# All Wales Medicines Strategy Group

Grŵp Strategaeth Meddyginiaethau Cymru Gyfan



# National Prescribing Indicators 2015–2016 Supporting Information for Prescribers

This report has been prepared by a multiprofessional collaborative group, with support from the All Wales Prescribing Advisory Group (AWPAG) and the All Wales Therapeutics and Toxicology Centre (AWTTC), and has subsequently been endorsed by the All Wales Medicines Strategy Group (AWMSG).

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For a full explanation of the evidence supporting the National Prescribing Indicators (NPIs), prescribing data and the terms used in this document, please refer to the NPIs 2015–2016 document on the All Wales Medicines Strategy Group (AWMSG) website.

This document summarises the AWMSG NPIs for 2015–2016 and provides points for consideration and links to supporting materials. The NPIs and supporting resources can be used to:

- Demonstrate quality improvement in therapeutics as part of revalidation (see General Medical Council requirements for revalidation);
- Encourage discussion and collaborative working through locality networks and cluster groups.

# **PROTON PUMP INHIBITORS (PPIs)**

*Measure:* Defined daily doses (DDDs) per 1,000 prescribing units (PUs)

This indicator aims to encourage a reduction in the prescribing of PPIs due to the potentially serious adverse effects linked to their long-term use.

#### Points for consideration

- Offer empirical full-dose PPI therapy for four weeks or Helicobacter. pylori 'test and treat' for people with uninvestigated dyspepsia. If symptoms return after initial care strategies, step down PPI therapy to the lowest dose needed to control symptoms.
- Review medications for possible causes of dyspepsia (e.g. calcium antagonists, nitrates, theophyllines, bisphosphonates, corticosteroids and non-steroidal antiinflammatory drugs [NSAIDs]).
- Gastro-protection should be considered for people taking high-risk medicines e.g. NSAIDs in osteoarthritis and rheumatoid arthritis.
- Adverse effects may be linked with long-term PPI use: fractures of the hip, wrist and spine, Clostridium difficile infection, hospital- and community-acquired pneumonia and hypomagnesaemia.
- Long-term PPI use has also been linked to rebound hypersecretion, which may exacerbate symptoms once PPI therapy is discontinued.
- National Institute for Health and Care Excellence (NICE) <u>Clinical Guideline (CG)</u>
   184 recommends offering people who need long-term management of dyspepsia symptoms an annual review of their condition.
- Encourage people who need long-term management of dyspepsia symptoms to reduce their use of prescribed medication stepwise: by using the lowest effective dose, by trying 'as-needed' use when appropriate, and by returning to self-treatment with antacid and/or alginate therapy.
- The <u>AWMSG PPI and Dyspepsia Resource Pack</u> provides support to review and discontinue PPIs.

#### LIPID-MODIFYING DRUGS

**Measure:** Low acquisition cost (LAC) statins as a percentage of all statin, ezetimibe and simvastatin/ezetimibe combination prescribing.

This indicator aims to increase the prescribing of statins with a LAC over more expensive lipid lowering treatments.

- Atorvastatin, simvastatin and pravastatin are LAC statins and remain the lipidmodifying drugs of choice.
- Use a statin of high intensity and low acquisition cost (NICE CG181).
- Offer atorvastatin 20 mg for the primary prevention of cardiovascular disease

- (CVD) to patients with or without type 2 diabetes who have a 10% or greater 10-year risk of developing CVD and all patients with type 1 diabetes (<u>CG181</u>).
- If a high-intensity statin is not tolerated, aim to treat with the maximum tolerated dose; other strategies may include changing the statin to a lower intensity group.

# **INHALED CORTICOSTEROIDS (ICS)**

*Measure:* Low strength ICS items as a percentage of all ICS prescribing.

This indicator aims to encourage the routine review of ICS in people with asthma, particularly those on high doses, encouraging step down of the dose when clinically appropriate.

## Points for consideration

- Potentially serious systemic side effects, such as adrenal suppression, growth failure, decrease in bone mineral density, cataracts and glaucoma, may be associated with ICS, particularly at high doses.
- To minimise side effects from ICS in people with asthma, the British Thoracic Society/Scottish Intercollegiate Guidelines Network <u>British guideline on the</u> <u>management of asthma</u> recommends that the dose of ICS should be titrated to the lowest dose at which effective control of asthma is maintained.
- ICS dose reduction should be considered every three months, decreasing the dose by approximately 25–50% each time.
- NICE <u>CG101</u> recommends that ICS should only be considered in combination with a long-acting beta-2 agonist in patients with stable chronic obstructive pulmonary disease who remain breathless or have exacerbations despite using short-acting bronchodilators.

#### HYPNOTICS AND ANXIOLYTICS

**Measure:** Average daily quantities (ADQs) per 1,000 specific therapeutic group agesex related prescribing units (STAR-PUs) of hypnotics and anxiolytics.

This indicator aims to encourage a reduction in the prescribing of hypnotics and anxiolytics in Wales, which has been higher than that in England since before 2008.

- There is still large variation in prescribing rates of these drugs across health boards in Wales (range 2,543–4,498 ADQs per 1,000 STAR-PUs for quarter ending September 2014). Prescribing in Wales is still high in comparison to England, with six out of seven health boards in Wales within the highest prescribing quartile when compared to clinical commissioning groups (CCGs) in England.
- The long-term use of benzodiazepine hypnotics and anxiolytics has been associated with an increased risk of Alzheimer's disease and a significantly increased risk of falls. Falls risk assessment tools advise reviewing benzodiazepines in patients at high risk of falling.
- Practice policy Appendices 11 and 12 of the <u>AWMSG Hypnotics and Anxiolytics Educational Pack</u> provide examples of practice protocols to allow clinicians to agree a consistent approach for the prescribing and review of hypnotics and anxiolytics.
- The <u>AWMSG Hypnotics and Anxiolytics Educational Pack</u> also provides materials to support the review and discontinuation of hypnotic and anxiolytic treatment. This may be via consultation or by letter; both have been used successfully in practices within Wales.

 Discharge summaries, and psychiatric and pain management plans should provide clear guidance on review or discontinuation of these medicines.

#### **OPIOID ANALGESICS**

**Measures:** 1) Morphine as a percentage of strong opioids; 2) Tramadol DDDs per 1,000 patients.

The indicators aim to encourage the appropriate prescribing of all opioid analgesics (including combination products containing codeine and dihydrocodeine 30 mg).

- When starting treatment with strong opioids, offer patients with advanced and progressive disease regular oral modified-release or oral immediate-release morphine (depending on patient preference), with rescue doses of oral immediate-release morphine for breakthrough pain. Do not routinely offer transdermal patch formulations as first-line maintenance treatment to palliative care patients in whom oral opioids are suitable (NICE CG140).
- Immediate-release preparations are more frequently associated with tolerance and problem drug use. The need for immediate-release opioids for persistent pain should prompt specialist review (<u>British Pain Society: Opioids for Persistent Pain: Good Practice</u>).
- When transdermal fentanyl is removed, a subcutaneous depot remains; significant levels of the medicine persist in the blood for 24 hours or more after the patch has been removed. Inappropriate use of transdermal preparations has caused fatalities (<u>Medicines and Healthcare Products Regulatory Agency [MHRA] Drug Safety Update on fentanyl patches</u>).
- To support these and other key messages, the MHRA has developed an Opioids Learning Module.
- Tramadol is subject to abuse and dependence. Deaths related to the misuse of tramadol in England and Wales increased from 83 in 2008 to 220 in 2013. In June 2014, tramadol was placed within Schedule III to the Misuse of Drugs Regulations but with exemptions from safe custody.
- AWMSG <u>Tramadol Educational Resource Materials</u> have been developed to support the review of tramadol.
- Avoid abrupt withdrawal after long-term tramadol treatment. Where physical
  dependence to tramadol develops, the withdrawal syndrome can be severe,
  with symptoms typical of opiate withdrawal sometimes accompanied by
  seizures, hallucinations and anxiety.
- Tramadol reduces the seizure threshold. Patients with a history of epilepsy should be prescribed tramadol only if there are compelling reasons to do so. Tramadol should be used with caution in patients taking concomitant drugs that can lower the seizure threshold (tricyclic antidepressants, selective serotonin reuptake inhibitors [SSRIs]) (MHRA Current Problems in Pharmacovigilance).
- Dizziness and constipation are common side effects of tramadol. Hallucinations, confusion and convulsions, as well as rare cases of drug dependence and withdrawal, have been reported with tramadol at therapeutic doses.
- Tramadol enhances the anticoagulant effect of warfarin, increasing the risk of bleeding.
- Concomitant administration of tramadol with other centrally depressant medicinal products including alcohol may potentiate the central nervous system effect. Concomitant therapeutic use of tramadol and serotonergic drugs, such as SSRIs, serotonin-norepinephrine reuptake inhibitors, tricyclic antidepressants and mirtazapine may cause serotonin toxicity. Signs of serotonin syndrome may include confusion, agitation, fever, sweating, ataxia, hyperreflexia, myoclonus and diarrhoea.

#### **ANTIBIOTICS**

**Measures:** 1) Total antibacterials per 1,000 STAR-PUs; 2) Fluoroquinolone items per 1,000 patients and as a percentage of total antibacterials; 3) Cephalosporin items per 1,000 patients and as a percentage of total antibacterials; 4) Co-amoxiclav items per 1,000 patients and as a percentage of total antibacterials.

These indicators support one of the core elements of the Welsh Antimicrobial Resistance Programme: to inform, support and promote the prudent use of antimicrobials. They also aim to reduce the prescribing of medicines associated with an increased risk of *C. difficile*, methicillin-resistant *Staphylococcus aureus* (MRSA) and resistant urinary tract infections (UTIs).

#### Points for consideration

- 'Start smart then focus' (<u>Public Health Wales: Antimicrobial Stewardship</u>):
  - Do not start antibiotics in the absence of clinical evidence of bacterial infection.
  - If there is evidence of bacterial infection, prescribe according to national or local guidelines.
  - Document in medical notes and on drug chart: clinical indication, duration or review date, route and dose.
  - For surgical prophylaxis, prescribe single dose where antibiotics have been shown to be effective.
  - In the hospital setting, review the clinical diagnosis and the continuing need for antibiotics by 48 hours and make a clear plan of action.
- Resistance and *C. difficile:* The use of simple generic antibiotics and the avoidance of broad-spectrum antibiotics (e.g. co-amoxiclav, fluoroquinolones and cephalosporins) preserve these from resistance and reduce the risk of *C. difficile*, MRSA and resistant UTIs.
- Resources are available to support appropriate antibiotic prescribing:
  - Welsh Medicines Resource Centre bulletin: <u>Appropriate Antibiotic Use –</u> <u>Whose Responsibility?</u>
  - Royal College of General Practitioners: <u>TARGET Antibiotics Toolkit</u>;
  - AWMSG CEPP National Audit: Focus on Antibiotic Prescribing this audit consists of stand-alone bite-size components (sore throat, acute rhinosinusitis, UTI in females, acute cough or bronchitis, quinolone prescribing, cephalosporin prescribing, co-amoxiclav prescribing, hospital prescribing of antibiotics, delayed prescriptions, read coding to identify healthcare-acquired infections [HCAI]).

# NON-STEROIDAL ANTI-INFLAMMATORY DRUGS

*Measures:* 1) NSAID ADQs per 1,000 STAR-PUs; 2) Ibuprofen and naproxen as a percentage of total NSAIDs.

The first indicator aims to encourage a reduction in total NSAID prescribing, which has been consistently higher than that seen in England, whilst the second indicator aims to increase the prescribing of ibuprofen and naproxen, because these drugs are associated with a lower risk of cardiovascular adverse events than other NSAIDs.

- NSAIDs are associated with increased risk of:
  - Serious gastro-intestinal toxicity, especially in patients over 75 years;
  - Renal failure in otherwise healthy patients (<u>MHRA Drug Safety Update on NSAIDs</u>);
  - Heart failure: NSAID treatment is contraindicated in severe heart failure;

- Thrombosis: Diclofenac 150 mg daily has a thrombotic risk profile similar to selective COX-2 inhibitors.
- NSAIDs are not recommended following hip fracture (<u>NICE CG124: Hip Fracture</u>).
- NSAIDs should be used with caution in uncontrolled hypertension, heart failure, ischaemic heart disease, peripheral artery disease, cerebrovascular disease, and when used long term for people with risk factors for CVD.
- It is recommended that prescribers should:
  - Review their NSAID prescribing using the <u>AWMSG CEPP National</u> <u>Audit: Towards Appropriate NSAID Prescribing;</u>
  - Use acute rather than repeat prescriptions for NSAIDs;
  - Set the default to small quantities (e.g. 1-2 weeks supply) per script;
  - Advise patients about the risks of NSAID therapy;
  - Provide the <u>AWMSG Patient Information Leaflet: Medicines for Mild to Moderate Pain Relief;</u>
  - Prescribe naproxen 250 mg rather than 500 mg to allow patients to make dose adjustments;
  - Promote post-operative pain management reviews;
  - Consider using Back Book Wales: Link to order.

#### **YELLOW CARDS**

*Measure*: Number of yellow cards submitted per practice and per health board.

#### Points for consideration

- Yellow card reporting supports the identification and collation of adverse drug reactions (ADRs), which might not have been known about before.
- For established medicines and vaccines, report all suspected ADRs considered to be serious (i.e. fatal, life-threatening, congenital abnormality, disabling or incapacitating, or resulting in prolonged hospitalisation).
- Report all ADRs associated with new medicines and vaccines (see list of black triangle medicines).
- Yellow card reporting can be used to report suspected ADRs (including those caused by medication errors) to medicines, vaccines, homeopathic or herbal remedies, medical device incidents, defective medicines (i.e. not of acceptable quality or not working as it should) or suspected counterfeit medicines.
- Yellow card champions are available in each health board to provide training.
- Yellow card reports can be completed on-line.

#### **NOTES**

Implementation of the NPIs does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

The NPIs highlighted constitute guidance only and neither this document in isolation, nor as part of a wider policy, comprise a financial incentive scheme to any medical practices and/or practitioners to prescribe a specific named medicine.