)	
	Antibiotics to prevent Otitis media		
	NNT 200	OR (if allergic to penicillin)	
	Use Clinical Prediction Rule to	Clarithromycin	
	estimate likelihood of Group A beta	500mg BD for 5 days *	
	haemolytic Streptococcus	(for child, consider erythromycin)	
	If Centor score 3 or 4 (fever, no cough,		
	lymphadenopathy, tonsillar exudate),	* Adult doses – for children see	
	consider 2-3 day delayed, or immediate	Appendix 1	^λ Little P, Williamson I, Warner G et al.
	antibiotics.		(1997) Open randomised trial of prescribing strategies in managing sore
			throat. BMJ 314: 722-7
	If the patient reconsults then a swab		
	should be taken		

Illness	Comments	First Line	Second Line
Acute Otitis Media	Children	If no vomiting or temp <38.5°C	
	Evidence suggests that slightly	optimise analgesia with paracetamol	
<u>CKS</u>	more children will be pain free at 2	or ibuprofen.	
	days if they take ibuprofen TDS		
	than if given paracetamol TDS.	Consider delayed prescription,	
	However, use of ibuprofen may be	held in practice as per original	
	associated with a slightly higher risk	study.	
	of mild nausea, vomiting or		
	abdominal pain	If antibiotics indicated:	
	Avoid antibiotics as 60% are better in	Amoxicillin	
	24 hours without; they only reduce pain	500mg TDS for 5 days*	
	at 2 days (NNT 15) and do not prevent	300mg 1D3 for 3 days	
	deafness	OR (if allergic to penicillin)	
	dearness	ort (ii anorgio to pornomiri)	
	Consider 2 or 3 day-delayed or	For children	
	immediate antibiotics for pain relief if:	Erythromycin	
	• <2yrs with bilateral AOM	Doses see Appendix 1	
	NNT4		
	 All ages with otorrhoea NNT3 	For adults	
		Clarithromycin	
	Antibiotics to prevent Mastoiditis NNT	500mg BD for 5 days*	
	> 4000	Jooning DD 101 J days	
	Macrolides are not the drug of choice	* Adult doses – for children see	
	against Haemophilus.	Appendix 1	

Acute Otitis externa First use aural toilet (if available) and analgesia. CKS Cure rates similar at 7 days for topical acetic acid or antibiotic +/-steroid If cellulitis or disease extending outside aural canal, start oral antibiotics and refer. (see cellulitis) In children with "grommets", topical treatment should be used with care. In the immunocompromised or (older) diabetic patient where Pseudomonas aeruginosa is identified in an ear swab, malignant otitis externa must be considered. This invasive infection is associated with severe pain. Immediate referral to the ENT surgeon is necessary.	Illness	Comments	First Line	Second Line
· · · · · · · · · · · · · · · · · · ·	Acute Otitis externa	First use aural toilet (if available) and analgesia. Cure rates similar at 7 days for topical acetic acid or antibiotic +/-steroid If cellulitis or disease extending outside aural canal, start oral antibiotics and refer. (see cellulitis) In children with "grommets", topical treatment should be used with care. In the immunocompromised or (older) diabetic patient where Pseudomonas aeruginosa is identified in an ear swab, malignant otitis externa must be considered. This invasive infection is	Acetic acid 2% (Earcalm® ear spray is available to the public): 1 spray TDS to affected ear(s) for 7 days. After topical treatment has been applied, the patient must lie with the ear "up" for at least 10 minutes to enable maximum	Dexamethasone 0.1%, neomycin sulphate 3250 units/mL, glacial acetic acid 2%. (Otomize) 1 spray TDS to affected ear(s) for

Illness	Comments	First Line	Second Line
Rhinosinusitis	Avoid antibiotics as 80% resolve in 14		
acute or chronic	days without, and they only offer marginal benefit after 7 days NNT 15	Do not prescribe	
CKS		OR	
	Reserve antibiotics for severe		
	symptoms +/or >10 days	Amoxicillin	
		500mg TDS for 7 days	
	Use adequate analgesia	(Adult dose – for children see	
		Appendix 1)	
	Consider 7-day delayed or immediate		
	antibiotic when purulent nasal discharge NNT 8	OR	
		Doxycycline 200mg stat, then	
		100mg daily (7 day course)	
		(Adult dose. Not for use in children	
		under 12 years or in pregnancy or	
		lactation.)	
		Cook owner odvice for shild allered	
		Seek expert advice for child allergic to penicillin.	

Illness	Comments	First Line	Second Line
LOWER RESPIRATORY TRACT	INFECTIONS		
Do NOT use quinolone (ciprofloxacir	n, ofloxacin) first line due to poor pneur	mococcal activity. Reserve all quinolon	es for proven resistant organisms
	Antibiotics have little benefit if no		
Acute cough, bronchitis	co-morbidity	Do not prescribe	Doxycycline 200mg stat then
			100mg OD. 5 day course.
Clinical Knowledge Summaries:	Symptom resolution may take 3	OR	(Adult dose. Not for use in children
Acute bronchitis - adult	weeks		under 12 years or in pregnancy or
		Amoxicillin	lactation.)
NICE CG69 (2008)	Consider 7day delayed antibiotic	500mg TDS for 5 days *	
	with symptomatic advice/leaflet		
		OR (if allergic to penicillin)	
	Consider immediate antibiotics if >		
	80yr and ONE of: hospitalisation in	Clarithromycin	
	past year, oral steroids, diabetic,	500mg BD for 5 days *	
	congestive heart failure	For child, consider erythromycin	
	OR> 65yrs with 2 of above		
		* Adult doses – for children see	
		Appendix 1	

Illness	Comments	First Line	Second Line
Acute exacerbation of COPD Adults only Clinical Knowledge Summary - Management of exacerbation of COPD NICE COPD guidelines CG 101	Antibiotics are not indicated in the absence of purulent sputum, unless consolidation on chest radiograph or clinical signs of pneumonia Treat exacerbations promptly with antibiotics if purulent sputum and increased shortness of breath and/or increased sputum volume Risk factors for antibiotic resistant organisms include co-morbid disease, severe COPD, frequent exacerbations, antibiotics in last 3 months	Amoxicillin 500mg TDS for 5 days OR Doxycycline 200mg stat then 100mg OD for 5 days (not for use in pregnancy or lactation) In penicillin allergy: Clarithromycin 500mg BD for 5 days	3 rd line if clinical failure to other antibiotics/resistance risk factors: Co-amoxiclav 625mg TDS for 5 days

Illness	Comments	First Line	Second Line
Community-acquired pneumonia: ADULTs Treatment in the community Clinical Knowledge Summary (Prodigy) - Community acquired pneumonia BTS CAP Guidelines Updated 2009	Use CRB65 score to help guide and review: Each scores 1: New Confusion (AMT<8); Respiratory rate >30/min; BP systolic <90 or diastolic ≤ 60; Age ≥ 65 years Score 0: suitable for home treatment; Score 1-2: hospital assessment or admission Score 3-4: urgent hospital admission Give immediate IM Benzylpenicillin or amoxicillin 1g orally if delayed admission (> 6 hours) / life threatening Mycoplasma infection is rare in over 65s	IF CRB65 = 0: Amoxicillin 500mg TDS for 7 days OR Clarithromycin 500mg BD for 7 days OR Doxycycline 200mg stat/100mg OD for 7 days (Adults only. Not for use in pregnancy or lactation.) If CRB65 = 1 & AT HOME Amoxicillin 500mg TDS AND clarithromycin 500mg BD for 7 - 10 days OR Doxycycline alone 200mg stat/100mg OD for 7-10 days	

CRB65 scoring system not appropriate CRB65 scoring system not appropriate	Illness	Comments	First Line	Second Line
> 2 years: 500mg ODS for / days	Community- acquired pneumonia CHILDREN Treatment in the community Clinical Knowledge Summary - Community Acquired Pneumonia in	CRB65 scoring system not appropriate CKS CAP in children Risk Assessment tool For children who are managed at home advise carers to: Control fever and maintain hydration with self-care measures. Check on the child regularly, including through the night, and seek medical advice if the child deteriorates or the carers are unable to cope. Arrange a review of the child and refer for hospital assessment if: The child deteriorates on treatment. The child does not improve after	For child well enough to be treated in the community Child under 5 years of age Amoxicillin 1 month − <1 year: 125mg TDS 1 - <5 years: 250mg TDS All for 5 - 7 days OR (if allergic to penicillin) Erythromycin ethylsuccinate SF suspension 1 month - < 2years: 250mg QDS for 7 days ≥ 2 years: 500mg QDS for 7 days Child ≥5 years of age Amoxicillin ≥ 5 years: 500mg TDS for 5 − 7 days OR if allergic to penicillin OR during known Mycoplasma outbreak Erythromycin ethylsuccinate SF suspension	Ref: NHS Clinical Knowledge summary NHS Clinical Knowledge Summaries - Clinical topic - Cough - acute with chest signs in children

Illness	Comments	First Line	Second Line
URINARY TRACT INFEC	TIONS		
People >65yrs: do not treat asympto	tomatic bacteriuria; it is common but i	is not associated with increased morb	idity
Catheter in situ: antibiotics will not	eradicate asymptomatic bacteriuria;	only treat if systemically unwell or p	yelonephritis likely
Do not use prophylactic antibiotics	for catheter changes unless history of	f catheter-change associated UTI	
Please do not use ciprofloxacin unle	ss no other option available		
Uncomplicated UTI in men and non-pregnant adult females (i.e. no fever or flank pain) HPA UTI quick reference guide	Uncomplicated lower UTI in non pregnant women (Birmingham and Solihull August 2012) Women with severe/≥ 3 symptoms:	Trimethoprim 200mg BD or Nitrofurantoin 100mg m/r BD Women for 3 days	Community multi-resistant E. coli with Extended-spectrum Beta-lactamase (ESBL) enzymes are increasing so perform culture in all treatment failures.
ESBLs Clinical Knowledge Summary - UTI in women over 14 years Clinical Knowledge Summary - UTI (lower) men	treat Women with mild/ ≤ 2 symptoms: use dipstick to guide treatment. Men: send pre-treatment MSU OR if symptoms mild/non-specific, use – ve nitrite and leucocytes to exclude UTI	Men for 7 days	ESBLs may be sensitive to nitrofurantoin. Seek specialist advice.
Acute prostatitis BASHH Guidelines Clinical Knowledge Summaries	Consider referral for GUM opinion Send MSU for culture and start antibiotics 4 weeks treatment may prevent chronic infection Quinolones achieve higher prostate levels	Ciprofloxacin 500mg BD for 28 days	Trimethoprim 200mg bd for 28 days

Illness	Comments	First Line	Second Line
HPA UTI quick reference guide CKS	Send pre-treatment MSU for culture & sensitivity and commence empirical antibiotics. In pregnancy, short term use of trimethoprim or nitrofurantoin is unlikely to cause problems to the foetus Avoid trimethoprim if low folate status or on folate antagonist (eg antiepileptic or proguanil)	Cefalexin 500mg TDS for 7 days	Nitrofurantoin 100mg m/r BD for 7 days OR Trimethoprim 200mg (off label) BD for 7 days Give folic acid if first trimester

Illness	Comments	First Line	Second Line
NICE CG54 Urinary tract infection in children: diagnosis, treatment and long-term management: Quick reference guide See pp 8 & 9 NICE CG 47 Feverish Illness in Children	Children <3mths: refer urgently for assessment Child ≥3mths: assess and manage in line with NICE 54 and 47. Start antibiotic treatment, unless high risk of serious illness in child < 3 years of age, then refer urgently. If suspect upper UTI seek specialist advice	Co-amoxiclav < 1 year Consult BNFc 1 – 6 years 5ml of 125/31mg suspension TDS 6 – 12 years 5ml of 250/62mg suspension TDS >12 years 1 x 250/125mg tablet TDS All doses are for 3 days	Cefalexin in divided doses 3mths - 1 yr 125mg BD 1-5 yrs 125mg TDS 5-12 yrs 250mg TDS > 12 years 500mg TDS All doses are for 3 days
Acute pyelonephritis (adults) Clinical Knowledge Summary (Prodigy) - Acute pyelonephritis	If admission not required, send MSU for culture & sensitivities and start antibiotics. If no response to treatment within 24 hours admit.	Co-amoxiclav 625mg TDS for 10 days OR For patients with penicillin allergy Ciprofloxacin 500mg BD for 7 days	

Illness	Comments	First Line	Second Line
Recurrent UTI in non- pregnant women ≥3 UTIs/year	Consider STIs Emphasise good fluid intake, and post-coital micturition. Cranberry products OR Post-coital OR standby antibiotics may reduce recurrence Post coital prophylaxis is as effective as prophylaxis taken nightly. Nightly prophylaxis: reduces UTIs but adverse effects Review every 3 months.	Nitrofurantoin 50- 100mg OR Trimethoprim 100mg BOTH: stat post coital (off-label) OR OD at night	

Illness	Comments	First Line	Second Line			
GASTRO-INTESTINAL TRACT I	GASTRO-INTESTINAL TRACT INFECTIONS					
Eradication of H.pylori	Eradication beneficial in DU, GU, and low grade MALToma,	PPI (cheapest) Full dose BD AND	PPI (cheapest) Full dose BD AND			
NICE CG17 Dyspepsia: Quick reference guide	For NUD, the NNT is 14 for symptomatic relief	Clarithromycin 250mg BD AND Metronidazole 400mg BD	Bismuthate (De-nol tab®) 120mg QDS AND 2 unused antibiotics:			
HPA QRG Diagnosis of H.pylori in dyspepsia	Consider test & treat in persistent uninvestigated dyspepsia	all for 7 days	 Amoxicillin 1g BD Metronidazole 400mg TDS Tetracycline 500mg QDS 			
Clinical Knowledge Summaries - Dyspepsia unidentified cause	Do not offer eradication in GORD – it is not effective	PPI (cheapest) Full dose BD AND	• Tetracycline 300ing QDS			
Clinical Knowledge Summaries - H.pylori eradication in PU disease	Do not use clarithromycin or metronidazole if used in the past year for any infection.	Clarithromycin 500mg BD AND Amoxicillin 1g BD all for 7 days				
Managing symptomatic relapse DU: Duodenal ulcer GU: Gastric ulcer NUD: Non ulcer dyspepsia GORD: Gastro oesophageal reflux disease	DU/GU relapse – retest for <i>H. pylori</i> if symptomatic using breath test OR consider endoscopy for culture & susceptibility NUD- Do not retest, treat as functional dyspepsia offer PPI or		Relapse or MALToma – 14 days			
GORD. Gasiro oesophageai renux disease	H ₂ RA					

Illness	Comments	First Line	Second Line	
Clostridium difficile	Stop unnecessary antibiotics and/or	1 st / 2 nd episodes	3 rd episode / severe	
	PPIs and/or laxatives	Metronidazole	Seek specialist advice	
<u>HPA</u>		400mg TDS for 14 days		
	70% respond to Metronidazole in 5			
	days; 92% in 14 days			
	If severe symptoms or signs (below)			
	or for relapses seek specialist			
	advice.			
	Admit if severe: T >38.5; WCC			
	>15, rising creatinine or			
	signs/symptoms of severe colitis			
Infectious diarrhoea	Refer previously healthy children with	h acute painful or bloody diarrhoea to e	exclude E. coli 0157 infection.	
CKG	Antibiotic therapy not indicated unless systemically unwell. If systemically unwell and campylobacter			
CKS	1	l abdominal pain), consider clarithromy	vcin 500 mg BD for 5–7 days if treated	
	early.			
	Beware of haemolytic uraemic syndrome (HUS) following VTEC 0157 which is increased with antibiotics			
Traveller's Diarrhoea	Only consider standby antibiotics for remote areas or people at high-risk of severe illness with travellers'			
A.	diarrhoea If stand-by treatment appropriate give: ciprofloxacin 500mg BD x 3 days This would be a private			
Clinical Knowledge	prescription If quinolone resistance high (e.g. South Asia): consider bismuth subsalicylate (PeptoBismol) 2			
Summaries -	tablets QDS as prophylaxis or 2 days	treatment (bought OTC from pharmacy	<i>(</i>)	
<u>Travellers Diarrhoea</u>				

Illness	Comments	First Line	Second Line
Threadworms			
	Treat household contacts at the	Adult and child > 6 months	
Clinical Knowledge Summary -	same time	Mebendazole 100mg stat	
Threadworm	PLUS	(Off label if < 2 years)	
	Advise on hygiene measures for 2		
	weeks (hand hygiene, pants at	Infant 3-6 months	
	night, morning shower)	Piperazine + sennoside preparation	
	PLUS	(Pripsen) 2.5ml spoon stat and	
	Wash sleepwear, bed linen, dust	repeat after 2 weeks	
	and vacuum on day one		
BNF for Children: 5.5.1 Drugs for		Infant < 3 months	
threadworms		Six weeks hygiene	
	BNFc 2013 states that mebendazole is		
	the drug of choice in children > 6		
	months. Reinfection is common and a		
	second dose may be required after 2		
	weeks.		
	Use under the age of 2 years is off-		
	label		
Other worms	Seek advice from ID specialist	Treatment to be prescribed by ID	
		specialist (not GP).	

Illness	Comments and oral azoles give 75%	Clotrimazolerips pareginal cream	Second Line
Vaginal candidiasis GENITAL TRACTIINFECTIONS	cure	stat OR	
STI screening Clinical Knowledge Summaries Chlamydiactrachomatis mal vaginal discharge SIGN BASHH HPA	Repplemithy is kontrord about does cree to the Wayingtone 7 days Risk factors: no condom use, recent (<1 Ideally, refer all patients with positive result to open access GUM service for treatment, contact screening and investigation for further STIs. Pregnancy or breastfeeding:	n Claterin chalantey d i Orago poerskoog as telel V, sy OR	
B&&erial vaginosis BASHH Clinical Knowledge Summaries HPA Management of abnormal vaginal discharge	Ozithmetrynidizethe (MDSZ) fiseative offictive as topical but cheaper Dess telepserwithe Tatayinhane Systay at the stelepser of weeks after treatment Pregnant/breast feeding: avoid 2g stat	Etythroidyzote 5000 mg QDSf for 77 days or 2g stat OR Amoxicillin 500 mg TDS for 7 days	Metronidazole 0.75% vaginal gel 5g applicatorful at night x 5 nights OR Clindamycin 2% cream 5g applicator full at night for 7 days
	For axins populated equilibrium in the relapse	Cefixime 200mg STAT + ofloxacin 400mg bd for 14 days	applicator fair at hight for 7 days
	For all age groups, send a urine sample for Chlamydia and GC PCR, need to specifically request BOTH of these tests. "First-catch" urine, 5-10 mL, should be collected into a RED top sterile container, at least 1 hour (preferably 2), after the last micturition. For patients with urethral discharge, confirmed N.gonorrhoea or Chlamydia refer to GUM clinic Need for urgent scrotal U/S should be made on an individual patient basis.	Beta-lactam allergy: monotherapy with ofloxacin 400 mg bd for 14 days	

Trichomoniasis	Ideally, refer all patients to open	Metronidazole 400mg BD for 5 - 7	
BASHH	access GUM service for treatment,	days	
	contact screening and investigation	OR	
Clinical Knowledge Summaries	for further STIs.	Metronidazole 2g in a single dose	
		(Avoid single dose regimen in	
HPA Management of abnormal		pregnancy or breastfeeding)	
vaginal discharge		OR	
<u> </u>		Clotrimazole 100mg pessary at	
		night for 6 nights	
		(Gives symptomatic relief - not	
		cure).	

Pelvic Inflammatory Disease	Refer woman and contacts to GUM	Metronidazole 400mg BD for 14	
(PID)	clinic.	days	
<u>BASHH</u>	Essential to test for Chlamydia and <i>N</i> .	PLUS	
	gonorrhoeae.	Ofloxacin 400mg BD for 14 days	
RCOG	28% of gonorrhoea isolates now		
	resistant to quinolones. If gonorrhoea	OR if high risk of GC	
Clinical Knowledge Summaries	likely (partner has it, severe		
	symptoms, sex abroad) avoid	Cefixime 400mg stat	
	ofloxacin regimen	PLUS	
		Metronidazole 400mg BD for 14	
	Admit in pregnancy or lactation as	days	
	primary care antibiotic regimens are	PLUS	
	not suitable	Doxycycline 100mg BD for 14	
		days	

Illness	Comments	First Line	Second Line
SKIN/SOFT TISSUE INFECTION	S		
Impetigo Clinical Knowledge Summary - Impetigo	As resistance is increasing reserve topical antibiotics for very localised lesions only. For extensive, severe, or bullous impetigo, use oral antibiotics Reserve Mupirocin for MRSA.	Flucloxacillin (suspension has unpleasant taste – use capsules wherever possible.) 500mg QDS for 7 days * OR (if allergic to penicillin) Clarithromycin 250 – 500mg BD for 7 days * (for child, consider erythromycin) * Adult doses – for children see Appendix 1	Fusidic acid topically TDS for 5 days OR Mupirocin topically TDS for 5 days (for MRSA only)

Illness	Comments	First Line	Second Line	
Eczema				
Clinical Knowledge Summary - Atopic eczema	Using antibiotics does not improve healing. In absence of visible signs of infection, use of antibiotics (alone or with steroids) encourages resistance.			
	No evidence for use of combined topical antibiotics and steroids.			
	In presence of visible signs of infection use treatment as in impetigo.			
	Visible signs of infection	ut eczema sites		

Illness	Comments	First Line	Second Line
Cellulitis in adults CKS	If febrile and ill, consider referral to Home iv service Solihull CCG protocols available at IV therapy and cellulitis Tel: 0121 746 4499 (Solihull Community IV therapy team) BEN protocols available at Link to be added here Tel 0845 600 4550 or admit for IV treatment If afebrile and otherwise healthy, other than cellulitis, use flucloxacillin alone Discuss with microbiologist where river or sea water exposure Treatment generally 7 days but if slow response continue for a further 7 days	First Line Flucloxacillin 500mg QDS * Treatment generally 7 days but if slow response continue for a further 7 days Suspension has unpleasant taste — use capsules wherever possible OR (if allergic to penicillin) Clarithromycin 500mg BD * (for child, consider erythromycin) Treatment generally 7 days but if slow response continue for a further 7 days In facial cellulitis Co-amoxiclav 500/125mg TDS * Treatment generally 7 days but if slow response continue for a further 7 days In periorbital cellulitis Admit Adult doses — for children see Appendix 1	Second Line

Illness	Comments	First Line	Second Line
MRSA HPA MRSA quick reference guide.	For MRSA screening and suppression, see HPA MRSA quick reference guide. For active MRSA infection: Use antibiotic sensitivities to guide treatment, seek advice from microbiologist For queries on colonisation, contact Infection Prevention team Solihull tel 0121 713 8886 BEN tel	If active infection confirmed, antibiotic treatment guided by sensitivities, seek specialist advice. If tetracycline sensitive MRSA strain: Doxycycline 100mg BD for 7 days	
PVL HPA QRG		s a toxin produced by 2% of <i>S. aureus</i> . Obs if recurrent boils/abscesses. At risk:	
Leg Ulcers HPA QRG CKS Diabetic Leg Ulcer	Ulcers always colonised. Antibiotics do not improve healing unless active infection. Active infection if cellulitis/increased pain/pyrexia/purulent exudate/odour. If active infection, send pretreatment swab Review antibiotics after culture results	If active infection: Flucloxacillin 500mg QDS OR Clarithromycin 500mg BD for 7 days but if slow response continue for further 7 days	

Illness	Comments	First Line	Second Line
	Not all diabetic ulcers should be	Not infected – no antibiotics	
	considered infected. A simple ulcer		
	with exudates does not on its own	Mild infection	
	merit antimicrobial therapy	Flucloxacillin 1g qds	
	Not infected – no cellulitis, no signs		
	of inflammation	Moderate infection	
	Mild infection – superficial cellulitis	Co-amoxiclav 625mg TDS for 7	
	<2cm, 2 of the following symptoms	days and review (adult dose)	
	of inflammation around ulcer		
	erythema, pain, warmth, induration,		
	Moderate infection – cellulitis		
	>2cm, signs of inflammation around		
	ulcer PLUS lymphangitic streaking		
	+/or localised dry gangrene +/or		
	deep tissue involvementRefer for		
	specialist opinion if severe infection		

Illness	Comments	First Line	Second Line
Bites Animal Bite CKS Human Bite	Comments Surgical toilet most important. Assess tetanus and rabies risk. Antibiotic prophylaxis should be given for — • cat bite/puncture wound; • bite involving hand, foot, face, joint, tendon, ligament; • immunocompromised, diabetics, elderly, asplenic, cirrhotic Antibiotic prophylaxis is advised. Assess tetanus and HIV/Hep B & C	Prophylaxis or treatment: Co-amoxiclav 375-625mg TDS for 7 days* OR (If penicillin allergic) Cat/dog/human bite Metronidazole 200-400mg TDS for 7 days* PLUS Doxycycline 100mg BD for 7 days (not for use in pregnancy or lactation)	Second Line
	risk – discuss with virologist as a matter of urgency	Human bite Metronidazole 200 – 400mg TDS for 7 days * PLUS Clarithromycin 250 – 500mg BD for 7 days* (for child, consider erythromycin) In all cases review at 24&48 hours * Adult doses – for children see Appendix 1	

Illness	Comments	First Line	Second Line
Conjunctivitis CKS	Most bacterial infections are unilateral and self-limiting 65% resolve on placebo by day five. If a sore throat is also present then it is probably a virus and so antibiotics are not indicated.	Consider delayed prescription If severe: Chloramphenicol 0.5% drops 2 hourly for 2 days then reducing to every four hours whilst awake AND Chloramphenicol eye 1% ointment at night. Continue for 48 hours after resolution	
	In newborn consider gonococcus, chlamydial or herpetic conjunctivitis - Send bacterial AND viral eye swabs and take history of vaginal discharge or lesions from mother. Infant will require systemic treatment – refer to paediatrics and ophthalmology for assessment and treatment Refer mother and partner(s) to GUM for assessment and treatment		

Illness	Comments	First Line	Second Line
Scabies Clinical Knowledge Summary - Scabies	Treat whole body from ear/chin downwards and under nails. If under 2yrs/elderly include scalp & face. Treat all household and sexual contacts within 24h.	Permethrin 5% cream. If allergy: malathion 0.5% aqueous liquid Use TWO applications one week apart	
Dermatophyte infection - nail HPA Fungal Skin and Nail Infections Clinical Knowledge Summaries - Fungal nail infections	Take nail clippings: Start therapy only if infection is confirmed by laboratory. Terbinafine is more effective than azoles	Terbinafine 250mg OD. 6-12 weeks for fingers and 3-6 months for toes. (adult dose)	Superficial only: Amorolfine 5% nail lacquer once or twice weekly.(adult dose) 6 months for fingers and 12 months for toes.
	For infections with yeasts and non-dermatophyte moulds use itraconazole. Liver reactions rare with oral antifungals For children – seek specialist advice	Itraconazole (Adult dose) 200mg BD for first 7 days of 28 day cycle. Two cycles for fingers. Three cycles for toes.	

Illness	Comments	First Line	Second Line
Dermatophyte infection of the skin HPA Fungal Skin and Nail Infections Clinical Knowledge Summaries - Fungal Skin Infections - Body & Groin Clinical Knowledge Summaries - Fungal Skin Infections - Foot Clinical Knowledge Summaries -	Terbinafine is fungicidal thus shorter treatment time required than with fungistatic imidazoles If candida possible use imidazole If intractable: Take skin scrapings for culture. If infection confirmed, use <i>oral</i> terbinafine/itraconazole Discuss scalp infections with dermatology specialist.	Topical terbinafine BD x 1 – 2 weeks OR (athlete's foot only): Topical undecanoates (Mycota®) BD for 1 -2 weeks after healing (i.e. for 4-6 weeks)	Topical imidazole BD for 1 – 2 weeks after healing (ie. for 4 – 6 weeks)
Fungal Skin Infections - Scalp Acne CKS - Acne vulgaris	Topical treatments for acne should be used first line (see section 13.6.1 of interface formulary) Co-cyprindiol contains an antiandrogen. It is no more effective than a broad spectrum antibacterial but is useful in women who also wish to receive oral contraception. Oral antibiotics should be reserved for acne if topical treatment is not adequately effective or if it is inappropriate. Minocycline is associated with increased rates of adverse effects compared to other tetracyclines and has no clear evidence of being more effective or better tolerated	Topical treatments for acne – if not effective or inappropriate Oxytetracycline 500mg bd (not for use in pregnancy or lactation)	Doxycycline 100mg od (not for use in pregnancy or lactation) OR Lymecycline 408mg od (not for use in pregnancy or lactation) Third line (reserved for patients not responding to other antibiotics – specialist recommendation only) Minocycline MR 100mg od (not for use in pregnancy or lactation)

Illness	Comments	First Line	Second Line
Varicella zoster/ Chicken pox	If pregnant or immunocompromised or neonate: seek urgent specialist	Where indicated: Aciclovir	
&	advice.	800mg five times a day for 7 days *	
Herpes zoster/ Shingles	Chicken pox: Clinical value of antivirals minimal unless	Emphasise importance of compliance with regimen	
CKS (chicken pox)	adult with severe pain or dense/oral rash or on steroids or secondary	* Adult doses – for children see Appendix 1	
CKS (shingles)	household case or smoker AND treatment started <24h of onset of rash – consider aciclovir		In exceptional cases only Valaciclovir 1g TDS* OR
	Shingles: Treat if • active ophthalmic, or Ramsay Hunt syndrome, or eczema OR • over 50 years and within 72 hrs of onset of rash (post herpetic neuralgia rare if < 50 years)		Famciclovir 250mg TDS* Both for 7 days NOTE: Ten to twenty times cost of aciclovir – only use if serious compliance problems in shingles * Adult doses

Illness	Comments	First line	Second line
DENTAL INFECTIONS – derive	d from the Scottish Dental Clinica	al Effectiveness Programme 2011	SDCEP Guidelines
This guidance is not designe conditions pending being see possible, advice should be so	d to be a definitive guide to oral core by a dentist or dental specialist.	Always spit out after use. Use until lesions resolve or less pain allows oral hygiene	ement of acute oral ed in dental treatment and, if
Acute necrotising ulcerative gingivitis	Commence metronidazole and refer to dentist for scaling and oral hygiene advice Use in combination with antiseptic mouthwash if pain limits oral hygiene	Metronidazole 400mg TDS for 3 days Chlorhexidine or hydrogen peroxide (see above dosing in mucosal ulceration). Until oral hygiene possible	

Pericoronitis	Refer to dentist for irrigation & debridement. If persistent swelling or systemic symptoms use metronidazole. Use antiseptic mouthwash if pain and trismus limit oral hygiene	Amoxicillin 500mg TDS for 3 days Metronidazole 400mg TDS for 3 days Chlorhexidine or hydrogen peroxide see above dosing in mucosal ulceration Until oral hygiene possible	
Dental abscess	 repeated courses of antibiotics without drainage are ineffective. Antibiotics are recommended risk of complications. Severe odontogenic infections swallowing, impending airway protect airway, achieve surgicate. The empirical use of cephalosy 	rst option until a dentist can be seen for abscess are not appropriate; Reve in preventing spread of infection. if there are signs of severe infection; defined as cellulitis plus signs of severe infection. Ludwigs angina. Refeat drainage and IV antibiotics porins, co-amoxiclay, clarithromyclental patients and should only be used.	peated antibiotics alone, a, systemic symptoms or high sepsis, difficulty in er urgently for admission to in, and clindamycin do not

Additional information	
CT information	<u>Drug Tariff</u>

References:	Health Protection Agency: Management of Infection - Guidance for Primary Care BNF 64 (Sept 2012) BNF for Children 2013
Development Group	Dr D Pillay, Dr K Nye, Dr K Struthers, Microbiology, HEFT Dr S Welch, Dept of Paediatrics, HEFT Karen Ennis, Mark Dasgupta, NHS BEN; Kate Arnold, SCT Update May 2013 Dr D Pillay, Rakhi Aggarwal, Bethan Knight, Shahzad Razaq
Consultation	Dr D Pillay, Dr K Nye, Microbiology, HEFT, & HEFT Antimicrobial committee Dr S Hackett, Dr S Welch, Dept of Paediatrics, HEFT Dr Jenny Short, Consultant ID Physician, HEFT Dr Husam Osman, Consultant Virologist, HEFT
Approval	Trust Antimicrobial Committee, Formulary Working Group, Solihull CCG Drug and Therapeutics Committee; BCCCCG Medicines Management Group

APPENDIX 1

Doses for children		
Drug	BNFc 2012-13 doses	Notes
Phenoxymethylpenicillin	1 month - 1yr 62.5mg QDS † 1-6 yrs 125mg QDS † 6-12 yrs 250mg QDS † >12 yrs 500mg QDS (1g QDS in severe infection) † May be increased to 12.5mg/Kg QDS in severe infection	Syrup has unpleasant taste – use tablets wherever possible
Amoxicillin	1 month - 1 yrs 62.5mg TDS 1- 5yrs 125mg TDS 5 - 18yrs 250mg TDS Dose doubled in community acquired pneumonia or other severe infection.	Dose also doubled in salmonellosis or Lyme disease (not featured in this guideline)
Flucloxacillin	1 month - 2 yrs 62.5 - 125mg QDS 2-10 yrs 125 - 250mg QDS >10yrs 250 - 500mg QDS	Suspension has unpleasant taste – use capsules where possible
Co-amoxiclav	< 1 year Consult BNFc 1 – 6 years 5ml of 125/31mg suspension TDS 6 – 12 years 5ml of 250/62mg suspension TDS >12 years 1 x 250/125mg tablet TDS Dose doubled in severe infection	
Cefalexin	1m - 1 yr 125mg BD 1-5 yrs 125mg TDS 5-12 yrs 250mg TDS > 12 years 500mg BD - TDS (increased to 1 – 1.5g 3-4 times daily for severe infection)	

Erythromycin	1m – 2yr 125mg QDS	Total daily dose may be
Eryunomycm	2 – 8 yr 250mg QDS	given in two divided doses
	>8 yr 250 – 500mg QDS	given in two divided doses
	250 – 500mg QD5	
	Dose doubled in severe infection	
Clarithromycin	Child 1m – 12 years – dose by bodyweight	
	Body-weight < 8kg 7.5mg/Kg BD	
	Body-weight 8 – 11 Kg 62.5mg BD	
	Body-weight 12 – 19Kg 125mg BD	
	Body-weight 20 – 29Kg 187.5mg BD	
	Body-weight 30 – 40Kg 250mg BD	
	12+ years 250mg BD (may be doubled in severe infections for max 14 days)	
Trimethoprim	6 weeks – 6 months 25mg BD	
	6m – 6 years 50mg BD	
	6 – 12 years 100mg BD	
	12+ years 200mg BD	
Nitrofurantoin	3m – 12 years 750 microgram/Kg QDS	
	12+ 50mg QDS; may be increased up to 100mg QDS in severe	
	chronic recurrent infections	
Metronidazole	Consult BNFc	
Aciclovir	1m - 2 years: 200mg QDS for 5 days	
Chickenpox and herpes	2-6 years: 400mg QDS for 5 days	
zoster infection	6-12 years: 800mg QDS for 5 days	
Other indications – see cBNF	12+ (Adult dose) 800mg FIVE times daily for 7 days	

APPENDIX 2

Clinical Prediction rules for Group A beta haemolytic streptococcus in tonsillitis			
Centor Criteria	Assess		
	History of fever		
	Absence of cough		
Ref: Centor RM et al. Med	Swollen tender anterior cervical lymph nodes		
Decision Making 1981; 1 : 239 – 246	Tonsillar Exudate		
	If none of the above – likelihood of GABHS < 3%		
	If 3 of 4 criteria present – likelihood of GABHS ca 40%		
Back to acute sore throat			
McIsaac Clinical Prediction	Assess and score		
Rule	• Temperature > 38 C = 1 point		
	• Absence of cough = 1 point		
D C M I WIL A I TANKA	• Swollen tender anterior cervical lymph nodes = 1 point		
Ref: McIsaac WJ et al, JAMA	• Tonsillar swelling or exudate = 1 point		
2004; 291:1587-1595	• Age		
	> 3 – 14 years = 1 point		
	➤ 45 years or older = subtract 1 point		
	Score Risk of GABHS		
	0 or <0 1-2.5%		
	1 5-10%		
	2 11-17%		
	3 28-35%		
	4 51-53%		
Back to acute sore throat			

INFECTIONS (SECONDARY CARE SPECIFIC)

This chapter is under development. Currently only medicines that are specifically subject to a positive NICE TA appear.

Green	Yellow	Double Yellow	Red as per NICE TAs			
5.1.9 Antituberculosis	5.1.9 Antituberculosis					
All antitubero	culosis preparations are classifie	ed as RED and should be prescr	ibed by HEFT			
5.3.1 HIV Infection						
	Tenofovir disoproxil					
			Lamivudine			
5.3.3 Viral hepatitis						
5.3.3.1 Chronic hepatitis B						
			Entecavir			
			Adefovir dipivoxil			
5.3.3.2 Chronic hepatitis c						
			Telaprevir			
	Boceprevir					
5.3.5 Respiratory syncytial virus						
			Palivizumab			
			Ribavirin			

Additional information	
NICE guidance	NICE TA 75 Hepatitis C - pegylated interferons, ribavirin and alfa interferon
	NICE TA 096 Hepatitis B (chronic) - adefovir dipivoxil and pegylated interferon alfa-2a
	NICE TA 106 Hepatitis C - peginterferon alfa and ribavirin
	NICE TA 153 Hepatitis B - entecavir
	NICE TA 154 Hepatitis B - telbivudine
	NICE TA 173 tenofovir disoproxil - chronic hepatitis B
	NICE TA 200 Hepatitis C - peginterferon alfa and ribavirin
	NICE TA 252 Hepatitis C (genotype 1) - telaprevir
	NICE TA 253 Hepatitis C (genotype 1) - boceprevir

MTRAC / Prodigy / other	
guidance	
PCT information	

ENDOCRINE SYTEM

6.1 Drugs used in diabetes

Notes on class

Insulins

- Recent discontinuations include Pork Actrapid, Pork Mixtard, Human Monotard, Human Insulatard, Humulin I
- Devices (syringe/pen/pre-filled pen) should be chosen to suit patient

Oral antidiabetics

- UKPDS study demonstrates compelling evidence for the use of metformin as first line therapy
- Sulphonylureas are second line therapy
- Glitazones are indicated in patients unable to tolerate a metformin/sulphonylureas combination or if either element is contra indicated (NICE 2003)

Green	Yellow	Double Yellow	Red		
6.1.1 Insulins	6.1.1 Insulins				
6.1.1.1 Short Acting Insulins					
Soluble insulin (e.g. Actrapid ® Humulin S ®)					
Insulin aspart					
Insulin glulisine					
Insulin lispro					
6.1.1.2 Intermediate & Long Act	ting Insulins				
Insulin glargine – NICE TA 53					
Insulin detemir					
Novomix 30 ®					
Humalog ® Mix					
6.1.2 Oral antidiabetics					
6.1.2.1 Sulphonylureas					
Gliclazide	Glibenclamide ^A				
Tolbutamide	Gliclazide M/R				

6.1.2.2 Biguanides				
Metformin	Metformin M/R ^C – ONLY for patients intolerant of slowly titrated standard release metformin			
6.1.2.3 Other antidiabetics	B.O. in		D 110 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	Rosiglitazone B-Specialist recommendation – in line with NICE	Exenatide D - Specialist Initiation with RICaD	Dapagliflozin – in line with NICE TA 288 Temporary Formulary position	
	Pioglitazone -Specialist recommendation - in line with NICE	Liraglutide – Specialist Initiation with RICaD . Maximum formulary dose 1.2mg per day as per NICE TA 203.		
	Nateglinide- Specialist recommendation – in line with NICE	Exenatide M/R injection. Specialist initiation with RICaD NICE TA 248		
	Repaglinide- Specialist recommendation – in line with NICE			
Sitagliptin	linagliptin			
6.1.3 Ketoacidosis				
			IV fluids	
			Soluble insulin	
6.1.4 Hypoglycaemia				
Glucagon			Glucose 50 %	
			Diazoxide	
6.1.6 Diagnostics				
Refer to local guidelines				
Additional information				
Drug specific notes	Patients admitted on combining in hospital Prescribing of Metformin M/F Medicines Management in P	Longer acting; avoid in elderly Patients admitted on combination (<i>Avandamet</i> ®) will be supplied metformin and rosiglitazone whilst in hospital Prescribing of Metformin M/R is expected to be in the region of 5% of the total of oral diabetic drugs. Medicines Management in Primary and Secondary care will monitor this. For use within licence, following specialist initiation as per NICE guidance. A RICaD must be		
	provided to GPs if they are a	provided to GPs if they are asked to take over prescribing. (NICE CG87 relating to exenatide)		

NICE guidance	NICE TA 53 Diabetes (types 1 and 2) - long acting insulin analogues NICE TA 60 - Patient education models NICE CG 66 Type 2 diabetes NICE CG 87 Type 2 diabetes - newer agents NICE TA 151 Diabetes - insulin pump therapy NICE TA 203 Diabetes (type 2) - liraglutide NICE TA 248 Diabetes (type 2) - exenatide (prolonged release) NICE TA 288 Dapagliflozin in combination therapy for treating type 2 diabetes
MTRAC / Prodigy / other guidance	MEREC: Blood glucose management in type 2 diabetes; MEREC: Managing CV risk in diabetes Prodigy: Diabetes management series
PCT information	Insulin Pumps are subject to a commissioning approval Drug Tariff

6.2 Thyroid & antithyroid drugs

Notes on class

- Carbimazole is associated with rare cases of neutropenia and agranulocytosis due to bone marrow suppression
 - Patients should be advised to report symptoms suggestive of infection, especially sore throat
 - Blood cell count should be performed if clinical evidence of infection
 - Carbimazole should be stopped if clinical/lab evidence of neutropenia

Green	Yellow	Double Yellow	Red
6.2.1 Thyroid Hormones			
Levothyroxine ^A			Liothyronine
6.2.2 Antithyroid			
Carbimazole ^B	Propylthiouracil ^B		Aqueous iodine

Additional information		
Drug specific notes	A Start at 25 micrograms in elderly or in cardiac states and increas by 25 micrograms every 4-6 weeks B Regular thyroid function tests required	
NICE guidance		
MTRAC / Prodigy / other guidance	Prodigy: Hyperthyroidism ; Prodigy: Hypothyroidism	
PCT information	Drug Tariff	

6.3 Corticosteroids

Notes on class

- In Addisons Disease or following adrenalectomy, physiological replacement is achieved with hydrocortisone supplements with fludrocortisone to augment mineralocorticoid effect
- Glucocorticoid equivalent
 - o Prednisolone 5mg ≡ dexamethasone 750 microgram ≡ hydrocortisone 20mg ≡ methylprednisolone 4mg ≡ triamcinolone 4mg
- If an equivalent of >7.5mg prednisolone daily long term (>3 months) assess for osteoporosis risk
 In asthma a two week acute course of 40mg daily of prednisolone or equivalent or less does not need stepping down BNF withdrawal of corticosteroids

Green	Yellow	Double Yellow	Red	
6.3.1 Replacement Therapy	6.3.1 Replacement Therapy			
Fludrocortisone				
6.3.2 Glucocorticoids				
Hydrocortisone			Betamethasone - parenteral	
Prednisolone				
Dexamethasone				
Methylprednisolone - parenteral				
Triamcinolone - parenteral				

Additional information	
Drug specific notes	
NICE guidance	
MTRAC / Prodigy / other	
guidance	
PCT information	Drug Tariff

6.4 Sex hormones

6.4.1 Female sex hormones

Notes on class

Notes on class

Heart of England NHS Foundation Trust will usually commence women on a product from the Elleste or Evorel range immediately following hysterectomy.

- HRT no longer recommended as first choice for prevention of osteoporosis (MHRA)
- HRT beneficial in quality of life vs risk balance, however, lowest effective dose used for shortest time possible, evaluate every 12 months (Committee on Human Medicines (formerly CSM)
- <50 yrs do not use for first line treatment of osteoporosis
- <50 yrs used as first line for premature menopausal symptoms > 50 HRT second line treatment should be considered
- HRT increases risk of venous thromboembolism, stroke and endometrial and breast cancer <u>Hormone replacement therapy: British National Formulary</u>
- Evidence suggests transdermal oestrogens do not produce the same degree of favourable alterations of lipoprotein cholesterol levels as oral oestrogens. However, oral therapy can raise triglyceride levels. Transdermal therapy may be appropriate in patients with hypertension, gall bladder disease, hypertriglyceridaemia, oral intolerance

Green	Yellow	Double Yellow	Red		
6.4.1.1 Oestrogens and HRT	6.4.1.1 Oestrogens and HRT				
Oral Combination Products	Oral Combination Products				
Prempak C ® ^A					
Premique ® cycle					
Elleste-Duet ®					
Femoston ®					
Oral Oestrogen Only					
Conjugated oestrogens					
(Premarin ®)					
Estradiol (Elleste-Solo ®)					
Period-Free Combination (Estra	adiol/Norethisterone) (B)				
Premique ®					
Premique low dose ®					
Femoston-Conti ®					
Kliovance ®					

Transdermal Oestrogen Only			
	When oral therapy		
	inappropriate		
	Estradot ® when oral therapy		
	inappropriate		
	Evorel ® - when oral therapy		
	inappropriate		
	FemSeven ® £- when oral		
	therapy inappropriate		
Transdermal Combination			
	When oral therapy	Evra® - Double yellow £££- for	
	inappropriate	women for whom neither an	
		oral preparation nor a long	
		acting reversible contraceptive	
		technology is appropriate	
	Evorel ® Sequi- when oral		
	therapy inappropriate		
	Evorel ® Conti – when oral		
	therapy inappropriate		
Other			
	Tibolone		
	Raloxifene D		
6.4.1.2 Progestogens			
Norethisterone ^C		Ulipristal acetate (Esmya®)	
		ESCA ^E	
Mirena ® - intra-uterine system			
Duphaston ® HRT			

Heart of England NHS Foundation Trust will usually commence women on a product from the Elleste or Evorel range immediately following hysterectomy.

Additional information	
Drug specific notes	Start with one month to ensure patient suitability, discussion of risks vs benefits essential Suitable for post menopausal, non-hysterectomised women who have not had natural period for at least one year
	Tranexamic acid is the first line treatment for menorrhagia, progestogens relatively ineffective, still useful to delay menses (start 3 days before period due) Raloxifene is indicated as second line for secondary prevention of osteoporotic fractures
	For use as per licence for pre-operative treatment of fibroids. HEFT to supply first month and ESCA and the GP to provide the further 2 months supply.
NICE guidance	NICE TA 087 Osteoporosis - secondary prevention (bisphosphonates, raloxifene and teriparatide)
MTRAC / Prodigy / other	
guidance	
PCT information	<u>Drug Tariff</u>

6.4.2 Male sex hormones

Green	Yellow	Double Yellow	Red
Finasteride ^A	Dutasteride – when finasteride	Testosterone undecanoate	
	has failed or is contraindicated	capsules – specialist	
		recommendation only	
Testosterone implants ^B	Nebido ® injection		
Cyproterone acetate			
Testosterone 2% gel (Tostran ®			
10mg metered application 60g			
multidose dispenser)			

Additional information		
Drug specific notes	В	Only effective in men with enlarged prostates >40ml; useful in benign prostatic hyperplasia if alpha blockers not tolerated Transdermal formulations not currently on formulary
NICE guidance		
MTRAC / Prodigy / other		
guidance		
PCT information	Dr	rug Tariff

6.5 Hypothalamic and pituitary hormones and anti-oestrogens

Green	Yellow	Double Yellow as per NICE TAs	Red
6.5.1 Hypothalamic and anterio	r pituitary hormones and anti-oe	estrogens	
Anti-oestrogens			
			Clomifene citrate (clomiphene)
Anterior Pituitary Hormones			
		Somatropin	Tetracosactide (tetracosactrin)
			Chorionic gonadotrophin (human chorionic
			gonadotrophin HCG)
			Human menopausal gonadotrophins
Hypothalmic Hormones			
			Gonadorelin (gonadatrophin – releasing hormone GnRH, LH-RH)
			Protirelin (thyrotrophin-releasing hormone TRH)
			Corticorelin – diagnostic use only
6.5.2 Posterior pituitary hormor	nes and antagonists		
Posterior pituitary hormones			
Desmopressin			Argipressin (synthetic vasopressin)
			Terlipressin

Antidiuretic Hormone Anta	gonists		
		Demeclocycline (unlicensed)	
		Tolvaptan ^A	
Additional information			
Drug specific notes	specialising in either diabetes an available for 5 inpatients or for a FWG of the effects it had on the the formulary.	ed section of the formulary. It will be available only to consultants and endocrinology, renal medicine and biochemistry. Tolvaptan will be period of 6 months (whichever is sooner). Dr Shakher will appraise patients treated. FWG will then review the position of tolvaptan on	
NICE guidance		NICE TA 064 - Growth hormone deficiency in adults -somatropin	
	NICE TA 188 Growth hormone defice	ciency in children - somatropin	

6.6 Drugs affecting bone metabolism

Notes on class

- NICE Guidance specifies alendronic acid/risedronate as first line for secondary prevention of fractures
- People at risk of osteoporosis need to maintain an adequate intake of calcium and vitamin D; vitamin D dosage should be 800iu per day

Green	Yellow	Double Yellow	Red
Alendronic acid AC££	Risedronate ^A ££	Ibandronic acid 50mg ESCA	Disodium pamidronate
	Etidronate A ££	Sodium clodronate ESCA	Zoledronic acid (Aclasta ® and
		(Haematology	Zometa ®) - D
	Strontium ranelate ^B ££		Teriparatide
			Denosumab (Prolia®) NICE
			TA 204
			Denosumab (Xgeva ®) NICE
			TA 265

Additional information	
Drug specific notes	Tablets must be taken on rising, swallowed whole with a full glass of water, 30 minutes before food. Patient must remain upright for 30 minutes post dose For treatment of postmenopausal osteoporosis for women who can not tolerate or comply with bisphosphonate therapy Available generically and should be used first line where appropriate Zometa ® For the treatment of Paget's bone disease in patients for whom the use of a bisphosphonate is appropriate OR Aclasta ® The treatment of osteoporosis in post-menopausal women at increased risk of fractures who are unsuitable for or unable to tolerate oral treatment options for osteoporosis.
NICE guidance	NICE TA 087 Osteoporosis - secondary prevention (bisphosphonates, raloxifene and teriparatide) NICE TA 160 Osteoporosis - primary prevention NICE TA 204 Osteoporotic fractures - denosumab NICE TA 265 Bone metastases from solid tumours - denosumab NICE TA 161 Osteoporosis - secondary prevention including strontium ranelate
MTRAC / Prodigy / other guidance	Prodigy: Osteoporosis: Treatment and prevention of fragility fractures
PCT information	Drug Tariff

6.7 Other endocrine drugs

Green	Yellow	Double Yellow	Red
6.7.1 Bromocriptine and Other	Dopaminergic Drugs		
	Cabergoline (specialist	Quinagolide – specialist	
	recommendation)	initiation	
6.7.2 Drugs affecting gonadotr	ophins		
	Buserelin (Suprefact) ££	Goserelin (Zoladex ®) - for endometreosis or breast cancer ££	Goserelin - for assisted conception ££
		Danazol – specialist recommendation benign fibrocystic breast disease	Danazol – hereditary angiodema (off label)
	Leuprorelin (Prostap) ££		Buserelin- for assisted conception ££
6.7.3 Metyrapone and trilostan	e		
	Trilostane (specialist initiation)		
6.7.4 Somatomedins			
			Mecasermin (Increlex®) Specialist paediatricians only for "named patients" only

Green	Yellow	Double Yellow	Red
Unlicensed			
			Stanozolol – hereditary
			angiodema
			Dehydroepiandosterone –
			Endocrinology only

Additional information	
Drug specific notes	
NICE guidance	
MTRAC / Prodigy / other	Cabergoline, is appropriate for Primary Care prescribing after confirmation of hyperprolactinaemia by
guidance	specialist

	PCT information	Drug Tariff
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7 OBSTETRICS, GYNAECOLOGY AND URINARY-TRACT DISORDERS

7.1 Drugs used in obstetrics

N.		_		_ 1	
N	ote	S:	on	CI	ass

Green	Yellow	Double Yellow	Red		
7.1.1 Prostaglandins and oxytocics					
			Carboprost		
			Dinoprostone		
			Ergometrine maleate		
			Oxytocin		
			Syntometrine		
			Misoprostol (off label)		
7.1.1.1 Ductus arteriosus					
			Indometacin (indomethacin)		
			Indocid PDA ®		
			Alprostadil		
7.1.2 Mifepristone					
			Mifepristone		
7.1.3 Myometrial					
			Atosiban		
			Salbutamol		
Additional information					
Drug specific notes			-		
NICE guidance N	ICE CG 70 induction of labou	<u>r CG70</u>			

7.2 Treatment of vaginal and vulval conditions

Notes on class	

Green	Yellow	Double Yellow	Red
7.2.1 Preparations for vaginal a	atrophy		
Estradiol (Vagifem ® vaginal			
tablets and Estring ®)			
Estriol (Ovestin ® and Ortho-			
Gynest ®			
7.2.2 Vaginal and vulval infecti	ons		
Clotrimazole ^A	Dalacin ®		Econazole pessaries
Miconazole	Zidoval ®		Nystatin pessaries
			(unlicensed)
			Amphotericin in KY jelly
			(unlicensed)
			Amphotericin + flucytosine in
			KY jelly (unlicensed)
			Boric acid pessaries
			(unlicensed)

Additional information	
Drug specific notes	A All formulations
NICE guidance	
MTRAC / Prodigy / other	
guidance	
PCT information	Drug Tariff

7.3 Contraceptives

Notes on class

There is an increased risk of venous thromboembolic disease (particularly during the first year) in users of oral contraceptives but this risk is considerably smaller than that associated with pregnancy (about 60 cases of venous thromboembolic disease per 100 000 pregnancies). In all cases the risk of venous thromboembolism increases with age and in the presence of other risk factors for venous thromboembolism (e.g. obesity). The risk of venous thromboembolism with transdermal patches is not yet known. The incidence of venous thromboembolism in healthy, non-pregnant women who are not taking an oral contraceptive is about 5 cases per 100 000 women per year. For those using combined oral contraceptives containing second-generation progestogens e.g. levonorgestrel, this incidence is about 15 per 100 000 women per year of use. Some studies have reported a greater risk of venous thromboembolism in women using preparations containing the third-generation progestogens desogestrel and gestodene; the incidence in these women is about 25 per 100 000 women per year of use.

7.3.1 Combined hormonal cont	raceptives		
Green	Yellow	Double Yellow	Red
Low dose preparations			
Loestrin 20 ® (norethisterone	Mercilon® (desogestrel 150		
acetate 1mg ethinyloestradiol	micrograms, ethinyloestradiol		
20 micrograms)	20 micrograms)		
	Femodette® (gestodene 75		
	micrograms, ethinyloestradiol		
	20 micrograms)		
Standard Dose Preparations			
Microgynon 30	Marvelon ® (ethinyloestradiol		
(ethinyloestradiol 30	30 micrograms, desogesterol		
micrograms, levonorgestrel 150	150 micrograms) ^A		
micrograms)			
	Femodene ® (gestodene 75		
	micrograms, ethinyloestradiol		
	30 micrograms) A		
	Cilest ® (norgestimate 250		
	micrograms ethinyloestradiol		
	35 micrograms) A		

	Loestrin 30® (norethisterone acetate 1.5mg, ethinylestradiol 30micrograms)	
7.3.2 Progestogen only contract	ceptives	
7.3.2.1 Oral Progestogen-only		
Micronor ® (norethisterone 350micrograms)	Femulen ® (etynodiol diacetate 500 micrograms) – for heavy bleeding	
Cerazette® (desogestrel 75 micrograms) -for younger women, previous ectopic pregnancy or >70kg		
Noriday® (norethisterone 350 micrograms) - for older women or whilst breast feeding		
Norgeston® (levonorgestrel 30 micrograms)		
7.3.2.2 Parenteral Progesterone only Preparations		
Etonogestrel implant 68mg (Implanon ®)		
Medroxyprogesterone acetate 150mg		
7.3.2.3 Intra-uterine progesterone		
Mirena ® (releasing 20 micrograms levonorgestrel in 24 hours)		

7.2.F. F			
7.3.5 Emergency Hormonal			
Contraception			
Levonorgestrel 1.5mg	Uli	pristal acetate (EllaOne) ^B	
Additional information			
Drug specific notes	В	The progestogens desogestrel, drospirenone, and gestodene (in combination with ethinylestradiol) may be considered for women who have side-effects (such as acne, headache, depression, weight gain, breast symptoms, and breakthrough bleeding) with other progestogens. However, women should be advised that desogestrel and gestodene have also been associated with an increased risk of <i>venous thromboembolism</i> As an option for women who have has unprotected intercourse between 72 and 120 hours previously who do not wish the fitting of a copper-bearing intrauterine device or for whom it is not possible to fit a copper-bearing intrauterine device. Women presenting within 72 hours of unprotected intercourse who do not wish the fitting of a copper-bearing intrauterine device should be offered levonelle.	
NICE guidance	NI	NICE CG 30 The effective and appropriate use of long-acting reversible contraception	
PCT information		Drug Tariff	

7.4 Drugs for genito-urinary disorders

Green	Yellow	Double Yellow	Red
7.4.1 Drugs for urinary reter	ntion		
Tamsulosin ^A	Alfuzosin (specialist initiation) ^B		Alfuzosin (off-label) to ease passing of renal stones
Distigmine bromide	Alfuzosin MR – specialist initiation		
	uency, enuresis and incontinence		
Oxybutynin	Oxybutynin XL ££	Oxybutynin patches (Kentera®) – specialist recommendation	Amitriptyline (off-label)
Tolteridine	Tolteridine XL ££		Imipramine (off-label)
	Trospium XL		Desmopressin (off-label)
7.4.3 Drugs used in urologic	cal pain		
Refer to BNF for preps			
7.4.4 Bladder instillations a	nd urological surgery		
Chlorhexidine			Cystistat ®
Dimethyl sulphoxide			Uracyst ®
Glycine			
Sodium chloride			
Sodium citrate solution			
7.4.5 Drugs for erectile dysf	function ^D		
Sildenafil ^D	Papaverine ^D		
	Tadalafil CD		
	Alprostadil		
Additional information			
Drug specific notes	prescribe tamsulosin capsule For two to three days post ca Tadalafil daily dosing is cons	es in the second one day post rerestdered appropriate for men experience previously responded to on dem	encing sexual activity on two or more
NICE guidance		Health Service Circular 1999/148 treatment of impotence	

8 MALIGNANT DISEASE AND IMMUNOSUPPRESSION

8.1 Cytotoxic drugs

Notes on class

Notes on class

- The chemotherapy of cancer is complex and should be confined to specialists in oncology/haematology.
- All chemotherapy drugs cause side-effects and a balance has to be struck between likely benefit and acceptable toxicity

8.1 Cytotoxic drugs

Double Yellow	Red	
	Dexrazoxane – for suspected anthracycline extravasation. Use as per HEFT policy	
	Calcium folinate (folinic acid/calcium leucovorin)	

Double Yellow	Red – as per NICE TA's where they exist (or via other specific formal agreement e.g. IFR)
8.1.1 Alkylating drugs	(c) the emer operation agreement eight the
Cyclophosphamide(oral) ESCA	Bendamustine
	Cyclophosphamide
8.1.2 Cytotoxic metabolites	
	Pegylated liposomal doxorubicin hydrochloride
8.1.3 Antimetabolites	
Methotrexate ESCA	Gemcitabine
	Fludarabine
	Capecitabine
	Tegafur with uracil
	Pemetrexed
	Fluorouracil
	Azacitidine

Double Yellow	Red – as per NICE TA's where they exist
8.1.4 Vinca alkaloids and etoposide	(or via other specific formal agreement e.g. IFR)
8.1.4 VIIIca aikaioius ailu etoposiue	Vinorelbine
8.1.5 Other neoplastic drugs	VIIIOLEIDILIE
0.1.5 Other neoplastic drugs	Bevacizumab – Off label use only for DMO ^C
	Bortezomib
	Cetuximab
	Cisplatin
	Dasatinib
	Docetaxel
	Erlotinib
	Gefitinib –
	Imatinib
	Ipilimumab
	Irinotecan
	Lapatinib
Hydroxycarbamide ESCA - for myeloproliferative disorders	Nilotinib
7 1	Oxaliplatin
	Paclitaxel
	Pazopanib
	Sunitinib
	Temozolomide
	Topotecan
	Trabectedin
	Trastuzumab
	Vemurafenib

Additional information	
NICE guidance	NICE TA 023 Brain Cancer - temozolomide
	NICE TA 025 - Pancreatic cancer - gemcitabine
	NICE TA 029 - Leukaemia (lymphocytic) - fludarabine
	NICE TA 034 Breast cancer - trastuzumab
	NICE TA 055 Ovarian Cancer - paclitaxel
	NICE TA 061 - colorectal cancer - capecitabine and tegafur uracil
	NICE TA 070 -Leukaemia (chronic myeloid) - imatinib
	NICE TA 086 - Gastrointestinal stromal tumours - imatinib
	NICE TA 091 - Ovarian cancer (advanced) - paclitaxel, pegylated liposomal doxorubicin
	hydrochloride and topotecan
	NICE TA 99 Renal transplantation - immunosuppressive regimens for children and adolescents
	NICE TA 100 Colon cancer (adjuvant) - capecitabine and oxaliplatin
	NICE TA 101 Prostate cancer (hormone-refractory) - docetaxel
	NICE TA 107 Breast cancer (early) - trastuzumab
	NICE TA 108 Breast cancer (early) - paclitaxel
	NICE TA 109 Breast cancer (early) - docetaxel
	NICE TA 116 Breast cancer - gemcitabine
	NICE TA 118 coloectal cancer (metastatic) - bevacizumab and cetuximab (partially updated by
	TA242)
	NICE TA 119 Leukaemia (lymphocytic) - fludarabine
	NICE TA 121 Glioma (newly diagnosed and high grade) - carmustine implants and
	temozolomide (Glioma is not treated at HEFT, but patients would be suitably referred)
	NICE TA 124 Lung cancer (non-small-cell) - pemetrexed
	NICE TA 129 Multiple myeloma - bortezomib
	NICE TA 135 Mesothelioma - pemetrexed disodium
	NICE TA 145 Head and neck cancer - cetuximab
	NICE TA 162 Lung cancer (non-small-cell) - erlotinib
	NICE TA 169 Renal cell carcinoma (advanced/metastatic) - sunitinib
	NICE TA 172 Head and neck cancer (squamous cell carcinoma) - cetuximab
	NICE TA 176 Colorectal cancer (first line) - cetuximab
	NICE TA 178 bevacizumab (first-line), sorafenib (first- and second-line), sunitinib (second-line)
	and temsirolimus (first-line) for the treatment of advanced and/or metastatic renal cell
	carcinoma
	NICE TA 179 Gastrointestinal stromal tumours - sunitinib
	NICE TA 181 Lung cancer (non-small-cell, first line treatment) - pemetrexed
	NICE TA 183 Cervical cancer (recurrent) - topotecan

	NICE TA 184 Lung cancer (small-cell) - topotecan
	NICE TA 185 Soft tissue sarcoma - trabectedin
	NICE TA 189 Hepatocellular carcinoma (advanced and metastatic) - sorafenib (first line)
	NICE TA 190 Lung cancer (non-small-cell) - pemetrexed (maintenance)
	NICE TA 191 Gastric cancer (advanced) - capecitabine
	NICE TA 192 Lung cancer (non-small-cell, first line) - gefitinib
	NICE TA 196 Gastrointestinal stromal tumours - imatinib (adjuvant)
NICE guidance	NICE TA 208 Gastric cancer (HER2-positive metastatic) - trastuzumab
	NICE TA 209 Gastrointestinal stromal tumours (unresectable/metastatic) - imatinib
	NICE TA 189 Hepatocellular carcinoma (advanced and metastatic) - sorafenib (first line)
	NICE TA 190 Lung cancer (non-small-cell) - pemetrexed (maintenance)
	NICE TA 191 Gastric cancer (advanced) - capecitabine
	NICE TA 192 Lung cancer (non-small-cell, first line) - gefitinib
	NICE TA 193 Leukaemia (chronic lymphocytic, relapsed) - rituximab
	NICE TA 196 Gastrointestinal stromal tumours - imatinib (adjuvant)
	NICE TA 208 Gastric cancer (HER2-positive metastatic) - trastuzumab
	NICE TA 209 Gastrointestinal stromal tumours (unresectable/metastatic) - imatinib
	NICE TA 212 Colorectal cancer (metastatic) - bevacizumab
	NICE TA 214 Breast cancer - bevacizumab (in combination with a taxane)
	NICE TA 215 Renal cell carcinoma (first line metastatic) - pazopanib
	NICE TA 216 Leukaemia (lymphocytic) - bendamustine
	NICE TA 218 Myelodysplastic syndromes - azacitidine
	NICE TA 219 Everolimus for the second-line treatment of advanced renal cell carcinoma
	NICE TA 222 Ovarian cancer (relapsed) - trabectedin
	NICE TA 227 Lung cancer (non-small-cell, advanced or metastatic maintenance treatment) -
	erlotinib (monotherapy)
	NICE TA 228 Multiple myeloma (first line) - bortezomib and thalidomide
	NICE TA 241 Leukaemia (chronic myeloid) - dasatinib, nilotinib, imatinib (intolerant, resistant)
	NICE TA 242 Colorectal cancer (metastatic) 2nd line - cetuximab, bevacizumab and
	panitumumab (review)
	NICE TA 243 Follicular lymphoma - rituximab
	NICE TA 250 Breast cancer (advanced) - eribulin
	NICE TA 251 Leukaemia (chronic myeloid, first line) - dasatinib, nilotinib and standard-dose
	imatinib
	NICE TA 255 Prostate cancer - cabazitaxel
	NICE TA 257 Breast cancer (metastatic hormone-receptor) - lapatinib and trastuzumab (with
	aromatase inhibitor)

		ETA 258 Lung cancer (non small cell, EGFR-TK mutation positive) - erlotinib (1st line)		
	NICE	ETA 263 Bevacizumab in combination with capecitabine for the first-line treatment of		
	meta	astatic breast cancer		
	NICE	TA 268 Melanoma (stage III or IV) - ipilimumab		
		NICE TA 269 Melanoma (BRAF V600 mutation positive, unresectable metastatic) -		
		urafenib		
		E CG 024 Lung cancer - docetaxel, paclitaxel, gemcitabine and vinorelbine		
		E CG 081 Advanced Breast Cancer		
	NICE	ECG 131 Colorectal cancer		
MTRAC / Prodigy / other guidance				
PCT information	С	For the treatment of diabetic macular odema (only) in patients that have		
		a) Failed laser treatment with gradual reduction of vision or		
		b) Involvement of central macula by DME where laser is risky.		
		Each patient may have up to three injections per affected eye as is clinically appropriate.		
		This must be performed as a day case in theatre. NB Primary Care will not fund the		
		· · · · · · · · · · · · · · · · · · ·		
		drug cost or the day case fee (Sept 10)		
		These drugs are excluded from PbR		
		Drug Tariff		

8.2 Drugs affecting the immune response

Green	Yellow	Double Yellow as per NICE TA's where they exist	Red – as per NICE TA's where they exist (or via other specific formal agreement e.g. IFR)
8.2.1 Antiproliferative immunos	suppressants		
		Azathioprine	Mycophenolate
8.2.2 Corticosteroids and other	immunosuppressants		
		Ciclosporin	
		Tacrolimus ^A	Sirolimus
8.2.3 Rituximab & alemtuzumak			
			Rituximab
			Alemtuzumab
8.2.4 Other immunomodulating	drugs		
			BCG – Bladder instillation
			Peginterferon alfa
			Thalidomide
			Mifamurtide
			Lenalidomide
			Interferon alfa
			Interferon beta
			Interferon gamma

8.2 continued Drugs affecting the immune response

Additional information	
Drug specific notes	A There are two formulations of tacrolimus which are not interchangeable – Please prescribe by brand
NICE guidance	Rituximab for follicular NHL (March 2002)
_	Rituximab for aggressive NHL (Sept 2003)
	NICE TA 032 - beta interferon and glatiramer acetate (not recommended MS)TA32)
	NICE TA 085 - Renal transplantation - immunosuppressive regimens (adults)
	(basiliximab, daclizumab are indicated in the acute period post operatively – this is not applicable at
	HEFT as transplants are not undertaken)
	NICE TA 065 Non hodgkin's lymphoma
	NICE TA 099 - Renal transplantation - immunosuppressive regimens for children and adolescents
	NICE TA 106 Hepatitis C - peginterferon alfa and ribavirin
	NICE TA 127 Multiple sclerosis - natalizumab (Multiple sclerosis is not a specialty represented at
	HEFT)
	NICE TA 137 Lymphoma (follicular non-Hodgkin's) - rituximab
	NICE TA 171 Multiple myeloma - lenalidomide
	NICE TA 174 Leukaemia (chronic lymphocytic, first line) - rituximab
	NICE TA 193 Leukaemia (chronic lymphocytic, relapsed) - rituximab
	NICE TA 200 Hepatitis C - peginterferon alfa and ribavirin
	NICE TA 202 Chronic lymphocytic leukaemia - ofatumumab
	NICE TA 226 Lymphoma (follicular non-Hodgkin's) - rituximab
	NICE TA 228 Multiple myeloma (first line) - bortezomib and thalidomide
	NICE TA 235 Osteosarcoma - mifamurtide
	NICE TA 243 Rituximab for the first-line treatment of stage III-IV follicular lymphoma
	NICE TA 254 Multiple sclerosis (relapsing-remitting) - fingolimod (Multiple sclerosis is not a specialty
	represented at HEFT)
MTRAC / Prodigy / other	
guidance	
PCT information	<u>Drug Tariff</u>

8.3 Sex hormones and hormone antagonists for malignant disease

Green	Yellow	Double Yellow	Red
8.3.1 Oestrogens			
<u> </u>		Diethylstilboestrol (Consultant Initiation)	
8.3.2 Progestogens			
	Medroxyprogesterone acetate		
8.3.3 Androgens (none used)			
8.3.4 Hormone antagonists			
8.3.4.1 Breast cancer			
Green	Yellow	Double Yellow (as per NICE TA's where they exist)	Red – as per NICE TA's where they exist
Tamoxifen		Anastrozole ESCA	
		Exemestane ESCA	
		Letrozole ESCA	
8.3.4.2 Prostrate cancer and go	onadorelin analogues	L	1
Cyproterone	Goserelin £ (First line parenteral)	Bicalutamide £	Abiraterone
	Leuprorelin £ (Second line parenteral)	Flutamide ESCA	
8.3.4.3 Somatostatin analogues			'
-	Octreotide ^A £	Lanreotide A ££	
Additional information			
Drug specific notes		label use. Specialist prescribing th	rough Cancer Network
NICE guidance		(early) - hormonal treatments	
	NICE TA 239 Breast cancer	· · · · · · · · · · · · · · · · · · ·	-
		er (metastatic, castration resistant)	 abiraterone (following cytoxic
	herapy) NICE TA 272 Urothelial tract	t carcinoma (transitional cell, advar	nced, metastatic) - vinflunine
MTRAC / Prodigy / other guidance	MTRAC guidance (1998; archive	ed) advises against prescribing eith	ner octreotide or lanreotide

9. Nutrition

9.1 Anaemias and some blood disorders

Green	Yellow	Double Yellow	Red
9.1.1 Iron-deficiency anaemias			
9.1.1.1 Oral iron			
Ferrous sulphate	Ferrous fumarate liquid		
	(Fersamal ®)		
Sodium feredetate (Sytron ®) –	Ferrous gluconate – if patient		
for paediatrics	intolerant of sulphate		
	Ferrous fumarate		
9.1.1.2 Parenteral iron			
			Iron dextran (CosmoFer ®)
			Iron sucrose (Venofer ®)
			Iron isomaltoside (Monofer) ® B
			Feric carboxymaltose (Ferinject
			®)
9.1.2 Drugs used in megaloblas			
Hydroxocobalamin injection	Cyanobalamin oral		
	preparations, for dietary vitamin		
	B12 deficiency. (Non- NHS		
	prescribable in primary care		
	unless endorsed SLS)		
Folic acid			
9.1.3 Drugs used in hypoplastic	c, haemolytic, and renal anaemia	s *	
			Epoetin
			Darbepoetin alfa
			Desferrioxamine mesilate
			(desferoxamine mesilate)
			Deferiprone
			Deferasirox A
			Micera ®
			Aranesp ®

9.1.4 Drugs used in platelet dis	orde	rs		
				Anagrelide
				Romiplostim
9.1.5 G6PD deficiency - for dru	gs to	avoid or used with cautio	n consult the BNF	
9.1.6 Drugs used in neutropenia				
				Filgrastim
				Lenograstim
				Pegfilgrastim
Additional information				
Drug specific notes	В	advantage and should not b Compound preparations – th group of vitamins (except for For patients where desferring respond to deferiprone To treat iron deficiency in putrimester and post delivery in due to moderate or severe in For high risk situations such increased risk of bleeding e iron response would be too	e used. nere is no justification for lic acid for pregnant women whose Fregnant women whose Fregnants who have failed intolerance or poor absolutes as severe anaemia (Hb.s.g. placenta previa and presiow	b falls below 10.5g/dl during the 2nd and 3 rd to respond or tolerate standard oral treatment
NICE guidance	NIC	CE TA 48 - home versus hos CE TA 142 Anaemia (cancer CE TA 221 Thrombocytopeni	-treatment induced) - ery	thropoietin (alfa and beta) and darbepoetin
MTRAC / Prodigy / other				
guidance				
PCT information		atients treated at HEFT or U scribe back to the hospital	HB – funding transferred	to specialist. GPs should refer any request to
	Pat	ients treated at BCH or othe	r providers – GP prescril	oing under ESCA

9.2.2Fluids and electrolytes

Green	Yellow	Double Yellow	Red		
9.2.1 Oral preparations for fluid	9.2.1 Oral preparations for fluid and electrolyte imbalance				
9.2.1.1 Oral potassium					
Potassium chloride					
Potassium removal					
			Calcium Resonium ®		
			Resonium A®		
9.2.1.2 Oral sodium and water					
	Sodium chloride MR –		Sodium chloride 1mmol/l oral		
	specialist recommendation		solution		
Oral rehydration salts (ORS)					
9.2.1.3 Oral bicarbonate					
Sodium bicarbonate					
	or fluid and electrolyte imbaland	e			
9.2.2.1 Electrolytes and water			_		
Sodium chloride			Sodium chloride/glucose		
			infusion		
Glucose			Hartmanns solution		
Water for injections			Potassium chloride infusions		
			Sodium bicarbonate		
9.2.2.2 Plasma and plasma sub	stitutes	,			
			Dextran 40 ®		
			Dextran 70 ®		
			Gelofusine ®		
			Etherified starch		
			Volulyte ®		
			Voluven ® (if Volulyte ®		
			unavailable)		
			Gelaspan ®		
			Geloplasma ®		

Additional information	
NICE guidance	NICE TA 74 - Trauma Fluid replacement therapy

9.3 Intravenous nutrition

Notes on class

Notes on class

- All patients who require parenteral nutrition must be referred to the Parenteral Nutrition Team.
- For patients who require home care, arrangements for discharge must be made as early as possible.
- Basic regimes are stocked for emergencies but wherever possible treatment must be tailored to the needs of the patient. These regimens are required to be ordered specially and may take a few days to arrive.

9.4 Oral Nutrition- Sip Feeds

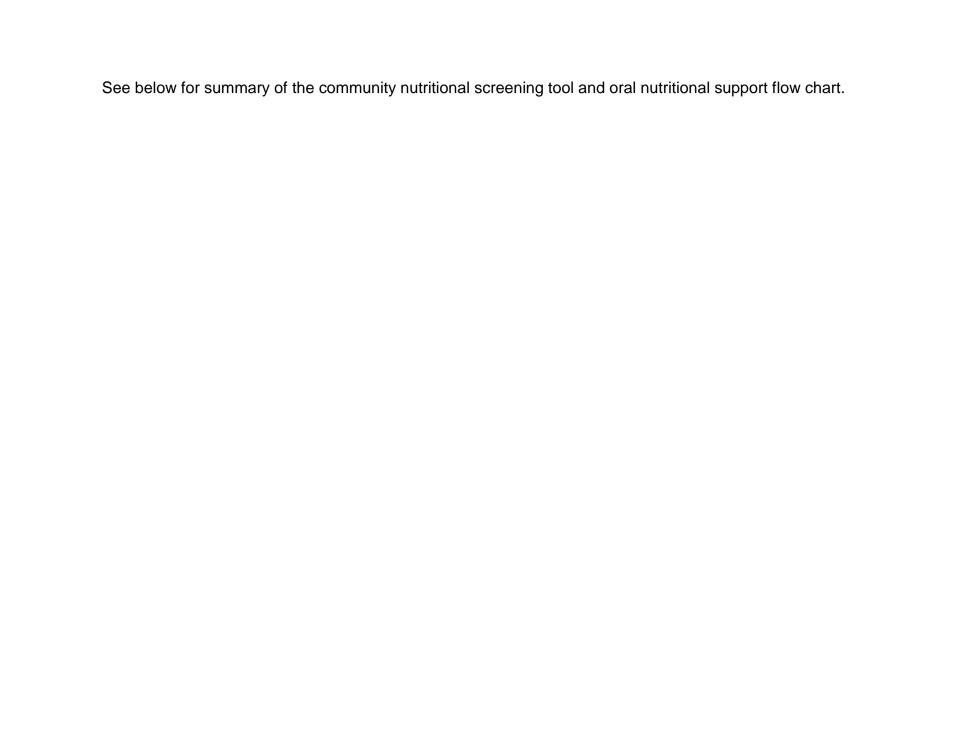
Notes on class

Notes on class

- The use of sip feeds should usually only be considered when food boosting dietary measures alone have failed to improve nutritional intake or status after 4 weeks.
- The community nutritional screening tool (below) should be used to identify patients who need food boosting dietary measures
- ACBS. In certain clinical conditions some foods may have the characteristics of drugs and ACBS advises as to the circumstances in which such foods may be regarded as drugs and so can be prescribed in the NHS. Prescriptions should be endorsed ACBS. Refer to appendix 7 in the BNF.
- The ACBS approved categories for prescribing sip feeds are; Shortbowel syndrome, Intractable malabsorption, Pre-operative preparation of patients who are malnourished, Proven inflammatory bowel disease, Total gastrectomy, Dysphagia and Disease related malnutrition (this can incorporate a range of conditions and is open to interpretation)
- Full details of the appropriate use of sip feeds can be found in the <u>SCT Guidelines for The Use of Sip Feeds</u>

Green	Yellow	Double Yellow	Red
Food Boosting Dietary	Fortisip Bottle	Scandishake Mix	
Measures (see below)	Fortisip Multifibre	Calogen	
	Fortijuce		
	Fortisip Yogurt Style		
	Fortisip Extra (Protein)		
	Fortimel ^A		
	Forticreme ^A		
	Fortisip Fruit Dessert ^A		

Additional information	
Main Aspects of Food	Use at least one pint of full fat milk each day
Boosting Dietary Measures.	Little and often – have nourishing snacks or drinks between meals and a snack supper before bed
0 - 0 0 7 0 1 1 1 1 1 1 1 1 1 1	• Enrich food and drinks such as cereals, milk puddings, canned fruit, potatoes, soups and vegetables
See SCT Guidelines for The	with cream, butter, margarine, cheese, evaporated milk or sugar
Use of Sip Feeds for further details	Drink more milk based drinks e.g. milky coffee, malted milk, hot chocolate and milkshakes
details	• Encourage full fat, high sugar varieties to provide more calories instead of low fat, low sugar products
	• 'Food Boosters' Leaflets are available from the Nutrition Support Service, Freshfields: (01564) 732803
	 and available on the SCT intranet from January 2009 This leaflet is not suitable for special diets e.g. people with diabetes or for people who require modified
	textures e.g. soft, puréed or liquid foods
Drug specific notes	• The use of sip feeds needs regular monitoring and they should only be used for an appropriate amount
	of time.
	Initial prescription should be for one weeks supply and marked 'mixed flavours'
	• Solihull Care Trust has a contract via the HPC with Nutricia. A rebate is made on Nutricia products that
	are prescribed on an FP10 prescription.
	A Dessert like sip feeds should not be used on a regular basis. These may be appropriate for patients with
	swallowing difficulties. Patients should be encouraged to follow food boosting advice and have real desserts.
NICE guidance	NICE GC 32 Nutrition Support in Adults
PCT information	SCT Guidelines for The Use of Sip Feeds
	The guidelines are a result of collaboration between the Nutritional Support Service and Medicines
	Management. They include a nutritional screening tool which identifies patients at risk of malnutrition and
	then a course of action once this risk has been identified.



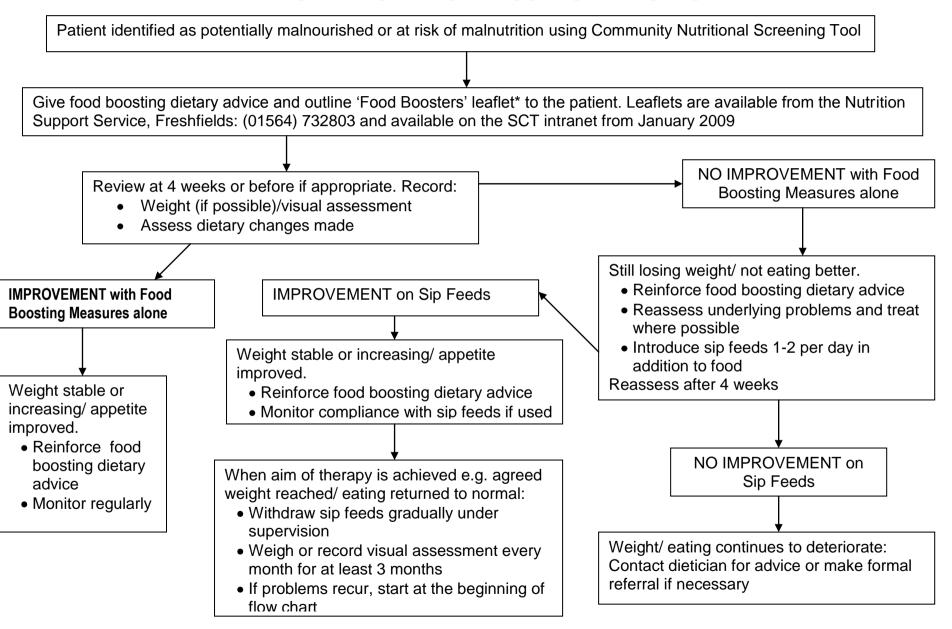
COMMUNITY NUTRITIONAL SCREENING TOOL

Select one score from each Criterion then add together for total score

CRITERION 1:	CRITERION 2:	CRITERION 3:
Visual Assessment of Body Weight- use body mass index (BMI) if height and weight are available)	Unintentional Weight Loss	Problem with intake of Food and Fluids
Visually, weight is acceptable (or BMI > 20) Score: 0	tht loss Score: 0	No problems Score: 0
Visually, thin (or BMI 18.5 – 20) Score: 1	3–6 kg within 12 months (½ - 1 stone) Score: 2	Some problems with intake of food & fluids for > 3 days
Visually, very thin (or BMI < 18.5) Score: 3	> 6kg within 12 months (> 1 stone) Score: 3	Score: 1 Severe problems with intake of food & fluid for > 3 days
	> 3kg within 3 months (> ½ stone) Score: 3	Score: 3

Score	Action Required
0	No further action required
1-2	Monitor weight where possible/repeat screening tool in 4 weeks
3+	Patient potentially malnourished or at risk of malnutrition Food Boosting Dietary Measures required- refer to Food Booster Leaflet See Oral Nutritional Support Flow Chart below

ORAL NUTRITIONAL SUPPORT FLOW CHART



9.5 Minerals

Green	Yellow	Double Yellow	Red
9.5.1 Calcium and magnesium			
9.5.1.1 Calcium supplements			
Adcal-D3 preparations	Calcium Sandoz ® specialist		Calcium gluconate injection
	recommendation (paeds) for		
	children on milk-free diets or		
	for endocrine/renal use post		
	parathyroidectomy		
			Calcium chloride injection
9.5.1.2 Hypercalcaemia and hy	percalciuria		
			Cinacalcet – renal directorate
			- NICE TA 117
9.5.1.3 Magnesium			
	Magnesium glycerophosphate		Magnesium sulphate injection
	(unlicensed) – specialist		
	initiation and stabilisation		
9.5.2 Phosphorus			
9.5.1.2 Phosphorus supplemen	its T		15
			Potassium acid phosphate
			Joulies phosphate solution -
			paediatrics
			Phosphate-Sandoz ®
			Addiphos ®
9.5.2.2 Phosphate-binding age			
	Aluminium hydroxide –	Patients established on	Patients starting therapy on
	specialist recommendation	therapy prior to 31/3/13 will	1/04/13 or later will receive
		continue to receive	treatment at HEF (via
		treatment under an ESCA	specialised commissioning)
	Calcium salts – specialist	Sevelamer ESCA	Sevelamer
	recommendation		
	Osvaren® - specialist	Lanthanum ESCA	Lanthanum
	recommendation		

9.5.3 Fluoride		
9.5.4 Zinc		
Zinc sulphate		

Additional information	
NICE guidance	NICE TA 117 Hyperparathyroidism - cinacalcet

9.6 Vitamins

Green	Yellow	Double Yellow	Red
9.6.1 Vitamin A			
	Vitamins A & D – specialist		Vitamin A drops paediatric
	recommendation		directorate only (unlicensed)
9.6.2 Vitamin B group			
Thiamine			Pabrinex ® injection
Pyridoxine			Nicotinamide - unlicensed
Vitamin B Compound Strong			Vigranon B ®
9.6.3 Vitamin C			
Ascorbic acid			
9.6.4 Vitamin D			
Calcichew D3 Forte ®	Colecalciferol drops –		Paricalcitol – renal directorate
	specialist recommendation		
Calcichew D3 ®			
Alfacalcidol			
Vitamin D (colecalciferol) 800			
units (Fultium ® and Desunin ®)			
9.6.5 Vitamin E			
	Alpha tocopheryl acetate		Vitamin E suspension
	capsules – CF patients only		
9.6.6 Vitamin K			
Menadiol sodium phosphate			
Phytomenadione			

9.6.7 Multivitamin preparation	ıs	
	on recommendation of gastroenterologist or dietician	Forceval soluble – prevention of re-feeding syndrome as per HEFT guidelines on recommendation of clinical nutrition team. Also post bariatric surgery patients (that as a result of complications or delays in progression from liquid diet cannot tolerate vitamin supplementation tablets/capsules form and will need a soluble vitamin supplement beyond 10 days and possibly for the duration of their in-patient stay).
Vitamin A.B,C and D drops	Ketovite ®	
Multivitamins	Forceval ®	

9.7 Bitters and tonics

Green	Yellow	Double Yellow	Red
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9.8 Drugs used in metabolic disorders

Notes on class

Notes on class

• BNF may be consulted for a list of drugs unsafe for use in acute porphyrias

Green	Yellow	Double Yellow	Red
9.8.1 Drugs used in metabolic of	disorders		
		Penicillamine – For Wilson's	Arginine
		disease (with ESCA)	
			Carnitine – for canite deficiency
			(paediatric directorate only)
			Mercaptamine (cysteamine)
			Sodium phenylbutyrate

		Sodium benzoate
9.8.2 Acute porphyrias		
		Haem arginate

9 MUSCULOSKELETAL AND JOINT DISEASES

9.1 Drugs used in rheumatic diseases and gout

10.1.1 Non Steroidal anti-inflammatory drugs

Notes on class

- For ALL NSAIDs use lowest dose of least toxic agent for shortest duration
- Assess GI, CV and renal risk, monitor regularly
- Safety of selective and non-selective NSAIDs: MHRA Oct 06

Green	Yellow	Double Yellow	Red
Ibuprofen	Diclofenac ^{B, C}	Etodolac ^D	
Naproxen	Celecoxib ££ ^A		Sulindac – in renal impariment only
Mefenamic acid (for dysmenorrhoea)	Meloxicam		
	Indometacin (indomethacin)		
	Aspirin ^B		

Additional information	
Drug specific notes	Celecoxib is associated with fewer GI effects over the shorter term. Contraindicated in CV disease – See NICE CG 59 and CG 79 Gastro-intestinal discomfort or nausea, ulceration with occult bleeding common with anti-inflammatory doses There are no proven benefits to using enteric coated aspirin CV risk comparable with coxibs: see MeReC Extra No30 See NICE CG 59 and CG 79
NICE guidance	NICE CG 59 Osteoarthritis NICE CG 79 Rheumatoid Arthritis
MTRAC / Prodigy / other	

guidance	
PCT information	There is poor outcome evidence for meloxicam. Drug Tariff

10.1.2 Local corticosteroids

Notes on class

Green	Yellow	Double Yellow	Red
Triamcinolone acetonide			
Methylprednisolone acetate			
Methylprednisolone acetate			
with lidocaine (lignocaine)			

Additional information	
Drug specific notes	
NICE guidance	
MTRAC / Prodigy / other	
guidance	
PCT information	<u>Drug Tariff</u>

10.1.3 Drugs which suppress the rheumatic disease process

Notes on class

Efaluzimab - Marketing authorisation was withdrawn by EMA after publication of TA103.

Green	Yellow	Double Yellow	Red as per NICE TA's where they exist
		Methotrexate ESCA A	Adalimumab
		Ciclosporin ESCA	Infliximab
		Penicillamine ESCA	Etanercept
		Sulfasalazine ESCA	Certolizumab
		Sodium aurothiomalate ESCA	Tocilizumab (Rheumatology
			only)
		Leflunomide ESCA	Golimumab
		Hydroxychloroquine ESCA	Abatacept
		Azathioprine ESCA ^B	Rituximab

Additional information	
Drug specific notes	Should only be prescribed as 2.5mg tablets (National Patient Safety Agency) ESCAs for Gastroenterological, rheumatological and dermatological conditions Azathioprine ESCA available for the treatment of patients with unresponsive chronically active Crohn's disease, resistant or frequently relapsing cases of Crohn's disease or Ulcerative colitis and as second-line treatment for fistulating Crohn's disease and continued as maintenance (all unlicensed indications. However an established therapy in these conditions) and autoimmune hepatitis (licensed indication)
NICE guidance	NICE TA 035 - Arthritis (juvenile idiopathic) - etanercept NICE TA 130 Rheumatoid arthritis - adalimumab, etanercept and infliximab NICE TA 143 Ankylosing spondylitis - adalimumab, etanercept and infliximab NICE TA 186 Rheumatoid arthritis - certolizumab pegol NICE TA 195 adalimumab etanercept infliximab rituximab and abatacept for the treatment of rheumatoid athritis after the failure of a TNF inhibitor NICE TA 199 Etanercept, infliximab and adalimumab for treatment of psoriatic arthritis NICE TA 220 Psoriatic arthritis - golimumab NICE TA 223 Ankylosing spondylitis - golimumab

	NICE TA 225 Rheumatoid arthritis (after the failure of previous anti-rheumatic drugs) - golimumab NICE TA 280 Abatacept for treating rheumatoid arthritis after the failure of conventional disease- modifying anti-rheumatic drugs (rapid review of technology appraisal guidance 234) NICE TA 238 Arthritis (juvenile idiopathic, systemic) - tocilizumab NICE TA 247 Tocilizumab for the treatment of rheumatoid arthritis
MTRAC / Prodigy / other quidance	
PCT information	Enhanced services in place for monitoring
	<u>Drug Tariff</u>

10.1.4 Gout and cytotoxic induced hyperuricaemia

Notes on class

Green	Yellow	Double Yellow	Red
Allopurinol	Febuxostat - in line with NICE		Probenecid - prevention of
	TA 164		nephrotoxicity associated with
			some anti-infective agents
Colchicine			Rasburicase – Onc and Haem

Additional information	
Drug specific notes	
NICE guidance	NICE TA 164 Hyperuricaemia - febuxostat
MTRAC / Prodigy / other	
guidance	
PCT information	Drug Tariff

10.2 Drugs used in neuromuscular disorders

10.2.1 Drugs which enhance neuromuscular transmission

Notes on class

Green	Yellow	Double Yellow	Red
	Pyridostigmine bromide		Edrophonium chloride
	(specialist recommendation)		(diagnostic)
	Neostigmine		
	Distigmine		

10.2.2 Skeletal muscle relaxants

Green	Yellow	Double Yellow	Red
Baclofen	Tizanidine – specialist initiation		
	and stabilisation		
Dantrolene			
Diazepam			
Quinine sulphate			

Additional information	
Drug specific notes	
NICE guidance	
MTRAC / Prodigy / other	
guidance	
PCT information	Drug Tariff

10.3 Drugs for the relief of soft tissue inflammation

10.3.1 Enzymes

Green	Yellow	Double Yellow	Red
			Collagenase Clostridium
			(Xiapex®) A

Additional information	
Drug specific notes	 Restricted to use as an alternative to limited fasciectomy in adult patients with Dupuytren's contracture of moderate severity (as defined by the British Society for Surgery of the Hand (BSSH), with a palpable cord and up to two affected joints per hand, who are suitable for limited fasciectomy, but for whom percutaneous needle fasciotomy is not considered a suitable treatment option. And in line with "Procedures of Limited Clinical Value commissioning policy". This states treatment of moderate to severe is appropriate where patients meet either of the following criteria: moderate metacarpo-phalangeal joint contracture (greater than 30 degrees). any proximal inter-phalangeal joint contracture. First web contracture. First web contracture. The above eligibility criteria is in line with the BSSH - The British Society for Surgery of the Hand - Evidence for Surgical Treatment Dupuytren's Disease. http://www.bssh.ac.uk/education/guidelines/dd_guidelines.pdf
NICE guidance	
MTRAC / Prodigy / other	
guidance	
PCT information	<u>Drug Tariff</u>

10.3.2 Rubifacients and other topical antirheumatics

Green	Yellow	Double Yellow	Red
Algesal ®	Ibuprofen gel ^A		
Transvasin ® cream	Capsaicin cream		

Additional information		
Drug specific notes	Α	Topical NSAIDs should be considered ahead of oral NSAIDs, COX-2 inhibitors. Be aware of
		systemic absorption.
NICE guidance	NI	CE CG 59 Oesteoarthritis
MTRAC / Prodigy / other		
guidance		
PCT information		

Miscellaneous

Green	Yellow	Double Yellow	Red

11 EYE

11.3 Anti-infective eye preparations

Notes on class

• Preservative free preparations are only indicated where there is demonstrable clinical need

Green	Yellow	Double Yellow	Red
11.3.1 Antibacterials			
Chloramphenicol ^B	Fusidic Acid ^A		Gentamicin 0.3% drops-
			ophthalmologist
			recommendation when
			sensitivity confirmed
	Ciprofloxacin – for corneal		Cefuroxime 5% drops
	ulcers		(unlicensed) Ophthalmologists
			only
	Ofloxacin – ophthalmologist		Neomycin sulphate 0.5% drops
	initiation		and ointment – neonates only
			Penicillin 5000 units in 1ml eye
			drops (unlicensed) –
			ophthalmologists only
11.3.2 Antifungals ^C			
11.3.3 Antiviral			
Aciclovir (acyclovir) 3% eye			Trifluorothymidine drops
ointment – for herpes simplex			

Additional information		
Drug specific notes	Α	Useful in staphylococcal infections
	В	Broad spectrum and treatment of choice for superficial eye infections
NICE guidance		
MTRAC / Prodigy / other		
guidance		
PCT information	<u>Dr</u>	ug Tariff

11.4 Corticosteroids and other anti-inflammatory preparations

Notes on class

- Ocular corticosteroids are associated with serious long term adverse effects and their use should be under specialist supervision
- Prodigy recommend against GPs starting corticosteroids for ophthalmic conditions unless they have access to a slit lamp and the necessary expertise
- For some chronic conditions e.g. uveitis, patients may be required to use steroid eye drops in the longer term under the advice and continuing review of a specialist. Long-term use is not covered by the licences for these eye drops, so the risks and benefits should be carefully considered and discussed with the patient before use.
- There is no stated limit for steroid eye drop use (in terms of days/weeks), it would seem sensible to ensure all patients using a corticosteroid eye drop receive regular reviews regarding its use.
- Therapy started for acute conditions should be stopped once the course is completed. Therapy for chronic conditions should be under the advice and continuing review of a specialist.

Green	Yellow	Double Yellow	Red				
11.4.1 Corticosteroids	11.4.1 Corticosteroids						
Betamethasone 0.1% drops ^B – Short term only – unless ophthalmologist recommendation	Maxitrol ® drops and ointment		Dexamethasone intravitreal implant – NICE TAG 229				
Dexamethasone 0.1% drops— Short term only – unless ophthalmologist recommendation	Prednisolone 0.5% drops – ophthalmologists recommendation		Loteprednol Etabonate 0.5% Eye Drops				
	Prednisolone 1% drops – ophthalmologist recommendation						
	Rimexolone drops – ophthalmologist recommendation						
	Fluorometholone drops – Short term only - ophthalmologist only						

11.4.2 Other anti-inflammatories					
Sodium cromoglicate (sodium cromoglycate) 2% drops Antazoline sulphate (with xylometazoline) drops £					
Olopatadine ^C £					

Additional information	
Drug specific notes	BNF states that use of combination products is rarely justified SPCs state that 'after more prolonged treatment (over 6 to 8 weeks), the drops should be withdraw slowly to avoid relapse'. For children with severe allergic eye disease when compliance with the more frequent dosage schedule of the other agents is an issue and treatment with sodium nedocromil has failed
NICE guidance	ICE TA 229 Macular oedema (retinal vein occlusion) - dexamethasone ICE TA 271 Diabetic macular oedema - fluocinolone acetonide intravitreal implant
PCT information	rug Tariff

11.5 Mydriatics and cycloplegics

Notes on class

•

Green	Yellow	Double Yellow	Red
	Atropine sulphate 0.5% drops -		Phenylephrine hydrochloride
	Ophthalmologist		drops – For clinic/practice use,
	recommendation		not prescribable
	Atropine 1% ointment -		Tropicamide drops –For
	Ophthalmologist		clinic/practice use, not
	recommendation		prescribable
	Cyclopentolate hydrochloride		
	drops - Ophthalmologist		
	recommendation		

11.6 Treatment of glaucoma

Notes on class

• All treatments for glaucoma should be hospital initiated

Green	Yellow	Double Yellow	Red		
Beta Blockers ^(A)					
	Timolol drops				
	Betaxolol drops				
	Carteolol drops				
	DuoTrav ®				
Prostaglandin analogues					
	Latanoprost drops				
	Travaprost drops				
	Xalacom ® drops				
	Tafluprost ® preservative free drops B				
	drops ^B				
Sympathomimetics					
	Brimonidine 0.5% drops				
Carbonic anhydrase inhibitors	and systemic drugs				
	Acetazolamide – oral				
	Brinzolamide drops				
	Dorzolamide 2% drops				
	Cosopt ® - drops				
Miotics					
	Pilocarpine drops and				
	ophthalmic gel				

Additional information		
Drug specific notes	В	Beta blockers should not be used in patients with asthma or a history of obstructive airways disease unless no alternative treatment is available For use within licence for those patients requiring a preservative free preparation
PCT information	Di	rug Tariff

11.7 Local anaesthetics

Notes on class

• These are obtainable for clinical practice; not prescribable

Green	Yellow	Double Yellow	Red
			For clinic/practice use, not prescribable
			Oxybuprocaine hydrochloride (benoxinate) drops
			Lignocaine and fluorescein drops
			Tetracaine hydrochloride drops (amethocaine hydrochloride)
			Proxymetacaine hydrochloride
			Proxymetacaine hydrochloride and fluorescein

Additional information	
Drug specific notes	
NICE guidance	
MTRAC / Prodigy / other	
guidance	
PCT information	Drug Tariff

11.8 Miscellaneous ophthalmic preparations

Green	Yellow	Double Yellow	Red		
11.8.1 Preparations For Tear Deficiency					
Hypromellose drops	Viscotears ® liquid gel single dose units – for patients that can not tolerate preservatives		Acetylcysteine 5% eye drops 5% eye drops (Euronac®) – Unlicensed ^A		
GelTears ®	Celluvisc ® drops - for patients that can not tolerate preservatives				
Lacri-Lube ®	Artificial Tears ® drops for patients that can not tolerate preservatives				
Sno Tears ®	Sodium hyaluronate eye drops – ophthalmologist initiation				
Simple eye ointment – yellow soft paraffin					
Sodium Chloride 0.9% drops					
11.8.2 Ocular Diagnostic and I					
	Apraclonidine drops – Ophthalmologist initiation		Fluorescein sodium drops – For clinic/practice use, not prescribable		
	Diclofenac sodium drops – Ophthalmologist initiation		Rose Bengal ®drops – For clinic/practice use, not prescribable		
	Ketorolac trometamol – Ophthalmologist initiation		Acetylcholine chloride solution for intra-ocular irrigation – Ophthalmologists only		
			Ranibizumab - NICE TA 155, TA 274 and TA 283		
Additional information					
Drug specific notes		A Unlicensed product manufactured in France. It has a shelf life of 15 days once opened			
NICE guidance	NICE TA 068 Macular degeneration (age related) photodynamic therapy NICE TA 155 Macular degeneration (age-related) - ranibizumab and pegaptanib NICE TA 274 Macular oedema (diabetic) - ranibizumab				

NICE TA 283 Ranibizumab for treating visual impairment caused by macular oedema secondary to
retinal vein occlusion

Miscellanous

Green	Yellow	Double Yellow	Red
			5FU drops
			Balanced salt solution –
			Sodium chloride 5% drops
			Ciclosporin (cyclosporin)
			Mitomycin drops
			Ethylenediaminetetraacetic acid
			(EDTA) 0.37% drops
			Hyaluronidase 1500 units

12 EAR, NOSE AND OROPHARYNX

12.1 Drugs acting on the ear

Notes on class

- Inflammatory reaction of skin, usually responds to gentle syringing or dry mopping.
- Most effective treatment is ribbon gauze soaked in corticosteroid eardrops.
- Exclude perforation before using topical amino glycosides (risk deafness). Committee on Human Medicines (formerly CSM) warning: topical aminoglycosides are contraindicated in patients with tympanic perforation
- Products containing anti-bacterials should be used for up to a week to prevent fungal complications which require specialist treatment

Green	Yellow	Double Yellow	Red			
12.1.1 Otitis externa						
Anti-inflammatory preparations	3					
Single agent preparations						
Betamethasone sodium						
phosphate						
Prednisolone sodium						
phosphate – Predsol ®						
Compound preparations						
Betamethasone sodium	Dexamethasone with neomycin					
phosphate with neomycin	and glacial acetic acid –					
(Vista-methasone N®)	(Otomize ®)					
Prednisolone with neomycin	Hydrocortisone with gentamicin					
(Predsol N ®)	– (Gentisone HC ®) specialist					
	receommendation. Not for use					
	in tympanic perforation					
	Flumetasone with clioquinol –					
	(Locorten-Vioform ®)					
	Tri-Adcortyl OTIC ® – specialist					
	recommendation					
	Sofradex ®					

Anti-infective preparations				
Clotrimazole solution	Ciprofloxacin 0.3% drops – Specialist recommendation (off			
	label of eye drops)			
Unlicensed				
			Aluminium acetate 13% drops	
12.1.2 Otitis Media				
Refer to antimicrobial formulary				
12.1.3 Removal of wax				
Olive oil				
Sodium bicarbonate 5% ear				
drops				
Green	Yellow	Double Yellow	Red	
Unlicenced (medical device)	Unlicenced (medical device)			
		Otovent balloons – specialist		

Additional information	
Drug specific notes	
NICE guidance	
MTRAC / Prodigy / other	
guidance	
PCT information	Drug Tariff

recommendation

12.2 Drugs acting on the nose

Notes on class

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Green	Yellow	Double Yellow	Red		
12.2.1 Drugs used in nasal alle	12.2.1 Drugs used in nasal allergy				
Beclometasone (beclomethasone) dipropionate	Fluticasone furoate nasal spray		Fluticasone furoate nasal drops – for use post operatively		
nasal preparations	(Avamys ®) £ B				
Betamethasone sodium phosphate nasal preparations	Mometasone – for use in Children only (Nasonex ®) £ B				
Budesonide nasal spray					
12.2.2 Topical nasal decongest	ants				
Sodium chloride 0.9% drops	Ephedrine hydrochloride 0.5% and 1% drops. ^C				
12.2.3 Anti infective nasal prep	arations				
	Mupirocin 2% nasal ointment - (Bactroban®) (A)		Bismuth subnitrate and iodoform		
Chlorhexidine plus neomycin –					
(Naseptin ® cream)					
12.2.4 Other nasal					
Sodium chloride nasal drops					

Additional information	
Drug specific notes	For methicillin resistant strains No evidence to demonstrate superior efficacy over beclomethasone Short term use only – efficacy limited
NICE guidance	
MTRAC / Prodigy / other	
guidance	
PCT information	<u>Drug Tariff</u>

12.3 Drugs acting on the oropharynx

Notes on class

•

Green	Yellow	Double Yellow	Red
12.3.1 Drugs for oral ulceration	and inflammation		
Choline salicylate dental gel	Benzydamine hydrochloride £		
Orabase ® paste			
Adcortyl in Orabase ®			
12.3.2 Oropharyngeal anti-infed	ctive drugs		
Amphotericin lozenges and			
suspension			
Miconazole oral gel			
Nystatin pastilles and			
suspension			
12.3.3 lozenges and sprays	,		
Benzydamine hydrochloride			
spray			
12.3.4 Mouthwashes, gargles a	nd dentifrices		
Chlorhexidine gluconate 0.2%			
as mouthwash			
12.3.5 Treatment of dry mouth			
Glandosane ® spray A			
Salivix ® pastilles A			
Oral balance oral gel A			

Additional information	
Drug specific notes	A Endorse ACBS in primary care
NICE guidance	
MTRAC / Prodigy / other	MHRA alert ref Choline salicylate in under 16s
guidance	
PCT information	Drug Tariff

13 SKIN

13.2 Emollients

Notes on class

- Should be applied frequently as effects are short-lived.
- Preparations containing an antibacterial should be avoided unless infection is present or a frequent complication
- Generally the best emollient will have a high lipid content,, which is lowest in lotions, intermediate in creams and highest in ointments i.e. the greasier the emollient the better it is. However, it is important to remember that emollient choice for an individual patient involves consideration of patient preference, other ingredients (does it contain potential allergens) and cost.

Green	Yellow	Double Yellow	Red
13.2.1 Emollients			
Aqueous cream	Oilatum ® cream £		
Emulsifying ointment	Diprobase ® cream ££		
White soft paraffin	Doublebase ® gel ££		
Yellow soft paraffin	Unguentum M ® cream ££		
Liquid paraffin/ white soft	Hydromol ® cream £££		
paraffin 50/50	Hydromol ® ointment		
Cetraben ® emollient cream £	Hydrous ointment BP		
E45 ® cream (contains lanolin)	Dermol ® 500 lotion (contains antimicrobials)		
Epaderm ® ointment (contains lanolin)	Dermol ® 200 shower emollient (contains antimicrobials)		
Aquadrate ® cream (contains urea)	Balneum ® Plus cream (contains urea) £		
	Calmurid ® cream (contains urea) ££		
	Eucerin ® (contains urea) ££		

13.2.1.1 Emollient Bath Additives			
Oilatum ® emollient bath	Dermol ® 600 (contains		
additive	antimicrobials) £££		
(contains wool fat)			
Oilatum ® fragrance free ££	Aveeno colloidal ® bath additive		
(contains wool fat)	£££		
Cetraben® bath additive	Oilatum ® Plus bath additive		
	£££		
Balneum ® bath oil ££	Aveeno Bath ® oil £££		
Balneum Plus ® £££	Emulsiderm		
Hydromol ®			
13.2.2 Barrier preparations			
Zinc and castor oil ointment	Metanium ® ointment £££		Sprilon®
(contains peanut oil)			
Conotrane ® cream	Sudocrem ® cream £££ -		_
	Paediatrics only		

Additional information	
Drug specific notes	
NICE guidance	
MTRAC / Prodigy / other	
guidance	
PCT information	Drug Tariff

13.3 Topical local anaesthetics and antipruritics

Notes on class

•

Green	Yellow	Double Yellow	Red
Calamine lotion – do not use on	Crotamiton cream £ (pruritis		
insect stings	after scabies)		
	Doxepin hydrochloride cream		
	£££. (Caution – possible		
	systemic effects)		

Additional information	
Drug specific notes	
NICE guidance	
MTRAC / Prodigy / other	
guidance	
PCT information	<u>Drug Tariff</u>

13.4 Topical corticosteroids

Notes on class

• Topical corticosteroids are contra-indicated in rosacea

Notes:

Apply once or twice daily.

Max quantities per week for an adult:

Face/Neck 15-30g

Both legs 100g Both arms 30-60g Scalp 15-30g Both hands 15-30g Trunk 100g Groins 15-30g

Formulation depends on lesion/site; cream is better for moist weepy lesions. Ointment useful for scaly, lichenfied areas.

• Occlusion increases absorption (+side effects) use only on thick skin in short term

Patients receiving regular topical steroids should be reviewed regularly. GPs should ensure patients are told about potential side effects and are advised that this advice, together with frequency of usage is documented in patient's notes.

Green	Yellow	Double Yellow	Red
Mild			
Hydrocortisone 0.5% and 1%			
Moderately potent			
Clobetasone butyrate 0.05%	Haelan ® Tape – Specialist		
(Eumovate ®)	recommendation		
	Alclometasone cream and		
	ointment (Modrasone ®)		
	Betamethasone 0.025%		
	(Betnovate RD)		
Potent			
Betamethasone 0.1%	Beclometasone dipropionate		
(Betnovate ®)	(beclomethasone dipropionate)		
	cream ointment and scalp		
	application		
Betacap ® scalp application	Hydrocortisone butyrate cream,		
	lipocream, ointment and scalp		
	lotion ££		
	Mometasone furoate cream,		
	ointment and scalp lotion £££		
	Diflucortolone valerate 0.1%		
	oily cream £££		
Very potent			
Clobetasol propionate	Diflucortolone valerate 0.3%		
(Dermovate ®) cream ointment	oily cream £ (short term		
& scalp application (for short	treatment of severe		
term treatment max 4 weeks)	exacerbations only) £		

Additional information	
Drug specific notes	Requesting a topical steroid to be diluted is not recommended and is expensive. Prescribe a less potent steroid
NICE guidance	NICE TA 81 - Atopic dermatitis - topical steroids
MTRAC / Prodigy / other	
guidance	
PCT information	Drug Tariff

Green	Yellow	Double Yellow	Red
With Antifungal			
Daktacort ^A (hydrocortisone 1%, miconazole nitrate 2%)	Nystaform-HC ® cream ^A		
CanestenHC ^A (clotrimazole 1%, hydrocortisone 1%)	Lotriderm ® cream ^C		
With antibacterial			
Vioform-Hydrocortisone AE (clioquinol 3%, hydrocortisone 1%)	Locoid C ® cream and ointment CE		
Betnovate C® CE	FuciBet CE		
(betamethasone 0.1%, clioquinol 3%)	(betamethasone 0.1%, fusidic acid 2%)		
Other compound preparations			
Eurax -Hydrocortisone ® cream A	Calmurid HC ® cream ^B		
With antibacterial and antifunga			
Timodine ^A (nystatin 100,000u per g, hydrocortisone 0.5%, dimethicone 10%)			
Trimovate ^B (clobetasone butyrate 0.05%, nystatin 100,000u per g, oxytetracycline 3%)			
With salicylic acid			
	Diprosalic ® ^B (betamethasone 0.05%, salicylic acid 3%)		
Additional information			
Drug specific notes	antimicrobial/corticosteroid	. Id be treated with oral antibiotics	wn to be no more effective than topica

NICE guidance	NICE TA 81 Atopic dermatitis –topical steroids
MTRAC / Prodigy / other	Prodigy guidance on combined topical steroid/antibacterial preparations
guidance	

13.5 Preparations for Eczema and psoriasis

Green	Yellow	Double Yellow	Red
Calcipotriol cream, ointment and scalp solution A	Calcitriol ointment £		Acitretin – Dermatologists and paediatricians only
Coal Tar preparations (proprietary e.g. Exorex ® lotion & Polytar Emollient ® bath additive (contains peanut oil)	Tazarotene gel ££		Alitretinoin - Dermatologists only in line with NICE TA 177
Dithrocream ® cream	Tacalcitol (face and flexures) £££		
Micanol ® 3% cream	Dovobet ® ointment AB – 4 weeks therapy only. Specialist initiation. Maximum 15g per day or 100g per week		
Alphosyl HC ® cream (contains wool fat)	Coal tar specials ££ - (see Specials section)		
Sebco ® ointment	Dovobet ® Gel – for use on scalp and or body		
Zinc and salicylic acid paste			

13.5.3 Drugs affecting the immune response			
Green	Yellow	Double Yellow	Red
	Tacrolimus ointment – Specialist recommendation	Methotrexate – specialist initiation and stabilisation, then suitable for GP prescribing with an ESCA	Ustekinumab – Dermatologists only in line with NICE TA 180
	Pimecrolimus cream – Specialist recommendation	Ciclosporin - specialist initiation and stabilisation	Infliximab
			Etanercept
			Adalimumab

Additional information		
Drug specific notes	A Maximum 100g in one week	
	Use for four weeks and then assess. Subsequent courses repeated after an interval of at least 4	
	weeks. Continuous use is not recommended due to the possibly of skin atrophy	
NICE guidance	NICE TA 082 Atopic dermatitis (eczema) - pimecrolimus and tacrolimus	
	NICE TA 103 - Psoriasis - efalizumab and etanercept	
	NICE TA 134 Psoriasis - infliximab	
	NICE TA 146 Psoriasis - adalimumab	
	NICE TA 177 for the treatment of severe chronic hand eczema	
	NICE TA 180 Treatment of adults with moderate to severe psoriasis with ustekinumab	
MTRAC / Prodigy / other		
guidance		
PCT information	Drug Tariff	

13.6 Acne and rosacea

13.6.1 Topical preparations for acne			
Green	Yellow	Double Yellow	Red
Azelaic acid cream	Dalacin T ® ^A		
Benzoyl peroxide	Duac ® 4% gel A		
Adapalene – Avoid in	Benzamycin gel ® £££ A		
pregnancy			
Isotretinoin 0.05% gel – Avoid	Nicotinamide 4% gel		
in pregnancy			
Tretinoin preparations (Retin- A			
®) ^B Avoid in pregnancy			

13.6.2 Oral preparations for acne (see also antimicrobial formulary for oral preparations)			
Green	Yellow	Double Yellow	Red
Co-cyprindiol (Dianette ®) ^C	Trimethoprim –Specialist initiation "off label use"	Clindamycin – specialist initiation	Isotretinoin- Dermatologists only. Contraindicated in pregnancy
Oxytetracycline	Minocycline £££–	Rifampicin – specialist initiation	
Erythromycin £££			

Additional information	
Drug specific notes	BNF No 51 'Topical antibiotics are probably best reserved for patients who wish to avoid oral antibacterials or who cannot tolerate them' 'To avoid antibiotic resistance: • where possible use non-antibiotic antimicrobials such as benzoyl peroxide • avoid concomitant treatment with different oral and topical antibiotics • if a particular antibiotic is effective, use it for repeat courses if needed. (short intervening courses of a topical antibacterial such as benzoyl peroxide may eliminate any resistant propionibacteria) B C Useful for comedonal acne CSM guidance on hormone treatment for acne
MTRAC / Prodigy / other	Prodigy guidance Acne vulgaris
guidance	
PCT information	Drug Tariff

13.7 Preparations for warts and calluses

Green	Yellow	Double Yellow	Red
	Specialist Initiation		Formaldehyde solution 10%
Glutaraldehyde 10% solution	Imiquimod 5% cream		
Salicylic acid (Verrugon ®	Podophyllotoxin (Warticon ®		
Occlusal ® Salactol ®)	and Warticon Fem ®)		
Silver nitrate applicators			
(40%,75% and 95%)			

13.8 Sunscreens and camouflagers

Green	Yellow	Double Yellow	Red
13.8.1 Sunscreen preparations			
Sunsense ® Ultra lotion	Roc Total Sunblock ® - tinted		Methyl aminolevulinate cream
	cream – for patients with vitiligo		(Metvix®)
Uvistat ® cream and ultrablock	Diclofenac sodium 3% gel –		
cream	Specialist initiation A.		
Actikerall®B	Fluorouracil 5% cream		
13.8.2 Camouflagers			
	Veil ® - for prescribing in		
	primary care following specialist		
	recommendation (contains wool		
	fat)		
	Dermablend ® - for prescribing		
	in primary care following		
	specialist recommendation		

Additional information		
Drug specific notes	В	For patient who have experienced an adverse effect to topical fluorouracil. (Maximum treatment period 90 days. Optimum effect seen 4 weeks after ceasing therapy) As an alternative to fluorouracil 5% cream for patients that have a layer of thick hyperkeratotic skin over the actinic keratosis lesions.
NICE guidance		

MTRAC / Prodigy / other	
guidance	
PCT information	Drug Tariff

13.9 Shampoos and Other preparations for scalp and hair conditions

Green	Yellow	Double Yellow	Red
Alphosyl 2 in 1 ® shampoo	Capasal ® shampoo -		
Selsun ® shampoo application	Polytar plus ® liquid		
Polytar ® liquid (contains	TGel ® shampoo		
peanut oil)			
Ketoconazole 2% shampoo -	Ceanel Concentrate ®		
for seborrhoeic dermatitis and	shampoo		
pityriasis versicolor. Primary			
care prescriptions must be			
endorsed SLS			
	Eflornithine		

13.10 Anti-infective skin Preparations

Green	Yellow	Double Yellow	Red		
13.10.1.1 Antibacterial prepa	13.10.1.1 Antibacterial preparations only used topically				
Fusidic acid 2%	Mupirocin 2% cream and ointment For MRSA.				
Polyfax ointment					
13.10.1.2 Antibacterial prepa	rations also used systemically		1		
Fusidic acid 2% cream and					
ointment					
(ointment contains wool fat)					
Metronidazole 0.75% gel					
(Rosex ®) – Acne rosacea					
Metronidazole 0.8% gel					
(Metrotop ®) – Malodorous					
tumours and skin ulcers					

T		
	Double Yellow	Red
1 - 1 - 1		
Ketoconazole cream		
Nystatin cream and ointment		
าร		
Carbaryl		
		Collodion flexible BP – not
		prescribable, to be applied by
		appropriately trained healthcare
		professional
		Dermabond ® – not
		prescribable, to be applied by
		appropriately trained healthcare
		professional
		Proflavine cream
	ns	Yellow Amorolfine cream and nail lacquer £££ consultant initiation Monphytol paint – consultant initiation Terbinafine cream £££ Tioconazole nail solution £££ Ketoconazole cream Nystatin cream and ointment

Additional information	
Drug specific notes	

NICE guidance	
MTRAC / Prodigy / other	
guidance	
PCT information	Drug Tariff

13.11 Skin Cleansers and antiseptics

Green	Yellow	Double Yellow	Red	
13.11.1 Saline				
Irriclens				
Steripods				
Normasol sachets				
13.11.2 Chlorhexidine				
Hibitane Obstetric ® cream				
Tisept ® solution				
Hibiscrub ® solution				
13.11.4 lodine				
Povidone iodine preparations				
13.11.5 Phenolics				
	Aquasept ® For MRSA			
13.11.6 Astringents, oxidisers a	13.11.6 Astringents, oxidisers and dyes			
	Hydrogen peroxide			
	Potassium permanganate			
	solution tablets			
	Crystacide ® cream			

Additional information	
Drug specific notes	
NICE guidance	
MTRAC / Prodigy / other	
guidance	
PCT information	Drug Tariff

13.12 Antiperspirants

Green	Yellow	Double Yellow	Red
13.12 Antiperspirants			
Aluminum salts			

13.13 Topical circulatory preparations

Green	Yellow	Double Yellow	Red
13.14 Topical circulatory preparations			
			Heparinoid 0.3% cream

Miscellaneous

Green	Yellow	Double Yellow	Red
			Botulinum A Toxin-
			Haemagglutinin complex – For
			hyperhidrosis of axillae*
			Depigmenting (tretinoin –
			Manchester Formula) cream
			Hydroquinone 2% and 4%
			cream
	Doxepin 5% cream		Trichloroacetic acid 90%
			Fumaric esters

Additional information	
Drug specific notes	* This is classified as a procedure of low clinical value. See link to Primary Care policy on PLCV below
NICE guidance	NICE TA 260 Migraine (chronic) - botulinum toxin type A
MTRAC / Prodigy / other guidance	
PCT information	Drug Tariff PLCV Policy

Specials.

Compounds	Compounds	Compounds	Compounds
	Dermovate ® cream 25% and		
	propylene glycol 40% in		
	Unguentum M®		
	Emulsifying ointment 25% in		
	coconut oil		
	Sulphur 2% and salicylic acid		
	2% in Unguentum M®		
Coal Tar preparations	Coal Tar preparations	Coal Tar preparations	Coal Tar preparations
	Coal tar solution 5% and		
	Betnovate ® ointment 25% in		
	Unguentum M®		
	Coal tar solution 3%, 5% and		
	6%in yellow soft paraffin		
	Crude coal tar 1 to 10% in		
	yellow soft paraffin		
Dithranol	Dithranol	Dithranol	Dithranol
	Dithranol 0.1%, 0.25%, 0.5%		
	1%, 2%, and 5% in yellow soft		
	paraffin or zinc and salicylic		
	acid paste		
Other	Other	Other	Other
	Salicylic acid 2%, 10% and		
	20% in white soft paraffin		
	Menthol 1% in aqueous cream		
	Metronidazole 2% in aqueous		
	cream		

Heart of England NHS Foundation NHS Trust, Solihull Care Trust and Birmingham East and North Primary Care Trust agree that those specials included in the British Association of Dermatologists (BAD) "preferred list of specials" are all by default included in the Interface Formulary as an option for appropriate prescribing. BAD Preferred list of specials

14 VACCINES AND ANTISERA

This chapter is under development. Currently only medicines that are specifically subject to a positive NICE TA appear

14.5.3.

Green	Yellow	Double Yellow	Red	
ANTI-D (Rh0) immunoglobulin				
			Anti-D (Rh0) immunoglobulin	

Additional information	
Drug specific notes	NICE TA 156 Pregnancy (rhesus negative women) - routine anti-D
NICE guidance	
MTRAC / Prodigy / other	
guidance	
PCT information	Drug Tariff

15 ANAESTHESIA

15.1.1 Intravenous anaesthetics

Green	Yellow	Double Yellow	Red	
Barbiturates				
			Thiopental sodium	
Other intravenous anaesthetics				
			Etomidate	
			Ketamine	
			Propofol	

Additional information	
Drug specific notes	
NICE guidance	
MTRAC / Prodigy / other	
guidance	
PCT information	Drug Tariff

15.1.2 Inhalational anaesthetics

		Notes on class
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Green	Yellow	Double Yellow	Red
			Isoflurane
			Sevoflurane
			Nitrous oxide

Additional information	
Drug specific notes	
NICE guidance	
MTRAC / Prodigy / other	
guidance	
PCT information	Drug Tariff

15.1.3 Antimuscarinic drugs

Notes on class

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Green	Yellow	Double Yellow	Red
	Hyoscine patch		Atropine sulphate
	Hyoscine hydrobromide		Glycopyrronium bromide

Additional information	
Drug specific notes	
NICE guidance	
MTRAC / Prodigy / other	
guidance	
PCT information	Drug Tariff

15.1.4. Sedative and analgesic peri-operative drugs

Notes on class

Do not prescribe tramadol and codeine phosphate together

Green	Yellow	Double Yellow	Red	
15.1.4.1 Anxiolytics and neuroleptics				
			Diazepam	
			Lorazepam	
			Midazolam	
			Temazepam	
15.1.4.2 Non-opioid analgesics			_	
Diclofenac – post operative use			Ketorolac	
			Parecoxib	
			Etoralac	
			Tenoxicam	
15.1.4.3 Opioid analgesics			_	
			Alfentanil	
			Alfentanil intensive care ® -High	
			strength - Palliative Care Team	
			recommendation during end of	
			life care only	
			Alfentanil nasal spray	
			(unlicensed)- Palliative Care	
			Team during end of life care for	
			the relief of incident pain	
			Fentanyl	
			Remifentanil	
			Morphine	
			Pethidine	
			Tramadol	

15.1.5 Neuromuscular blocking drugs

No	tes	on	clas	S

Green	Yellow	Double Yellow	Red
Non-depolarising muscle relaxants			
			Atracurium
			Mivacurium

			Pancuronium
			Rocuronium
			Vecuronium
Depolarising muscle relaxants			
			Suxamethonium

Additional information	
Drug specific notes	
NICE guidance	
MTRAC / Prodigy / other	
guidance	
PCT information	Drug Tariff

15.1.6 Anticholinesterases used in anaesthesia

Green		Yellow	Double Yellow	Red
				Edrophonium chloride
				Neostigmine
				Sugammadex ^A
Additional information				
Drug specific notes				
	A	For use within the terms of 1) Approved by a Consul practical post emerge 2)Suxamethonium is confident.	tant Anesthetist either at the time ncy	of the emergency or as soon as
NICE guidance				
MTRAC / Prodigy / other				
guidance				
PCT information	Dru	g Tariff		

15.1.7 Antagonists for central and respiratory depression

Notes on class	
•	

Green	Yellow	Double Yellow	Red
			Flumazenil
			Naloxone

Additional information	
Drug specific notes	
NICE guidance	
MTRAC / Prodigy / other	
guidance	
PCT information	Drug Tariff

15.1.8 Drugs for Malignant hyperthermia

Green	Yellow	Double Yellow	Red
			Dantrolene sodium

15.2 Local anaesthesia

Notes on class

Green	Yellow	Double Yellow	Red
Emla cream		Lidocaine 5% patches - A	Lidocaine
		specialist initiation.	
Ametop cream			Bupivacaine
			Levobupivacaine
			Prilocaine
			Ropivacaine
			Tetracaine
			Articaine hydrochloride
			LAT gel (unlicensed product)
			LMX gel - paediatrics only

Additional information	
Drug specific notes	A GP to receive clear information regarding the choice of therapy and the steps that should be taken if treatment is deemed successful or not within a specified time frame
NICE guidance	
MTRAC / Prodigy / other	
guidance	
PCT information	Drug Tariff

APPENDIX

The following drugs are <u>not</u> considered appropriate for initiation. HOWEVER if patients are stable on these medications there is no requirement to change them to an alternative.

BNF Category	Drug
2.2.2 Loop diuretics	Torasemide
2.5.5.2 Angiotensin Receptor Blockers	Eprosartan,
·	Telmisartan
	Olmesartan
2.6.1 Nitrates	Isosorbide dinitrate (oral)
2.6.2 Calcium channel blockers	Lacidipine
	Lercanidipine
	Nicardipine
2.8 Anticoagulants and protamine	Dalteparin
	Tinzaparin
	Lepiridin
4.1 Hypnotics and anxiolytics	Clomethiazole (chlormethiazole)
	Nitrazepam
4.3	Escitalopram
4.7.1 Non-opioid analgesics	Co-dydramol
4.7.2 Opioid analgesics	Dipipanone hydrochloride
	Buprenorphine patches (Transtec®)
4.8.1 Control of epilepsy	Ethosuximide
	Clobazam
4.9.1 Dopaminergic drugs used in parkinsonism	Pergolide
	Cabergoline
	Bromocriptine
6.1.1.1 Short Acting Insulins	Inhaled Insulin (Exubera ®) as part of Extended Transition Programme in
	Secondary Care only
6.1.2.3	Vildagliptin
	Saxagliptin
6.3.2 Glucocorticoids	Cortisone

6.4.2 Male sex hormones	Sustanon ® preparations
7.3.1 Combined hormonal contraceptives	NuvaRing ®
	Qlaira ®
	Yasmin ®
	Logynon ®
7.4.2 Drugs for urinary frequency, enuresis and incontinence	Propiverine
	Solifenacin
11.6	Bimatoprost drops
	Ganfort ®
12.2.1	Fluticasone propionate (Flixonase ® and Nasofan ®)