All Wales Therapeutics and Toxicology Centre

Canolfan Therapiwteg a Thocsicoleg Cymru Gyfan

NATIONAL PRESCRIBING INDICATORS 2014–2015

ANALYSIS OF PRESCRIBING DATA TO SEPTEMBER 2014

February 2015

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

- This report summarises the prescribing of medicines associated with a National Prescribing Indicator (NPI) for quarter 2 2014–2015 (quarter ending September 2014).
- For a detailed explanation of the clinical relevance of these indicators please refer to www.awmsg.org/docs/awmsg/medman/National_Prescribing_Indicators_2014-2015.pdf
- For 2014–2015 there are 14 NPIs focusing on eight areas of prescribing:

Indicator	Unit of measure	Clinical relevance
Lipid-modifying drugs	Items of LAC statins as a percentage of all statin, ezetimibe and simvastatin/ezetimibe combination prescribing	There are still savings to be made by some health boards through the use of LAC statins. Simvastatin, atorvastatin and pravastatin are the agents of choice.
Hypnotics and anxiolytics	ADQs per 1,000 STAR-PUs	There is considerable variation in use of these medicines across health boards. Wales prescribes more hypnotic and anxiolytic items per 1,000 patients than demographically similar regions of England.
Antidepressants	ADQs per 1,000 STAR-PUs	To monitor variation in prescribing across Wales.
Opioid analgesics	Total items per 1,000 PUs	NICE CG140 recommends oral modified-release morphine as first-line maintenance treatment for patients with advanced and progressive disease who require strong opioids. Tramadol has been associated with an increasing number of deaths and reports to the National Poisons Information Service.
	Items of morphine as a percentage of strong opioid prescribing	
	Tramadol DDDs per 1,000 patients	
Antibiotics	Total antibacterial items per 1,000 STAR-PUs	The NPIs support one of the key elements of the Welsh Antimicrobial Resistance Programme: to inform, support and promote the prudent use of antimicrobials. Public health guidance states "Use simple generic antibiotics if possible. Avoid broad-spectrum antibiotics (e.g. co-amoxiclav, quinolones and cephalosporins) where narrow spectrum antibiotics remain effective".
	Quinolones as a percentage of total antibacterial items	
	Cephalosporins as a percentage of total antibacterial items	
	Co-amoxiclav as a percentage of total antibacterial items	
Insulin	Items of long-acting insulin analogues as a percentage of total long- and intermediate-acting insulin (excluding biphasics)	NICE CG87 recommends that when insulin therapy is necessary, human isophane (NPH) insulin is the preferred option. Long-acting insulin analogues offer no significant advantage and are more expensive.
Non-steroidal anti-inflammatory drugs (NSAIDs)	ADQs per 1,000 STAR-PUs	There is overwhelming evidence to reduce prescribing of NSAIDs, especially in the elderly, due to the risk of gastro-intestinal, cardiovascular and renal complications.
	Ibuprofen and naproxen as a percentage of NSAID items	
Yellow cards	Number of yellow cards submitted per practice and per health board	To encourage reporting of adverse events.
ADQ = average daily quantity; DDD = defined daily dose; LAC = low acquisition cost; PU = prescribing unit; STAR-PU = specific therapeutic group age–sex related prescribing unit		

For each NPI, a threshold is set at the 75th percentile (i.e. encouraging a reduction or increase in prescribing rates in line with the best performing 25% of practices).

- Quarterly reports for 2014–2015 will be available by the following dates:
  Data for the quarter ending December 2014: 12 April 2015
  Data for the quarter ending March 2015: 11 July 2015

1.0 LIPID-MODIFYING DRUGS

This indicator aims to increase the prescribing of statins with a low acquisition cost (LAC) over more expensive lipid lowering treatments.

LAC statins accounted for more than 90% of the prescribing of medicines monitored by this indicator in the quarter to September 2014. Prescribing has increased in line with the aim of the indicator compared to the equivalent quarter of the previous year.

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 2 2014–2015.

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

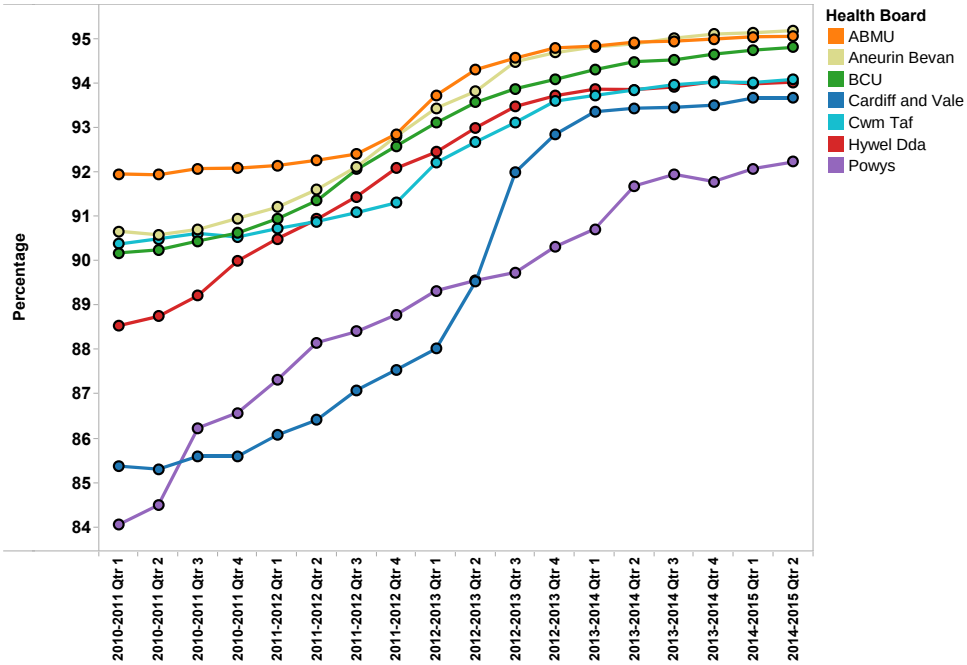


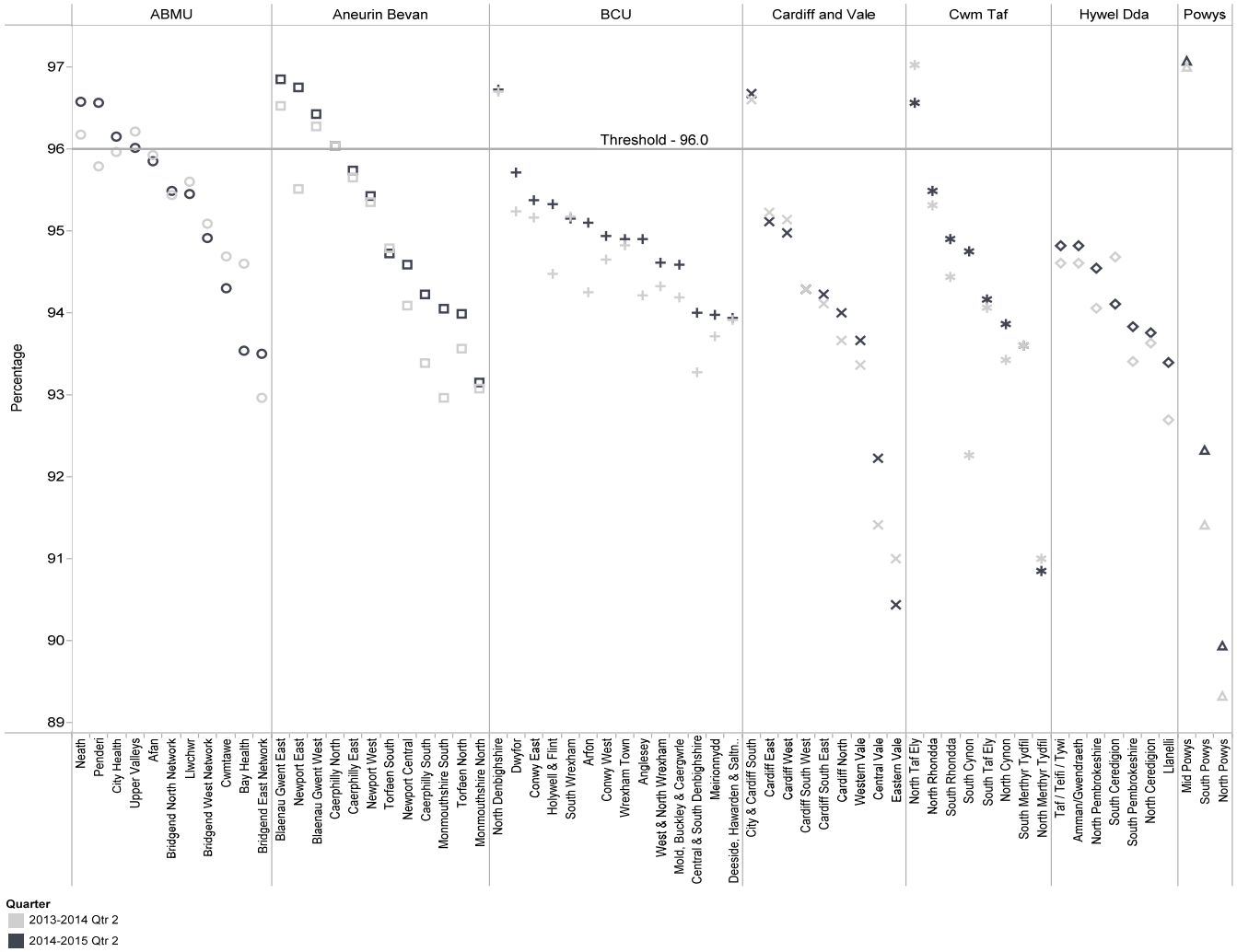
Table 1 compares prescribing in quarter 2 2013–2014 with quarter 2 2014–2015. Prescribing above the national average is highlighted in green; prescribing below the national average is highlighted in blue.

Table 1. LAC statins as a percentage of all statin, ezetimibe and simvastatin/ezetimibe combination prescribing

	2013–2014 Qtr 2	2014–2015 Qtr 2	Change	% Change
ABMU	94.92	95.05	0.13	0.14%
Aneurin Bevan	94.88	95.18	0.30	0.32%
BCU	94.48	94.80	0.32	0.34%
Cardiff and Vale	93.43	93.66	0.23	0.25%
Cwm Taf	93.84	94.08	0.24	0.26%
Hywel Dda	93.85	94.02	0.17	0.18%
Powys	91.68	92.22	0.54	0.59%
National average	94.23	94.49	0.26	0.28%

Figure 2 compares prescribing across cluster groups for quarter 2 2013–2014 with quarter 2 2014–2015.

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



2.0 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.

Figure 3 shows the trend in hypnotic and anxiolytic prescribing by health board from quarter 1 2012–2013 to quarter 2 2014–2015.

Figure 3. Trend in hypnotic and anxiolytic prescribing

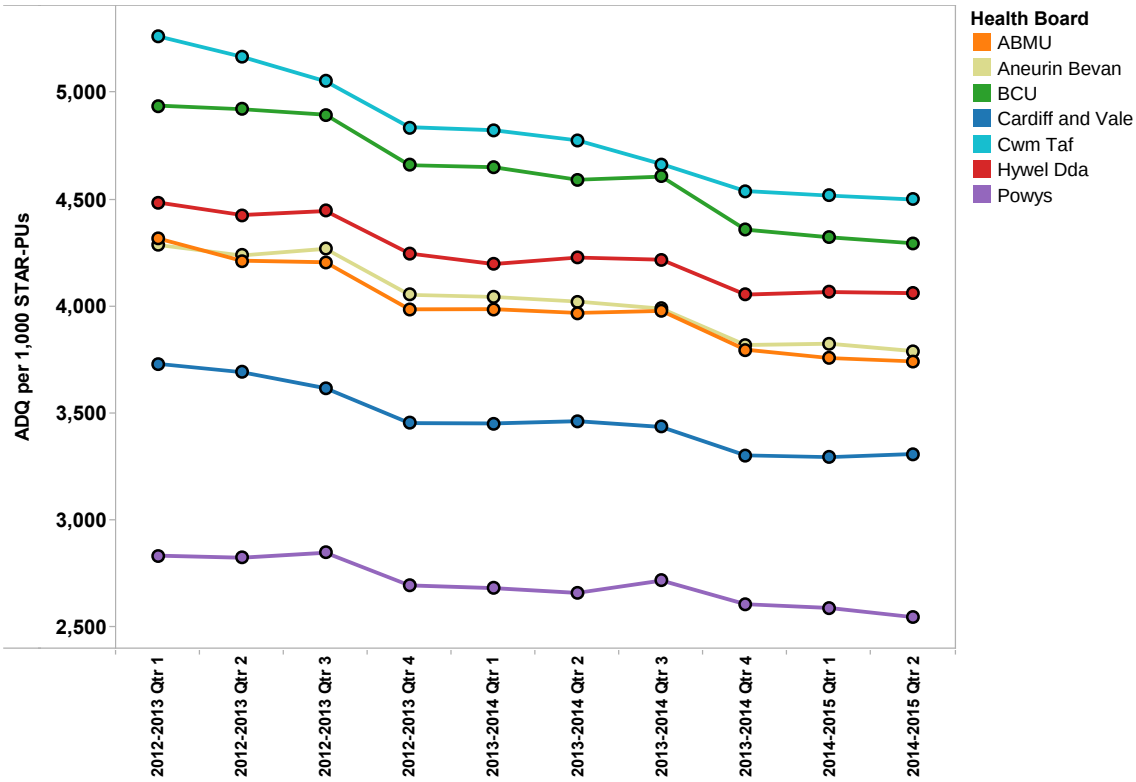


Table 2 compares prescribing in quarter 2 2013–2014 with quarter 2 2014–2015. Prescribing below the national average is highlighted in green; prescribing above the national average is highlighted in blue.

Table 2. Hypnotic and anxiolytic ADQs per 1,000 STAR-PUs (13)

	2013–2014 Qtr 2	2014–2015 Qtr 2	Change	% Change
ABMU	3,966.9	3,739.9	-227.0	-5.72%
Aneurin Bevan	4,020.0	3,788.5	-231.5	-5.76%
BCU	4,589.9	4,292.6	-297.3	-6.48%
Cardiff and Vale	3,460.1	3,307.0	-153.2	-4.43%
Cwm Taf	4,774.1	4,497.6	-276.6	-5.79%
Hywel Dda	4,226.0	4,059.7	-166.4	-3.94%
Powys	2,656.9	2,543.2	-113.7	-4.28%
National average	4,096.0	3,870.3	-225.7	-5.51%

3.0 ANTIDEPRESSANTS

This NPI was introduced in 2013–2014 to monitor variation in prescribing across Wales; therefore no target has been set.

Figure 4 shows the trend in antidepressant prescribing in the seven health boards in Wales from quarter 1 2012–2013 to quarter 2 2014–2015.

Figure 4. Trend in antidepressant prescribing

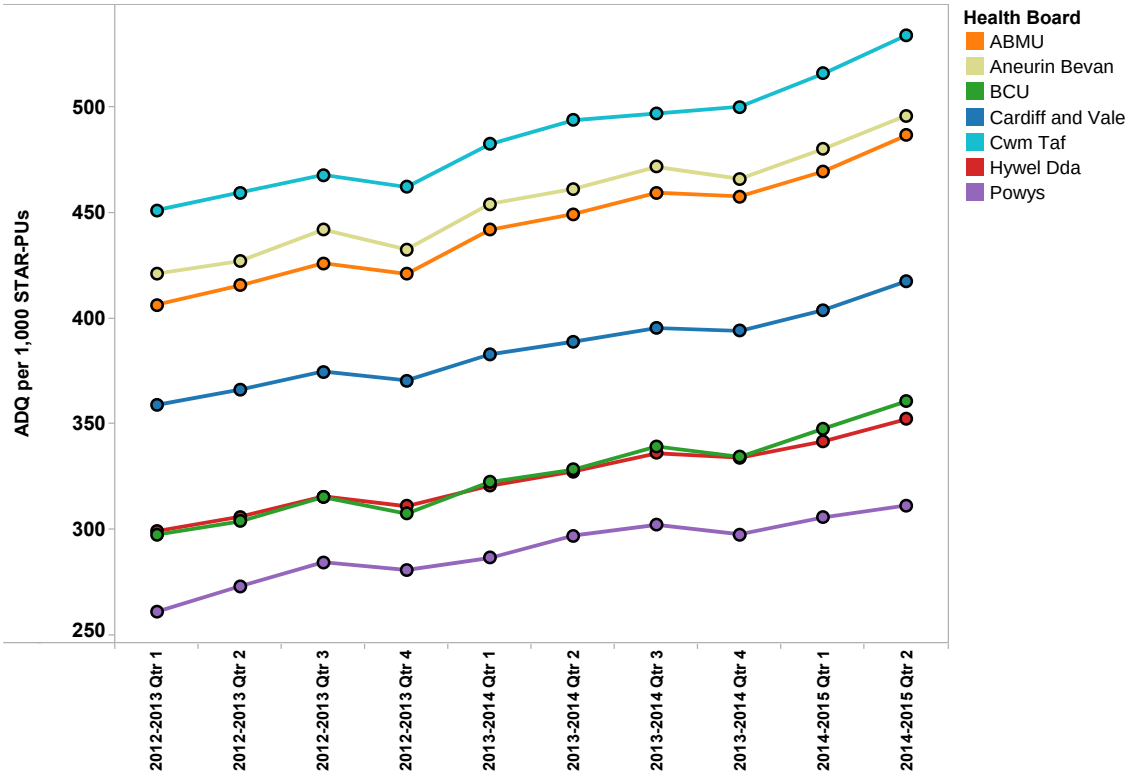


Table 3 compares prescribing in quarter 2 2013–2014 with quarter 2 2014–2015. Prescribing below the national average is highlighted in green; prescribing above the national average is highlighted in blue.

Table 3. Antidepressant ADQs per 1,000 STAR-PUs (13)

	2013–2014 Qtr 2	2014–2015 Qtr 2	Change	% Change
ABMU	449.1	486.4	37.3	8.30%
Aneurin Bevan	461.0	495.8	34.8	7.55%
BCU	328.3	360.7	32.4	9.86%
Cardiff and Vale	388.8	417.4	28.7	7.37%
Cwm Taf	493.5	533.7	40.3	8.16%
Hywel Dda	327.5	352.2	24.7	7.55%
Powys	297.1	311.4	14.3	4.81%
National average	397.1	429.3	32.1	8.09%

4.0 OPIOID ANALGESICS

There are three indicators focusing on opioid prescribing for 2014–2015. The indicators aim to encourage the appropriate prescribing of all opioid analgesics (including combination products containing codeine and dihydrocodeine 30 mg).

4.1 Total opioid items per 1,000 PUs

No target is set for this indicator, as it is intended to be a comparator for the other NPIs.

Figure 5 shows the trend in opioid analgesic prescribing in the seven health boards in Wales from quarter 1 2012–2013 to quarter 2 2014–2015.

Figure 5. Trend in opioid analgesic prescribing (including combination products containing codeine and dihydrocodeine 30 mg)

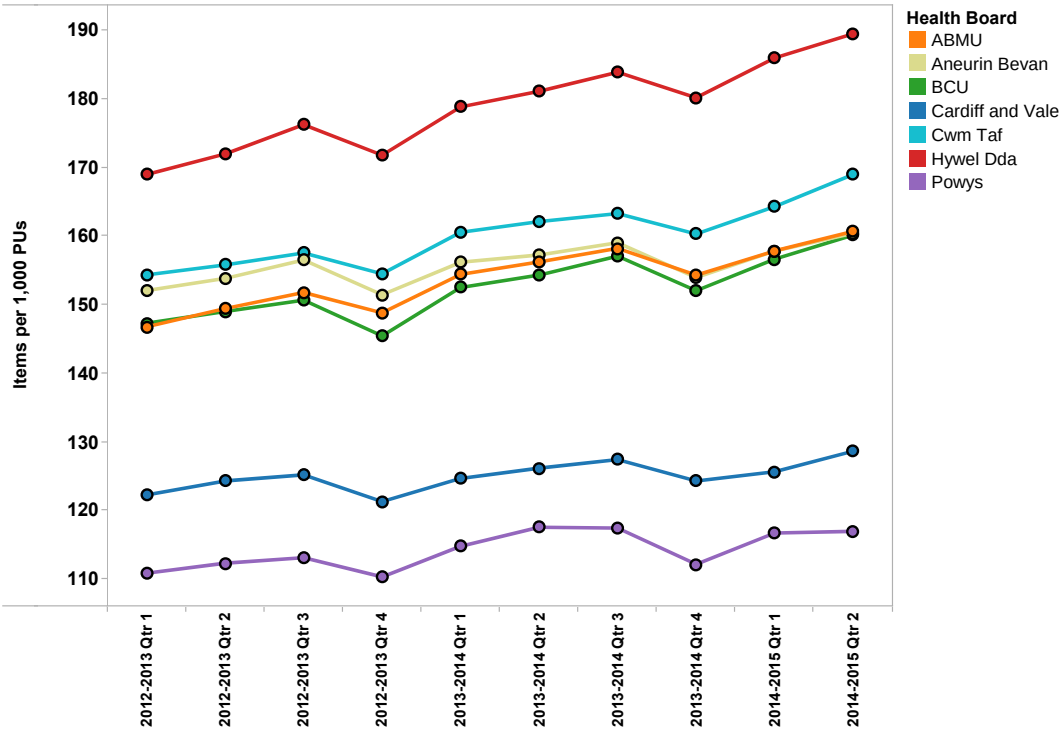


Table 4 compares prescribing in quarter 2 2013–2014 with quarter 2 2014–2015. Prescribing below the national average is highlighted in green; prescribing above the national average is highlighted in blue.

Table 4. Total opioid items per 1,000 PUs

	2013–2014 Qtr 2	2014–2015 Qtr 2	Change	% Change
ABMU	156.2	160.6	4.4	2.85%
Aneurin Bevan	157.2	160.4	3.2	2.01%
BCU	154.3	160.1	5.9	3.79%
Cardiff and Vale	126.1	128.6	2.5	1.97%
Cwm Taf	162.1	168.9	6.9	4.25%
Hywel Dda	181.1	189.5	8.4	4.64%
Powys	117.5	116.9	-0.6	-0.51%
National average	153.5	158.2	4.7	3.06%

4.2 Items of morphine as a percentage of strong opioid prescribing

This indicator aims to encourage the use of morphine as first-line treatment in patients requiring strong opioid analgesics, in line with NICE recommendations.

Figure 6 shows the trend in morphine prescribing as a percentage of total opioid prescribing in the seven health boards in Wales from quarter 1 2011–2012 to quarter 2 2014–2015.

Figure 6. Trend in morphine prescribing as a percentage of strong opioid prescribing

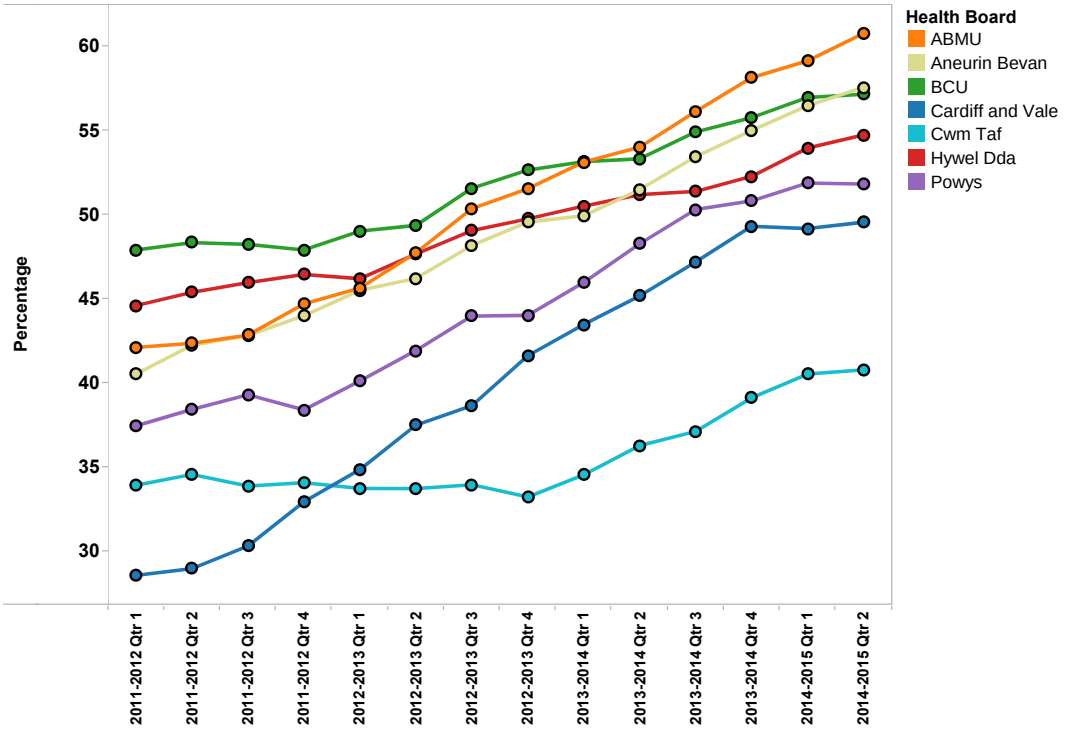


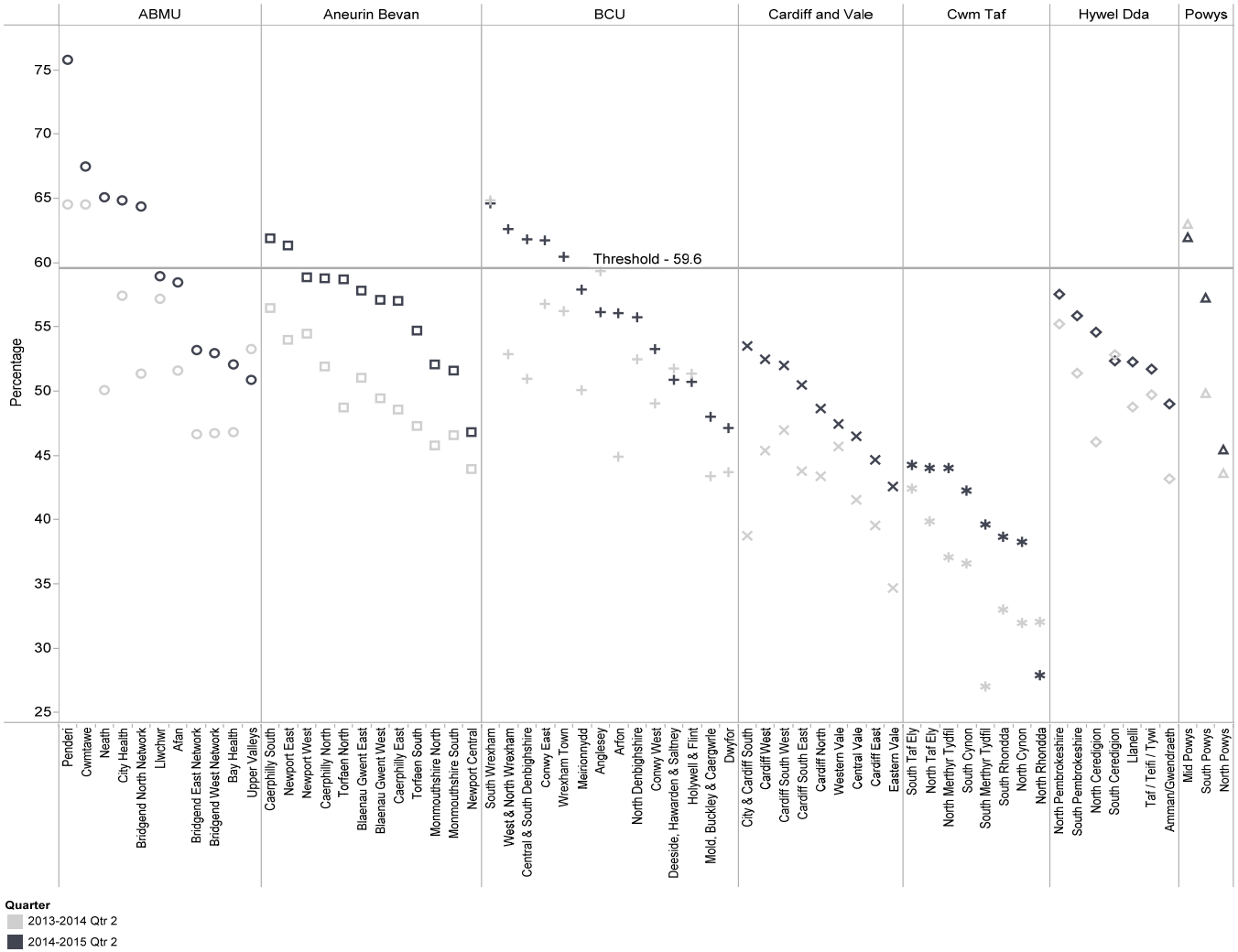
Table 5 compares prescribing in quarter 2 2013–2014 with quarter 2 2014–2015. Prescribing above the national average is highlighted in green; prescribing below the national average is highlighted in blue.

Table 5. Trend in morphine prescribing as a percentage of strong opioid prescribing

	2013–2014 Qtr 2	2014–2015 Qtr 2	Change	% Change
ABMU	53.98	60.75	6.77	12.54%
Aneurin Bevan	51.45	57.53	6.08	11.82%
BCU	53.28	57.12	3.84	7.21%
Cardiff and Vale	45.13	49.51	4.38	9.71%
Cwm Taf	36.23	40.73	4.50	12.42%
Hywel Dda	51.15	54.70	3.55	6.94%
Powys	48.23	51.78	3.55	7.36%
National average	49.82	54.60	4.78	9.59%

Figure 7 compares prescribing across cluster groups for quarter 2 2013–2014 with quarter 2 2014–2015.

Figure 7. Morphine items as a percentage of strong opioid prescribing by cluster group – Quarter ending September 2013 versus quarter ending September 2014



4.3 Tramadol DDDs per 1,000 patients

This NPI aims to encourage the prudent prescribing of tramadol, which has been associated with an increasing number of deaths and reports to the National Poisons Information Service.

Figure 8 shows the trend in tramadol prescribing in the seven health boards in Wales from quarter 1 2011–2012 to quarter 2 2014–2015.

Figure 8. Trend in tramadol prescribing

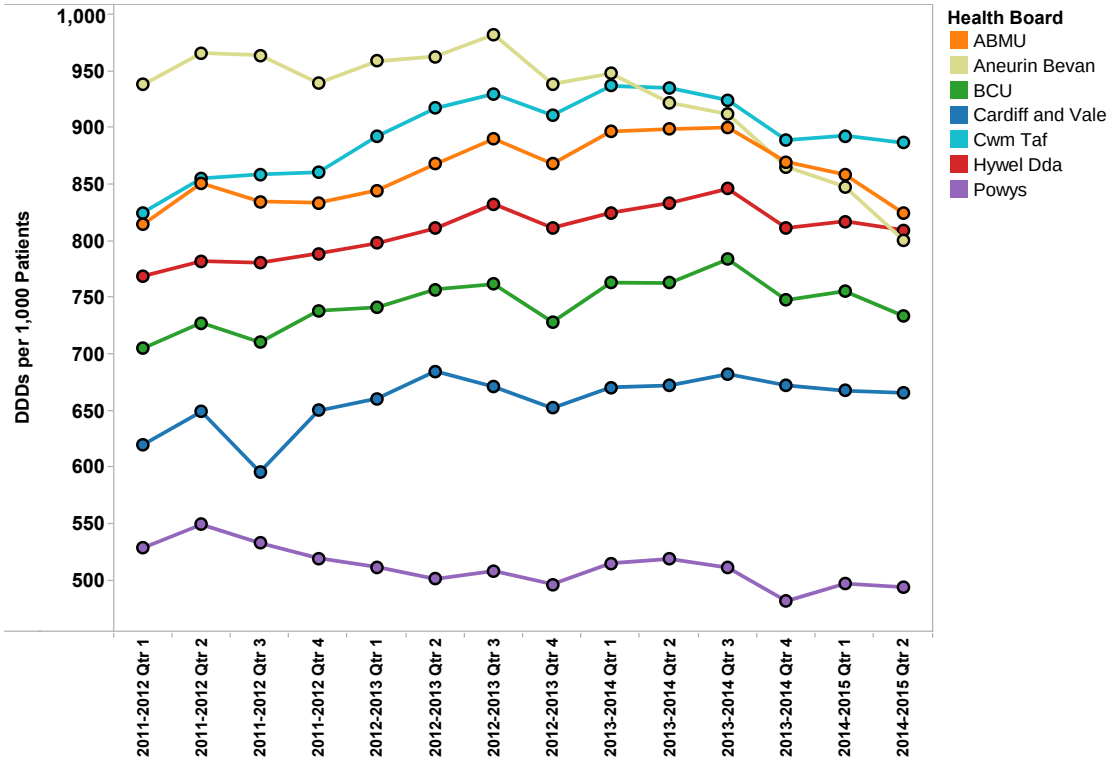


Table 6 compares prescribing in quarter 2 2013–2014 with quarter 2 2014–2015. Prescribing below the national average is highlighted in green; prescribing above the national average is highlighted in blue.

Table 6. Tramadol DDDs per 1,000 patients

	2013–2014 Qtr 2	2014–2015 Qtr 2	Change	% Change
ABMU	898	824	-74	-8.27%
Aneurin Bevan	922	800	-121	-13.17%
BCU	762	733	-29	-3.81%
Cardiff and Vale	672	665	-7	-0.98%
Cwm Taf	935	886	-49	-5.19%
Hywel Dda	833	809	-24	-2.87%
Powys	518	494	-25	-4.80%
National average	816	764	-52	-6.34%

5.0 ANTIBIOTICS

There are four antibacterial prescribing indicators for 2014–2015:

1. Total antibacterial items per 1,000 STAR-PUs;
2. Quinolones as a percentage of total antibacterial items;
3. Cephalosporins as a percentage of total antibacterial items;
4. Co-amoxiclav as a percentage of total antibacterial items.

5.1 Total antibacterial items per 1,000 STAR-PUs

This indicator supports one of the core elements of the Welsh Antimicrobial Resistance Programme: to inform, support and promote the prudent use of antimicrobials.

Figure 9 shows the seasonal trends in total antibiotic prescribing for the summer quarters (April–September) and the winter quarters (October–March) from 2012–2013 to 2014–2015.

Figure 9. Trend in total antibiotic prescribing for summer and winter quarters

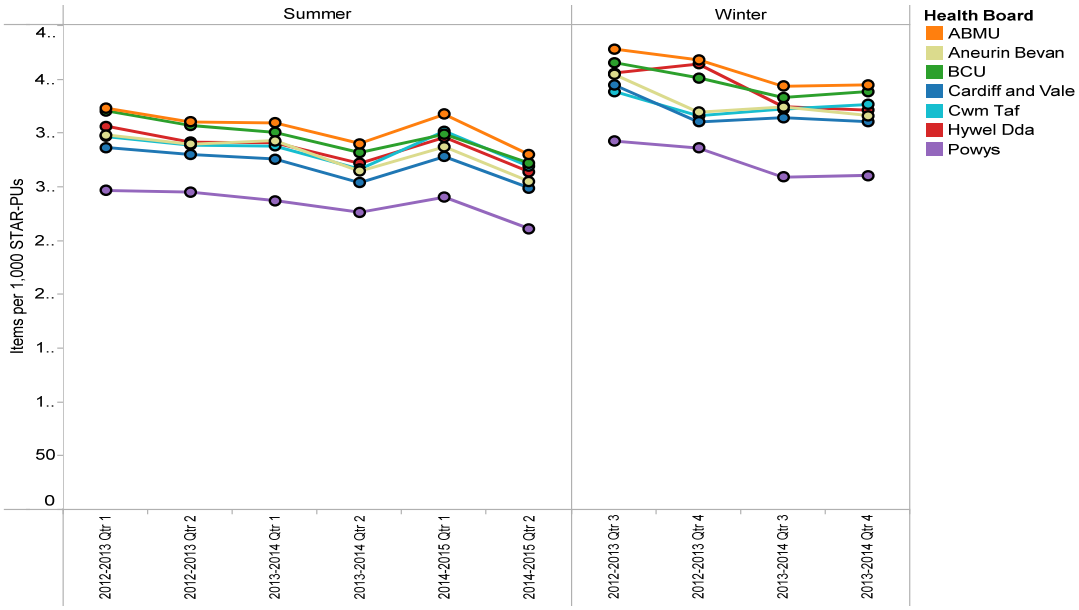


Table 7 compares prescribing in quarter 2 2013–2014 with quarter 2 2014–2015. Prescribing below the national average is highlighted in green; prescribing above the national average is highlighted in blue.

Table 7. Total antibacterial items per 1,000 STAR-PUs (13)

	2013–2014 Qtr 2	2014–2015 Qtr 2	Change	% Change
ABMU	340.3	329.9	-10.4	-3.07%
Aneurin Bevan	314.5	305.1	-9.4	-3.00%
BCU	331.8	322.0	-9.8	-2.97%
Cardiff and Vale	303.8	299.0	-4.8	-1.58%
Cwm Taf	316.4	318.9	2.5	0.80%
Hywel Dda	321.8	314.0	-7.8	-2.42%
Powys	276.3	261.1	-15.2	-5.50%
National average	320.6	312.6	-7.9	-2.48%

5.2 Quinolones, cephalosporins and co-amoxiclav

Antibacterial prescribing indicators 2, 3 and 4 aim to reduce the prescribing of medicines associated with an increased risk of *Clostridium difficile*, methicillin-resistant *Staphylococcus aureus* (MRSA) and resistant urinary tract infections.

Figures 10, 11 and 12 show the seasonal trends in quinolone, cephalosporin and co-amoxiclav prescribing for the summer quarters (April–September) and the winter quarters (October–March) from 2010–2011 to 2014–2015.

Figure 10. Trend in quinolone prescribing as a percentage of total antibacterial items for summer and winter quarters

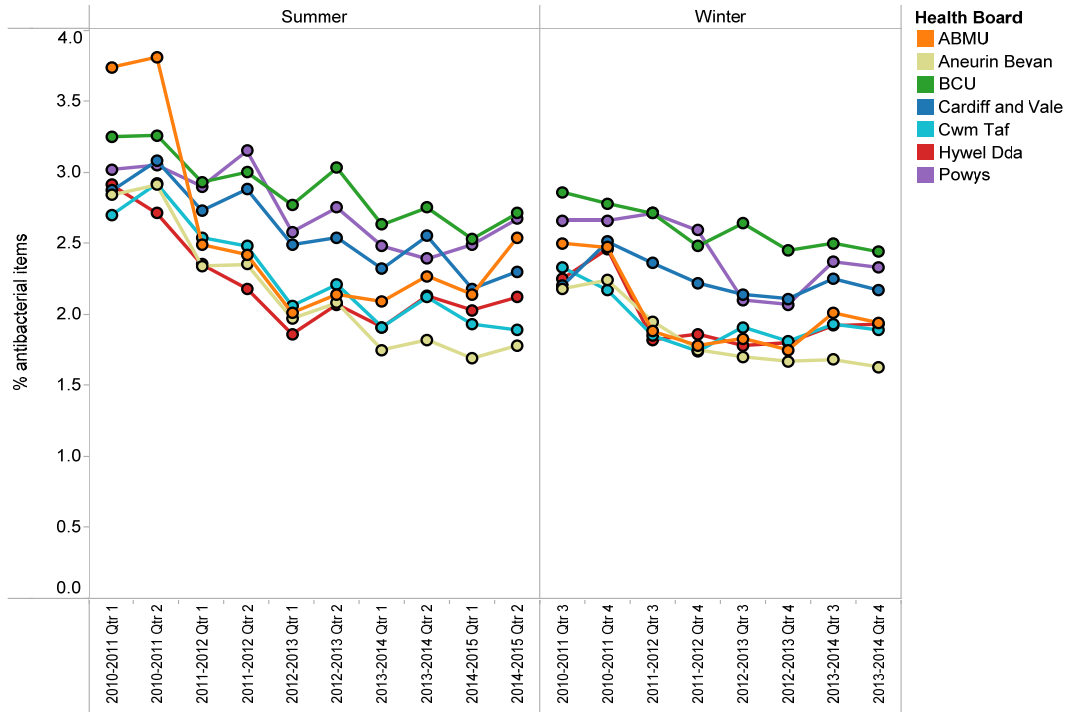


Figure 11. Trend in cephalosporin prescribing as a percentage of total antibacterial items for summer and winter quarters

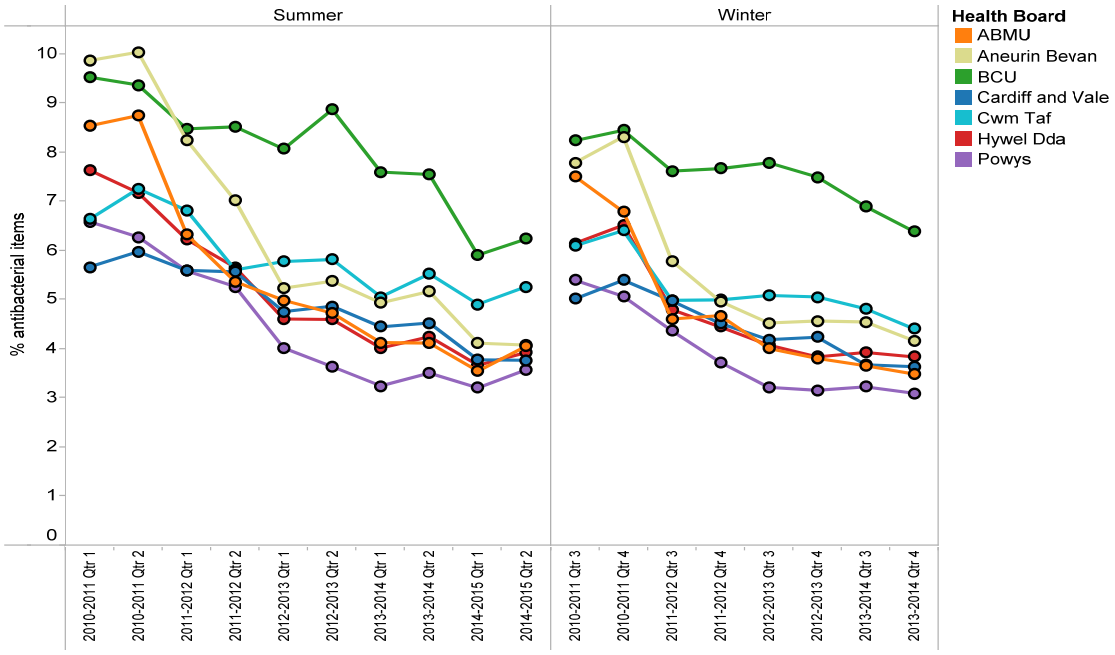


Figure 12. Trend in co-amoxiclav prescribing as a percentage of total antibacterial items for summer and winter quarters

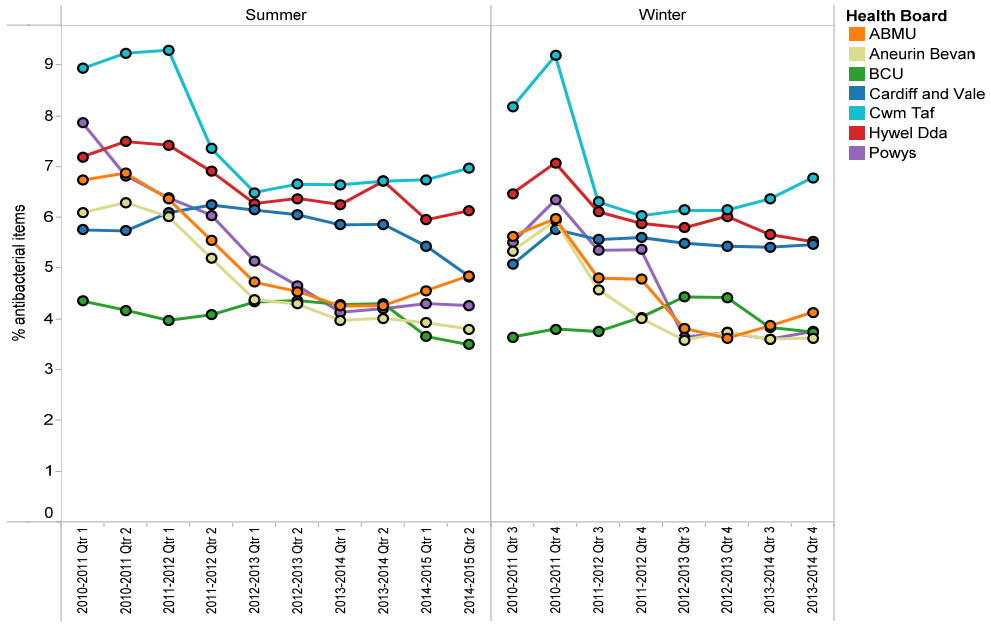
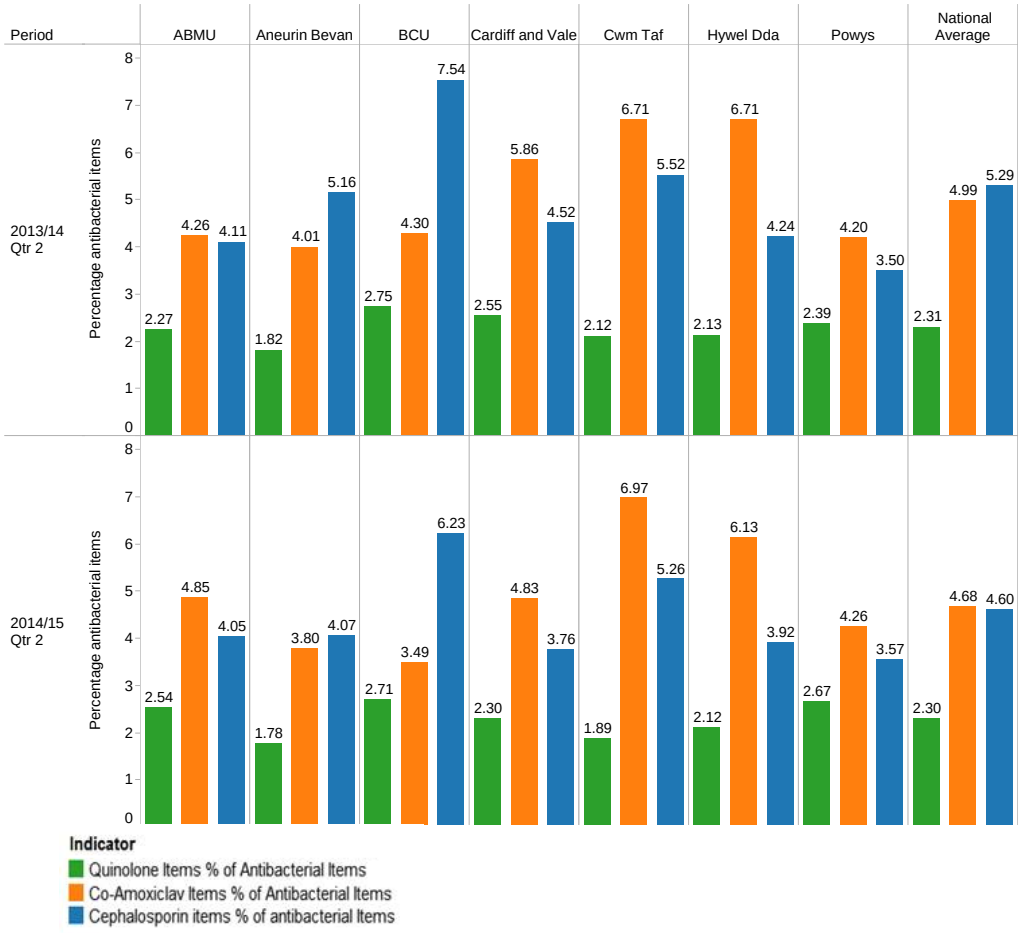


Figure 13 compares the prescribing of quinolones, cephalosporins and co-amoxiclav in quarter 2 2013–2014 with quarter 2 2014–2015 across the seven health boards in Wales.

Figure 13. Antibiotic indicators 2–4
Quarter ending September 2013 versus quarter ending September 2014



Figures 14, 15 and 16 compare prescribing of each antibiotic or group of antibiotics across cluster groups for quarter 2 2013–2014 with quarter 2 2014–2015.

Figure 14. Quinolones as a percentage of total antibacterial items – Quarter ending September 2013 versus quarter ending September 2014

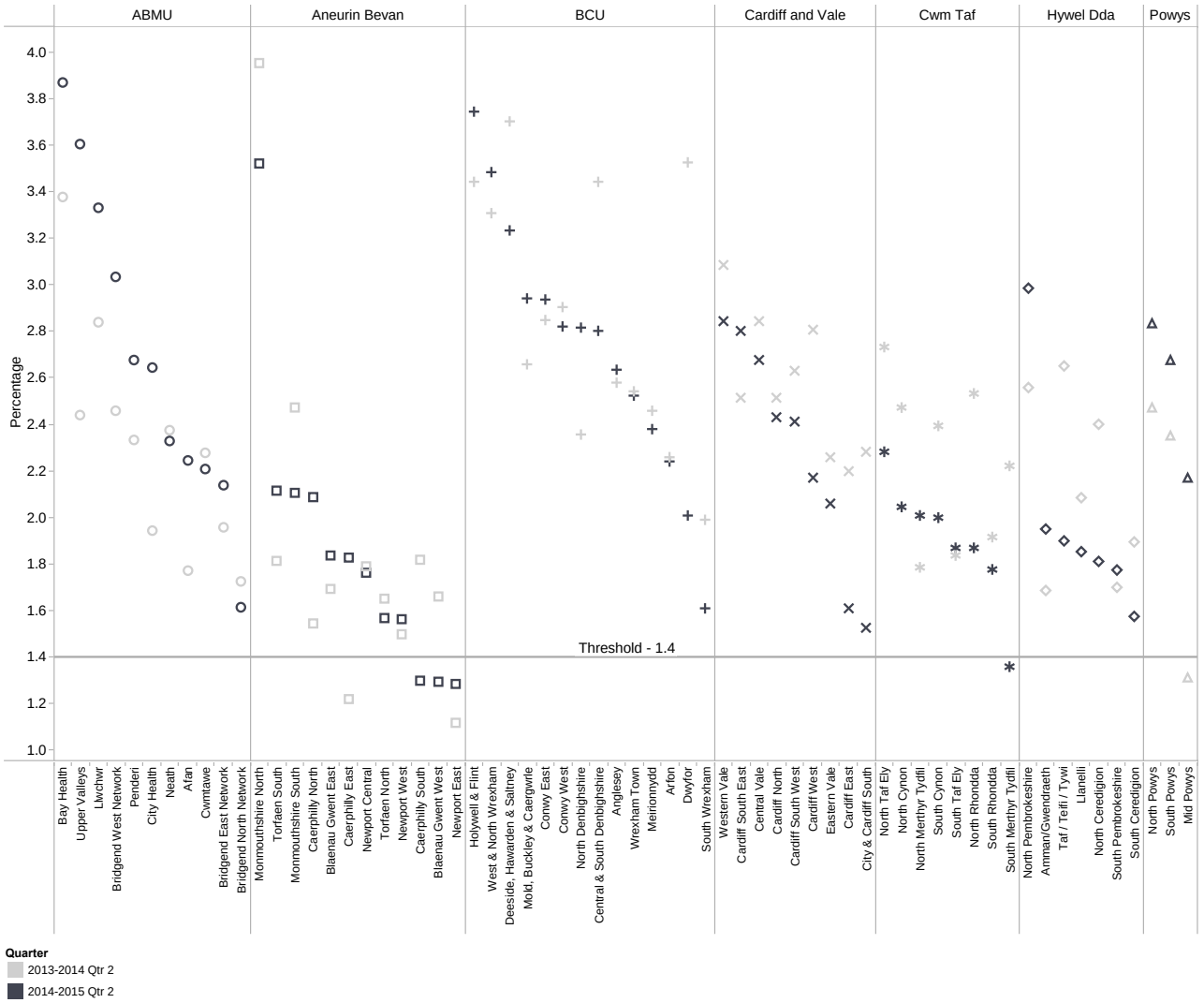


Figure 15. Cephalosporins as a percentage of total antibacterial items – Quarter ending September 2013 versus quarter ending September 2014

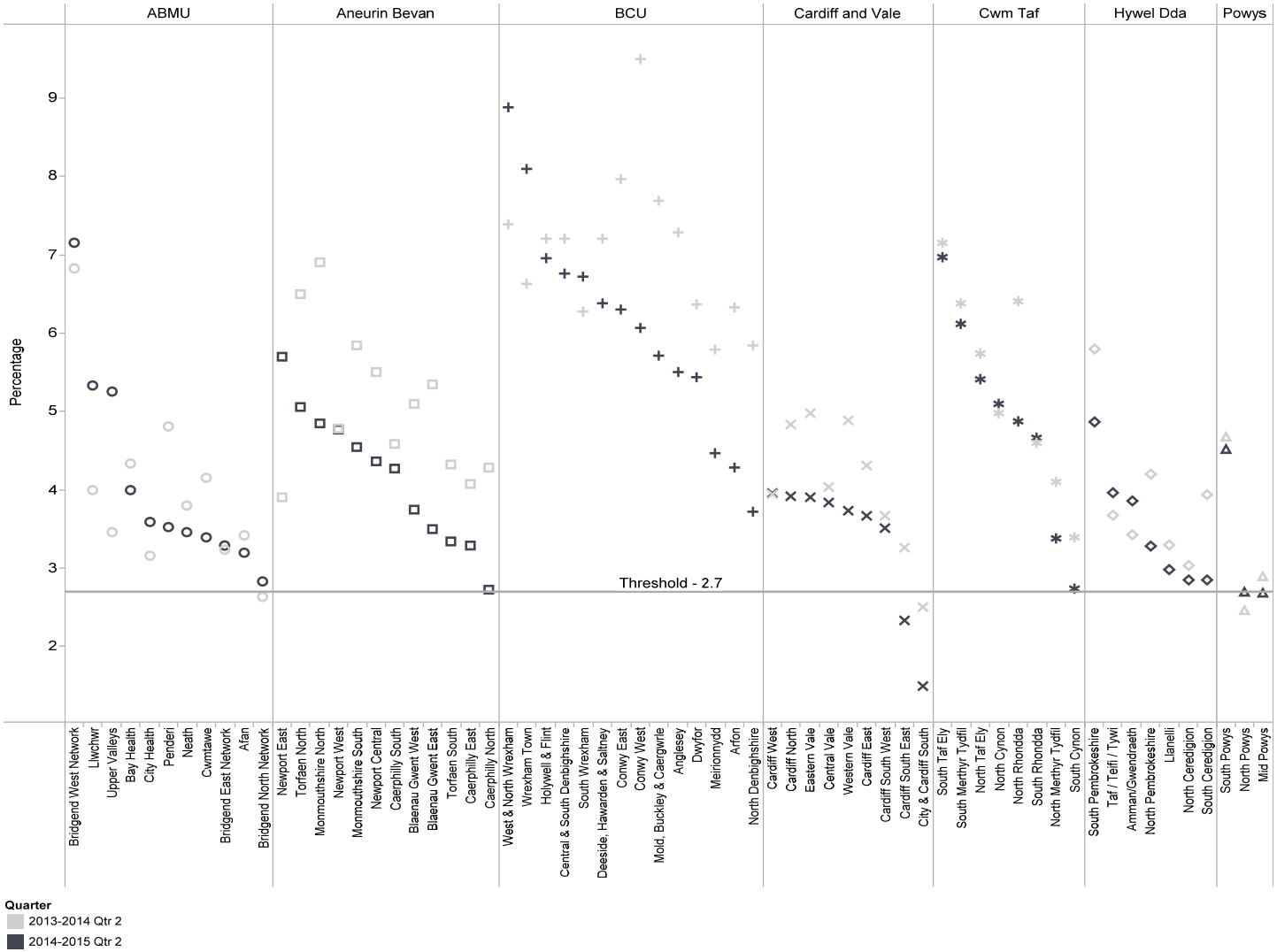
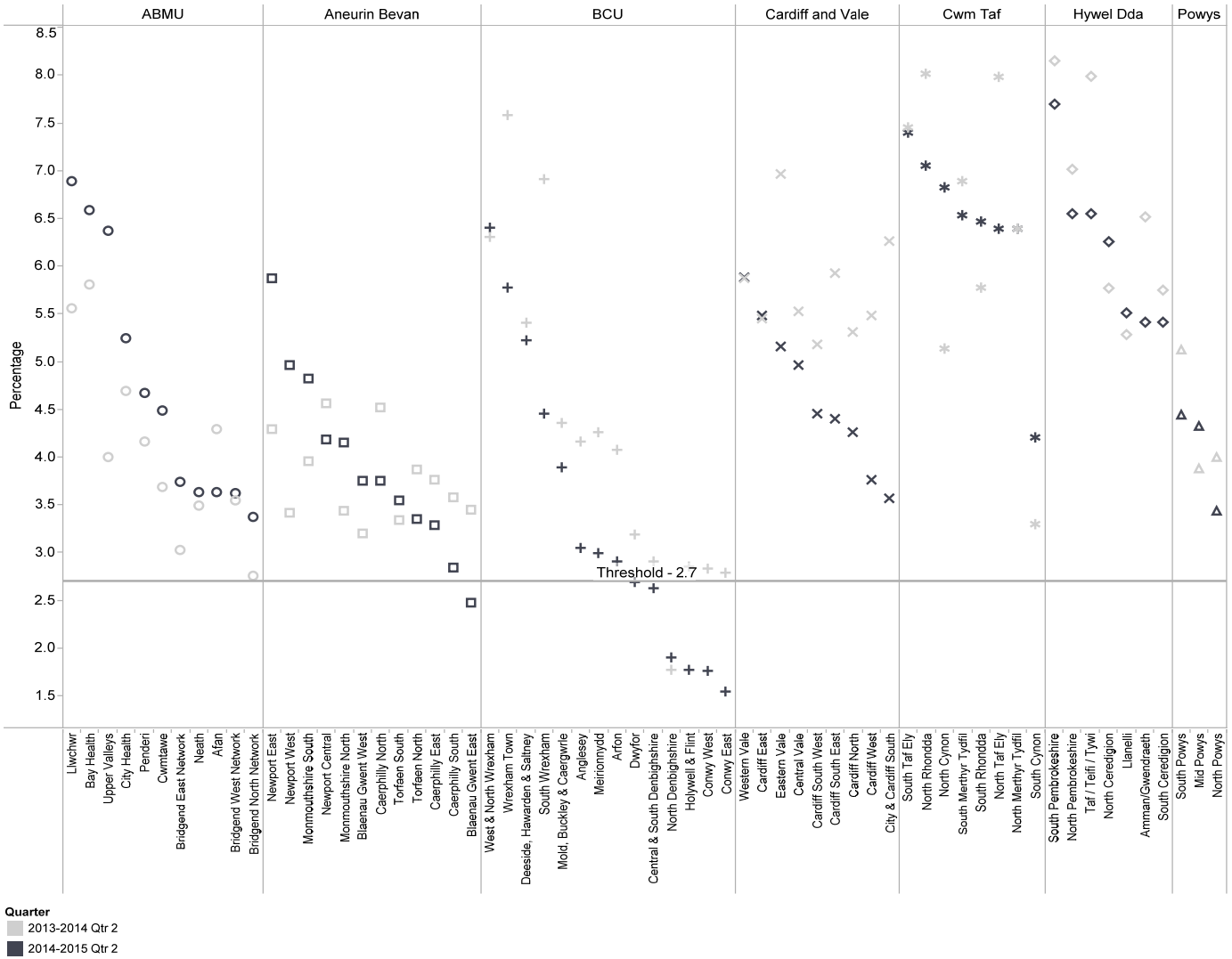


Figure 16. Co-amoxiclav as a percentage of total antibacterial items – Quarter ending September 2013 versus quarter ending September 2014



6.0 INSULIN

This indicator aims to reduce the prescribing of long-acting insulin analogue items in favour of more cost-effective alternatives.

Figure 17 shows the trend in long-acting insulin analogue items as a percentage of all long- and intermediate-acting insulin items (excluding biphasics) from quarter 1 2010–2011 to quarter 2 2014–2015.

Figure 17. Trend in long-acting insulin analogue prescribing as a percentage of total long- and intermediate-acting insulin prescribing

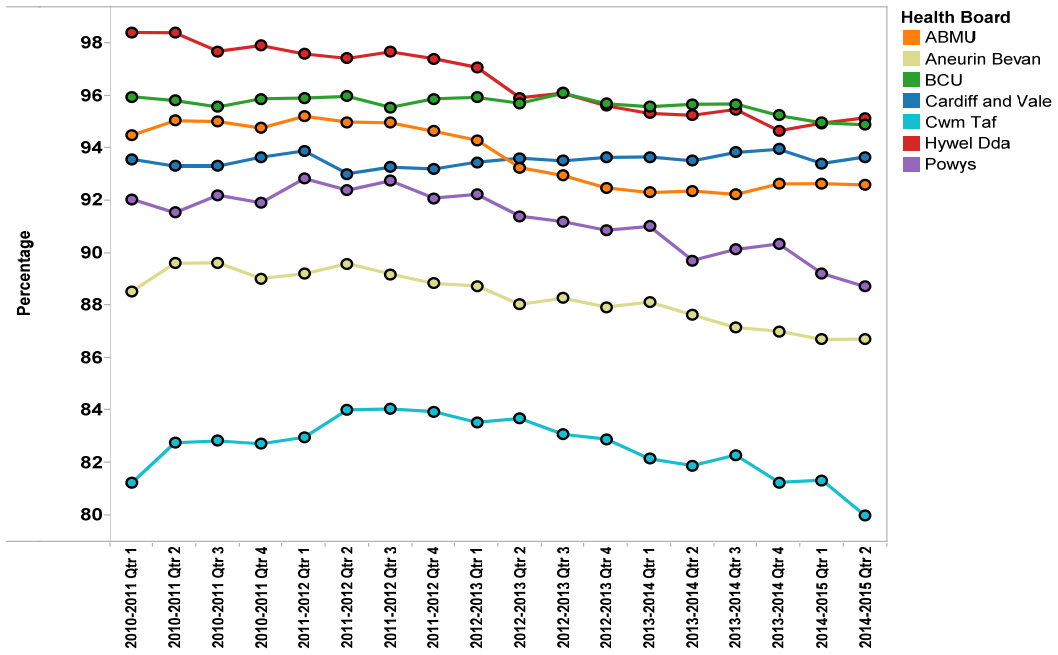


Table 8 compares prescribing in quarter 2 2013–2014 with quarter 2 2014–2015. Prescribing below the national average is highlighted in green; prescribing above the national average is highlighted in blue.

Table 8. Long-acting insulin analogue prescribing as a percentage of total long- and intermediate-acting insulin prescribing (excluding biphasics)

	2013–2014 Qtr 2	2014–2015 Qtr 2	Change	% Change
ABMU	92.35	92.58	0.23	0.25%
Aneurin Bevan	87.62	86.70	-0.92	-1.05%
BCU	95.66	94.88	-0.78	-0.82%
Cardiff and Vale	93.50	93.65	0.15	0.16%
Cwm Taf	81.87	79.96	-1.91	-2.33%
Hywel Dda	95.24	95.14	-0.10	-0.10%
Powys	89.70	88.70	-1.00	-1.11%
National average	91.43	90.87	-0.56	-0.61%

7.0 NON-STEROIDAL ANTI-INFLAMMATORY DRUGS

There are two non-steroidal anti-inflammatory drug (NSAID) NPIs for 2014–2015:

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

7.1 Total NSAID ADQs per 1,000 STAR-PUs

The first indicator aims to encourage a reduction in total NSAID prescribing, which has been consistently higher than that seen in England.

Figure 18 shows the trend in total NSAID prescribing from quarter 1 2012–2013 to quarter 2 2014–2015.

Figure 18. Trend in total NSAID prescribing

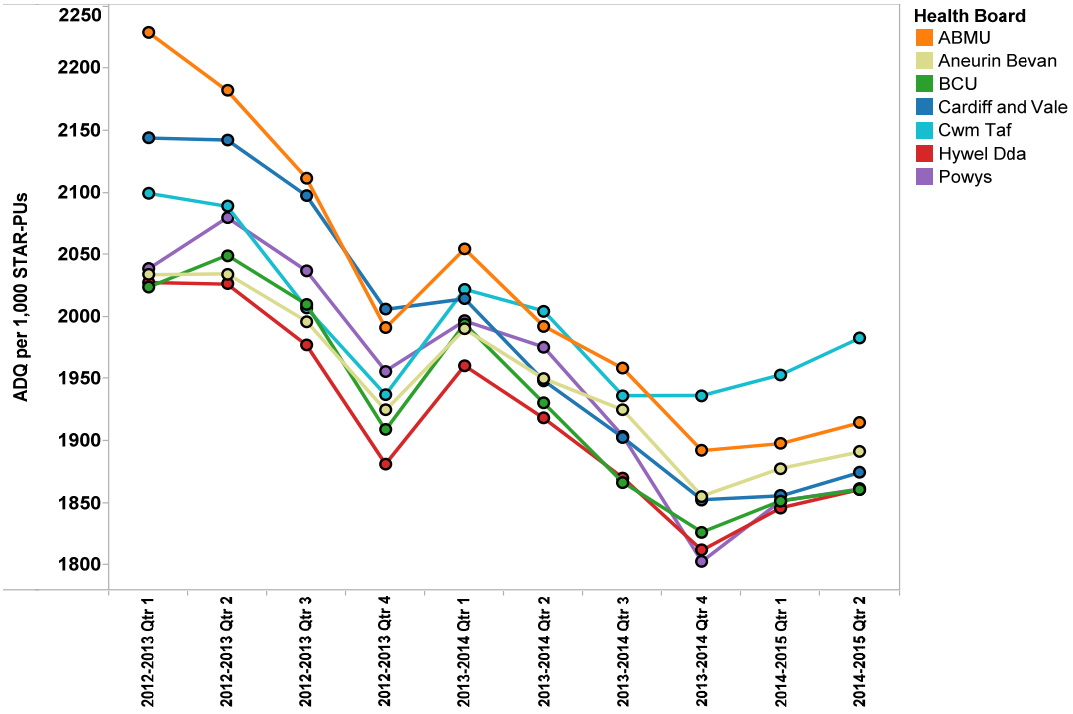


Table 9 compares prescribing in quarter 2 2013–2014 with quarter 2 2014–2015. Prescribing below the national average is highlighted in green; prescribing above the national average is highlighted in blue.

Table 9. Total NSAID ADQs per 1,000 STAR-PUs (13)

	2013–2014 Qtr 2	2014–2015 Qtr 2	Change	% Change
ABMU	1,992	1,914	-78	-3.91%
Aneurin Bevan	1,950	1,891	-59	-3.03%
BCU	1,930	1,860	-70	-3.62%
Cardiff and Vale	1,948	1,874	-74	-3.79%
Cwm Taf	2,004	1,983	-22	-1.09%
Hywel Dda	1,918	1,861	-57	-2.99%
Powys	1,975	1,861	-114	-5.78%
National average	1,955	1,889	-66	-3.37%

7.2 Ibuprofen and naproxen as a percentage of NSAID items

The second NSAID 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.

Figure 19 shows the trend in ibuprofen and naproxen prescribing from quarter 1 2010–2011 to quarter 2 2014–2015.

Figure 19. Trend in ibuprofen and naproxen prescribing as a percentage of NSAID items

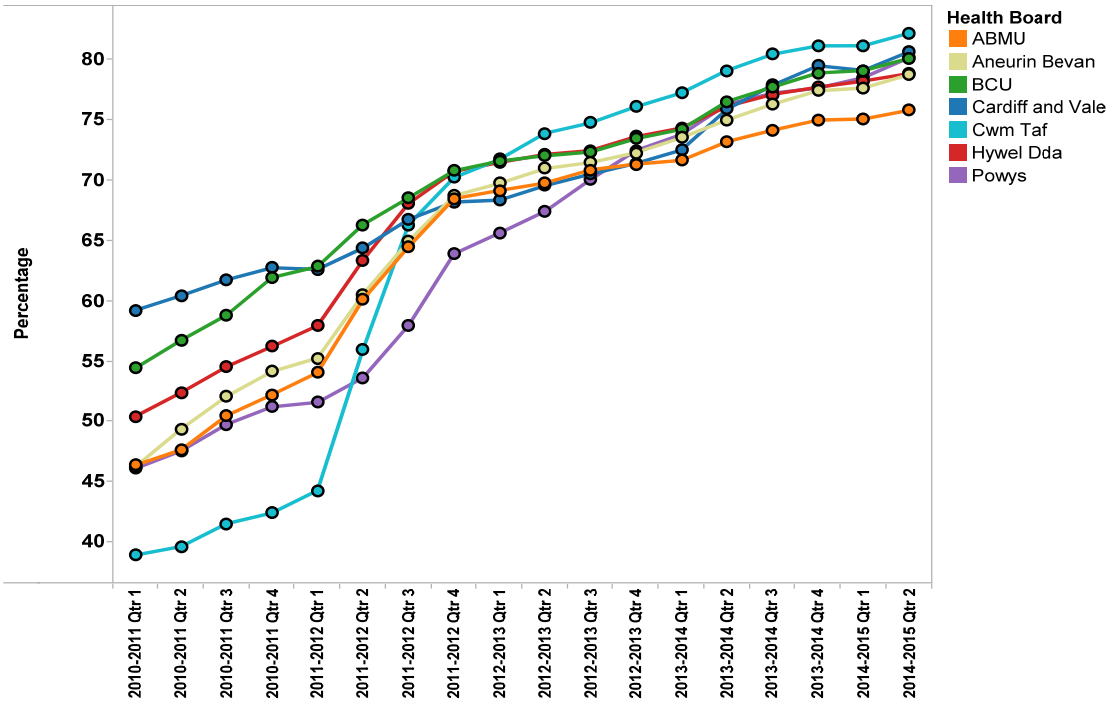


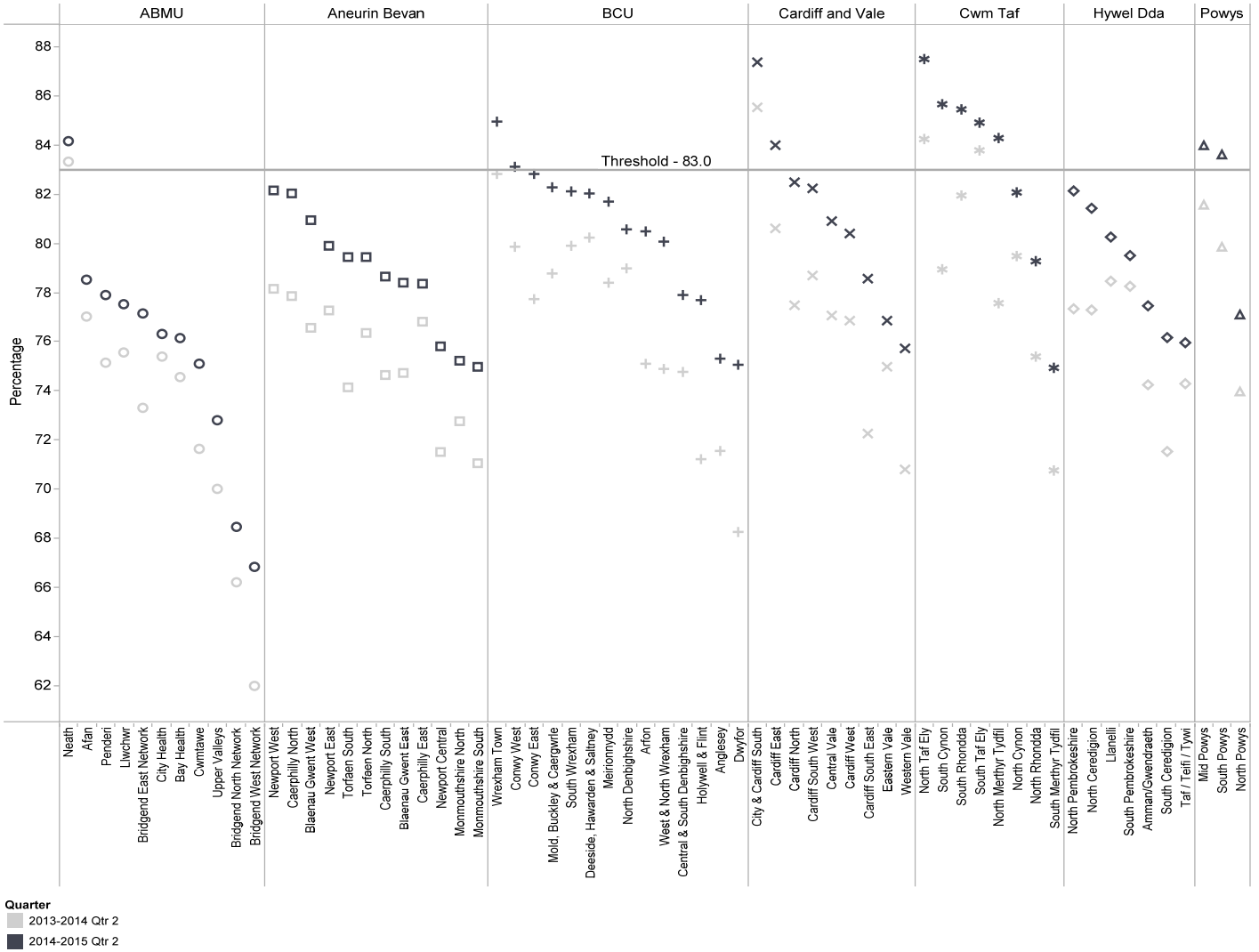
Table 10 compares prescribing in quarter 2 2013–2014 with quarter 2 2014–2015. Prescribing above the national average is highlighted in green; prescribing below the national average is highlighted in blue.

Table 10. Ibuprofen and naproxen items as a percentage of NSAID items

	2013–2014 Qtr 2	2014–2015 Qtr 2	Change	% Change
ABMU	73.19	75.79	2.60	3.55%
Aneurin Bevan	74.99	78.75	3.76	5.01%
BCU	76.52	80.10	3.58	4.68%
Cardiff and Vale	75.89	80.64	4.75	6.26%
Cwm Taf	79.10	82.19	3.09	3.91%
Hywel Dda	76.12	78.84	2.72	3.57%
Powys	76.29	80.15	3.86	5.06%
National average	75.76	79.22	3.46	4.57%

Figure 20 compares prescribing across cluster groups for quarter 2 2013–2014 with quarter 2 2014–2015.

Figure 20. Ibuprofen and naproxen as a percentage of NSAID items – Quarter ending September 2013 versus quarter ending September 2014



8.0 YELLOW CARDS

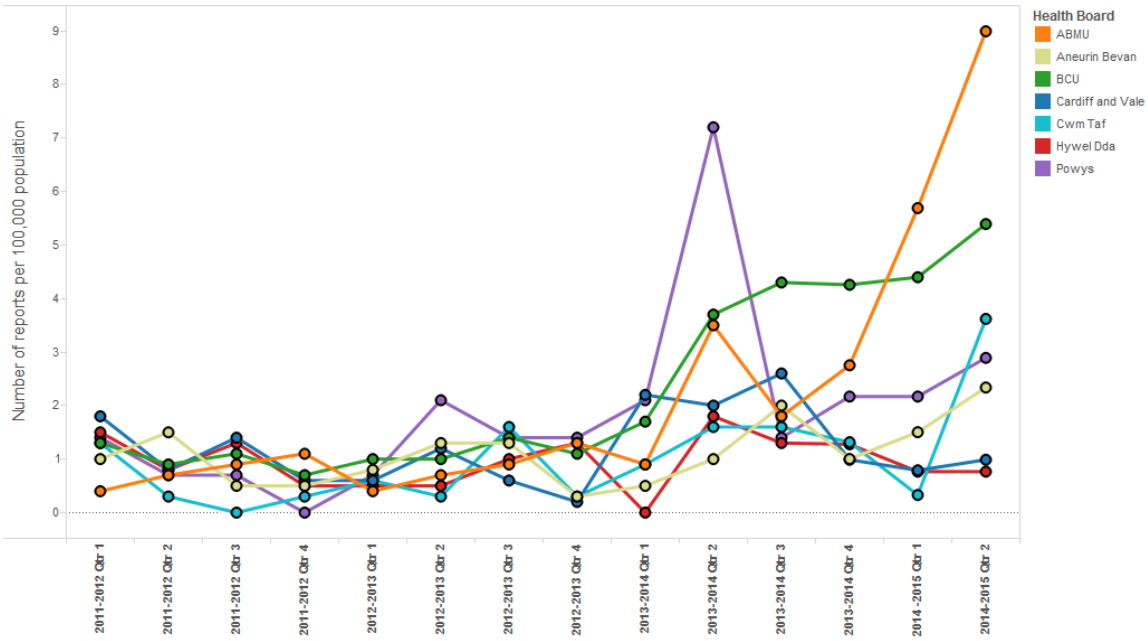
This is a new indicator for 2014–2015.

The Yellow Card Scheme is vital in helping the Medicines and Healthcare products Regulatory Agency (MHRA) monitor the safety of medicines and vaccines.

The purpose of this indicator is to increase the number of yellow cards submitted by GPs in Wales, and these figures are monitored by the Yellow Card Centre (YCC) Wales.

Figure 21 shows the trend in the number of yellow card reports submitted by GPs in the seven health boards in Wales per 100,000 population from quarter 1 2011–2012 to quarter 2 2014–2015.

Figure 21. Trend in yellow card reporting



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.

PRESCRIBING – 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.

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.