NATIONAL PRESCRIBING INDICATORS 2013–2014

ANALYSIS OF PRESCRIBING DATA TO SEPTEMBER 2013
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INTRODUCTION

The All Wales Medicines Strategy Group (AWMSG) endorses the National Prescribing Indicators (NPIs) as a means of promoting safe and cost-effective prescribing. For each NPI, the threshold is set at the 75th percentile (i.e. reducing or increasing prescribing rates in line with the best performing 25% of practices). All practices within health boards are encouraged to reach or move towards these thresholds. This report summarises the prescribing against these NPIs for the quarter ending September 2013.

1.0 LIPID-MODIFYING DRUGS

Unit of measurement:
Items of low acquisition cost (LAC) statins (simvastatin, atorvastatin, pravastatin) as a percentage of all statin, ezetimibe and simvastatin/ezetimibe combination prescribing.

Figure 1 shows the proportion of LAC statin prescribing in each of the 58 clusters in Wales for the quarter ending September 2013. Cluster level data show the average value for all practices in the cluster.

Figure 1. LAC statins as a percentage of all statin, ezetimibe and simvastatin/ezetimibe combination prescribing – Quarter ending September 2013
2.0 HYPNOTICS AND ANXIOLYTI C S

Unit of measurement:
Hypnotics and anxiolytics average daily quantities (ADQs) per 1,000 specific therapeutic group age-sex related prescribing units (STAR-PUs).

The indicator has a user-defined drug group (UDG) encompassing the benzodiazepines typically used as hypnotics and anxiolytics, together with the “Z-drugs”.

Figure 2 compares the performance of individual practices within localities and health boards with respect to the hypnotics and anxiolytics NPI in the quarter ending September 2013. The colour of the line indicates whether the practice has achieved (blue) or not achieved (orange) the NPI threshold. Outlying practices with high usage remain in some health boards.

Figure 2. Practice level hypnotic and anxiolytic (UDG) usage as ADQs per 1,000 STAR PUs – Quarter ending September 2013
3.0 DOSULEPIN

Unit of measurement:
Dosulepin defined daily doses (DDDs) per 1,000 prescribing units (PUs).

The prescribing of dosulepin continues to be measured due to the associated increased risk of cardiovascular toxicity compared with other tricyclic antidepressants.

Figure 3 shows dosulepin prescribing as DDDs per 1,000 PUs for each of the 22 localities for the quarter ending September 2013. The colour and size of the box indicates the level of usage within the locality (the greener the box, the lower the usage; the deeper the red, the higher the usage).

Figure 3. Dosulepin usage as DDDs per 1,000 PUs – Quarter ending September 2013
4.0 ANTIDEPRESSANTS

Unit of measurement: Antidepressant ADQs per 1,000 STAR-PUs.

This indicator was introduced in 2013–2014 to monitor the variation in usage across Wales.

Figure 4 shows antidepressant usage as ADQs per 1,000 STAR-PUs for each locality in Wales. There is considerable variation in antidepressant use between localities across Wales.

Figure 4. Antidepressant usage as ADQs per 1,000 STAR-PUs – Quarter ending September 2013
5.0 STRONG OPIOIDS

Unit of measurement:
Morphine items as a percentage of strong opioid items. The indicator has a UDG:

UDG: Buprenorphine, dipipanone, fentanyl, hydromorphone, morphine, oxycodone, papaveretum, pentazocine, pethidine, tapentadol (buprenorphine preparations prescribed for the management of opioid dependence, and injection formulations, are excluded from this indicator).

Figure 5 shows morphine usage as a percentage of strong opioids for the 22 localities in Wales for the quarter ending September 2013. The graph shows considerable variation between localities for this measure (36.11% to 62.51%).

Overall morphine prescribing as a percentage of all strong opioids has increased by an average of 5% in Wales from the quarter ending September 2012 to the quarter ending September 2013.

Figure 5. Morphine items as a percentage of strong opioid prescribing – Quarter ending September 2013
6.0 ANTIBIOTICS

Units of measurement:
There are four antibacterial prescribing indicators for 2013–2014:
1. Total antibacterial items per 1,000 STAR-PUs;
2. Cephalosporins as a percentage of total antibacterial items;
3. Quinolones as a percentage of total antibacterial items;
4. Co-amoxiclav as a percentage of total antibacterial items.

Figure 6 shows the trend in antibiotic usage for summer and winter as items per 1,000 STAR-PUs. The upward trend seen for total antibiotic usage for summer quarters for 2010–2011 to 2012–2013 appears to be reversing and total antibiotic usage has decreased from summer quarter 2012–2013 to summer quarter 2013–2014. For the winter quarters, although an overall downward trend is seen in all health boards, there is considerable variation in the trends.

Figure 6. Trend in antibiotic usage as items per 1,000 STAR-PUs for summer (April–September) and winter (October–March) quarters
Analysis of indicators two, three and four for the quarter ending September 2013 is summarised in Figure 7. It can be seen from the graph that prescribing across Wales is generally somewhat higher than the NPI threshold. This may reflect the fact that the thresholds are set based on prescribing data from a winter quarter (ending December 2012), when total antibiotic usage is high. As overall usage falls in the summer quarters (see Figure 6), the percentage usage of cephalosporins, quinolones and co-amoxiclav appears elevated. However, absolute usage of these agents shows less seasonal variation and an overall downward trend.

Figure 7. Antibiotic usage as a percentage of total antibacterial items – Quarter ending September 2013
7.0 INSULIN

Unit of measurement:
Long-acting insulin analogue items as a percentage of long- and intermediate-acting insulin items (excluding biphasics).

This indicator does not include insulin degludec as this medicine was only licensed in March 2013 and has not been appraised by AWMSG. A statement of advice was issued in May 2013. Insulin degludec accounted for a very small number of items in the quarter ending September 2013 compared to insulin glargine and insulin detemir.

Figure 8 shows performance against this NPI in primary care for the quarter ending September 2013 for the 58 clusters in Wales.

Figure 8. Long-acting analogue insulin items as a percentage of long- and intermediate-acting insulin items (excluding biphasics) in primary care – Quarter ending September 2013
8.0 NON-STEROIDAL ANTI-INFLAMMATORY DRUGS (NSAIDS)

Units of measurement:
There are two NSAID NPIs for 2013–2014:

1. Total NSAID ADQs per 1,000 STAR-PUs.
2. Ibuprofen and naproxen as a percentage of total NSAID items.

Figure 9 shows the overall downward trend in total NSAID usage in Wales over time. The variation in prescribing between health boards was considerably smaller in the quarter ending September 2013 compared with the same quarter in 2010.

Figure 9. Trend in total NSAID usage as ADQs per 1,000 STAR-PUs over time
The second NPI encourages first-line use of NSAIDs with improved cardiovascular safety, i.e. ibuprofen and naproxen.

Figure 10 shows performance against this NPI in primary care for the quarter ending September 2013 for the 58 clusters in Wales.

The proportion of ibuprofen and naproxen usage continues to increase in all of the health boards in Wales for the quarter ending September 2013 compared to the same quarter for the previous year.

Figure 10. Ibuprofen and naproxen usage as a percentage of total NSAID usage – Quarter ending September 2013
GLOSSARY

**ADQ** – The average daily quantity (ADQ) is a measure of prescribing volume based upon prescribing behaviour in England. It represents the assumed average maintenance dose per day for a medicine used for its main indication in adults. The ADQ is not a recommended dose but an analytical unit to compare prescribing activity.

**DDD** – The defined daily dose (DDD), developed by the World Health Organisation, is a unit of measurement whereby each medicine is assigned a value within its recognised dosage range. The value is the assumed average maintenance dose per day for a medicine when used for its main indication in adults. A medicine can have different DDDs depending on the route of administration.

**PU** – Prescribing units (PUs) were adopted to take account of the greater need of elderly patients for medication in reporting prescribing performance at both the practice and primary care organisational level.

**STAR-PU** – Specific therapeutic group age-sex related prescribing units (STAR-PUs) are designed to measure prescribing weighted for age and sex of patients. There are differences in the age and sex of patients for whom medicines in specific therapeutic groups are usually prescribed. To make such comparisons, STAR-PUs have been developed based on costs of prescribing of items within therapeutic groups.