All Wales Medicines Strategy Group

Grŵp Strategaeth Meddyginiaethau Cymru Gyfan

# PRESCRIBING INDICATORS 2009-10

This paper sets out the proposed national prescribing indicators for 2009/10 retaining efficiency and safety principles as a means to monitor Local Health Board (LHB) prescribing patterns across Wales. The methods and principles used to determine the indicators and targets are also set out.

For many years the performance of the prescribing indicators were measured by the Welsh Assembly Government under the Service and Financial Framework (SaFF) targets. In 2007-08, they were removed from the SaFF, but are now reported to regional office under the Welsh Health Circular WHC (2007) 085, Improving Efficiency and Productivity within NHS Wales.

**Summary:**

The All Wales Medicine Strategy Group (AWMSG) is asked to support implementation of the following prescribing indicators.

| Indicator | Unit | Target |
|---|---|---|
| Generic prescribing | As percentage of specified drug basket | Maintain performance levels in upper quartile or show an increase towards the quartile above |
| Statins | Low cost statins as a percentage of all statin prescribing | Maintain performance levels in upper quartile or show an increase towards the quartile above |
| Angiotensin Receptor Blockers | As percentage of drugs affecting the renin-angiotensin system | Maintain performance levels within the lower quartile or show a reduction towards the quartile below |
| Chiral drugs | As percentage of chiral+ parent drug | Maintain performance levels within the lower quartile or show a reduction towards the quartile below |
| Hypnotics and Anxiolytics | 1. DDD per 1,000 patients | Maintain performance levels within the lower quartile or show a reduction towards the quartile below |

| | | |
|---|---|---|
| NSAIDs | DDD per 1,000PUs | Maintain performance levels within the lower quartile or show a reduction towards the quartile below |
| | Ibuprofen and naproxen as % of NSAIDs | Maintain performance levels in upper quartile or show an increase towards the quartile above |

**Background:**

At the October 2003 meeting of AWMSG it was agreed that prescribing indicators were useful tools to promote rational prescribing. It was also noted there was unease with indicators that had an over-emphasis on cost rather than quality.

Prior to the establishment of AWMSG, prescribing advisers produced the basket of indicators that were used to monitor prescribing patterns across Local Health Groups. AWMSG tasked the All Wales Prescribing Advisory Group (AWPAG) with developing national indicators for 2008/09. A sub-group was set up to develop this issue consisting of the following members:

Mrs Louise Howard-Baker (Chair)
(Head of Pharmacy & Medicines Management, Wrexham LHB)
Mrs Delyth Simons
(Head of Pharmacy & Medicines Management, Pembrokeshire LHB)
Mrs Judith Vincent
(Head of Pharmacy & Medicines Management, Swansea LHB)
Mr Jonathan Simms
(Head of Pharmacy & Medicines Management, Torfaen LHB)
Mr William Duffield
(Head of Pharmacy & Medicines Management, Denbighshire LHB)
Dr Mark Daniels
(General Practitioner, Vale of Neath Practice, Neath Port Talbot)
Dr Robert Davies
(Consultant Anaesthetist, Cwm Taf NHS Trust)
Ms Andrea Dahlgren
(Interface Pharmacist Cwm Taf NHS Trust)

**Method**

The Working Group used the 2008/09 prescribing indicators as a starting point to develop indicators and targets for 2009/10. Additional factors taken into account also included consideration of the evidence base, current prescribing patterns across Wales, and benchmarking with England.

Continuing with the principles previously agreed when developing an indicator:

- Indicators should be evidence based
- Indicators should be clear, easily understood and applicable at practice level
- Targets should be challenging but achievable, and based on the principle of encouraging all LHBs to achieve the prescribing rates of the best quartile
- Targets should be set based on prescribing data for the quarter ending March 2009

- Furthermore, at the All Wales Heads of Pharmacy and Medicines Management meeting in June 2007, there was general agreement that the prescribing indicator sub-group should consider that the targets should address efficiency as well as quality.

The following indicators are proposed as the next step in developing indicators which are clear, easily understood and have achievable targets. In addition, the indicators should, wherever possible, continue to be an integral part of an educational programme that targets the relevant professionals to reinforce the likelihood of achieving a favourable outcome.

The hypnotics and anxiolytic and non-steroidal anti-inflammatory drug targets will require sustained input over a number of years. This should not deter endeavours to deliver change and achieve measurable progress year on year.

**Generic prescribing**

For the 2008-09 financial year, the prescribing indicator group considered whether driving up the generic prescribing rate for all prescription drugs would achieve the possible savings potential. It was decided that the risks of this strategy outweighed the benefits, as this might result in GPs issuing prescriptions for items such as contraceptives, compound creams, dressings or enteral feeds. The likely outcome would be an increase in dispensing errors and workload for practices, clarifying what was prescribed.

Therefore in order to keep the principle of an efficiency target, the Indicator Group is recommending that LHBs should aim to increase the generic prescribing of a specific basket of drugs that would yield quantifiable savings.

Because of the manner in which the prices of generic drugs are calculated, (the Secretary of State for Health determines the price of Category A drugs by a weighted average of prices listed by four manufacturers and the price of Category M drugs are based on information submitted by manufacturers), not all generic prescribing generates savings. A recent search by Health Solutions Wales(HSW) of Category A and M drugs revealed that although there are still significant savings to be made in Wales, which supports the National Audit Office findings [1], they would only be generated from just over half of the Category A and M drugs. A basket of drugs was produced that consistently demonstrated savings, as calculated by HSW over four quarters in 2007.

References:

1. Prescribing costs in Primary Care, National Audit Office accessed on 29/5/07 http://www.nao.org.uk/pn/06-07/0607454.htm

*Purpose*: appropriate generic prescribing can make considerable savings with no difference in therapeutic outcome.

*Unit of measure:* Percentage items generic medicines prescribed from an agreed basket of Category A and M drugs which would generate savings.

*Target for 2009/2010:* Maintain performance levels in upper quartile or show an increase towards the quartile above

**Statins**

The National Institute for Healthcare and Clinical Excellence (NICE) technology appraisal, Statins for the Prevention of Cardiovascular Disease[1] and the Lipid Modification clinical guideline[2] state:
When considering lipid modification therapy for primary and secondary prevention, drugs are preferred for which there is evidence in clinical trials of a beneficial effect on CVD morbidity and mortality.

- 40mg simvastatin (or drug of similar efficacy and acquisition cost) should be offered to:
    - Adults over 40 who have a ≥20% 10 year risk of developing CVD.
    - All adults with clinical evidence of CVD.

- A lower dose of simvastatin or pravastatin should be offered in all cases where 40mg simvastatin is contraindicated, or where there are potential drug interactions.

- For primary prevention, the level of CVD risk should be estimated using an appropriate risk calculator, or by clinical assessment for people for whom an appropriate risk calculator is not available (for example, older people, people with diabetes or people in high-risk ethnic groups).

- For primary prevention, there is no target for total or LDL cholesterol.

- For secondary prevention, where 40mg of simvastatin does not reduce the total cholesterol (TC) to below 4mmol/l or the LDL cholesterol does not fall below 2mmol/l consider increasing the dose of simvastatin to 80mg.

- Recognise that less than half of patients will achieve these targets, so an 'audit' level of TC of 5mmol/l should be used to assess progress in patient groups with CVD.

The NICE meta-analysis of all placebo-controlled trials (primary and secondary prevention studies) that published data in a usable form indicated that therapy with a statin was associated with a statistically significant reduction in risk of all-cause mortality, cardiovascular mortality, coronary heart disease (CHD) mortality and fatal myocardial infarction (MI).

Similarly a recent meta-analysis by Zhou and colleagues looking at the evidence for pravastatin, simvastatin and atorvastatin showed there was no difference among the statins in reducing fatal CHD, non-fatal MI, fatal and non-fatal strokes, all CVD, or mortality due to any cause.[3] All the studies showed a similar reduction in lipid levels.

Simvastatin 20–40mg daily has been shown in large, well conducted clinical trials (4S and HPS) [4, 5] to reduce clinically relevant events such as heart attacks and strokes.

Pravastatin is also available as a generic product. Pravastatin has clinical outcome data from the PROSPER [6], WOSCOPS [7], CARE [8] and LIPID[9] studies that show reduced rates of myocardial infarction and death due to cardiovascular causes. The PROSPER study provides good evidence for the use of pravastatin in elderly patients. It is pragmatic to use pravastatin 40mg daily in simvastatin or atorvastatin intolerant patients where benefits and risks have been assessed [10].

Atorvastatin 10mg daily also has clinical outcome data showing evidence of benefit (ASCOT-LLA and CARDS).[11,12] However, it is over twelve times the cost of generic simvastatin 40mg daily.

At this time only one study has been published for rosuvastatin which reports patient outcome data. Other studies only report surrogate markers (disease orientated outcomes). The CORONA study compared rosuvastatin 10mg vs placebo in 5011 patients with heart failure due to CHD. The primary end point was CV death, MI or stroke. Rosuvastatin was **not associated** with a reduction in primary endpoint of CV death, MI, or stroke at median 32.8-month follow-up compared with placebo, despite effectively reducing LDL.[13]

The following table shows the absolute and percentage reductions in LDL-cholesterol concentration according to the statin and the daily dose used:

| | 5mg | 10mg | 20mg | 40mg | 80mg |
|---|---|---|---|---|---|
| **Atorvastatin** | | 1.79 (1.62 to 1.97) 37% | 2.07 (1.90 to 2.25) 43% | 2.36 (2.12 to 2.59) 49% | 2.64 (2.31 to 2.96) 55% |
| **Fluvastatin** | | | 1.02 (0.90 to 1.13) 21% | 1.30 (1.19 to 1.41) 27% | 1.58 (1.40 to 1.76) 33% |
| **Pravastatin** | | 0.95 (0.83 to 1.07) 20% | 1.17 (1.10 to 1.23) 24% | 1.38 (1.31 to 1.46) 29% | |
| **Rosuvastatin** | 1.84 (1.74 to 1.94) 38% | 2.08 (1.98 to 2.18) 43% | 2.32 (2.20 to 2.44) 48% | 2.56 (2.42 to 2.70) 53% | |
| **Simvastatin** | | 1.31 (1.22 to 1.40) 27% | 1.54 (1.46 to 1.63) 32% | 1.78 (1.66 to 1.90) 37% | 2.01 (1.83 to 2.19) 42% |

*Law MR, Wald NJ, Rudnicka AR. Quantifying effect of statins on low density lipoprotein cholesterol, ischaemic heart disease, and stroke: systematic review and meta-analysis. BMJ 2003;326: 1423-9.*

Based on 28 days treatment at BNF dose range for hypercholesterolaemia. Prices taken from Drug Tariff, June 2008[13].

| Drug | Strength | Reductions in serum LDL-cholesterol | Price per 28 days treatment (June 2008) |
|---|---|---|---|
| Simvastatin 40mg | 40mg | 37% | £1.42 |
| Pravastatin 40mg | 40mg | 29% | £6.99 |
| Fluvastatin 80mg | 80mg | 33% | £19.20 |
| Atorvastatin 10mg | 10mg | 37% | £18.03 |
| Rosuvastatin 5mg | 5mg | 38% | £18.03 |

From this table it can be seen simvastatin 40mg daily (recommended to be taken at night) reduces LDL-cholesterol to the same extent as atorvastatin 10mg daily.

There has been ongoing debate regarding the target cholesterol levels that should be aimed for. The Joint British Societies' guideline recommended lower targets, although it is acknowledged that there are no clinical trials which have evaluated the relative and absolute benefits of cholesterol lowering to different total and LDL cholesterol targets in relation to clinical events [15]. The NICE full clinical guideline 67 [2] states that "using a threshold target of 4mmol/l total cholesterol is cost effective so long as titration stops at 80mg of simvastatin. Most patients would not achieve a target concentration of 4mmol/l

total cholesterol and modelling suggests that it is not cost effective to try and take more patients to target using higher cost statins such as atorvastatin."

Simvastatin 20mg at night costs £0.56 for 28 days treatment, simvastatin 40mg at night costs £1.42 for 28 days treatment, pravastatin 40mg at night costs £6.99 for 28 days treatment, atorvastatin 10mg daily costs £18.03 for 28 days treatment.[14] The NHS can treat nearly thirteen patients with simvastatin 40mg at night for less than treating one patient with atorvastatin 10mg daily.

Based on clinical trial evidence and cost, generic simvastatin 40mg (target dose) daily is a reasonable first-line statin choice fulfilling NICE criteria. For intolerance, pravastatin 40mg is a reasonable alternative.

*Purpose*: appropriate prescribing of statins with the lowest acquisition cost can make considerable savings with no difference in therapeutic outcome.

*Unit of measure:* Percentage items simvastatin and pravastatin as percentage of total statin items (excluding combinations of statins with ezetimibe):

*Target for 2008/2009:* Maintain performance levels in upper quartile or show an increase towards the quartile above


1. National Institute for Health and Clinical Excellence. Statins for the prevention of cardiovascular events. Technology appraisal 94. January 2006
2. National Institute for Health and Clinical Excellence. Lipid modification. Clinical guideline 67.
3. Zhou Z, Rahme E, Pilote L. Are statins created equal? Evidence from randomised trials of pravastatin, simvastatin and atorvastatin for cardiovascular disease prevention. Am Heart J 2006;151:273-81
4. Scandinavian Simvastatin Survival Study Group. Randomised trial of cholesterol lowering in 4444 patients with coronary heart disease: the Scandinavian Simvastatin Survival Study (4S). Lancet 1994;344:1383-9.
5. Heart Protection Study Collaborative Group. MRC/BHF Heart Protection Study of cholesterol lowering with simvastatin in 20,536 high risk individuals: a randomised placebo-controlled trial. Lancet 2002;360:7-22
6. Shepherd J, Blauw GJ, Murphy MB, et al. Pravastatin in elderly individuals at risk of vascular disease (PROSPER): a randomized controlled trial. Lancet 2002;360:1623-30.
7. Prevention of coronary heart disease with pravastatin in men with hypercholesterolaemia. West of Scotland Coronary Prevention Study Group (WOSCOPS) N Engl J Med. 1995 Nov 16;333(20):1301-7.
8. Sacks FM, Pfeffer MA, Moye LA, et al. The effect of pravastatin on coronary events after myocardial infarction in patients with average cholesterol levels (CARE). N Engl J Med. 1996; 335:1001-1009.
9. Long-Term Intervention with Pravastatin in Ischaemic Disease (LIPID) Study Group. Prevention of cardiovascular events and death with pravastatin in patients with coronary heart disease and a broad range of initial cholesterol levels. N Engl J Med. 1998; 339:1349-1357.

10. Prodigy Guidance. Available at: http://www.cks.library.nhs.uk/lipids_management/in_depth/management_issues?hierarchy=Idn180546n264759n180580n237976%2cIdn180546n264759n180580n237976n240466%2cIdn180546n264759n180580n237976n240466n239286#NodeIdn180546n264759n180580n237976n240466n239286 (accessed on 29/5/2007)
11. Sever PS, Dahlöf B, Poulter NR, et al. Prevention of coronary and stroke events with atorvastatin in hypertensive patients who have average or lower-than-average cholesterol concentrations, in the Anglo-Scandinavian Cardiac Outcomes Trial — Lipid Lowering Arm (ASCOT-LLA): a multicentre randomized controlled trial. Lancet 2003;361:1149-58.
12. Colhoun HM, Betteridge DJ, Durrington PN et al Primary prevention of cardiovascular disease with atorvastatin in type 2 diabetes in the Collaborative Atorvastatin Diabetes Study (CARDS): multicentre randomised placebo-controlled trial.Lancet.2004 364(9435):685-96
13. Controlled Rosuvastatin Multinational Trial in Heart Failure (CORONA) Kjekshus J, et al. N Engl J Med 2007;357:2248-61
14. TSO Drug Tariff June 2008 accessed on 23/6/2008 http://www.ppa.org.uk/ppa/edt_intro.htm
15. Joint British Societies' Guidelines On Prevention Of Cardiovascular Disease In Clinical Practice accessed on 26/03/07http://www.bcs.com/download/651/JBS2final.pdf

**ARBs as % of ACE inhibitors**

The National Institute for Healthcare and Clinical Excellence (NICE) clinical guidelines for hypertension[1] stated that the benefit from ACE inhibitors and angiotensin-II receptor antagonists (ARBs) were closely correlated and that they should be treated as equal in terms of efficacy (although due to cost differences, ACE inhibitors should be initiated first).

The updated NICE clinical guideline for Type 2 diabetes[2] recommends an ACE1 first-line for all patients with raised blood pressure, reserving an ARB for continuing intolerance to ACE inhibitor.

In a systematic review of 43 RCTs of ACE1 & ARB versus placebo and ACE1 versus ARB, ACE1s reduced all cause mortality in patients with diabetic nephropathy. ARBs did not. Both had similar effects on renal outcomes. Therefore choice should be based on cost[3]

Angiotensin-II receptor antagonists have not been shown to increase life expectancy compared to ACE inhibitor therapy for patients with heart failure due to left ventricular systolic dysfunction in several RCTs[4]. Only one of the ARBs marketed in the UK currently has a licence for the treatment of heart failure[5].

The incidence of side effects with ACE1 is estimated to be between 3-25%[6]. The NICE guideline for hypertension states that "80% of patients starting on ACE inhibitors would continue with these, but that 20% would switch to ARBs due to an inability to tolerate ACE inhibitors (expert opinion)"[1].

1. http://guidance.nice.org.uk/CG34/niceguidance/word/English accessed on 17/3/07
2. NICE clinical guideline 66 (update of NICE clinical guidelines E, F G and H) Type 2 diabetes; May 2008
3. Strippoli GF, et al. BMJ 2004; 329: 828i
4. http://guidance.nice.org.uk/CG5/guidance/pdf/English accessed on 17/5/07

5. http://www.bnf.org accessed on 17/5/07
6. http://www.oft.gov.uk/shared_oft/reports/comp_policy/oft885m.pdf accessed on 17/3/07

*Unit of measure:* Items of angiotensin receptor blockers (ARB) as percentage of all drugs affecting the renin-angiotensin system

*Target for 2009/10:* Maintain performance levels within the lower quartile or reduction towards the quartile below.

**Hypnotics and anxiolytics**

It is recognised that prescribing of hypnotics and anxiolytics is appropriate in some circumstances, and that for some geographical areas this is a more challenging agenda than others. Good practice needs to be promoted and a reduction in the prescribing of hypnotics and anxiolytics targeted.

*Purpose*: There are disproportionately more hypnotics and anxiolytics prescribed in Wales compared to England than in any other drug category.

*Unit of measure:* Defined daily dose of hypnotics (4.1.1.) and anxiolytics (4.1.2) prescribed per 1000 patients.

*Target for 2009/10:* Maintain performance levels within the lower quartile or reduction towards the quartile below

**Non-steroidal anti-inflammatory drug prescribing (NSAIDs)**

*Purpose:* There is overwhelming evidence to reduce prescribing of anti-inflammatory drugs especially in the elderly. The Committee on Safety of Medicines (CSM), now the Medicines and Healthcare products Regulatory Agency (MHRA), have issued five warnings to prescribers regarding the gastrointestinal dangers of NSAIDs, culminating in the following warning issued in 2003:

*Reminder: Gastrointestinal toxicity of NSAIDs*

All NSAIDs, including ibuprofen and COX-2 inhibitors, are associated with reports of serious gastrointestinal toxicity. The elderly and those taking concomitant aspirin are high-risk groups.

Detailed advice on the gastrointestinal safety of NSAIDs (including aspirin and selective COX-2 inhibitors) has previously been provided. The MRHA continues to receive reports of serious and fatal gastrointestinal reactions associated with NSAIDs.

In October 2006 and December 2007, the MHRA[2] issued further warnings on the increased risk of thrombotic events associated with the long term use of NSAIDs.

Prescribers are reminded:

- GI and cardiovascular risks of NSAIDs may be minimised by selecting the lowest dose for the shortest duration.
- Risks of GI toxicity are higher in the elderly.

- Diclofenac 150mg daily has a similar thrombotic risk profile to that of at least one cox-2 inhibitor etoricoxib), and possibly others.
- Epidemiological data do not suggest an increased risk of myocardial infarction when naproxen 1000mg daily or ibuprofen at lower doses (less than 1200mg daily) are used.
- Aspirin and another NSAID should only be used together when absolutely necessary - the combination substantially increases GI risk. Patients taking long-term aspirin should be reminded to avoid NSAIDs, including those purchased "over the counter".
- Ibuprofen is associated with the lowest GI risk of the traditional NSAIDs, but serious and fatal GI reactions have been reported in association with its use.
- Clinical trial data suggest that selective COX-2 inhibitors have GI safety advantages over standard NSAIDs, but serious and fatal GI reactions have none the less been associated with these drugs.
- Prescribing should be based on the safety profiles of individual NSAIDs or cox-2 inhibitors and on individual patient risk profiles (eg. gastrointestinal and cardiovascular).
- Prescribers should not switch between NSAIDs without careful consideration of the overall safety profile of the products, a patient's individual risk factors, and patient preference.

Ensure NSAID treatment is not contraindicated before prescribing.


1. MHRA/CSM (2003) Gastrointestinal toxicity of NSAIDs. Current Problems in Pharmacogivilance. **29:** 8-9)
2. http://www.mhra.gov.uk/home/idcplg?IdcService=SS_GET_PAGE&useSecondary=true&ssDocName=CON2025040&ssTargetNodeId=221
3. Drug Safety Update Volume 1, Issue 5, December 2007 http://www.mhra.gov.uk/Publications/Safetyguidance/DrugSafetyUpdate/CON2033216 accessed 24/6/2008


*Unit of measure:* Defined daily dose per 1000 PUs

1. *Target for 2009/10:* Maintain performance levels within the lower quartile or reduction towards the quartile below
2. *Target for 2009/10:* Ibuprofen and naproxen as % of NSAIDs

**Chiral Drugs**

The vast majority of drugs are manufactured and marketed as a mixture of enantiomers (racemic mixtures). Enantiomers have the same chemical formula but a different three-dimensional configuration (or mirror image) and are the result of the manufacturing process. One of the enantiomers may have little or no effect in the body and is harmless. However, recent advances in chemistry have allowed the active enantiomer to be isolated and a number of drugs are now available containing only the active molecule.

Three such drugs are currently marketed in the UK, with further products in the pipeline, and the evidence suggests that whilst there may be clinical differences between the single enantiomer and the racemic mixture, the magnitude of any benefits is debatable.

In the case of esomeprazole, an analysis of four RCTs in oesophagitis for the NICE guideline did not find any evidence to suggest that one PPI is more effective than another when compared at appropriate equivalent doses[1]. Similarly a meta-analysis of 25 RCTs found no significant differences between equivalent doses of PPIs in

endoscopic healing of Gastro-oesophageal reflux disease (GORD) or Peptic Ulcer Disease (PUD). The authors concluded that the decision should be based on cost considerations, rather than arguable differences in clinical efficacy[2].

In the treatment of depression, the NICE Clinical Guidelines[3] found that there was either little, or no clinical significance between escitalopram and other Selective Serotonin Re-uptake Inhibitors (SSRIs) in either efficacy or acceptability and tolerance and it is recommended that a generic SSRI should be used first line for the treatment of moderate to severe depression.

In a review of treatments for hay-fever, it was found that there was little evidence to confirm whether, in practice, third generation antihistamines (e.g. desloratadine or levocetirizine) confer any benefit over second generation antihistamines and they should be reserved for patients who cannot tolerate or have not responded to other therapies[4].

The case for a review of prescribing of chiral drugs has been made in several publications[5,6,7] on the grounds of cost-effectiveness and a lack of robust evidence to demonstrate a clinical advantage. They are marketed at a premium price and offer no demonstrable clinical advantages over existing products and generally have not been compared with them. Patients stabilised on treatment with a well established safety profile may be switched to a "black triangle" product with no clinical advantage.

| Parent Drug | Cost for 28 days* | Chiral Drug | Cost for 28 days* |
|---|---|---|---|
| Cetirizine10mg | £0.47 | Levocetirizine 5mg | £4.85 |
| | | | |
| Omeprazole 10mg caps | £2.05 | | |
| Omeprazole 20mg caps | £2.15 | Esomeprazole 20mg | £18.50 |
| Omeprazole 40mg caps | £9.28 | Esomeprazole 40mg | £25.19 |
| | | | |
| Citalopram 10mg | £0.99 | Escitalopram 5mg | £8.97 |
| Citalopram 20mg | £1.24 | Escitalopram 10mg | £14.91 |
| Citalopram 40mg | £1.87 | Escitalopram 20mg | £25.20 |

*June 2008 Prices


1. North of England Dyspepsia Guideline Development Group. Dyspepsia: managing dyspepsia in adults in primary care. Full Clinical Guideline No17. August 2004. Accessed from www.nice.org.uk accessed on 2/10/08
2. Klok RM, Postma MJ, Van Hout BA, et al. Meta-analysis: comparing the efficacy of proton pump inhibitors in short-term use. Aliment Pharmacol Ther 2003;17:1237-45
3. Depression: Management of Depression in Primary and Secondary Care. National Clinical practice Guideline Number 23. http://www.nice.org.uk/nicemedia/pdf/CG23fullguideline.pdf accessed on 2 October 2008
4. Common questions about hay fever. MeReC Bulletin Volume 14, Number 5
5. http://www.oft.gov.uk/shared_oft/reports/comp_policy/oft885m.pdf accessed on 17/3/07
6. Drug and Therapeutics Bulletin Volume 44 No. 10, October 2006
7. Prolonging market exclusivity of medicines – implications for the NHS. WeMeReC Bulletin Volume10 No. 2, July 2003
8. TSO Drug Tariff June 2008 accessed on 23/6/2008 http://www.ppa.org.uk/ppa/edt_intro.htm

*Purpose:* Prescribing of racemic mixture as first choice over single enantiomer preparation can make considerable savings with negligible difference in therapeutic outcome.

*Unit of Measure:* esomeprazole, escitalopram & levocetirizine as % of esomeprazole, omeprazole, escitalopram, citalopram, levocetirizine & cetirizine

*Target for 2009/10:* Maintain performance levels within the lower quartile or reduction towards the quartile below.