Prescribing and Polypharmacy Guidelines

NHS Lanarkshire Care Homes Protocol Group

Date of Publication	November 2020
Review Date	November 2023
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Contents

1. Introduction

This guideline is intended to help practices in NHS Lanarkshire with prescribing governance for their care home patients.

The guidelines cover prescribing house-keeping, consent to treatment, prescribing in intercurrent illness, the medication review process, polypharmacy and prescribing for the latter stages of life. Reference is also made to the importance on non-drug treatments.

Patients at the highest risk of inappropriate polypharmacy are those with the greatest frailty, on the most medicines and taking high risk medicines.[1] With respect to polypharmacy, the risk of harmful effects and hospitalisations increases when patients are taking many prescription medicines. This guideline is intended to help practices come to rational judgements when making difficult choices in initiating or continuing treatments whilst avoiding over-medication with treatment of limited prognostic or symptomatic value and whilst also considering the risk of side-effects to which the frail elderly are susceptible.

As patient specific goals rather than disease specific goals are important, it is not intended that the guidelines be overly prescriptive as each case has to be dealt with individually and will require clinical judgement on the part of the prescriber. Indeed, although the national polypharmacy guidance is based on a wealth of evidence, this seldom includes patients over the age of 80 and, therefore, decisions are more likely to be based on what is important to the patient.

2. Prescribing House-keeping

a) Directions

It is important that vague directions such as “as directed” be avoided when issuing prescriptions and this is particularly common in treatments use topically. Where possible, directions should be specific, e.g. “apply twice daily to affected area”, and with duration of treatment highlighted, where appropriate.

Where a specific medication administration chart exists, e.g. insulin administration chart or warfarin administration chart, directions on the prescription may refer to the relevant administration chart, e.g. “to be given as documented in warfarin administration chart”.

b) Monitoring

Monitoring can be enhanced by using structured techniques such as pain charts, ABC charts, stool charts and BP charts so that the prescriber has a clearer impression of the response to any changes of medication (rather than general impression from staff who may just have returned from leave or from bank staff).
Appropriate structured monitoring can be agreed between the prescriber and care home when the change of medication is prescribed. [2]

3. Consent to Treatment and Capacity to Consent[3, 4, 5]

In coming to decisions regarding treatment, it is important that the prescriber involves the patient or, if appropriate, relevant others in discussing the treatment.

Should a patient have capacity under the terms of the Adults with Incapacity (Scotland) Act, the patient is able to give or with-hold consent his or herself.

Should a patient lack capacity, an AWI Section 47 certificate should be issued by the GP in relation to the treatment under consideration, if such a certificate is not already in place.

If the patient who lacks capacity has a welfare attorney or welfare guardian, the attorney or guardian can, in the majority of situations, give or with-hold consent on the patient's behalf. Therefore, the prescriber should discuss the treatment under consideration with the welfare attorney or welfare guardian.

If the patient who lacks capacity does not have a welfare attorney or welfare guardian, the GP responsible for the patient's treatment may make decisions about treatment although such decisions must be taken in the best interest of the patient. In coming to such decisions, the GP should take into account the patient's wishes, expressed whilst still capable, and the GP should also take into account the views of relevant others, such as a close relative or the main carer.

More detailed guidance is provided in the AWI legislation and also by the Mental Welfare Commission for Scotland.

4. Non-Drug Treatments

In considering treatment options for frail elderly care home patients, it is important to bear in mind that non-drug treatments often have an important role to play.
This is particularly relevant, not only in dementia, but also in delirium where non-drug treatments, e.g. good diet, fluid intake, mobility and sleep patterns as well as managing the patient in a quiet area with subdued lighting should often be used first line before drug treatment. Further information is available in the existing NHS Lanarkshire Guidelines for the Management of Delirium in Care Homes. [6]

5. Management Of Medication During Intercurrent Illness

At times of intercurrent illness, the frail elderly care home population may be more susceptible to adverse events from their medication and some medications may need to be adjusted or with-held. This is commonly referred to as sick day rules and, indeed, the Care Inspectorate and the national guidance promote the use of sick day rule cards. [7, 8]

a) General Sick Day Rules

The need to review some medications is particularly important when a patient's oral intake is poor or if they are losing excess fluid e.g. due to fever or gastrointestinal disturbance.

In these circumstances, it may be advisable to with-hold temporarily medication which may aggravate dehydration or which is more likely to cause toxicity if renal perfusion and function are impaired.

The drugs most commonly associated with adverse events in these circumstances are diuretics, ACE inhibitors, angiotensin 2 antagonists and non-steroidal anti-inflammatory drugs (NSAIDs).

Similarly, metformin for diabetes should be with-held when a patient is dehydrated due to the risk of lactic acidosis.

The SGLT2 inhibitors used in diabetes (e.g. canagliflozin) can increase the risk of diabetic ketoacidosis and should be with-held if a patient is dehydrated.

In addition to the risk of dehydration and acute kidney injury at the time of intercurrent illness, prescribers need to be aware that medication can contribute to delirium. Drugs most commonly associated with delirium include analgesics, psychotropic drugs and drugs with anti-cholinergic properties.

When medication has been temporarily with-held, a decision should be made regarding whether or when the medication should re-commence, e.g. 2-3 days after the illness has resolved.

b) Insulin Sick Day Rules.

NHS Lanarkshire sick day rules leaflets for type 1 and type 2 diabetes should be consulted for guidance and care home staff may seek medical advice or specialist diabetic nursing advice if required:

Sick Day Rules for type 1 diabetes
Sick day rules for people with type 2 diabetes on insulin

In care home residents on insulin, intercurrent illnesses can upset diabetic control and blood glucose levels may rise even when the patient is unable to eat or drink. In these circumstances, insulin should not be with-held. Blood glucose should be monitored 2 hourly and in type 1 diabetes, the urine should be tested for ketones. If ketones are present or if the patient is vomiting, medical advice should be sought.

If patients are unable to take solid food, they should be offered soft foods such as soup. If unable to take soft diet, sweet drinks can be offered, especially if there are concerns regarding hypoglycaemia.

If symptoms persist for more than 24 hours, medical advice should be sought.

6. Review of Medication

Criteria for how to prioritise patients for a polypharmacy medication review have been considered in previous years. The following revised case finding criteria are recommended as a way to prioritise patients for a polypharmacy medication review: [1]

A. Aged 50 years and older and resident in a care home, regardless of the number of medicines prescribed

B. Approaching the end of their lives: adults of any age, approaching the end of their life due to any cause, are likely to have different medication needs, and risk versus benefit discussions will often differ from healthy adults with longer expected life spans. Consider frailty score

C. Prescribed 10 or more medicines (this will identify those from deprived communities where the average age is lower when taking 10 or more medications)

D. On high-risk medication, regardless of the number of medicines taken

As can be seen, although the first criteria (A) would prioritise all care home residents for a polypharmacy medication review; many of the remaining criteria would also apply, highlighting the importance of medication review in this group of patients.

The third edition of the national polypharmacy guideline[1] updates the useful 7 step process for reviewing medication that was highlighted in the previous edition of this guideline. However, in the care home setting, much the evidence does not apply as the studies do not include patients over the age of 80 or care home residents. Hence, in the care home setting, the person-centred factors become more important. Therefore, the 7 step process has been amended to put person-centred factors first.

The 7-Steps below demonstrate that this patient review process is not a single one-off event, but is cyclical, requiring regular repeat and review. The important point is "*what matters to the patient"*, as they play a vital part in making informed decisions about their medicines, as long as they are provided with the right information, tools and resources.

Person-centred factors	1.	What matters to the person?	Review diagnoses and identify therapeutic objectives with respect to: • What matters to me (the person)? • Understanding of objectives of drug therapy • Management of existing health problems • Prevention of future health problems
Person-centred factors	2.	Is the person willing and able to take the drug therapy as intended?	Does the person understand the outcomes of the review? • Do they understand why they need to take their medication? • Consider Teach back

			Ensure drug therapy changes are tailored to the person's preferences • Is the medication in a form they can take? • Is the dosing schedule convenient? • Consider what assistance the person might have and when this is available • Are they able to take medicines as intended? Agree and Communicate Plan • Discuss objectives and priorities with the patient/welfare proxy/relevant others • Decide with the patient/welfare proxy/relevant others what medicines have an effect of sufficient magnitude to consider continuing or stopping • Inform relevant healthcare and social care carers change in treatments across the care interfaces Add the READ code **8B31B** to the patient record so that when they move across transitions of care it is clear their medication has been reviewed
Need	3.	Identify essential drug therapy	Identify essential drugs (not to be stopped without specialist advice) • Drugs that have essential replacement function (e.g. levothyroxine) • Drugs to prevent rapid symptomatic decline (e.g. for Parkinson's disease or heart failure)
	4.	Does the patient take unnecessary drug therapy?	Identify and review the continued need for drugs • With temporary indications • With higher than usual maintenance doses • With limited benefit in general for the indication for which they are being used • With limited benefit for the individual patient (e.g. with poor prognostic indicators)
Effectiveness	5.	Are therapeutic objectives being achieved?	Identify the need for adding/intensifying drug therapy in order to achieve therapeutic objectives • To achieve symptom control

			• To achieve biochemical/clinical targets • To prevent disease progression or exacerbation • Can be facilitated by structured monitoring by care home staff in keeping with National Care Standard 15.8 (see note below*)
Safety	6.	Does the patient have adverse drug reactions or is the patient at risk of ADRs? Do they know what to do if they are ill?	Identify patient safety risks by checking for • Drug-disease interactions • Drug-drug interactions • Robust monitoring processes for high risk drugs • Drug-drug & drug-disease interactions • Risk of accidental overdosing Identify adverse drug effects by checking for • Specific symptoms or laboratory markers (e.g. hypokalaemia) • Cumulative adverse drug effects • Drugs used to treat ADRs caused by other drugs • Can be facilitated by structured monitoring by care home staff in keeping with National Care Standard 15.8 (see note below*) (*Sick Day Rule* guidance can be used to help patients know what do with their medicines if they fall ill)
Cost-effectiveness	7.	Is drug therapy cost-effective?	Identify unnecessarily costly drug therapy Consider more cost-effective alternatives balanced against, effectiveness, safety and convenience

The national polypharmacy guidance contains a useful table (Table 2 b) which links drug groups to each of these 7 steps. [1]

7. Barriers to de-prescribing

There are many possible barriers to de-prescribing. These can be described as:

a) Clinician anxieties
   - How the patient/family will perceive this, for example – has their doctor given up on them? This can be eased by having clear discussions about continuing to provide care and focusing on achievable, patient-centred outcomes.
   - It may be easier to leave the patient on the current regimen

- GPs may struggle for adequate time to review longstanding medications or be reluctant to stop drugs started elsewhere by a colleague, especially a "specialist". This can be helped by explaining that often the clinical picture has altered significantly since the initial prescription. Regular review by a GP is **expected and welcomed** by the vast majority of specialists. Utilise the experience of practice-based pharmacists or nurses to review the patients medications.

b) Patient anxieties
   - Patients may over-estimate the value of medication e.g. this pill will stop me having a stroke. Prescribers may have been complicit in this in attempts to ensure treatment adherence. It may be helpful therefore to discuss where appropriate, that most trials have deliberately excluded patients with co-morbidities, the very elderly and complex and therefore can vastly overestimate the likely benefit in the frail.
   - Trust in the prescriber
   - Previous advice to take "for the rest of your life"

8. Polypharmacy – General

The frail elderly care home population is more likely to be taking multiple medications but is also more likely to suffer from adverse effects from these medications. This section of the guideline is intended to help practices come to decisions about which medications should be continued and which could be discontinued safely.

When prescribing for this population, prescribers should bear in mind factors such as low body mass and impaired renal function as these factors may influence choice of drug or choice of dose or strength.
For example, digoxin dose may need to be introduced in a low dose in renal impairment. Similarly, paracetamol will need to be prescribed in a reduced dose for patients of less than 50kg in weight.

a) High Risk Combinations

The following are highlighted as being particularly high risk combinations and should be avoided where possible and clearly justified when considered necessary. This list is NOT exhaustive, and the safety of other drugs has to be considered depending on individual circumstances. [9]

NSAID
+ Angiotensin Converting Enzyme Inhibitor [ACE] or Angiotensin 2 Receptor Blocker [ARB] + Diuretic ['Triple Whammy' combo]
+ eGFR <60
+ diagnosis heart failure
+ Warfarin
+ age >75 without PPI

Warfarin

+ another antiplatelet. It is noted that although specific indications for this exist. In a frail group of patients the risk is high and combination should be challenged unless specifically noted as having taken account of patient frailty/polypharmacy. (See Drugs with Shared Side-Effects below regarding relative risk of bleeding).
+ NSAID
+ Macrolide
+ Quinolone
+ Metronidazole
+ azole antifungal

Heart Failure diagnosis

+ Glitazone
+ NSAID
+ Tricyclic antidepressant

b) Drugs Which Are Poorly Tolerated In The Elderly

Similar to above, although sometimes necessary, the following groups are noted to be poorly tolerated and associated with adverse events [esp. falls]. It is particularly important to clarify if patients on the following have a valid and current Indication and are still felt to be effective**.** Attention is still needed when considering stopping these. (See section below – Drugs associated with rapid symptomatic decline if stopped) [9]

- Digoxin in higher doses 250microgram +
- Antipsychotics [although note caution re rapid symptomatic decline]
- Tricyclic Antidepressants
- Benzodiazepines particularly long term
- Hypnotics
- Anticholinergics
- Phenothiazines [e.g. prochlorperazine]
- Combinations painkillers [e.g. CoCodamol v Paracetamol]

c) Medication and falls risk in the Older Person

There are extensive resources and support tools in the Care Inspectorate Guidance[10] on managing falls and fractures in care homes which may be useful in practice.

The following medicines are those in the highest risk category most commonly implicated in falls. [1] This list is not intended to be fully comprehensive but is to raise awareness.

Antidepressants	Avoid TCAs with high anti-muscarinic activity, e.g. amitriptyline. SSRIs are associated with a reduced incidence of side effects. Trial of gradual antidepressant withdrawal should be attempted after 6 –12 months
Antipsychotics including atypicals	Risk of hypotension is dose related reduced by the 'start low go slow approach.' Atypical antipsychotics have similar falls risk to traditional ones. Attempted withdrawal **MUST** always be gradual. Prochlorperazine is often inappropriately prescribed for dizziness and causes drug induced Parkinson's disease

Anti-muscarinic drugs	Oxybutynin may cause acute confusional states in the elderly especially those with pre-existing cognitive impairment
Benzodiazepines & Hypnotics	Dose reduction is beneficial if withdrawal is not possible. Avoid long acting benzodiazepines. Newer hypnotics are associated with reduced hangover effects but all licensed for short-term use only
Dopaminergics in Parkinson's disease	Sudden excessive daytime sleepiness can occur with levodopa and other dopamine receptor agonists. Dose titration is important in initiation due risk of inducing confusion. Maintenance doses may need to be reduced with ageing

d) Drugs Commonly Associated With Admissions Due To Adverse Reactions

In 2004 UK study most common drug groups associated with admission due to ADR were: [9]

1. NSAIDs 29.6%
2. Diuretics 27.3%
3. Warfarin 10.5%
4. ACE 7.7%
5. Antidepressants 7.1%
6. Beta blockers 6.8%
7. Opiates 6%
8. Digoxin 2.9%
9. Prednisolone 2.5%
10. Clopidogrel 2.4%

e) Drugs With Shared Side-Effects

In addition to those drugs which can lead to hypotension, there are other groups of drugs which have shared side-effects which can lead to avoidable morbidity in the elderly, particularly if these drugs are used in combination. Prescribers should bear the risk of shared side-effects in mind.

i) Anti-Cholinergics

Anti-cholinergic side-effects are common to a number of different groups of drugs, e.g. tricyclic anti-depressants, anti-spasmodics and drugs for irritable bladder. Anti-cholinergic side-effects are a not uncommon cause of falls, impaired cognition, constipation and urinary retention in the care home population. There can be considerable variation between patients with anticholinergic dose and signs and symptoms of toxicity, so individual review is essential. The anticholinergic effects of multiple drugs are also cumulative which needs considered when medicines are reviewed. In the national polypharmacy guidelines, there is a useful table (Table 3B "Reducing Anticholinergic Burden") that is a guide to which areas the anticholinergic burden is likely to be the highest. [1]

ii) Sedatives

Similarly, sedative side-effects are common to a wide range of drugs, e.g. anti-depressants, hypnotics, anxiolytics, analgesics, anti-psychotics. When used in combination, these groups of drugs can lead to increased levels of sedation and falls can occur.

iii) Blood thinning medicines

When warfarin and anti-platelet drugs are used in combination, the risk of significant bleeding increases markedly. The figures below quantify the level of risk. [1]

Taking warfarin as baseline i.e. 1 risk of bleeding in a recent large study is as follows

Aspirin	0.93 [0.88 - 0.98]
Clopidogrel	1.06 [0.87 - 1.29]
Aspirin + Clopidogrel	1.66 [1.34 -2.04]
Warfarin + Aspirin	1.83 [1.72-1.96]
Warfarin + Clopidogrel	3.08 [2.32 - 3.91] 13.9% bleed /patient year
Warfarin + Aspirin + clopidogrel	3.7 [2.89 - 4.76] 15.7% bleed /patient year

Bleeding here = admission to hospital with bleeding related episode or death with bleed.
Average Age in trial 70
Main indication. 82 854 patients surviving hospitalisation with atrial fibrillation.
Stroke occurrence lowest in warfarin-only group

The national polypharmacy guidance contains a useful table showing cumulative adverse drug effects.

e) Blood Pressure Reduction

Lowering blood pressure is an effective way to reduce the risk of cardiovascular events across a range of ages including the elderly. The benefits are greatest with reduction from very high blood pressure, and less impact from reducing moderately raised blood pressure. There is increased risk of harm when reducing blood pressure to very low levels in the frail elderly. Study evidence reported an increase in mortality over 2 years in nursing home residents (mean age 87.6 years) when blood pressure ran < 130 on 2 or more blood pressure agents. The number needed to harm was 10 patients treated for one extra death over 2 years. [Mortality over two years 30% v 20% so this is perhaps a fairly fit care home group]. [11] It is important to note that antihypertensives may be prescribed for another condition, most notably left ventricular systolic dysfunction, which should influence deprescribing decisions. [1]

Orthostatic hypotension is an important common problem in the frail elderly and it is often medication-related. However, orthostatic hypotension is often unrecognized and seldom properly assessed.

f) Diabetic Treatment

In the frail elderly there is an increased risk of adverse outcomes if glycaemic control is either very poor or overly strict.

Tight glycaemic control takes a long time (10 years) to derive positive outcomes, and there can be increased risk of harm below an HbA1c of 65, especially in the frail elderly. Having recognised these facts, the overriding principle is to individualise targets for each patient.

In type 2 diabetes, there has recently been evidence of little benefit and possible harm in the moderately frail/very frail diabetic populations with tighter HbA1c. It is expected that these patients would make up a majority of care home residents. Whilst targets do need to be individualised for specific patients; as a general guide, a target of HbA1c of 53-58 is considered reasonable for non-frail patients but for the frailer population, targets of HbA1c of 59-69 should be aimed for.

g) Antipsychotic Medication in Dementia

The existing guidance for managing stress and distress in dementia is pertinent in the context of polypharmacy and is available shortly on the clinical guidelines website. https://www.nhslcg.scot.nhs.uk/

h) Laxatives

Medication reviews carried out by colleagues in the Care Inspectorate indicate that laxative polypharmacy is not an uncommon problem.

In keeping with Section 5 above , prescribers are reminded that the first step in managing constipation should be non-drug treatment with high fibre diet, good fluid intake and, where practical, physical activity.

Also, practices should review the use of any drugs which commonly cause constipation as a side-effect, such as codeine, opiates, tricyclics and anti-cholinergics.

Should the prescription of laxative medication prove necessary, prescribers are advised to follow NHS Lanarkshire Formulary guidance. The relevant section of the NHS Lanarkshire Formulary is linked below: [12]

NHS Lanarkshire Adult Formulary section 1.06 - Laxative section

9. Polypharmacy – Shortened Life Expectancy

This section deals with the latter stages of life for care home patients and it is aimed at the months or weeks leading up to death.

However, this section does not deal with the final days of life as these are covered by other guidance from colleagues in the Palliative Care MCN.

a) Prognostic Indicators

In some situations, e.g. health care insurance in the USA, being in a care home is in itself considered to be a poor prognostic factor and, indeed, in the Scottish context, the national care home census indicates a declining median completed length of stay in care

homes, the latest median completed length of stay being 1.5 years. Therefore, many care home residents will have poor prognoses.
However, each resident has to be considered on an individual basis.

Practices will already be familiar with identifying poor prognosis in cancer or organ failure. However, poor prognostic indicators can also be identified for frailty and dementia and these are of particular relevance in the care home setting.

As regards frailty, the poor prognostic indicators are: -

- Multiple co-morbidities with signs of impairments in day to day functioning
- Deterioration functional score e.g. EPOC/Karnofsky
- Combination of at least 3 of the following: - weakness, slow walking speed, low physical activity, weight loss, self reported exhaustion

With respect to dementia, the poor prognostic indicators are: -

- Inability to walk without assistance, and
- Urinary and faecal incontinence, and
- No consistently meaningful verbal communication, and
- Inability to dress without assistance
- Bartel < 3
- Reduce ability to perform activities of daily living
- Plus any one of the following: - 10% weight loss in previous 6 months with no other causes, pyelonephritis or UTI, serum albumin 25g/l, severe pressure sores e.g. stage III/IV, recurrent fevers, reduced oral intake, aspiration pneumonia

The Gold Standards Framework[13] provides prognostic indicators to identify those requiring supportive palliative care. They also provide specific information as to what indicates poor prognosis in a number of conditions including frailty. Embedded below is the Supportive and Palliative Care Indicators Tool (SPICT April 2019) which helps identify poor prognostic indicators.[14] SPICT_April-2019.pdf

b) Vital Hormone Replacement

Drugs such as levothyroxine, insulin and hydrocortisone for adrenal replacement should be continued in the latter stages of life until such time as the patient is immediately terminal, i.e. dying has been diagnosed.

c) Drugs Which Can Be Associated With Rapid Symptomatic Decline If Stopped

Drugs in this group may be in need of review but commonly will require specialist advice or cautious stepwise withdrawal. [9]

- ACE inhibitors in heart failure [left ventricular impairment]
- Diuretics in heart failure
- Steroids
- Drugs for heart rate or rhythm control [Beta Blockers; Digoxin]

Drugs for which specialist advice is strongly advised before altering include:

- Anticonvulsants for epilepsy
- Antidepressant, antipsychotic and mood stabilising drugs [e.g. Lithium]
- Drugs for the management of Parkinson's Disease
- Amiodarone
- Disease modifying Anti-rheumatic drugs.

d) Review of Cognitive Enhancer Medication

The existing Review of Dementia Medication guideline in the process of being updated and will be accessible at the NHS Lanarkshire Clinical Guidelines webpage.

e) Liquid Formulations

It is not uncommon in the care home setting to be asked to prescribe liquid formulations of medication if a patient is having difficulty taking tablets or capsules.
Should a practice be asked to consider liquid formulations, it is important to consider whether the patient is having difficulty with swallowing and, if necessary, a Speech and Language Therapy swallowing assessment could be sought.

If it is thought that the patient does indeed have impaired swallowing, this is a poor prognostic indicator. In such circumstances, it is important to review the patient's medication in line with sections 5 b to d above.

If liquid medication is considered to be necessary, the most cost-effective licensed preparation should be used. If there is no suitable licensed preparation, off-label use of an existing preparation should be considered.
If this too is not available, a special may be prescribed and these should be sourced from one of the NHS special pharmacies. In these circumstances, it is best to seek the advice of community pharmacy or the GP practice pharmacist. Further information on these options is detailed below: [15]
A stepped approach to choosing a suitable medicine is suggested:

1. If possible, use a licensed medicine in a suitable formulation to meet the patient's needs (e.g. a dispersible tablet or licensed liquid medicine). Consider switching to a different agent in the same class, or to a different route of administration to allow a licensed medicine to be used. Licensed medicines are manufactured to specific standards and have been assessed for efficacy, safety and quality.

2. Consider off-label use – (the medicine has a product licence in the UK, but that product licence does not cover the indication/dose/route for which the medicine is being prescribed). e.g. crushing/dispersing tablets or opening capsules. Not all medicines are suitable for use in this manner and it is important to check beforehand with a pharmacy professional or appropriate reference source. Take into account the patient/carer's ability to administer medicines in this way and consider any risks to the carer from exposure to medicines such as cytotoxics or hormones.

3. In situations where the patient's needs cannot be met by licensed medicines consider using a special-order product ('Special'). These products are unlicensed and are not required to meet the same standards as licensed preparations. Prescribers assume greater liability when using them and should document why they are required.

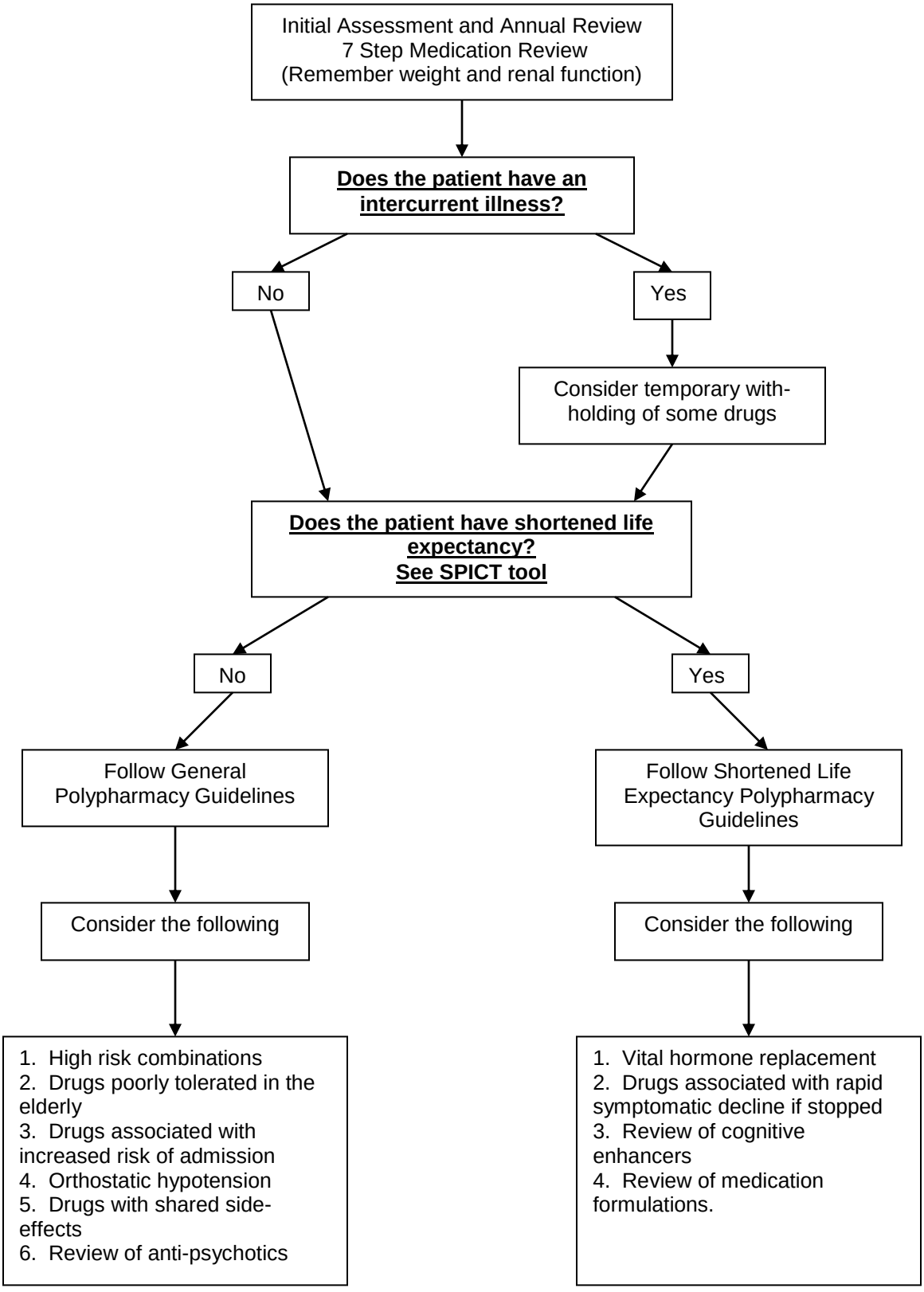
10. Acknowledgements

The protocol group acknowledges the work of the Scottish Government Polypharmacy Model of Care Group 2018 on whose latest edition of the national polypharmacy guidance this document is heavily reliant.

11. Appendices

1. NHS Lanarkshire Care Home LES Prescribing and Polypharmacy Algorithm

The algorithm below can be printed off and used as a summary of the guideline.



2. Link to Desktop version of National Polypharmacy Guidance

http://www.polypharmacy.scot.nhs.uk/

A polypharmacy app has also been produced by NHS Education for Scotland as a mobile resource to accompany the national guidance.

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