Medication Review Support Guide

**STOPP:**
Screening Tool of Older People’s Potentially Inappropriate Prescriptions

**START:**
Screening Tool to Alert Doctors to Right (i.e. appropriate, indicated) Treatments
Contents
Introduction .................................................................................................................. 3
Colour Key ................................................................................................................... 5
Gastrointestinal System BNF Section 1 ................................................................. 6
  STOPP .................................................................................................................... 6
  START .................................................................................................................... 6
National and local guidance ..................................................................................... 7
Cardiovascular System BNF Section 2 .................................................................. 8
  STOPP .................................................................................................................... 8
  START .................................................................................................................... 9
National and local guidance ..................................................................................... 10
Respiratory System BNF Section 3 ......................................................................... 11
  STOPP .................................................................................................................... 11
  START .................................................................................................................... 12
National and local guidance ..................................................................................... 12
Central Nervous System & Psychotropic Drugs BNF Section 4 ....................... 13
  STOPP .................................................................................................................... 13
  START .................................................................................................................... 16
National and local guidance ..................................................................................... 16
Endocrine System BNF Section 6 .......................................................................... 17
  STOPP .................................................................................................................... 17
  START .................................................................................................................... 17
National and local guidance ..................................................................................... 17
Urogenital System BNF Section 7 .......................................................................... 18
  STOPP .................................................................................................................... 18
National and local guidance ..................................................................................... 18
Musculoskeletal System BNF Chapter 10 ............................................................. 19
  STOPP .................................................................................................................... 19
  START .................................................................................................................... 19
National and local guidance ..................................................................................... 20
References .................................................................................................................. 21
Introduction

Increasingly, prescribers are becoming aware of the need to review medication and consider the benefits of ‘deprescribing’. Deprescribing is not about denying effective treatment to people who will benefit, it is about ensuring people do not receive unnecessary treatment, which is unlikely to be of benefit and may cause harm. This is particularly relevant where there is polypharmacy or, when prescribing, in older people who have an increased risk of adverse effects with medication due to age related alteration in pharmacokinetics and pharmacodynamics.

The STOPP/START support tool has been developed to assist prescribers and their patients in making informed and rational decisions on whether to deprescribe or not. This medication review support guide is based upon this tool.

All recommendations from the STOPP START Tool are included here, and where space allows local and national guidance. The recommendations are grouped according to British National Formulary chapters with the STOPP items coloured red and the START items coloured green. The rationale for the intervention is given in italics.

A medication review can be defined as:

‘A structured, critical examination of a patient’s medicines with the objective of reaching an agreement with the patient about treatment, optimising the impact of medicines, minimising the number of medication-related problems and reducing waste’.

A medication review can be described in differing levels dependent on the depth of the review from Level 0 (unstructured, opportunistic) to Level 3 (full clinical face-to-face review of medicines and condition). Further information can be found at: 

As well as using the list of drugs within this guide to decide which might need to be stopped, it should also be considered if the drug gives daily symptomatic benefit (e.g. pain killers), prevents rapid worsening of symptoms (e.g. medications for Parkinson’s Disease) or replaces a hormone vital for normal function (e.g. levothyroxine). If so it should normally be continued.

Care should be taken if considering stopping the following drugs (continue treatment, gradual withdrawal or specialist advice before stopping):

- ACEI and diuretics used in heart failure.
- Amiodarone, CCBs, betablockers or digoxin used to control heart rate or rhythm.
- Anticonvulsants used in epilepsy.
- Antidepressant, antipsychotic or mood stabilizing drugs.
- Antimuscarinic or other drugs used in Parkinson’s disease
- Steroids, DMARDS or immunosuppressant drugs.

It is the clinicians’ responsibility to consider other drug interactions or contra-indications not listed within this guide.

Where there is any doubt about the information within this guide please check that it is in line with manufacturers recommendations, published literature or national and local guidance as this may have changed.
Polypharmacy (usually considered as the use of at least four or five medicines) can be defined as ‘appropriate’ and ‘problematic’:

- **Appropriate** – Prescribing for an individual for complex conditions or for multiple conditions in circumstances where medicines use has been optimised and where the medicines are prescribed according to best evidence.
- **Problematic** – Prescribing of multiple medications inappropriately, or where the intended benefit of the medication is not realised, e.g. treatments not evidence based, risk of harm outweighs benefits, medicines interactions present, unacceptable ‘pill burden’, difficulty achieving clinically useful medicines adherence, medicines prescribed to treat side effects of other medicines.

**Practical tips for the management of polypharmacy**:

- Never assume the patient is taking what you think they are taking. Review regularly and consider brown bag reviews (where patients are asked to bring all of the medicines they are taking to clinic) or reviews at the patient’s home.
- Keep medication regimens as simple as possible – ideally once or twice daily dosing. Keep the number of pills or ‘pill burden’ to the minimum necessary to provide effective treatment.
- Provide clear written instructions and a dosing schedule. Avoid use of ‘as directed’ and put specific dosage instructions on the prescription.
- Ensure you are aware of medicines which may not be on the patient’s record e.g. supplied via acute specialties e.g. renal, psychiatry, memory clinic etc.
- Therapeutic duplication may occur when the patient has multiple prescribers.
- Consider advantages and disadvantages of compliance aids for individual patients and their specific medication regimen. (N.B. Monitored dosage systems [MDS] should not be used first line as they can have disadvantages; assessment should be undertaken by the community pharmacy e.g. medicine stability and difficulty in following directions e.g. “when required” or with/after food.)
- Be aware of known pitfalls of specific medicines and recognise medicines interactions (may be ‘medicine–medicine’, ‘medicine–food’, ‘medicine–alcohol’, ‘medicine–herbal’ or ‘medicine-smoking’).
- Identify over-ordering and hoarding of medicines which can cause problems and can also indicate poor control (e.g. bronchodilators, glyceryl trinitrate sprays, opiates). Try to ensure medication quantities are synchronised to avoid potential missed doses and reduce waste.
- Ensure that directions on each prescription item identify the problem it is intended to treat.
- Put systems in place to ensure consistent and appropriate biochemical monitoring for high-risk medicines e.g. lithium, disease modifying anti-rheumatic drugs (DMARDs), warfarin.
- Discuss complex repeat medication regimens with pharmacy colleagues for advice on safety, interactions, formulation choice and to aid with checking patient understanding.
Colour Key

**STOFP**: Screening Tool of Older People’s potentially inappropriate Prescriptions.
The following STOPP prescriptions are potentially inappropriate in persons aged ≥ 65 years of age

**START**: Screening Tool to Alert doctors to Right i.e. appropriate, indicated Treatments.
These START medications should be considered for people ≥ 65 years of age with the following conditions, where no contraindication exists.

**National and Local Guidance**
This includes NICE Guidelines, other supporting/useful information e.g. BTS/SIGN Guideline on the Management of Asthma and local guidance e.g. Joint Wirral Dyspepsia Treatment Clinical Guideline.

All local guidance can be found at the Wirral Medicines Management website: [http://mm.wirral.nhs.uk/aboutus](http://mm.wirral.nhs.uk/aboutus)
Gastrointestinal System BNF Section 1

STOPP

Diphenoxylate (co-phenotrope), loperamide or codeine phosphate
- for treatment of diarrhoea of unknown cause
  - risk of delayed diagnosis
  - may exacerbate constipation with overflow diarrhoea
  - may precipitate toxic megacolon in inflammatory bowel disease
  - may delay recovery in unrecognised gastroenteritis
- for treatment of severe infective gastroenteritis i.e. bloody diarrhoea, high fever or severe systemic toxicity
  - risk of exacerbation or protraction of infection

Prochlorperazine or metoclopramide
- in patients with Parkinsonism
  - risk of exacerbating Parkinsonism

Proton pump inhibitor at treatment dose
- for peptic ulcer disease at full therapeutic dosage for > 8 weeks
  - risk of unnecessarily prolonged treatment and masking symptoms of gastric cancer; earlier discontinuation or dose reduction for maintenance/prophylactic treatment of peptic ulcer disease, oesophagitis or GORD
  - risk of C. difficile

Omeprazole or esomeprazole
- if co-prescribed clopidogrel.
  - Medicines and Healthcare products Regulatory Agency (MHRA) Drug Safety Update (2010) advises that concurrent use should be discouraged due to reduced antiplatelet effect.

Anticholinergic antispasmodic drugs (e.g. hyoscine butylbromide, dicycloverine)
- for patients with chronic constipation
  - risk of exacerbation of constipation

Stimulant laxatives (e.g. senna, bisacodyl)
- for patients with intestinal obstruction
  - risk of bowel perforation

START

Proton Pump Inhibitor
- for severe gastro-oesophageal acid reflux disease or peptic stricture requiring dilatation
- for patients over 80 years old on anti-platelets and SSRIs

Fibre Supplement
- for chronic, symptomatic diverticular disease with constipation
National and local guidance

Joint Wirral Dyspepsia Treatment Clinical Guideline (under review):

Joint Wirral Laxative Guidelines (adults)
http://mm.wirral.nhs.uk/document_uploads/guidelines/LaxativesAdultsClinicalGuidelineJune142.pdf

Joint Wirral Laxative Guidelines (children)

NICE CG184 Dyspepsia and gastro-oesophageal reflux disease

PHE Primary Care Guidance Infectious diarrhoea: microbiological examination of faeces.
Cardiovascular System BNF Section 2

STOPP

Digoxin
- at a long-term dose >125microgram/day with impaired renal function (eGFR <50mL/minute)
  - increased risk of toxicity (e.g. nausea, diarrhoea, arrhythmias)
    - levels can be taken (must be > 6 hours post dose) if there is a risk of toxicity and/or toxicity suspected

Loop diuretic (e.g. furosemide, bumetanide)
- for dependent ankle oedema only i.e. no clinical signs of heart failure
  - no evidence of efficacy
    - compression hosiery usually more appropriate
- as first-line monotherapy for hypertension
  - safer, more effective alternatives available

Thiazide diuretic (e.g bendroflumethiazide)
- with a history of gout
  - risk of exacerbating gout

Beta-blocker
- in combination with verapamil
  - risk of symptomatic heart block

Non-cardioselective beta-blocker (e.g. propranolol, sotalol)
- in patients with COPD
  - risk of bronchospasm

Calcium channel blockers
- with chronic constipation
  - may exacerbate constipation
- Use of diltiazem or verapamil with NYHA Class III or IV heart failure
  - may worsen heart failure
- if ankle oedema present
  - may be result of calcium channel blocker (see UKMI Q&A 330.2 "How should ankle oedema caused by calcium channel blockers be treated"

Vasodilator drugs (e.g. hydralazine, minoxidil)
- with persistent postural hypotension i.e. recurrent > 20 mmHg drop in systolic blood pressure
  - risk of syncope and falls
    - stop if patient has fallen in past 3 months

Aspirin
- at dose >150 mg/day; restart at 75mg if still indicated
  - increased bleeding risk, no evidence for increased efficacy
- with concurrent bleeding disorder
  - high risk of bleeding
- if prescribed as monotherapy solely for stroke prevention in atrial fibrillation (AF); review and as per NICE Clinical Guideline CG180 June 2014
Warfarin
- after 6 months of treatment for first, uncomplicated deep venous thrombosis
  - no proven added benefit beyond 6 months
- after 12 months of treatment for first uncomplicated pulmonary embolus
  - no proven benefit beyond 12 months
- with concurrent bleeding disorder
  - high risk of bleeding
- hepatic impairment with impaired clotting ability and raised INR
  - increased risk of bleeding as a result of impaired ability to produce clotting factors

Clopidogrel
- with concurrent bleeding disorder
  - high risk of bleeding

Dipyridamole
- as monotherapy for cardiovascular secondary prevention, unless intolerant to aspirin and clopidogrel (secondary prevention TIA)
  - no evidence for efficacy
- with concurrent bleeding disorder
  - high risk of bleeding
- immediate release tablets
  - no evidence for efficacy and non-formulary

Statins
- In patients displaying symptoms of muscle weakness and pain
  - Risk of myopathy and rhabdomyolysis
  - Check creatinine kinase if patient presents with muscular symptoms

Ticagrelor (Brilique®)
- in combination with low-dose aspirin in acute coronary syndrome, after 12 months (aspirin to continue)

Omega-3 fatty acids
- Prescribed for secondary prevention of myocardial infarction

START

Warfarin or a NOAC
- in the presence of chronic atrial fibrillation
- following diagnosis of deep vein thrombosis or pulmonary embolism if benefit outweighs risk of treatment

Aspirin
- in the presence of chronic atrial fibrillation, where warfarin is contraindicated, but not aspirin (not as monotherapy)

Aspirin or clopidogrel
- with a documented history of atherosclerotic coronary, cerebral or peripheral vascular disease in patients with sinus rhythm
- following an acute myocardial infarction
Antihypertensive
- therapy where systolic blood pressure consistently >160 mmHg

Statin
- therapy with a documented history of coronary, cerebral or peripheral vascular disease

*Note:* Maximum dose of simvastatin is 20mg at night when given with concomitant amlodipine, verapamil, diltiazem, amiodarone

Angiotensin Converting Enzyme (ACE) inhibitor
- with chronic heart failure
- following acute myocardial infarction

Beta-blocker
- with chronic stable angina
- following an episode of ACS if no contra-indications

Proton pump inhibitor
- with aspirin and warfarin in combination

National and local guidance

Joint Wirral Lipid Lowering Guidelines (Under review)
http://mm.wirral.nhs.uk/document_uploads/guidelines/Lipidloweringguidelines.pdf

NICE CG CG181 Lipid Modification
http://www.nice.org.uk/guidance/cg181/

NICE CG127 Hypertension

NICE CG180 Atrial Fibrillation
https://www.nice.org.uk/guidance/CG180

NICE Omega-3 fatty acid supplements
Refer to individual NOAC checklists at;
http://mm.wirral.nhs.uk/guidelines/
Respiratory System BNF Section 3

STOPP

Theophylline
- as monotherapy for COPD
  - safer, more effective alternative; risk of adverse effects due to narrow therapeutic index
- oral theophylline if patient on aminophylline infusion
  - risk of toxicity if oral continued during i/v therapy; risk of adverse effects due to narrow therapeutic index

Systemic corticosteroids
- instead of inhaled corticosteroids for maintenance therapy in moderate-severe COPD
  - unnecessary exposure to long-term side-effects of systemic steroids

Nebulised ipratropium
- Prescribing as required (prn) in addition to regular
  - Can lead to exceeding licensed dosage and therefore exacerbate side effects
- with glaucoma
  - may exacerbate glaucoma
    - Adapted masks can be used to reduce direct optical exposure to ipratropium

First generation antihistamines
- Stop if patient has fallen in past 3 months
  - sedative

Carbocisteine
- if no benefit after 4 weeks
  - unnecessary if no benefit shown

Antibiotics Review
- i/v antibiotics after 48 hours and switch to oral if possible
  - Cultures and sensitivities may be available by this point; if i/v antibiotics continue beyond 48 hours review daily
START

Beta-2 agonist or anticholinergic (antimuscarinic)
- agent for mild to moderate COPD
  - Review patients with mild or moderate COPD at least once a year, and severe or very severe COPD (FEV1 <50% predicted) at least twice a year. Follow NICE guidance regarding treatment selection

Calcium supplement and bisphosphonate
- in patients at high risk of osteoporosis due to long term treatment with steroids

Spacer for MDI devices
- for patients struggling with inhaler technique and/or with dexterity problems
- to reduce incidence of oral thrush resulting from inhaled corticosteroids

National and local guidance

Joint Wirral Medicines Formulary - Respiratory Guidelines

Joint Wirral Asthma Guidelines (under review)
http://mm.wirral.nhs.uk/document_uploads/guidelines/Asthmaguidelineswseretidepreps.pdf

NICE CG 101 COPD
http://www.nice.org.uk/guidance/CG101/

BTS/SIGN Guideline on the Management of Asthma (under review)
Tricyclic antidepressants (TCAs)

NB. Discontinuation and withdrawal syndrome has been associated with the abrupt discontinuation of all doses of antidepressants and with drugs that have a shorter half-life. In most cases these drugs should be withdrawn gradually, over about four weeks. This may be longer for people who have been on longer term maintenance treatment or if withdrawal symptoms emerge e.g. dizziness, anxiety and agitation, abdominal spasms, low mood swings.

- with dementia
  - risk of worsening cognitive impairment
- with glaucoma
  - likely to exacerbate glaucoma
- with cardiac conductive abnormalities
  - pro-arrhythmic effects
- with constipation
  - likely to worsen constipation
- with an opiate or calcium channel blocker
  - risk of severe constipation
- with prostatism or prior history of urinary retention
  - risk of urinary retention

Benzodiazepines

NB. In cases where a patient has been on benzodiazepine for a prolonged period they should be withdrawn very slowly**

- if long-term (i.e. > 1 month) and long-acting (e.g. chlordiazepoxide, oxazepam, nitrazepam) and benzodiazepines with long-acting metabolites (e.g. diazepam)
  - risk of prolonged sedation, confusion, impaired balance, falls
- if fallen in past 3 months

Antipsychotics (Neuroleptics)

NB. As with initiation of medication, reduction should be carried out slowly with monitoring effect.

- long-term (i.e. > 1 month) as hypnotics
  - risk of confusion, hypotension, extra-pyramidal side effects, falls
- long-term (> 1 month) in those with parkinsonism
  - likely to worsen extra-pyramidal symptoms
- if fallen in past 3 months
  - may cause gait dyspraxia, parkinsonism
- used for treatment of behavioural and psychological symptoms of dementia patients (review ongoing need)
  - risk of gait disturbances, dehydration, prolonged sedation, cognitive decline, falls, stroke and death

Phenothiazines (e.g. prochlorperazine, chlorpromazine)

- in patients with epilepsy
  - may lower seizure threshold
Anticholinergics
- to treat extra-pyramidal side-effects of neuroleptic medications
  - risk of anticholinergic toxicity, including confusion and urinary retention

Selective serotonin re-uptake inhibitors (SSRI's)
- with a history of clinically significant hyponatraemia (<130 mmol/L within the previous 2 months)
  - SSRIs can cause/worsen hyponatraemia

First generation antihistamines (e.g. diphenhydramine, chlorphenamine, cyclizine, promethazine)
- if prolonged use (> 1 week)
  - risk of sedation and anti-cholinergic side effects
- cyclizine cautioned in heart failure

Opioids
- use of long-term strong opiates as first line therapy for mild-moderate pain
  - WHO analgesic ladder not observed
- regular opiates for more than 2 weeks in those with chronic constipation without concurrent use of laxatives
  - risk of severe constipation
- long-term in those with dementia unless for palliative care or management of chronic pain syndrome
  - exacerbation of cognitive impairment
- long-term in those with recurrent falls unless for palliative care or management of chronic pain syndrome
  - risk of drowsiness, postural hypotension, vertigo

Domperidone
- prescribed for an indication other than nausea and vomiting, for patients with an underlying cardiac condition, with impaired cardiac conduction, co-prescribed other medications known to prolong QT interval or potent CYP3A4 inhibitors or with severe hepatic impairment
  - contraindicated see MHRA Drug Safety Update May 2014 Domperidone

Metoclopramide
- if prolonged use
  - indications restricted see MHRA Drug Safety Update August 2013 Metoclopramide
START

Levodopa
- in idiopathic Parkinson’s disease with definite functional impairment and resultant disability
  - *specialist initiation only, refer where necessary*

Antidepressant
- medication in the presence of moderate-severe depressive symptoms lasting at least three months

Laxatives
- in patients taking opioids
  - Prevent constipation

National and local guidance

NICE CG90 Depression in Adults
http://www.nice.org.uk/guidance/cg90
The first step in mild depression is not routinely to prescribe e.g. offer CBT

Cheshire & Wirral Partnership NHS Foundation Trust Antidepressant Guidelines

WHO analgesic ladder
**Mild Opioid:** codeine, dihydrocodeine, tramadol, buprenorphine
**Strong Opioid:** morphine, diamorphine, oxycodone, fentanyl, pethidine

UKMI
What are the equivalent doses of oral benzodiazepines? Q&A 293.4 June 2014
http://www.evidence.nhs.uk/search?q=%22What+are+the+equivalent+doses+of+oral+benzodiazepines%22

Patient.co.uk
**Patient Information** and **Professional Resources** on benzodiazepine dependence

End of life care
The Wirral Pain guidelines are under review
Endocrine System BNF Section 6

**STOPP**

**Glibenclamide**
- with Type 2 diabetes mellitus
  - risk of prolonged hypoglycaemia

**Beta-blockers**
- in those with diabetes mellitus and frequent hypoglycaemic episodes i.e. > 1 episode per month
  - risk of masking hypoglycaemic symptoms

**Oestrogens**
- with a history of breast cancer or venous thromboembolism
  - increased risk of recurrence
- without progestogen in patients with intact uterus
  - risk of endometrial cancer

**Pioglitazone**
- in patients with heart failure or at risk of heart failure
  - increased incidence of heart failure with pioglitazone

**START**

**Metformin**
- with type 2 diabetes +/- metabolic syndrome

**ACE inhibitor or Angiotensin Receptor Blocker (ARBs)**
- in diabetes with nephropathy i.e. overt urinalysis proteinuria or microalbuminuria (>30mg/24 hours) +/- serum biochemical renal impairment - eGFR <50mL/minute

**Antiplatelet therapy**
- in diabetes mellitus if one or more co-existing major cardiovascular risk factors present (hypertension, hypercholesterolaemia, smoking history)

**Statin therapy**
- in diabetes mellitus if one or more co-existing major cardiovascular risk factor present

**National and local guidance**

**NICE CG87 Type 2 Diabetes**
[http://www.nice.org.uk/guidance/CG87](http://www.nice.org.uk/guidance/CG87)
- Covers: offering lifestyle advice as well as medication to achieve individually set HbA1c levels (and not to pursue highly intensive management to levels of less than 6.5%)
- self-monitoring of blood glucose only when it can be used as part of the overall management and which medication to use

**Joint Wirral Clinical Guideline – Type 2 Diabetes**
Urogenital System BNF Section 7

**STOPP**

**Bladder antimuscarinic drugs**
- with dementia
  - risk of increased confusion, agitation
- with chronic glaucoma
  - risk of acute exacerbation of glaucoma
- with chronic constipation
  - risk of exacerbation of constipation
- with chronic prostatism
  - risk of urinary retention

**Alpha-blockers**
- in males with frequent incontinence i.e. one or more episodes of incontinence daily
  - risk of urinary frequency and worsening of incontinence
- with long-term urinary catheter in situ i.e. more than 2 months
  - drug not indicated

**National and local guidance**

NICE CG171 Urinary Incontinence in Women
http://www.nice.org.uk/Guidance/CG171

Joint Wirral Medicines Formulary – Urinary Tract Disorders
**STOPP**

**Non-steroidal anti-inflammatory drug (NSAID)**
- with history of peptic ulcer disease or gastrointestinal bleeding, unless with concurrent H2 receptor antagonist, PPI
  - risk of peptic ulcer relapse
- with moderate-severe hypertension (moderate: 160/100mmHg – 179/109mmHg; severe: \( \geq 180/110\text{mmHg} \))
  - risk of exacerbation of hypertension
- with heart failure
  - risk of exacerbation of heart failure
- with warfarin
  - risk of gastrointestinal bleeding
- with chronic renal failure - eGFR 20-50mL/minute
  - risk of deterioration in renal function
- long-term use of NSAID (>3 months) for relief of mild joint pain in osteoarthritis
  - simple analgesics preferable and usually as effective for pain relief
- Long-term NSAID or colchicine for chronic treatment of gout where there is no contraindication to allopurinol
  - allopurinol first choice prophylactic drug in gout
- Long-term corticosteroids (>3 months) as monotherapy for rheumatoid arthritis or osteoarthritis
  - risk of major systemic corticosteroid side-effects
- Cyclo-oxygenase-2 selective inhibitors, diclofenac and ibuprofen (at total daily dose above 1200mg per day) in cardiovascular disease
  - Increased risk of thrombotic events

**START**

**Disease-modifying anti-rheumatic drug (DMARD)**
- with active moderate-severe rheumatoid disease lasting > 12 weeks

**Bisphosphonates**
- in patients taking maintenance oral corticosteroid therapy with previous fragility fractures or incident fractures during glucocorticoid. Ensure there are no absorption interactions e.g. Calcium. Counsel patient on the correct way to take a bisphosphonate

**Calcium and Vitamin D**
- supplement in patients with known osteoporosis (radiological evidence or previous fragility fracture or acquired dorsal kyphosis). Consider making dose times at lunch & teatime to avoid absorption interactions e.g. with levothyroxine, bisphosphonate
  - 400 units for prevention of deficiency and 800 units for treatment
National and local guidance

Joint Wirral NSAID Guidelines

NICE CG177 - Osteoarthritis
http://www.nice.org.uk/guidance/CG177

Joint Wirral Guidelines for the Management of Osteoporosis

NICE CG79 – Rheumatoid arthritis

Joint Wirral Guideline Vitamin D – for adults (under review)
http://mm.wirral.nhs.uk/document_uploads/guidelines/VitaminDadultscgv1b.pdf
References:


Acknowledgements to NHS Cumbria STOPP/START Toolkit Feb 2013 which is available at: http://www.cumbria.nhs.uk/ProfessionalZone/MedicinesManagement/Guidelines/StopstartToolkit2011.pdf - adapted with permission