

BNSSG Medication Review Tool for Polypharmacy in the Elderly

Age alone is not an indication to consider deprescribing. The two main considerations (apart from patient choice) are:

- Prognosis
- Frailty

Prognosis

Prognostic indicators can be estimated using the [Gold Standards Framework Prognostic Indicator Guidance](#).

Frailty

There are a number of tools to identify frailty, including the [Rockwood Frailty Scale](#). EMIS also has the [Electronic Frailty Index](#) embedded within it, which is a population risk stratification tool, rather than a clinical diagnostic tool, so clinical judgment is still important. Gloucestershire CCG has produced some useful [Prescribing Guidance for Moderate to Severely Frail patients](#)

Quality Outcomes Framework 2019/20 GP contract

The 2019/20 GP contract had some significant QOF changes with regards to age and frailty.

In summary, primary prevention blood pressure targets have been reduced to 140/90 for those under the age of 80 years but remain the same (150/90) for those over the age of 80. Diabetes targets are now higher (HbA1c 75 mmol/mol) for those patients with moderate or severe frailty.

The full 2019/20 GP contract, including the QOF changes can be found [here](#).

Individualised Care

It is important to adopt an individualised approach to medication reviews and deprescribing, considering a person's preferences, values and approach to risk. This is summarised in an NHS England document on [shared decision making](#).

Approach to Medication Reviews

There are a number of systematic approaches for assessing a patient's medication list.

The [7-steps medication review](#) developed in Scotland considers: 1. What matters to the patient 2. Essential drug therapy 3. Unnecessary drug therapy 4. Effectiveness of a drug 5. Safety of a drug 6. Cost-effectiveness of a drug 7. Assessment of adherence

The [NO TEARS tool](#) developed in Wales uses the acronym "No Tears" to denote: **N**eed and indication, **O**pen questions, **T**ests and monitoring, **E**vidence and guidelines, **A**dverse events, **R**isk reduction or prevention, **S**implification and switches.



The table below is a guide to which specific drugs to review during a medication review:

MEDICATIONS	REVIEW ESPECIALLY IF:	WHY REVIEW?
ALPHA BLOCKERS	➤ Hypertension	High risk postural hypotension/falls
AMIODARONE	➤ Persistent AF ➤ Rate control	Stop – not indicated Stop – use alternative
ANTI-EMETICS (Prochlorperazine or Metoclopramide)	➤ Parkinsonism	Worsening symptoms
ANTI-HISTAMINES (esp 1 st generation)	➤ Used as hypnotic ➤ Confusion/constipation	Development tolerance Anti-cholinergic burden
ANTI-MUSCARINICS (bladder) (catheter = no benefit)	➤ Dementia ➤ Glaucoma ➤ Constipation ➤ Prostatism	Worsening of conditions Anti-cholinergic burden
ANTI-PSYCHOTICS (Tapered dose reduction: 25 - 50% dose reduction every 1-2 weeks) Anti-psychotic deprescribing algorithm	➤ Hypnotic > 1 month ➤ Parkinsonism ➤ Falls	Falls, confusion, extra-pyramidal side effects, sedation
ANTI-PLATELETS Cardiovascular guidelines	➤ Primary Prevention ➤ Dual anti-platelets	Stop - not indicated Review indication
ANTI-SPASMODICS BOWEL (not mebeverine)	➤ Chronic constipation ➤ Dementia	Worsening symptoms Anti-cholinergic burden Confusion
BENZODIAZEPINES/Z DRUGS Benzodiazepine deprescribing algorithm	➤ Over 65s for insomnia ➤ Fallen in last 3 months	Confusion, sedation Falls
BETA BLOCKERS	➤ Diabetes ➤ Asthma ➤ With verapamil	Increased hypos Bronchospasm Heart block risk

<p>BISPHOSPHONATES</p> <p>BNSSG Algorithm to assess bisphosphonate drug holiday Alendronic acid shared decision aid Mayo Osteoporosis Decision Aid</p>	<ul style="list-style-type: none"> ➤ Use > 5 years ➤ Prognosis < 1-2 years 	<p>Consider drug holiday</p> <p>Stop – no benefit</p>
<p>CALCIUM CHANNEL BLOCKER</p>	<ul style="list-style-type: none"> ➤ Ankle swelling ➤ HF 	<p>Side effect Diltiazem - >HF worse</p>
<p>CARBOCISTEINE</p>	<ul style="list-style-type: none"> ➤ No benefit after 4 weeks 	<p>Not beneficial</p>
<p>“DAMN” drugs Diuretics/ACEI/Metformin/NSAIDS</p> <p>Patient leaflet sick day rules</p>	<ul style="list-style-type: none"> ➤ Dehydration states such as D&V ➤ CKD 	<p>Trigger AKI</p>
<p>DEMENTIA DRUGS</p> <p>Dementia deprescribing algorithm</p>	<ul style="list-style-type: none"> ➤ End stage dementia with deterioration functioning and cognition 	<p>Reduce risks harm</p>
<p>DIABETIC DRUGS</p> <p>Diabetes deprescribing algorithm</p>	<ul style="list-style-type: none"> ➤ Age > 65 years and hypoglycaemia risk ➤ Uncertain benefit 	<p>Reduce hypoglycaemic episodes</p>
<p>DIGOXIN</p>	<ul style="list-style-type: none"> ➤ Dose > 125micrograms daily and eGFR < 50 ➤ Hypokalaemia ➤ Pulse < 60 bpm 	<p>Toxicity</p>
<p>DIURETICS</p>	<ul style="list-style-type: none"> ➤ Gout (thiazides) ➤ Ankle oedema and no diagnosis heart failure 	<p>Exacerbate gout</p> <p>No benefit</p>
<p>METFORMIN</p> <p>Metformin shared decision aid</p>	<ul style="list-style-type: none"> ➤ GFR < 45: review dose ➤ Avoid GFR < 30 	<p>Lactic acidosis</p>
<p>NSAIDs</p>	<ul style="list-style-type: none"> ➤ Hx Peptic Ulcer Disease/GI bleed ➤ HF ➤ GFR< 60 ➤ With anti-platelet/OAC/steroids 	<p>Exacerbation of all events</p> <p>Risk AKI</p>



<p>OPIOIDS</p> <p>Opioids Aware resource BNSSG Chronic Pain Guidelines</p>	<ul style="list-style-type: none"> ➤ Chronic non-cancer pain ➤ Morphine > 120mg day 	<p>Consider alternatives</p> <p>Taper down</p>
<p>PARACETAMOL</p> <p>Oral paracetamol dosing in adult patients</p>	<ul style="list-style-type: none"> ➤ Weight < 50kg + other risk factors 	<p>Increased toxicity - > reduce dose</p>
<p>PIOGLITAZONES</p>	<ul style="list-style-type: none"> ➤ HF ➤ Elderly 	<p>Increased risk fracture/HF/bladder Ca</p>
<p>PPIs (will need additional medication while stopping)</p> <p>BNSSG PPI deprescribing algorithm PPI deprescribing algorithm</p>	<ul style="list-style-type: none"> ➤ High dose > 8 weeks ➤ Maintenance > 1 year 	<p>Risk bone fractures, low magnesium, C diff</p>
<p>QUININE</p> <p>MHRA quinine</p>	<ul style="list-style-type: none"> ➤ Leg cramps 	<p>Little evidence</p>
<p>SSRIs</p> <p>Drug safety update citalopram</p>	<ul style="list-style-type: none"> ➤ Citalopram > 20mg in over 65 years 	<p>Maximum dose</p>
<p>STATINS (Primary Prevention)</p> <p>NNT in primary prevention</p> <p>Mayo Statin Decision Aid primary prevention</p> <p>Absolute CVD risk benefit tool</p>	<ul style="list-style-type: none"> ➤ Stop if prognosis < 2 years ➤ Muscle weakness/pain 	<p>Risks outweigh benefits</p> <p>Check CPK</p>
<p>THEOPHYLLINES</p>	<ul style="list-style-type: none"> ➤ Frailty and prognosis < 1 year 	<p>Increased risk toxicity</p>
<p>TRICYCLIC ANTIDEPRESSANTS</p>	<ul style="list-style-type: none"> ➤ Dementia ➤ Glaucoma ➤ Constipation ➤ Lower urinary tract symptoms 	<p>Worsens all conditions</p>
<p>VITAMINS/IRON</p>	<ul style="list-style-type: none"> ➤ Duration > 6 months 	<p>Review indication for all but especially if constipated</p>



Anticholinergic Burden (ACB)

Anticholinergic drugs block acetylcholine and side effects include cognitive impairment, dizziness, sedation, blurred vision, palpitations, confusion, dry mouth, urinary retention and falls. There is an association with an ACB > 3 and increased mortality. ([PrescQIPP Anticholinergic Drugs](#))

An [ACB Calculator](#) can be used to determine the anticholinergic burden of a drug, which the table below summarises.

1 point	2 points	3 points
Codeine Haloperidol Mirtazapine Quetiapine Ranitidine	Baclofen Carbamazepine Cetirizine Cimetidine Hyoscine Loperamide Loratadine Nortriptyline Prochlorperazine Sertraline Solifenacin	Amitriptyline Chlorpheniramine Chlorpromazine Cyclizine Diphenhydramine Dosulepin Doxepin Hydroxyzine Imipramine Olanzapine Oxybutynin Paroxetine Promethazine Propantheline Tolterodine Trifluoperazine Trihexyphenidyl Trosipium

References

[Scottish Polypharmacy Guidance](#)

[Scotland Polypharmacy Guidance: Realistic Prescribing](#)

[Wales Polypharmacy Guidance](#)

[Wales Prescribing in Frail adults](#)

[RPS Guidance Polypharmacy](#)

[Polypharmacy and Medicines Optimisation: Kings Fund](#)

[NICE Guidance Multimorbidity](#)

[NICE database of treatment effects](#)

[Canadian Deprescribing Guidelines](#)

[Medstopper tool](#)

[STOPP/START tool](#)

[BNSSG STOPP/START tool](#)

[Prescribing Guidance for Moderate to Severely Frail patients: Gloucestershire CCG](#)

[Primary Health Tasmania Deprescribing Resources](#)

[Northern Ireland Medicines Management Deprescribing Supplement](#)

[PrescQIPP Anticholinergic Drugs](#)

[NNT website](#)

[European Journal of Hospital Pharmacy: Deprescribing themed issue](#)

[2015 AGS BEERS criteria: pocket guide](#)

[7-steps medication review](#)

[NO TEARS tool for Medication Reviews](#)

[ACB Calculator](#)

[Patient centred approach to Polypharmacy \(Specialist Pharmacy Service\)](#)