NATIONAL PRESCRIBING INDICATORS 2012–2013

ANALYSIS OF PRESCRIBING DATA: SEPTEMBER 2012

December 2013
This report has been prepared by the Welsh Analytical Prescribing Support Unit (WAPSU), part of the All Wales Therapeutics and Toxicology Centre (AWTTC).

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INTRODUCTION

The All Wales Medicines Strategy Group (AWMSG) endorses the national prescribing indicators to promote safe and cost-effective prescribing. For each national prescribing indicator the threshold is set at the 25\textsuperscript{th} percentile (i.e. reducing or increasing prescribing rates in line with the best performing 25\% of practices). For the 2012–2013 indicators, the prescribing data for all general practices in Wales for the quarter ending 31 December 2011 has been utilised. All practices within Health Boards (HBs) are encouraged to achieve or move towards these thresholds. The National Prescribing Indicators paper 2012–13 can be found here.

1. 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 a map of all localities within NHS Wales with respect to percentage prescribing of LAC statins.

Figure 1. Items of LAC statins as a percentage of all statin, ezetimibe and simvastatin/ezetimibe combination prescribing – Quarter ending September 2012

- Figure 2 compares prescribing of LAC statins in primary and secondary care within each HB.
Welsh Analytical Prescribing Support Unit

Figure 2. Items of LAC statins as a percentage of all statin, ezetimibe and simvastatin/ezetimibe combination prescribing – Quarter ending September 2012

2. DOSULEPIN

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

- Dosulepin remains a national prescribing indicator, due to the need to further reduce prescribing, based on its adverse safety profile.
- Figure 3 shows the change in usage in each of the localities between the quarter ending March 2012 and the quarter ending September 2012.

Figure 3. Dosulepin usage – Quarter ending March 2012 versus quarter ending September 2012
3. HYPNOTICS AND ANXIOLYTICS

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

- For 2012–2013, hypnotic and anxiolytic prescribing is being measured as a combined entity, using ADQs per 1,000 STAR-PUs. The indicator has a user-defined drug basket encompassing the benzodiazepines typically used as hypnotics and anxiolytics, together with the “Z drugs”.
- As of September 2012, only Monmouth locality and Powys HB had reached the lower quartile threshold for this indicator.
- Figure 4 shows the variation in practice level prescribing rates of these medicines by HB.

**Figure 4. Analysis by practice – Hypnotics and anxiolytics (user-defined group) ADQs per 1,000 STAR-PUs (threshold for lower quartile – 1,691) – Quarter ending September 2012**

**Explanation of Figure 4**
Each practice is represented by a horizontal line. Therefore each practice is plotted anonymously on the graph within its HB. The national indicator threshold is plotted as the black line. It is therefore possible to identify the proportion of practices within a HB that are meeting the threshold. It is also possible to identify the range of prescribing within a HB and identify whether prescribing within the HB is reasonably consistent, or whether a HB has outlying practices.
4. NON-STEROIDAL ANTI-INFLAMMATORY DRUGS (NSAIDS)

*Units of measurement:*

There are two NSAID prescribing indicators for 2012–2013:

1. Total NSAID ADQs per 1,000 STAR-PUs. Maintain performance in the lower quartile [985] or show a reduction towards the quartile below
2. Ibuprofen and naproxen as a percentage of total NSAID items

- Figure 5 shows the gradual downward trend in total NSAID usage since 2010/2011 quarter 1.

![Figure 5. Trend in total NSAID usage over time](image)

- The second national prescribing indicator encourages first-line use of NSAIDs with improved cardiovascular safety, i.e. ibuprofen and naproxen.
- Figure 6 shows that over the last two years the threshold has steadily increased and ibuprofen and naproxen as a percentage of all NSAID prescribing has increased.
Figure 6. Practice level ibuprofen and naproxen usage as a percentage of total NSAID dispensing – Quarter ending September 2012

Comment
- Threshold Achieved
- Threshold Not Achieved
5. ANTIBIOTICS

Units of measurement:
There are five antibacterial prescribing indicators for 2012–2013:
1. Total antibacterial items per 1,000 STAR-PUs
2. Top nine antibacterials (penicillin V, flucloxacillin, amoxicillin, oxytetracycline, doxycycline, erythromycin, clarithromycin, trimethoprim and nitrofurantoin) as a percentage of total antibacterial items
3. Cephalosporins as a percentage of total antibacterial items
4. Quinolones as a percentage of total antibacterial items
5. Co-amoxiclav as a percentage of total antibacterial items

- The total number of items, percentage of top nine drugs, and percentage of quinolone antibacterials are carried over from 2011–2012, whilst the proportions of cephalosporin and co-amoxiclav usage are new indicators for 2012–2013.
- Total antibacterial usage shows a gradual upward trend over time (see Figure 7).

Figure 7. Trend in antibiotic usage for summer (April–September) and winter (October–March) quarters

Indicators 2–5 for the quarter ending September 2012 are summarised in Figure 8. The horizontal lines represent the threshold upper quartile value (indicator 2) and threshold lower quartile values (indicators 3–5).
6. OPIOID PRESCRIBING

*Unit of measurement:* Morphine items as a percentage of all strong opioid items

- This is a new national prescribing indicator for 2012–2013.
- Figure 9 shows that whilst morphine accounts for 43% of items, it accounts for only 14% of costs, whereas fentanyl, buprenorphine and oxycodone combined account for 52% of items and 80% of spend on strong opioids within NHS Wales.

Figure 9. Strong opioid cost versus number of items – Quarter ending September 2012

- Figure 10 compares primary and secondary care prescribing of strong opioids.
7. INSULIN

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

- This is a new indicator for 2012–2013.
- Insulin glargine and insulin detemir make up 93% of the total items of intermediate/long-acting insulin prescribed and 95% of the total costs.
- Analogue insulins are more expensive than standard isophane preparations and their use is increasing. The cost for the year to September 2012 has increased by 3.6% from the previous year to £8.09 million per annum.
- Figure 11 compares prescribing of insulin in primary and secondary care within each HB.
Figure 11. Long-acting analogue insulin items as a percentage of all long- and intermediate-acting insulin items (excluding biphasics) in primary and secondary care – Quarter ending September 2012

<table>
<thead>
<tr>
<th>Care Sector</th>
<th>Primary Care</th>
<th>Secondary Care</th>
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<tbody>
<tr>
<td>Velindre</td>
<td>100.00</td>
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<tr>
<td>Aneurin Bevan</td>
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<tr>
<td>BCU</td>
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<td>Hynel Dia</td>
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<tr>
<td>Cam Taf</td>
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<td>80.60</td>
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<tr>
<td>Powys</td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Average</td>
<td>92.02</td>
<td>80.60</td>
</tr>
</tbody>
</table>

Note: 100% value for Velindre based on four issues only.
**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 drug 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 dosage (DDD), developed by the World Health Organisation (WHO), is a unit of measurement whereby each drug is assigned a value within its recognised dosage range. The value is the assumed average maintenance dose per day for a drug when used for its main indication in adults. A drug 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 drugs 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.