



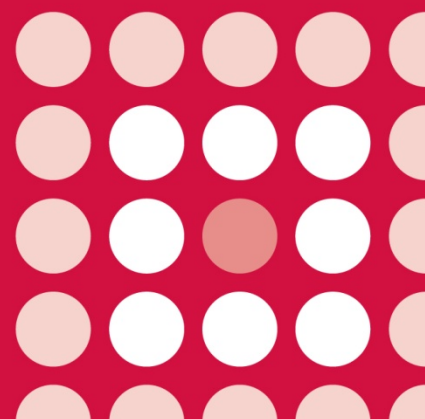
All Wales Therapeutics
and Toxicology Centre
Canolfan Therapiwteg a
Thocsicoleg Cymru Gyfan

NATIONAL PRESCRIBING INDICATORS 2013–2014

ANALYSIS OF PRESCRIBING DATA TO MARCH 2014



September 2014



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 (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 prescribing against these NPIs for the quarter ending March 2014.

Although the term 'prescribing' is used in this report, the data presented represent prescriptions that have been dispensed and forwarded for pricing. It is assumed that the difference between the number of prescriptions issued and those dispensed is not significant, and that dispensing provides an accurate representation of prescribing.

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, with the aim of achieving or increasing towards the threshold of 96%.

Figure 1 shows the trend in the proportion of LAC statin prescribing in the seven health boards in Wales from quarter 1 2010–2011 to quarter 4 2013–2014. The graph clearly shows an increase in LAC statin prescribing, particularly in health boards with initially lower prescribing. Despite high levels of LAC statin prescribing in the final quarter of 2012–2013, prescribing continued to increase slowly during 2013–2014, with a national average of 94.4% in quarter 4.

Figure 1. Trend in LAC statin prescribing as a percentage of all statin, ezetimibe and simvastatin/ezetimibe combination prescribing

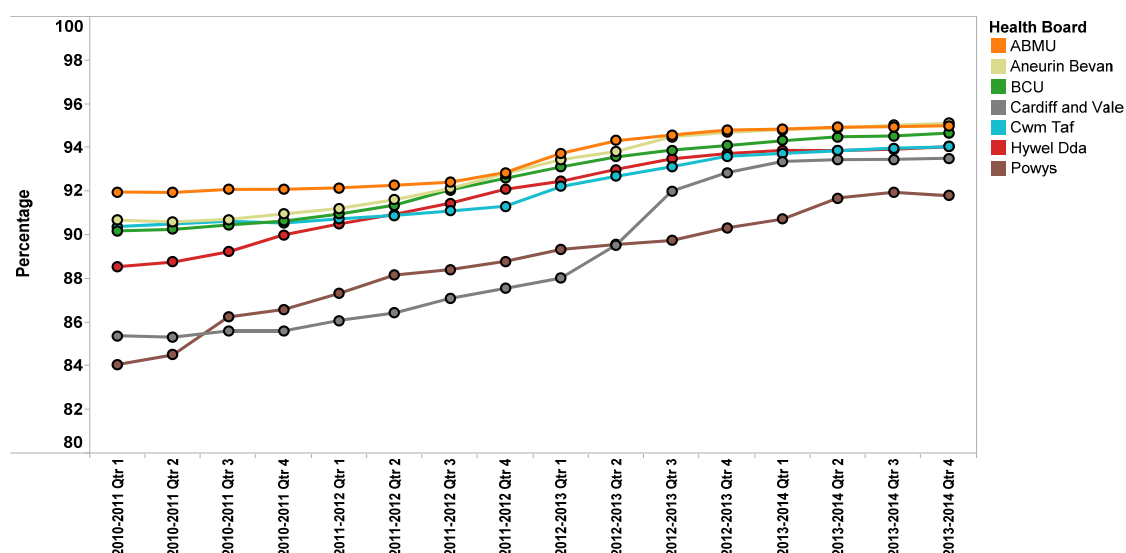
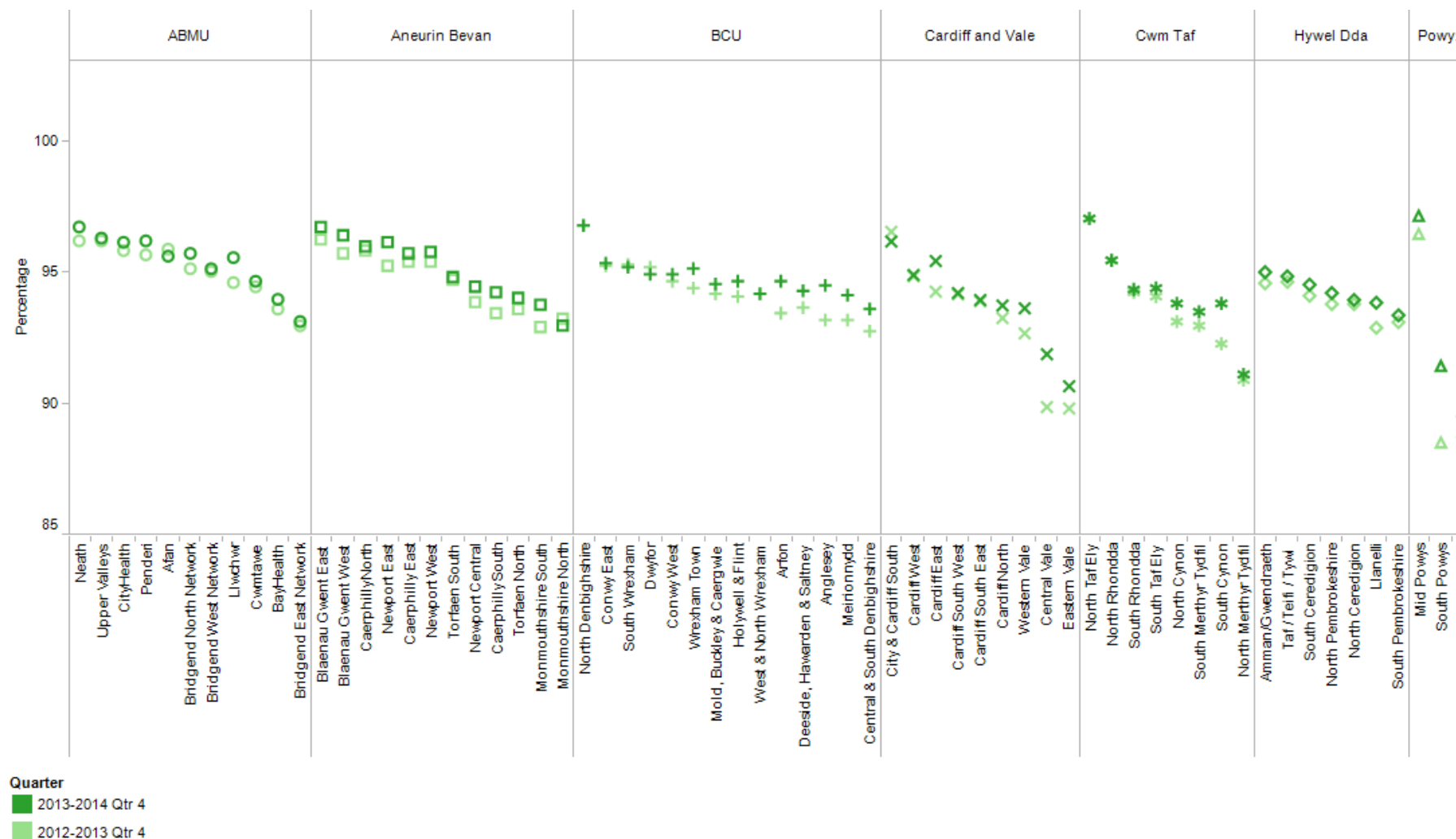


Figure 2 compares prescribing across cluster groups for quarter 4 2012–2013 with quarter 4 2013–2014. The graph shows movement towards the NPI threshold across the majority of clusters during the period.

**Figure 2. LAC statin prescribing as a percentage of all statin, ezetimibe and simvastatin/ezetimibe combination prescribing
Quarter ending March 2013 versus quarter ending March 2014**



2.0 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-PU), with the aim of achieving or reducing towards the threshold of 1,568 ADQs per 1,000 STAR-PU.

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

Figure 3 shows the trend in hypnotic and anxiolytic prescribing by health board from quarter 1 2010–2011 to quarter 4 2013–2014. National average prescribing fell from 2,227 ADQs per 1,000 STAR-PU in quarter 4 2012–2013 to 2,106 ADQs per 1,000 STAR-PU in quarter 4 2013–2014, a reduction of 5.4%.

Figure 3. Trend in hypnotic and anxiolytic prescribing

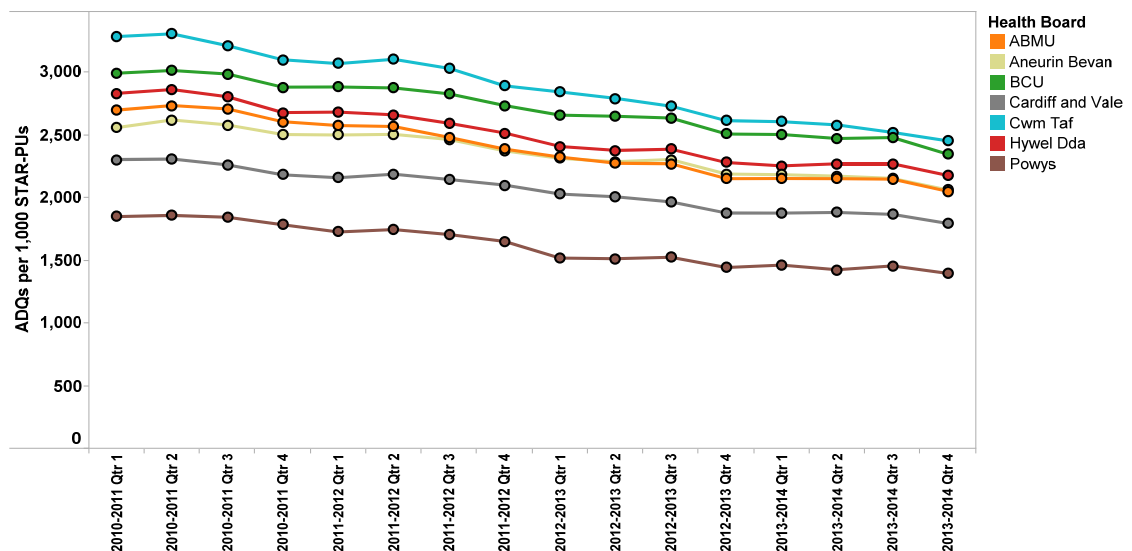
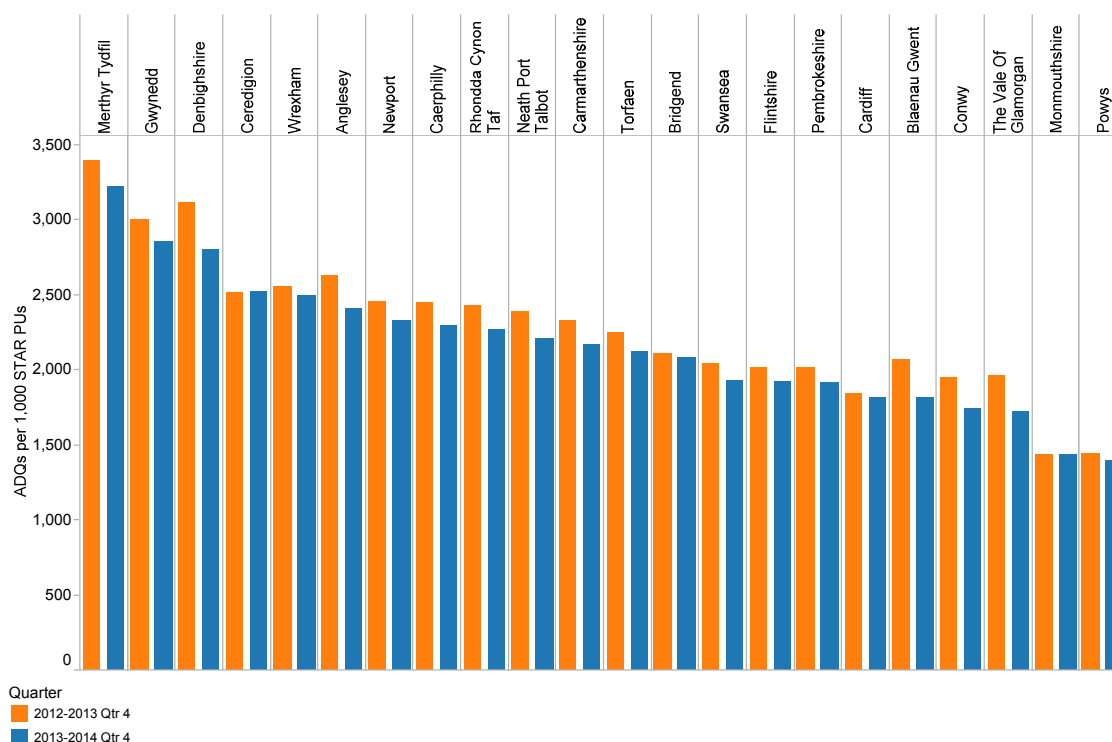


Figure 4 compares prescribing in quarter 4 2012–2013 to that in quarter 4 2013–2014 across the former local health board regions. The largest percentage reductions were seen in the Vale of Glamorgan (–12.3%), Blaenau Gwent (–12.2%), Conway (–10.4%) and Denbighshire (–10.0%).

**Figure 4. Hypnotic and anxiolytic prescribing
Quarter ending March 2013 versus quarter ending March 2014**



3.0 DOSULEPIN

Unit of measurement:

Dosulepin defined daily doses (DDD) per 1,000 prescribing units (PUs), with the aim of achieving or reducing towards the threshold of 31.22 DDDs per 1,000 PUs.

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

Figure 5 shows the continued reduction in dosulepin prescribing during 2013–2014, although some variation between the health boards remains. National average prescribing fell from 71.8 DDDs per 1,000 PUs in quarter 4 2012–2013 to 57.3 DDDs per 1,000 PUs in quarter 4 2013–2014 (a reduction of 20.2%).

Figure 5. Trend in dosulepin prescribing

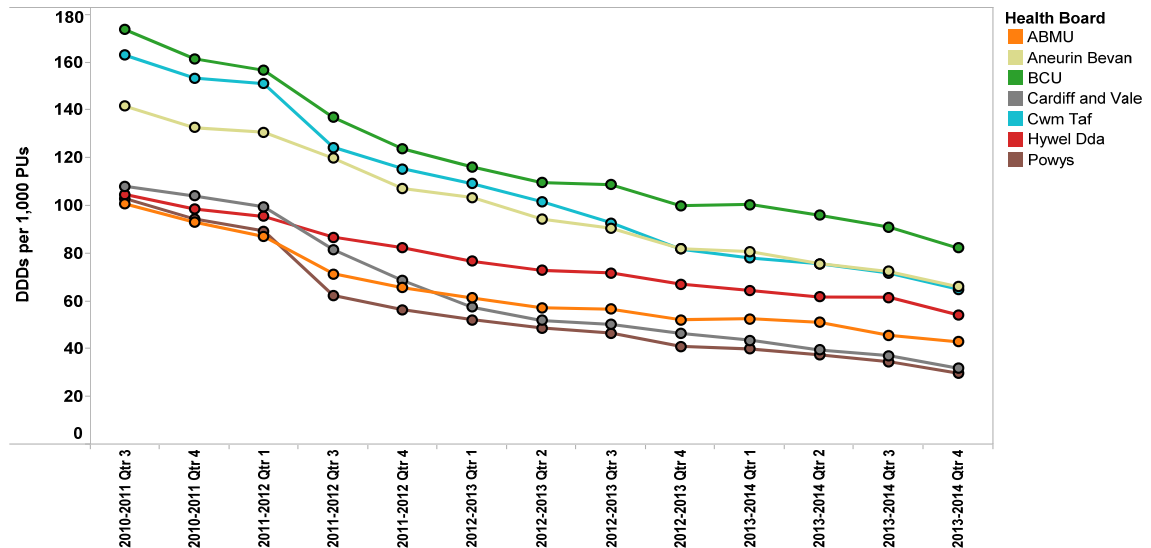
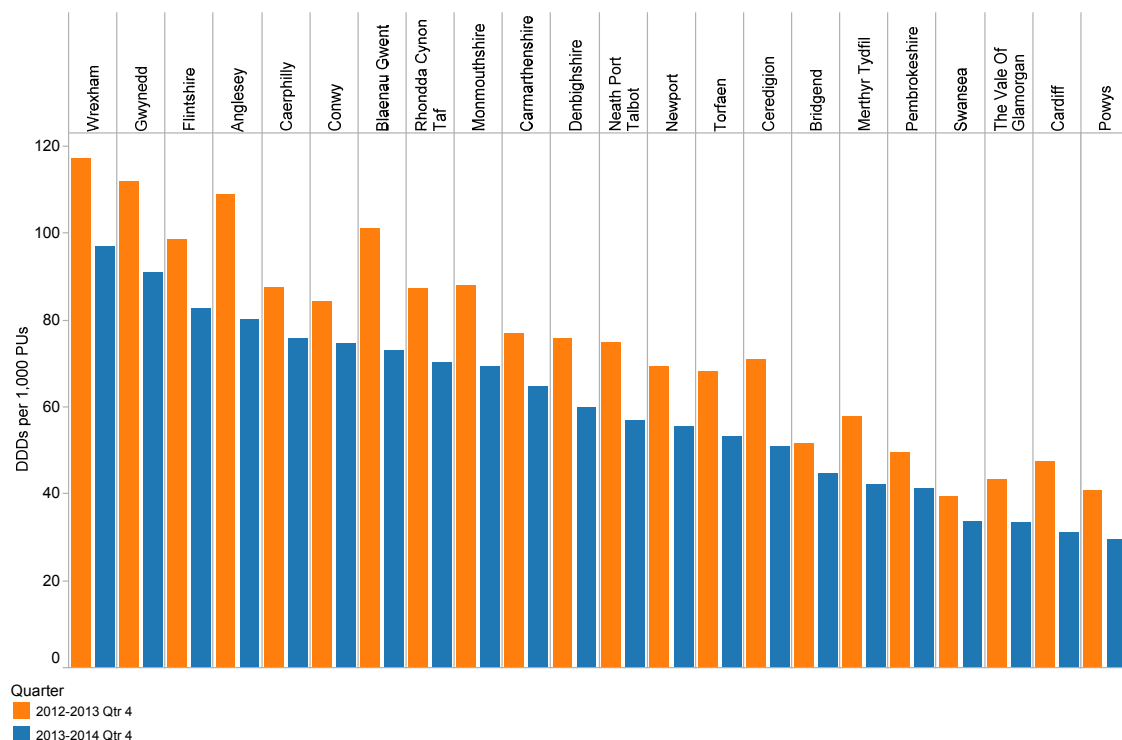


Figure 6 compares prescribing in quarter 4 2012–2013 to that in quarter 4 2013–2014 across the former local health board regions. It illustrates the significant reduction in prescribing across the regions during the period. The largest percentage reductions were seen in Cardiff (–34.4%), Ceredigion (–28.6%), Blaenau Gwent (–27.8%) and Powys (–27.5%).

Figure 6. Dosulepin prescribing
Quarter ending March 2013 versus quarter ending March 2014



4.0 ANTIDEPRESSANTS

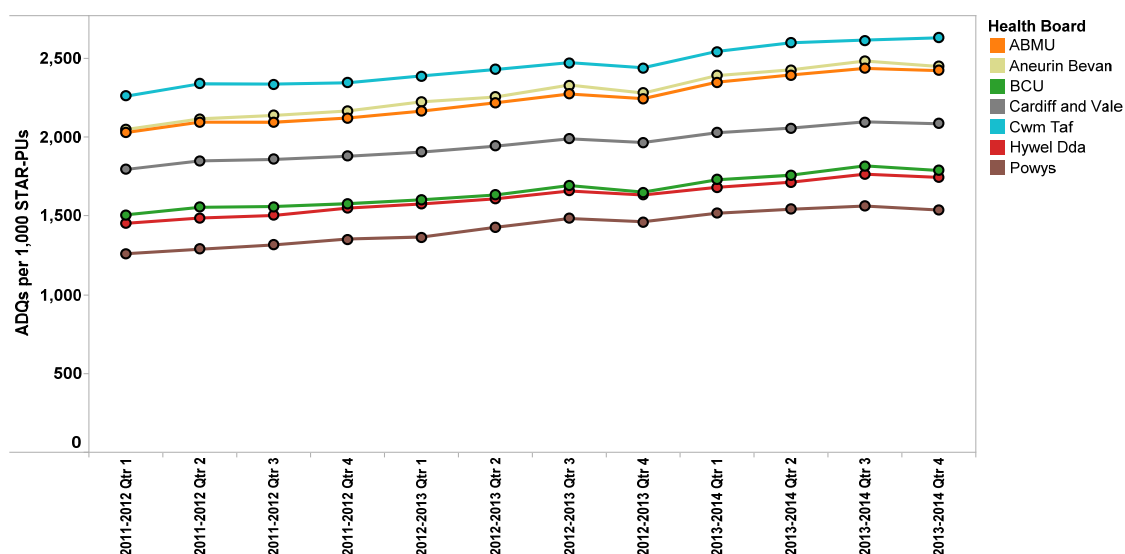
Unit of measurement:

Antidepressant ADQs per 1,000 STAR-PU.

This NPI was introduced in 2013–2014 to monitor the variation in prescribing across Wales.

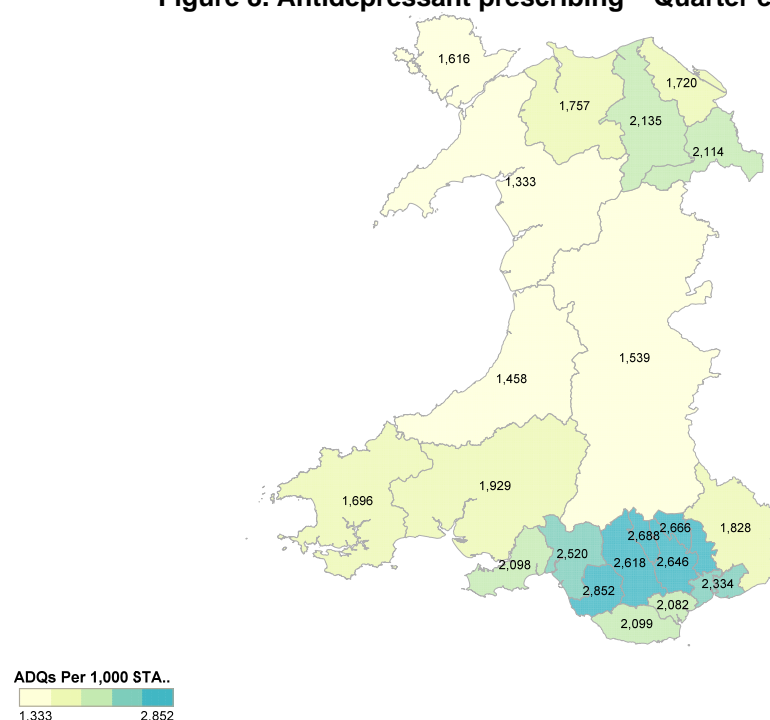
Figure 7 shows the trend in antidepressant prescribing from quarter 1 2011–2012 to quarter 4 2013–2014. It shows an increase in prescribing in all health boards and illustrates regional variation in prescribing.

Figure 7. Trend in antidepressant prescribing



The map in Figure 8 illustrates the variation in antidepressant prescribing across the former local health board regions for the quarter ending March 2014, for local reflection.

Figure 8. Antidepressant prescribing – Quarter ending March 2014



5.0 STRONG OPIOIDS

Unit of measurement:

Morphine items as a percentage of strong opioid items, with the aim of achieving or increasing towards the threshold of 56%. 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 9 shows the trend in morphine prescribing as a percentage of strong opioids from quarter 1 2011–2012 to quarter 4 2013–2014. The graph illustrates the increases seen across the health boards since the introduction of this indicator. During 2013–2014 national average usage increased from 48.8% in quarter 1 to 52.7% in quarter 4 (a percentage increase of 8.0%). The largest percentage increases across individual former local health board regions were seen in Merthyr Tydfil (23.1%), the Vale of Glamorgan (17.1%) and Torfaen (16.8%).

Figure 9. Trend in morphine prescribing as a percentage of strong opioid prescribing

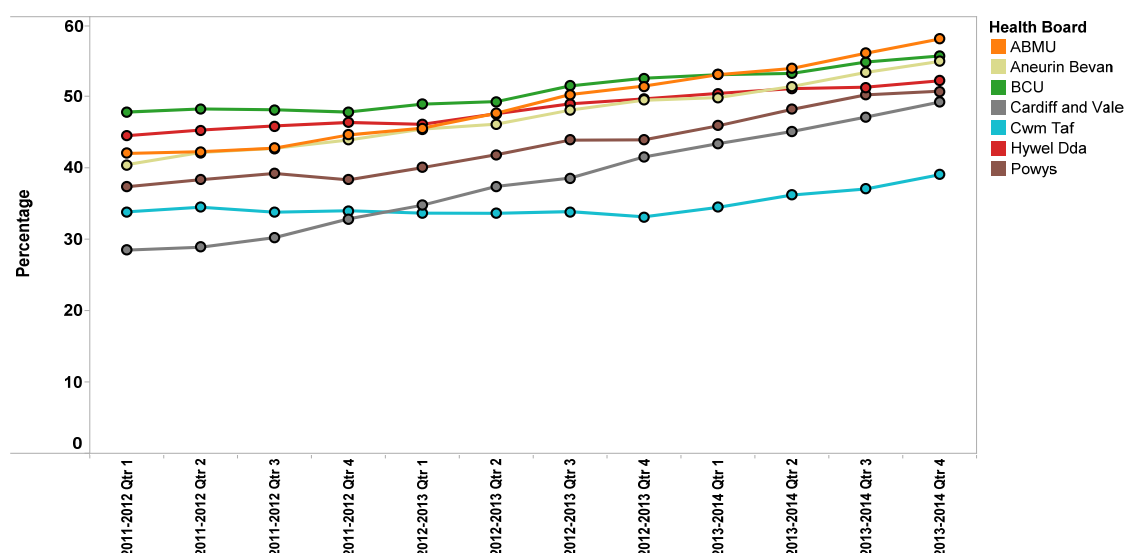
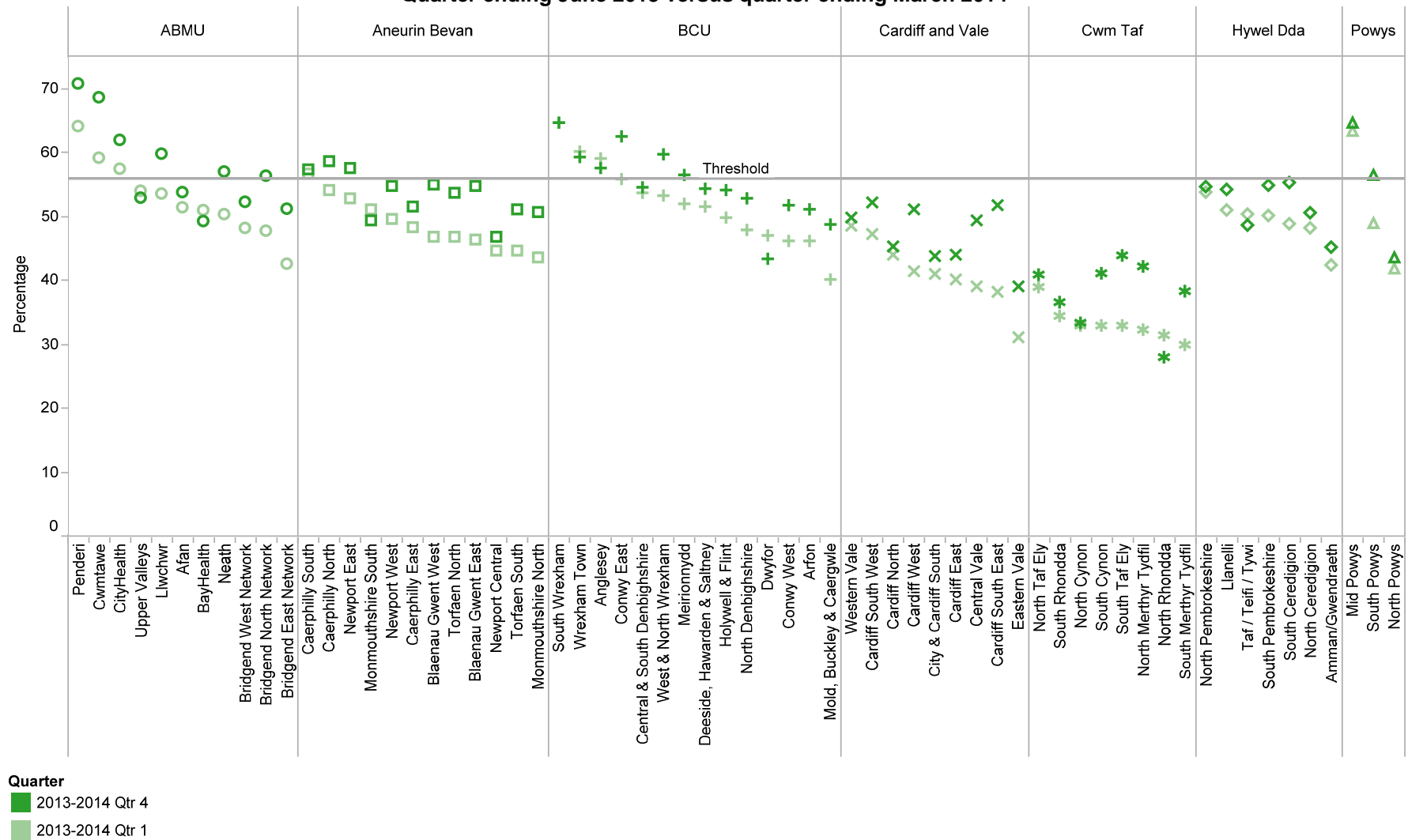


Figure 10 compares prescribing for the quarter ending June 2013* with the quarter ending March 2014 across the cluster groups in Wales. The graph shows that morphine prescribing has increased in the majority of areas during the period.

* Note that data for the quarter ending June 2013 are used for this comparison due to a change in the drug basket for this indicator and the unavailability of historical prescribing data.

Figure 10. Morphine prescribing as a percentage of strong opioid prescribing by cluster group
Quarter ending June 2013 versus quarter ending March 2014



6.0 ANTIBIOTICS

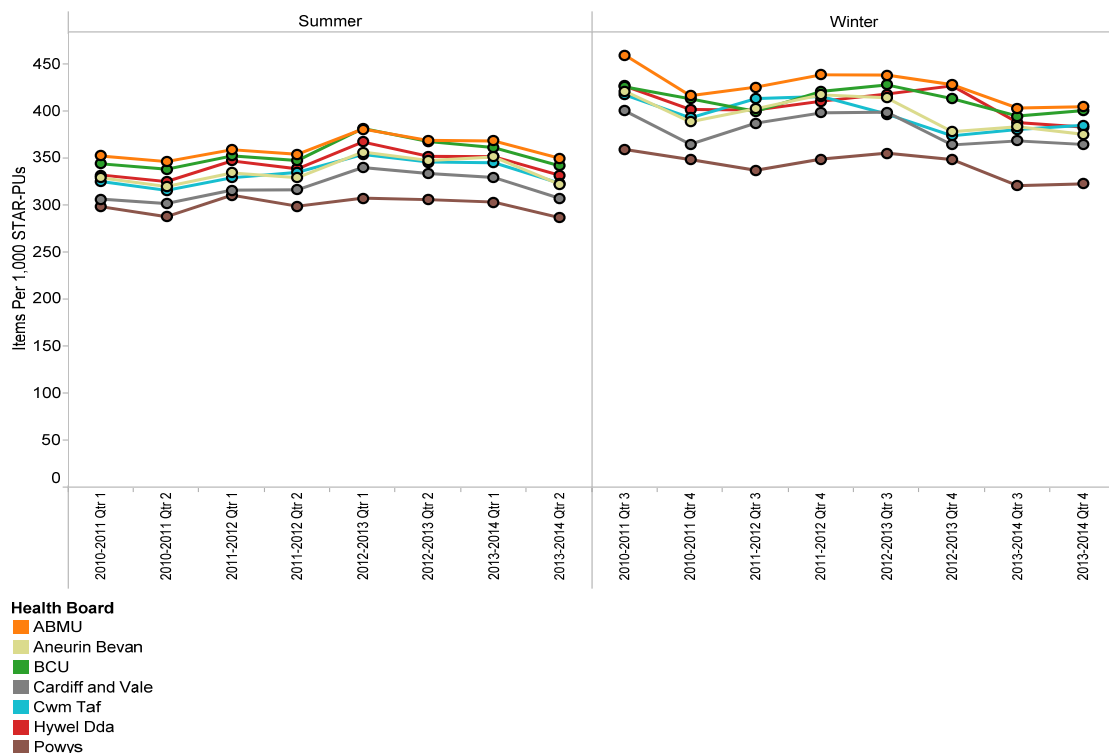
Units of measurement:

There are four antibacterial prescribing indicators, focusing on reducing antibiotic prescribing, 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 11 shows the trend in total antibiotic prescribing for the summer quarters (April–September) and the winter quarters (October–March) as items per 1,000 STAR-PUs. The upward trend in prescribing for the summer quarters 2010–2011 to 2012–2013 appears to be reversing and total antibiotic prescribing has decreased from summer quarters 2012–2013 to summer quarters 2013–2014. Comparing the winter quarters 2010–2011 to 2013–2014, there has been a reduction in prescribing across the health boards.

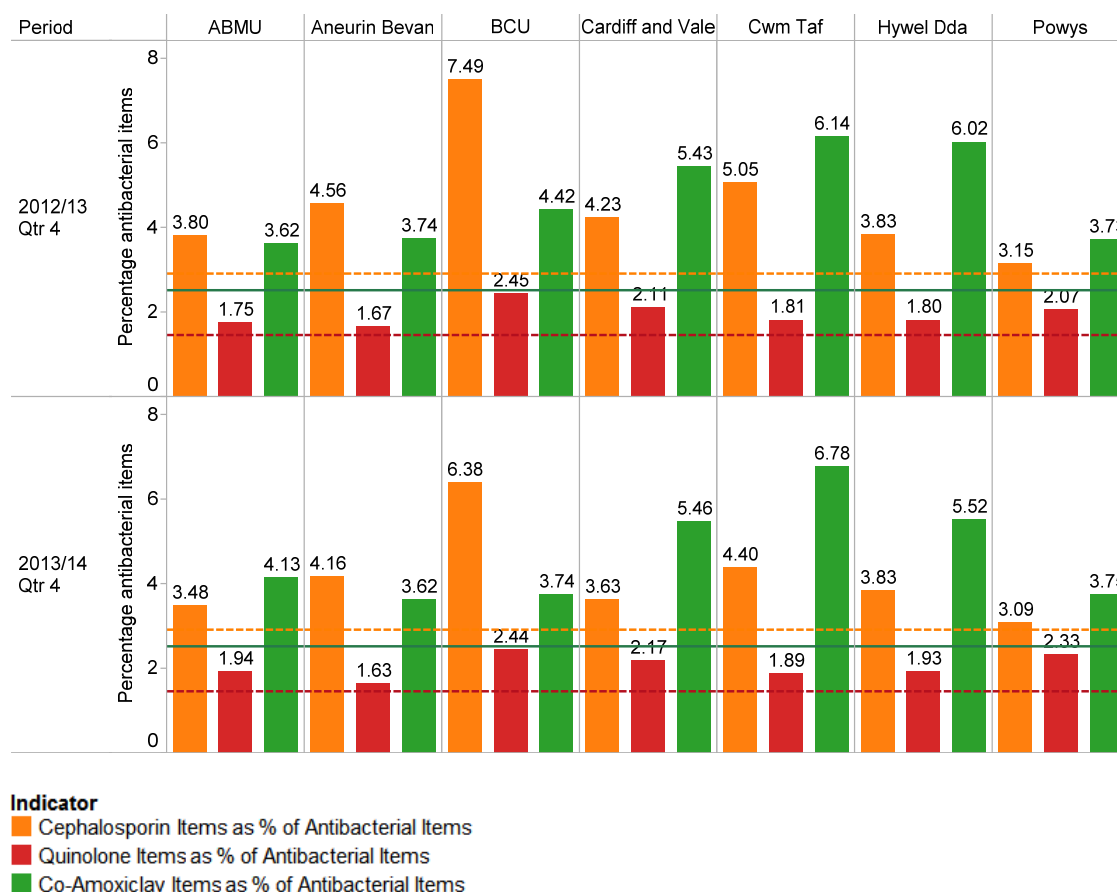
Figure 11. Trend in antibiotic prescribing for summer and winter quarters



Data relating to the remaining antibiotic indicators are presented in Figure 12. The graph compares proportional prescribing of each antibiotic or group of antibiotics for the quarter to March 2013 with that for the quarter to March 2014. The threshold values used on the graphs (illustrated as horizontal lines) refer to values for the financial year 2013–2014.

The graph shows the variation in prescribing of the different medicines across the health boards.

Figure 12. Antibiotic indicators 2–4
Quarter ending March 2013 versus quarter ending March 2014



7.0 INSULIN

Unit of measurement:

Long-acting insulin analogue items as a percentage of long- and intermediate-acting insulin items (excluding biphasics), with the aim of achieving or reducing towards the threshold of 90%.

This indicator does not include insulin degludec as this medicine was not recommended for use within NHS Wales by AWMMSG. Insulin degludec accounted for a very small number of items in the quarter ending March 2014 compared to insulin glargine and insulin detemir.

Figure 13 shows the trend in long-acting insulin analogue items as a percentage of all long- and intermediate-acting insulin items from quarter 1 2010–2011 to quarter 4 2013–2014. National average prescribing fell from 91.8% in the quarter to March 2013 to 91.2% in the quarter to March 2014. Prescribing in the lowest prescribing (Cwm Taf) and highest prescribing (Betsi Cadwaladr) health boards was 81.2% and 95.2% respectively for the quarter ending March 2014.

Figure 13. Trend in long-acting insulin analogue prescribing as a percentage of all long- and intermediate-acting insulin prescribing

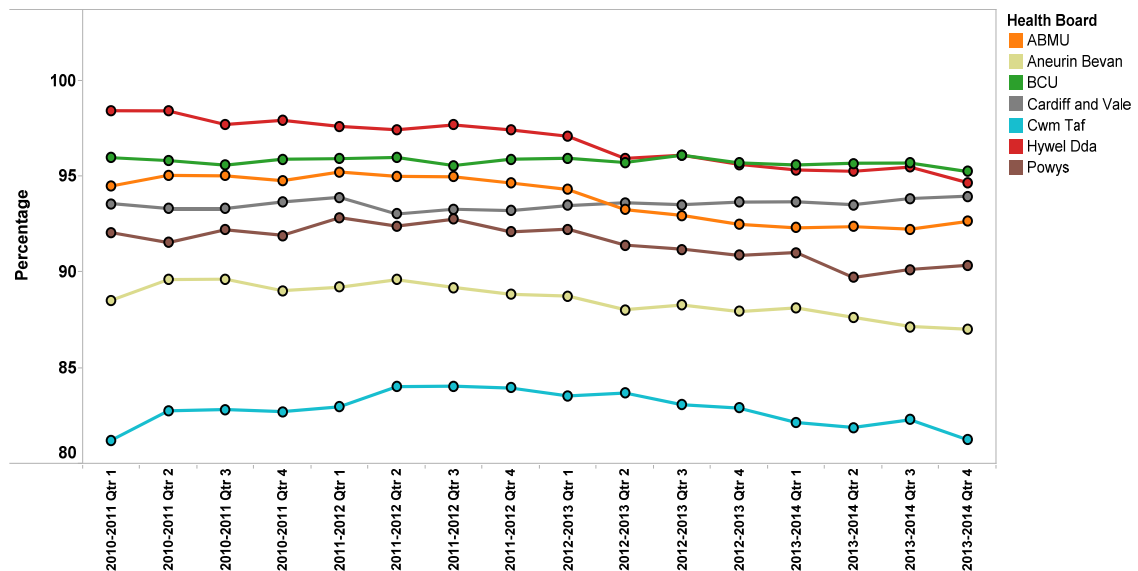
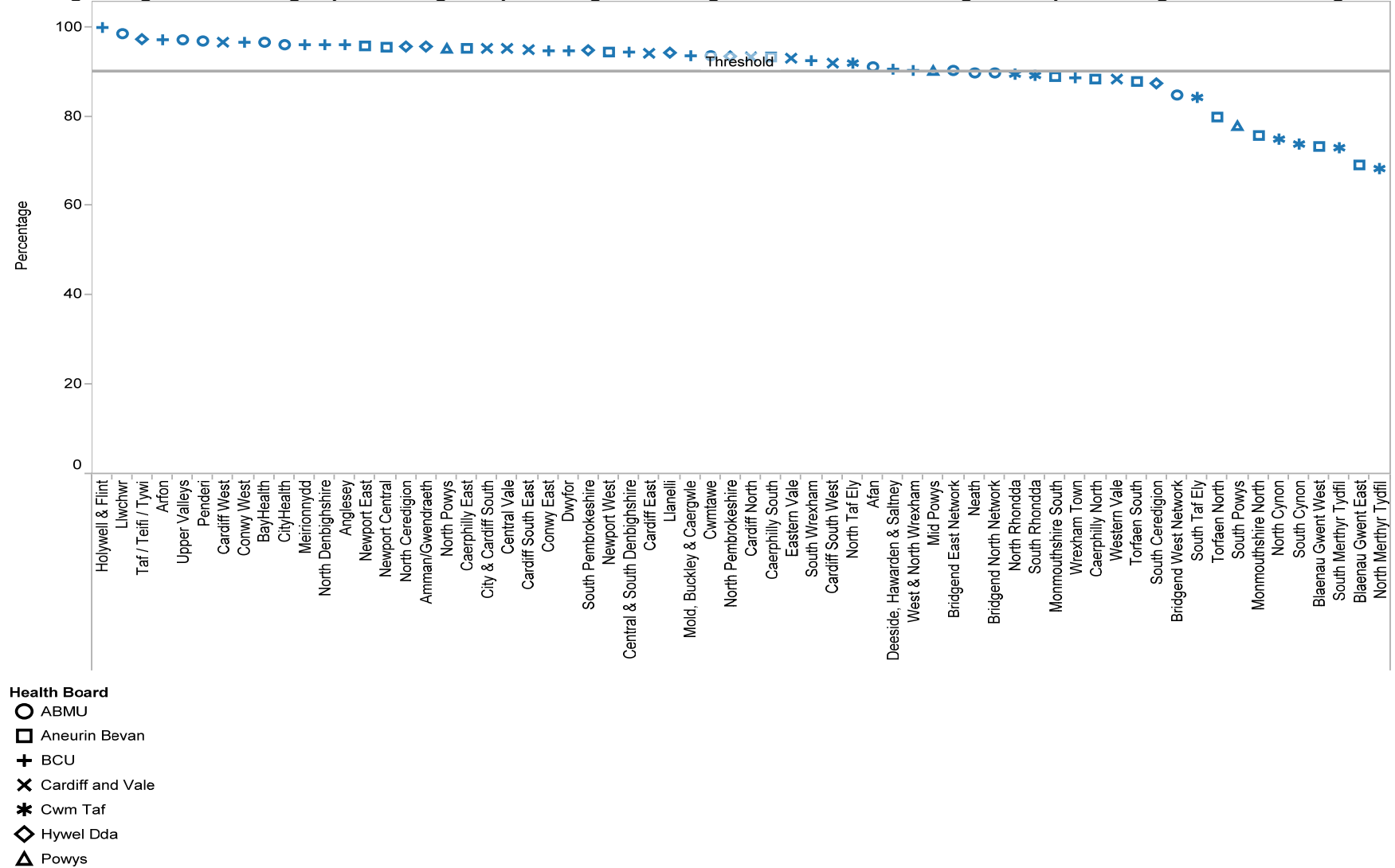


Figure 14 shows the regional variation in insulin prescribing, according to cluster group, for the quarter ending March 2014.

Figure 14. Long-acting insulin analogue prescribing as a percentage of all long- and intermediate-acting insulin prescribing – Quarter ending March 2014



8.0 NON-STEROIDAL ANTI-INFLAMMATORY DRUGS

Units of measurement:

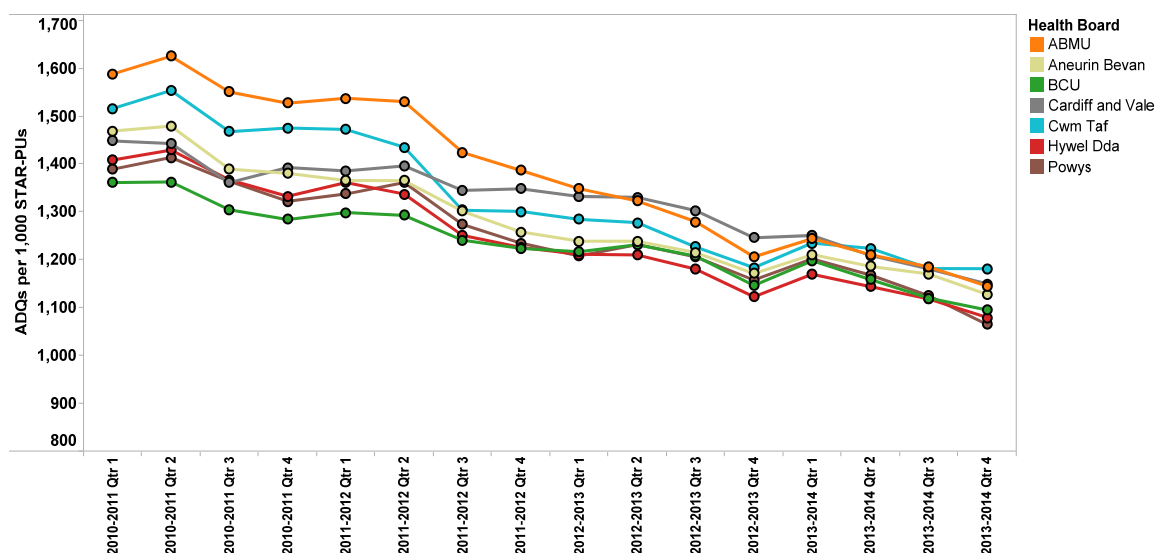
There are two non-steroidal anti-inflammatory drug (NSAID) NPIs for 2013–2014:

1. Total NSAID ADQs per 1,000 STAR-PUs, with the aim of achieving or reducing towards the threshold of 923 ADQs per 1,000 STAR-PUs.
2. Ibuprofen and naproxen as a percentage of total NSAID items with the aim of achieving or increasing towards the threshold of 78.3%.

Figure 15 shows the trend in total NSAID prescribing from quarter 1 2010–2011 to quarter 4 2013–2014, and Figure 16 shows prescribing of ibuprofen and naproxen as a proportion of total NSAID prescribing over the same period. The graphs show that prescribing continues to change in line with the NPIs, and that the variation between health boards has reduced.

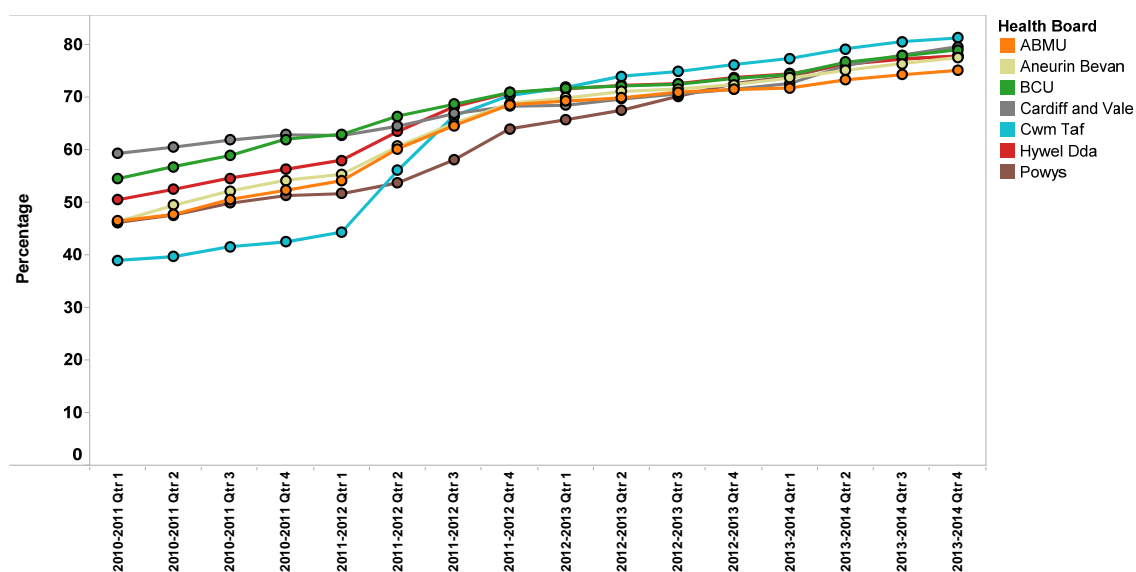
Average total NSAID prescribing fell by 54.2 ADQs per 1,000 STAR-PUs across Wales from the quarter ending March 2013 to the quarter ending March 2014 (a reduction of 4.6%). The largest percentage reductions were seen in Cardiff (–8.4%), Powys (–8.0%), Merthyr Tydfil (–7.6%) and Neath Port Talbot (–7.1%) localities.

Figure 15. Trend in total NSAID prescribing



On average, prescribing of ibuprofen and naproxen as a proportion of total NSAID prescribing increased from 72.8% in the quarter ending March 2013, to 78.0% in the quarter ending March 2014 across Wales. The Vale of Glamorgan (14.6%), Cardiff (10.2%), Anglesey (9.7%) and Denbighshire (9.5%) showed the largest percentage increases of the former local health board regions.

Figure 16. Trend in ibuprofen and naproxen prescribing as a percentage of total NSAID prescribing



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 DDIs 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.