Directorate of Finance, eHealth & Pharmaceuticals
Pharmacy and Medicines Division

The Scottish Government

CEL 36 (2012)

1 November 2012

Dear Colleague

APPROPRIATE PRESCRIBING FOR PATIENTS AND POLYPHARMACY GUIDANCE FOR REVIEW OF QUALITY, SAFE AND EFFECTIVE USE OF LONG- TERM MEDICATION

Introduction

NHS Scotland has a very good track record in delivering high standards of care and the safe, effective and efficient use of medication is no exception. All clinicians are asked to consider the appropriateness of long term prescribing not only when reviewing existing treatments but also when starting new medicines (see Annex 1: Algorithm for improving drug therapy in patients). It is recogonised that there is a challenge of providing safe and effective healthcare with a population that is aging and suffers from multiple – morbidities.

Background

Medication is by far the most common form of medical intervention. Four out of five people aged over 75 years take a prescription medicine and 36 per cent are taking four or more[1]. However, it is suggested that up to 50 per cent of drugs are not taken as prescribed, many drugs in common use can cause problems and that adverse reactions to medicines are implicated in 5 - 17 per cent of hospital admissions[2].

Research has demonstrated that patients on multiple medications are more likely to suffer drug side effects and that this is more related to the number of co-morbidities a patient has than age[2]. There is a clear and steady increase in the number of patients admitted to hospital with drug side effects[3]. Patients admitted with one drug side effect are more than twice as likely to be admitted with another. There may be the situation where the potential harm of the drug outweighs any possible benefit. Drug side effects can also be more common as a result of altered pharmacodynamics and pharmacokinetics in the elderly, This can lead to a situation where adults can suffer from side effects that can lead to hospital admission.

For action
Chief Executives of NHS Boards, Chairs of NHS Boards, Medical Directors and Directors of Pharmacy of NHS Boards, Directors of Public Health NHS Boards, Chairs of NHS Board Area Drug & Therapeutics Committees.

For information
Finance Directors NHS Boards, Nurse Directors NHS Boards, Area Clinical Forum Chairs, Scottish Medicines Consortium Chair, Chief Executive of Healthcare Improvement Scotland.

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[1] Quality and Outwork framework 2012 http://www.nhsemployers.org/Aboutus/Publications/Documents/QOF_2012-13.pdf
[2] Co-morbidity and repeat admission to hospital for adverse drug reactions in older adults: retrospective cohort study M Zhang et al BMJ 2009;338:a275
[3] Adverse drug reactions as cause of admission to hospital: prospective analysis of 18 820 patients M Pirmohamed et al, BMJ 2004;329:15-19

We are pleased to present the Polypharmacy Guidance for 2012. This is the first iteration of a national approach to address the issues resulting from the use of multiple medicines in the frail and elderly population. The aim is to improve therapeutic care by reducing the risk of adverse drug reactions associated with polypharmacy.
The direct link to the document is:
http://www.qihub.scot.nhs.uk/media/458907/polypharmacy_guidance_for_clinicians_october2012.pdf

It is important to highlight that this report contains both **management information** for boards to use locally and **guidance information for clinicians** to undertake the review.

Management information included is the evidence based rationale behind this approach to addressing polypharmacy. In addition there is included a set of tools that can be used by NHS Boards to **form the guidance documents to allow clinicians to** implement change.
A quick reference guide for clinicians has also been produced and this can be accessed at:
http://www.qihub.scot.nhs.uk/programmes/prescribing.aspx -

Annex 2 illustrates the process to be undertaken when carrying out medication reviews

Actions

It is recommended that the Polypharmacy Guidance 2012 is considered by boards for Prescribing Action Plans and in addition:

(i) NHS boards Drug and Therapeutics Committee should ensure that boards have plans in place to review patients identified as high risk by multidisplinary teams

(ii) NHS boards collect the information required to allow for evaluation on the impact of reviews for patients as detailed in the guidance.

Yours sincerely

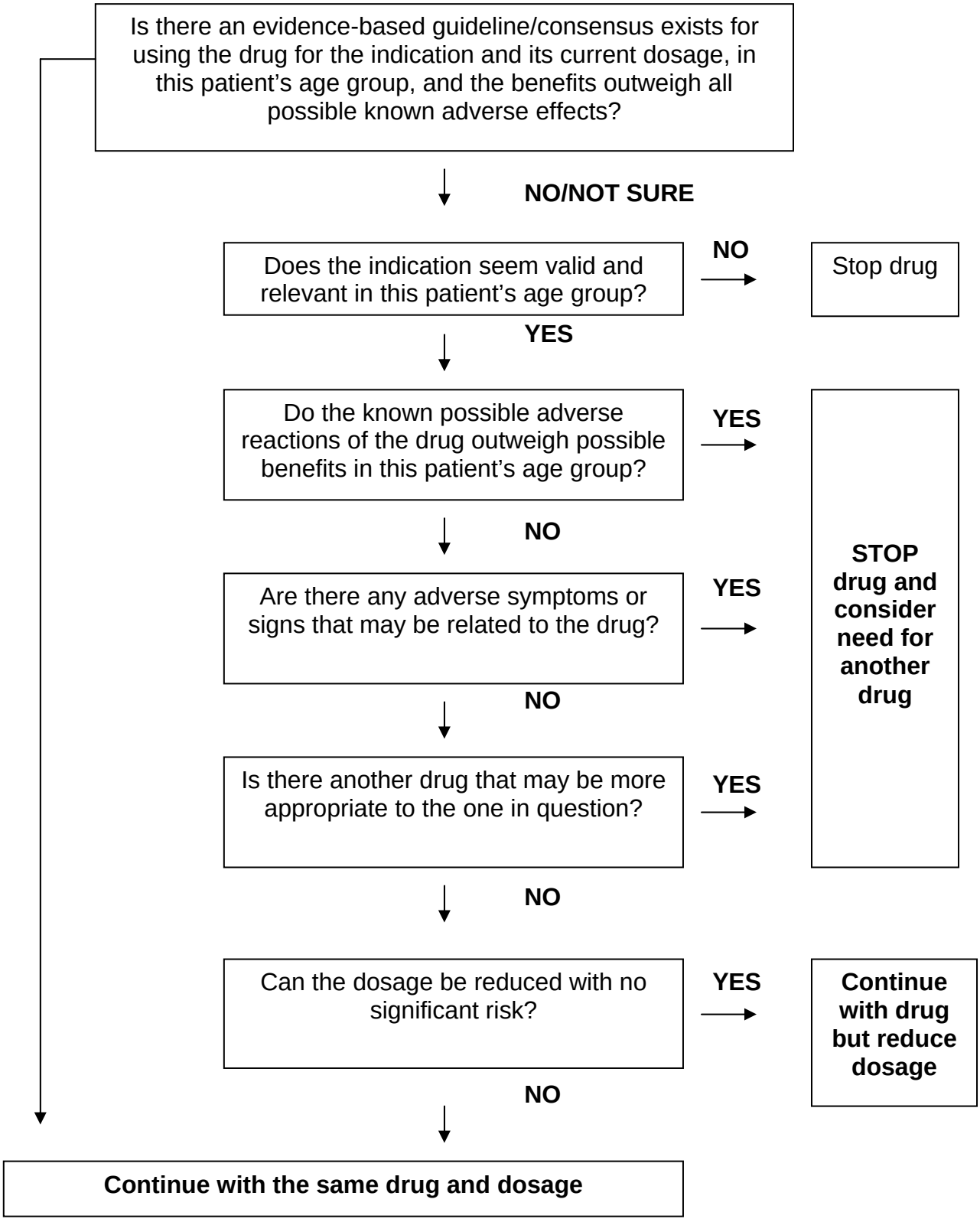
Harry Burns ***Bill Scott***

SIR HARRY BURNS
Chief Medical Officer

PROFESSOR BILL SCOTT
Chief Pharmaceutical Officer

Annex1

ALGORITHM FOR IMPROVING DRUG THERAPY IN PATIENTS



This algorithm is an adaptation of an algorithm detailed in *Resolving Polypharmacy in the Disabled Elderly*; IMAJ; Volume 9; June 2007 p 431

Annex 2: Drug review process

This review should be undertaken in the context of holistic care considering each medication and its impact on the individual clinical circumstances of each patient. As part of this it is important to consider the cumulative effects of medications.

Number	CRITERIA / CONSIDERATIONS	PROCESS/GUIDANCE		References / Further reading or Examples
1	**Is there a valid and current indication? Is the dose appropriate?**	Identify medicine and check that it does have a valid and current indication in this patient with reference to local formulary. Check the dose is appropriate (over/under dosing?)		**e.g.** PPIs- use minimum dose to control GI symptoms - risk of *c.difficile* and fracture **e.g** quinine use- see MHRA advice re safety **e.g**. long term antibiotics
2	**Is the medicine preventing rapid symptomatic deterioration?**	Is the medicine important/essential in preventing rapid symptomatic deterioration? If so, it should usually be continued or only be discontinued following specialist advice.		**e.g.** Medications for Heart failure, medications for Parkinson's Disease are of high day to day benefit and require specialist input if being altered. review of doses may be appropriate e.g. digoxin
3	**Is the medicine fulfilling an essential replacement function?**	If the medicine is serving a vital replacement function, it should continue.		**e.g.** thyroxine and other hormones
4	**Consider medication safety Is the medicine causing: -Any actual or potential ADRs? -Any actual or potentially serious drug interactions?**	**Contraindicated drug or high risk drugs group?**	Strongly consider stopping	See High Risk Drug section e.g is the patient on a high risk combination " triple Whammy" Ref. "STOPP" List BNF Sections to Target
		Poorly tolerated in frail patients? For guidance on frailty see Gold National Framework	Consider stopping	
		Particular side effects?	May need to consider stopping	
5	**Consider drug effectiveness in this group/person?**	For medicines not covered by steps 1 to 4 above, compare the medicine to the 'Drug Effectiveness Summary' which aims to estimate effectiveness.		Ref. Drug Effectiveness Summary Ref NNT/NNH Medication used for dementia patients- see Gold SF
6	**Are the form of medicine and the dosing schedule appropriate? Is there a more cost effective alternative with no detriment to patient care?**	Is the medicine in a form that the patient can take supplied in the most appropriate way and the least burdensome dosing strategy? Is the patient prepared to take the medication? UKMI Guidance on choosing medicines for patients unable to swallow solid oral dosage forms should be followed.		Consideration should be given to the stability of medications. Ensure changes are communicated to the patients' Pharmacist: *Would this patient benefit form Chronic medication Service*?
7	**Do you have the informed agreement of the patient/carer/welfare proxy?**	Once all the medicines have been through steps 1 to 6, decide **with the patient/carer/or welfare proxies** what medicines have an effect of sufficient magnitude to consider continuation/discontinuation.		