Prescribing Safety Indicators

Prescribing safety indicators describe scenarios where there is potentially inappropriate (and unsafe) prescribing. Based on a project commissioned by the RCGP a set of prescribing safety indicators has been developed for use in general practices based on the consensus of a varied sample of GPs in the UK. Practices can use these indicators to develop their own computer searches to identify patients at risk. The most up-to-date list of these indicators is shown below. Further details about how the indicators were developed can be found on the BJGP website: [http://bjgp.org/content/64/621/e181](http://bjgp.org/content/64/621/e181)

Indicators rated as appropriate for assessing the safety of prescribing of individual GPs and of general practices

A: Cardiovascular and respiratory disease

1) Aspirin or clopidogrel prescribed to people with previous peptic ulcer or GI bleed without gastro-protection
2) Prescription of aspirin at a dose >75mg daily for ≥ one month in a patient aged >65yrs
3) Prescription of digoxin at a dose > 125 micrograms daily in a patient with renal impairment (e.g. CKD 3 or worse)
4) Prescription of digoxin at a dose of greater than 125 micrograms daily for a patient with heart failure who is in sinus rhythm
5) Prescription of diltiazem or verapamil in a patient with heart failure
6) Prescription of a beta-blocker to a patient with asthma (excluding patients who also have a cardiac condition, where the benefits of beta-blockers may outweigh the risks)
7) Prescription of a long-acting beta-2 agonist inhaler to a patient with asthma who is not also prescribed an inhaled corticosteroid

B: Central nervous system (including analgesics)

1) Prescription of a benzodiazepine or Z drug for more ≥21 days, in a patient aged >65yrs, who is not receiving benzodiazepines or Z drugs on a long-term basis
2) Initiation of prescription of benzodiazepine or Z drugs for ≥21 days in a patient >65yrs with depression
3) Antipsychotics prescribed for >6weeks in the over 65’s with dementia but not psychosis
4) Amitriptyline at dose >75mg prescribed to a patient with heart failure, arrhythmia, heart block or postural hypotension
5) Prescription of aspirin to a child aged ≤16yrs
6) Bupropion prescribed to a patient with epilepsy

C: Anti-infective agents

1) Prescription of mefloquine to a patient with a history of convulsions
D: Endocrine and metabolic

1) Glitazone prescribed to patient with heart failure
2) Metformin prescribed to a patient with renal impairment where the eGFR is ≤30 ml/min.
3) Oral prednisolone prescribed at a dose ≥ 7.5mg daily for more than 3 months to the over 65’s without co-prescription of osteoporosis preventing treatments.
4) Modified release potassium supplements prescribed to a patient with a history of peptic ulcer disease.

E: Women’s health and urinary disorders

1) Prescription of a combined hormonal contraceptive to a woman with a history of venous or arterial thromboembolism
2) Prescription of oral or transdermal oestrogens to a woman with a history of breast cancer
3) Prescription of oral or transdermal oestrogen without a progestogen in a woman with an intact uterus
4) Prescription of a combined hormonal contraceptive to a woman aged 35 years or older who is a current smoker
5) Prescription of a combined hormonal contraceptive to a woman with a body mass index of ≥40

F: Immunosuppression

1) Methotrexate prescriptions should state ‘weekly’
2) Methotrexate 2.5/10mg co-prescription
3) Methotrexate prescribed without folic acid.

G: Musculoskeletal

1) Concurrent use of two NSAIDS for more than two weeks (not including low dose aspirin).
2) Prescription of an NSAID, without co-prescription of an ulcer healing drug, to a patient with a history of peptic ulceration
3) Prescription of an NSAID in a patient with heart failure
4) Prescription of an NSAID in a patient with chronic renal failure with an eGFR <45
5) Allopurinol prescribed at a dose of >200mg per day to patients with renal impairment (eGFR <30 or CKD4)

H: Hazardous co-prescriptions and allergy

1) Prescription of warfarin and aspirin in combination (without co-prescription of gastroprotection)
2) Concurrent use of warfarin and any antibiotic without monitoring the INR within 5 days*
3) Prescription of warfarin in combination with an oral NSAID
4) Prescription of a phosphodiesterase type-5 inhibitor, e.g. sildenafil, to a patient who is also receiving a nitrate or nicorandil**
5) Co-prescription of lithium with thiazide diuretic
6) Prescription of a potassium salt or potassium sparing diuretic (excluding aldosterone antagonists) to a patient who is also receiving an ACE inhibitor or angiotensin II receptor antagonist
7) Prescription of verapamil to a patient who is also receiving a beta-blocker drug
8) Co-prescription of itraconazole with simvastatin, or with atorvastatin at a dose ≥80mg**
9) Co-prescription of trimethoprim with methotrexate for >7 days
10) Prescription of clarithromycin or erythromycin to a patient who is also receiving simvastatin, with no evidence that the patient has been advised to stop the simvastatin whilst taking the antibiotic
11) Prescription of a penicillin-containing preparation to a patient with a history of allergy to penicillin

I: Laboratory test monitoring

1) Patients aged >75 years on loop diuretics who have not had a U+E in the previous 15 months
2) Prescription of amiodarone without a record of liver function being measured in the previous nine months
3) Prescription of amiodarone without a record of thyroid function being measured within the previous nine months
4) Prescription of an ACE inhibitor or angiotensin II receptor antagonist without a record of renal function and electrolytes being measured prior to starting therapy
5) Patients on an ACEI or angiotensin II receptor antagonist who have not had a U+E in the previous 15 months
6) Prescription of warfarin to a patient without a record of INR having been measured within the previous 12 weeks (excluding patients who self monitor)
7) Prescription of a statin without an ALT taken prior to starting treatment
8) Prescription of a statin without an ALT taken prior to starting treatment and within 3 months of starting treatment
9) Prescription of lithium without a record of a lithium level being measured within the previous six months
10) Metformin without yearly serum creatinine
11) Use of a hypo-thyroid agent without monitoring relevant thyroid function tests within 2-4 months of initiation or dosage change and at least every 15 months thereafter
12) Prescription of methotrexate without a record of a full blood count within the previous three months
13) Prescription of methotrexate without a record of liver function having been measured within the previous three months.
14) Allopurinol without baseline urea, electrolytes, creatinine and eGFR
**Notes**

*Consensus reached for assessing the safety of prescribing of practices, but not individual GPs

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ACEI = angiotensin-converting enzyme inhibitor CKD = chronic kidney disease.

NSAID = non-steroidal anti-inflammatory drug.

INR = International Normalised Ratio; U+E = Urea and electrolytes ALT = Alanine transferase; and eGFR = estimated glomerular filtration rate