



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

National Prescribing Indicators 2015–2016

Analysis of Prescribing Data to September 2015





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

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

Please direct any queries to AWTTC:

All Wales Therapeutics and Toxicology Centre (AWTTC)
University Hospital Llandough
Penlan Road
Llandough
Vale of Glamorgan
CF64 2XX

awttc@wales.nhs.uk
029 2071 6900

EXECUTIVE SUMMARY

- The All Wales Medicines Strategy Group (AWMSG) has endorsed the National Prescribing Indicators (NPIs) as a means of promoting safe and cost-effective prescribing since 2003.
- For 2015–2016, there are 13 NPIs focusing on eight areas of prescribing and the reporting of adverse events (Yellow Cards)*. Two of the indicators, proton pump inhibitors and inhaled corticosteroids, are new for 2015–2016.
- A threshold level of prescribing/reporting is set for 12 of the 13 NPIs*.
- For existing NPIs there was an overall improvement in Wales in line with the aim of each indicator with a threshold, compared to the equivalent quarter of the previous year (quarter ending September 2014).
- At a national level, the NPIs associated with the largest changes in prescribing compared to the equivalent quarter of the previous year were co-amoxiclav (16% reduction), cephalosporins (17% reduction) and fluoroquinolones (8% reduction).
- Hypnotic and anxiolytic prescribing decreased across all of the health boards compared to the equivalent quarter of the previous year. The largest decreases were seen in Cardiff and Vale University Health Board (UHB) (12%) and Betsi Cadwaladr UHB (10%).
- The proportion of morphine items as a percentage of strong opioid prescribing has continued to increase by an average of 5% across Wales compared to the same quarter of the previous year.
- In line with the aim of the NPI, tramadol prescribing decreased across all of the health boards compared to the equivalent quarter of the previous year. The largest decrease of 11% was seen in Aneurin Bevan UHB.
- Prescribing of co-amoxiclav decreased in all of the health boards compared to the equivalent quarter of the previous year (in line with the aim of the NPI). The largest decrease of 32% was seen in Cardiff and Vale UHB.
- Prescribing of cephalosporins decreased in all but one of the health boards compared to the equivalent quarter of the previous year (in line with the aim of the NPI). The largest decrease was seen in Cardiff and Vale (30%) and Aneurin Bevan (26%) UHBs.
- Prescribing of fluoroquinolones decreased in five of the seven health boards compared to the equivalent quarter of the previous year. The largest decrease of 20% was seen in Cardiff and Vale UHB. There was an increase in prescribing in Hywel Dda and Cwm Taf UHBs.

Future quarterly NPI reports for 2015–2016 will be available on the following dates:

Quarter to December 2015: 11 April 2016

Quarter to March 2016: July 2016

* For full details, including unit of measure and threshold for each indicator please see Appendix 1. For prescribing data for GP clusters please see Appendix 2.

1.0 PROTON PUMP INHIBITORS

This indicator has been re-introduced as an NPI for 2015–2016.

Although proton pump inhibitors (PPIs) are generally well tolerated, there is emerging evidence that serious adverse effects may be linked with long-term PPI use. These include fractures of the hip, wrist and spine, *Clostridium difficile* infection, hospital- or community-acquired pneumonia, hypomagnesaemia and a very low risk of subacute cutaneous lupus erythematosus.

PPI use (measured in DDDs per 1,000 PUs) is continuing to increase across Wales at a rate of 5% per year, with over 4 million prescriptions for PPIs dispensed in Wales in 2014–2015. In the quarter to September 2015, prescribing in Wales was 19% higher than that seen in England.

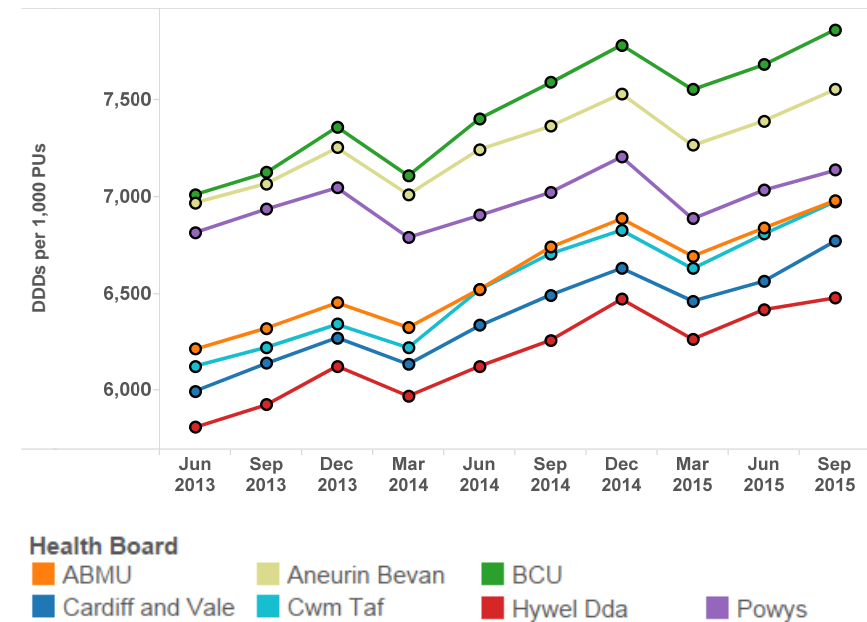
The aim of this indicator is to ensure appropriate use of PPIs and to encourage a review and reduction in prescribing where possible.

- For the quarter ending September 2015, PPI usage ranged from 6,476 to 7,860 DDDs per 1,000 PUs across the health boards.
- The health board with the lowest prescribing was Hywel Dda UHB whilst the highest prescribing was seen in Betsi Cadwaladr UHB.
- PPI prescribing for the quarter ending September 2015 was greater than the equivalent quarter of the previous year across all of the health boards.
- The smallest percentage increase compared to the equivalent quarter of the previous year was seen in Powys Teaching HB and the largest increase was seen in Cardiff and Vale UHB.

Table 1. PPI DDDs per 1,000 PUs

	2014–2015 Qtr 2	2015–2016 Qtr 2	% Change
Powys	7,021	7,134	1.61%
Aneurin Bevan	7,363	7,551	2.56%
Hywel Dda	6,258	6,476	3.48%
ABMU	6,738	6,978	3.56%
BCU	7,586	7,860	3.61%
Cwm Taf	6,705	6,973	4.00%
Cardiff and Vale	6,491	6,769	4.27%
Wales	6,959	7,197	3.41%

Figure 1. Trend in PPI prescribing DDDs per 1,000 PUs



2.0 LIPID-MODIFYING DRUGS

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

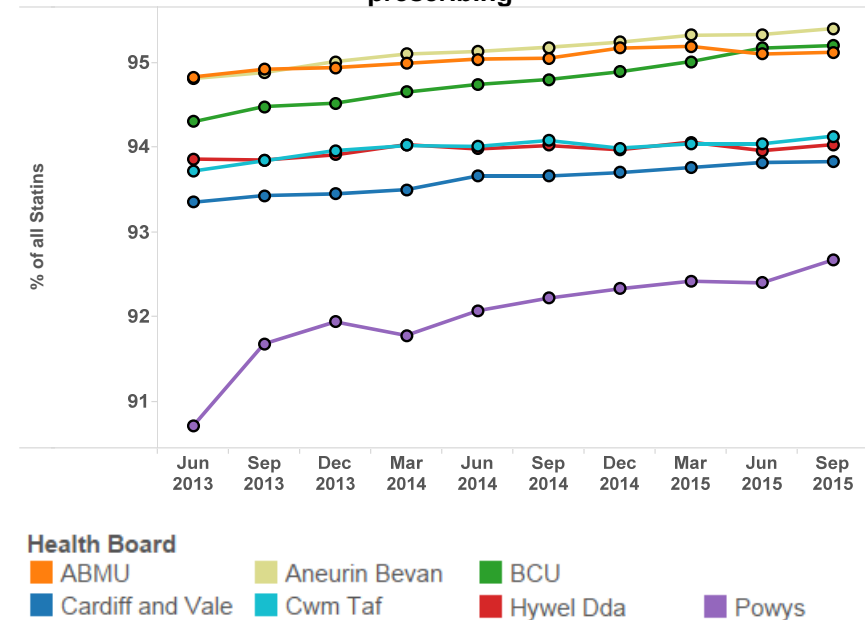
The proportion of LAC statin prescribing continues to increase in line with the aim of the indicator over time. However, the rate of increase has slowed since the Welsh health board average reached 94% in June 2013.

- For the quarter ending September 2015, the proportion of LAC statin prescribing ranged from 92.67% to 95.40% across the health boards.
- The health board with the highest prescribing rate was Aneurin Bevan UHB, whilst the lowest prescribing was seen in Powys Teaching HB.
- The proportion of LAC statin prescribing increased compared to the equivalent quarter of the previous year in all health boards.
- The largest percentage increase was seen in Powys Teaching HB and the smallest percentage increase was seen in Hywel Dda UHB.

Table 2. LAC statins as a percentage of all statin, ezetimibe and simvastatin/ezetimibe combination prescribing

	2014–2015 Qtr 2	2015–2016 Qtr 2	% Change
Powys	92.22	92.67	0.49%
BCU	94.80	95.20	0.42%
Aneurin Bevan	95.18	95.40	0.23%
Cardiff and Vale	93.66	93.83	0.18%
ABMU	95.05	95.12	0.07%
Cwm Taf	94.08	94.13	0.05%
Hywel Dda	94.02	94.03	0.01%
Wales	94.49	94.68	0.20%

Figure 2. Trend in LAC statin prescribing as a percentage of all statin, ezetimibe and simvastatin/ezetimibe combination prescribing



3.0 INHALED CORTICOSTEROIDS

This is a new indicator for 2015–2016.

The aim of this indicator is to encourage the routine review of inhaled corticosteroids (ICS) in people with asthma, particularly those on high strengths, encouraging step down of the strength when clinically appropriate.

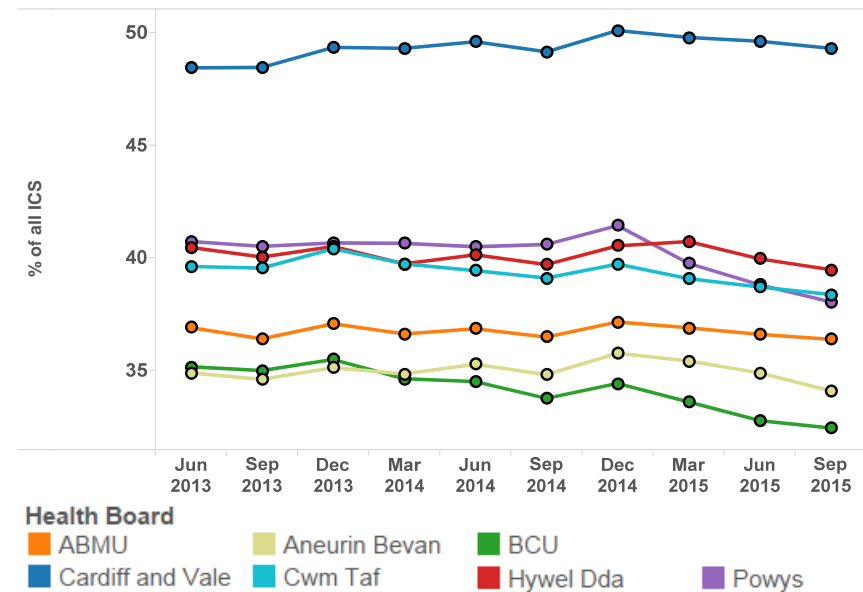
An increase in the proportion of low strength ICS usage as a percentage of total ICS usage would suggest that prescribing is changing in line with the aim of the indicator.

- For the quarter ending September 2015, the proportion of low strength ICS prescribing ranged from 32.45% to 49.31% across the health boards.
- The health board with the highest percentage of low strength ICS prescribing was Cardiff and Vale UHB, whilst the lowest prescribing was seen in Betsi Cadwaladr UHB.
- The proportion of low strength ICS prescribing only increased in one of the seven health boards compared to the equivalent quarter of the previous year: Cardiff and Vale UHB.
- A decrease in the percentage of low strength ICS prescribing was seen in all other HBs. The smallest decrease was seen in Abertawe Bro Morgannwg UHB, and the largest decrease was seen in Powys Teaching HB.

Table 3. Low strength ICS prescribing as a percentage of all ICS prescribing

	2014–2015 Qtr 2	2015–2016 Qtr 2	% Change
Cardiff and Vale	49.15	49.31	0.33%
ABMU	36.49	36.39	-0.27%
Hywel Dda	39.71	39.48	-0.58%
Cwm Taf	39.11	38.38	-1.87%
Aneurin Bevan	34.82	34.10	-2.07%
BCU	33.77	32.45	-3.91%
Powys	40.60	38.05	-6.28%
Wales	37.98	37.31	-1.76%

Figure 3. Trend in low strength ICS prescribing as a percentage of all ICS prescribing



4.0 HYPNOTICS AND ANXIOLYTICS

There has been ongoing concern with regard to the high level of anxiolytic and hypnotic prescribing within NHS Wales. Some prescribing may be inappropriate and contribute to the problem of physical and psychological dependence, and/or may be responsible for masking underlying depression.

This indicator aims to reduce inappropriate prescribing of hypnotics and anxiolytics.

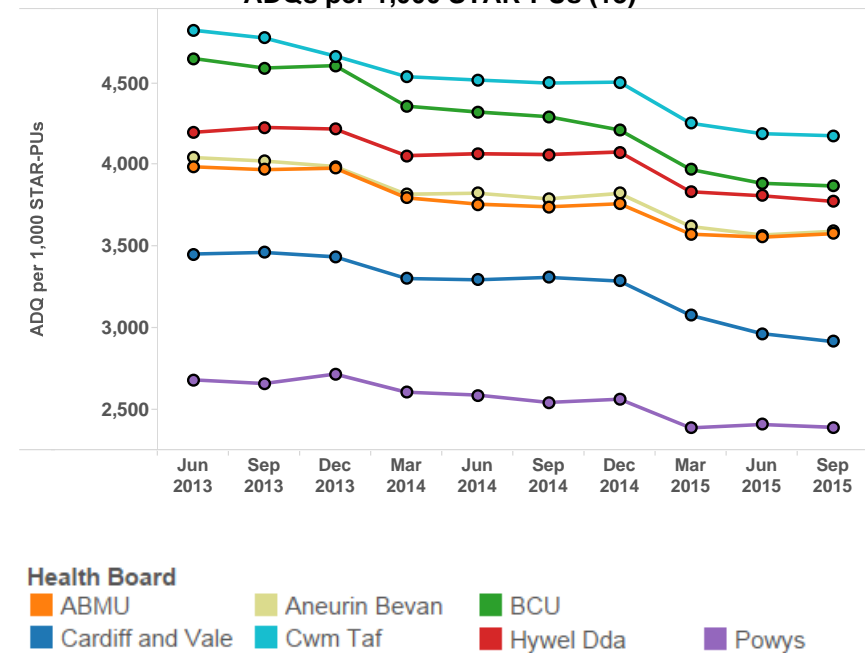
The prescribing of hypnotics and anxiolytics continues to decrease across Wales, in line with the aim of this indicator. However, prescribing (measured as ADQs per 1,000 STAR-PUUs [13]) remained 50% higher than that seen in England for the quarter to March 2015.

- For the quarter ending September 2015, hypnotic and anxiolytic prescribing ranged from 2,388 to 4,175 ADQs per 1,000 STAR-PUUs (13) across the health boards.
- The health board with the highest prescribing was Cwm Taf UHB, whilst the lowest prescribing was seen in Powys Teaching HB.
- Hypnotic and anxiolytic prescribing decreased compared to the equivalent quarter of the previous year in all of the health boards.
- The largest decrease was seen in Cardiff and Vale UHB, and the smallest decrease was seen in Abertawe Bro Morgannwg UHB.

Table 4. Hypnotic and anxiolytic ADQs per 1,000 STAR-PUUs (13)

	2014–2015 Qtr 2	2015–2016 Qtr 2	% Change
Cardiff and Vale	3,307	2,913	-11.91%
BCU	4,291	3,868	-9.88%
Cwm Taf	4,498	4,175	-7.18%
Hywel Dda	4,060	3,773	-7.06%
Powys	2,541	2,388	-6.02%
Aneurin Bevan	3,788	3,589	-5.26%
ABMU	3,740	3,575	-4.42%
Wales	3,870	3,577	-7.58%

Figure 4. Trend in hypnotic and anxiolytic prescribing ADQs per 1,000 STAR-PUUs (13)



5.0 OPIOID ANALGESICS

There are two NPIs monitoring the usage of opioid analgesics for 2015–2016:

1. Morphine items as a percentage of strong opioid prescribing
2. Tramadol usage measured as DDDs per 1,000 patients

5.1 Morphine as a percentage of strong opioid prescribing

NICE CG140 recommends oral modified-release morphine as the first-line maintenance treatment for patients with advanced and progressive disease who require strong opioids.

The efficacy and safety of morphine is established in clinical practice. There is a lack of evidence from high-quality comparative trials that other opioids have advantages in terms of either efficacy or side effects that would make them preferable to morphine for first-line use in cancer pain.

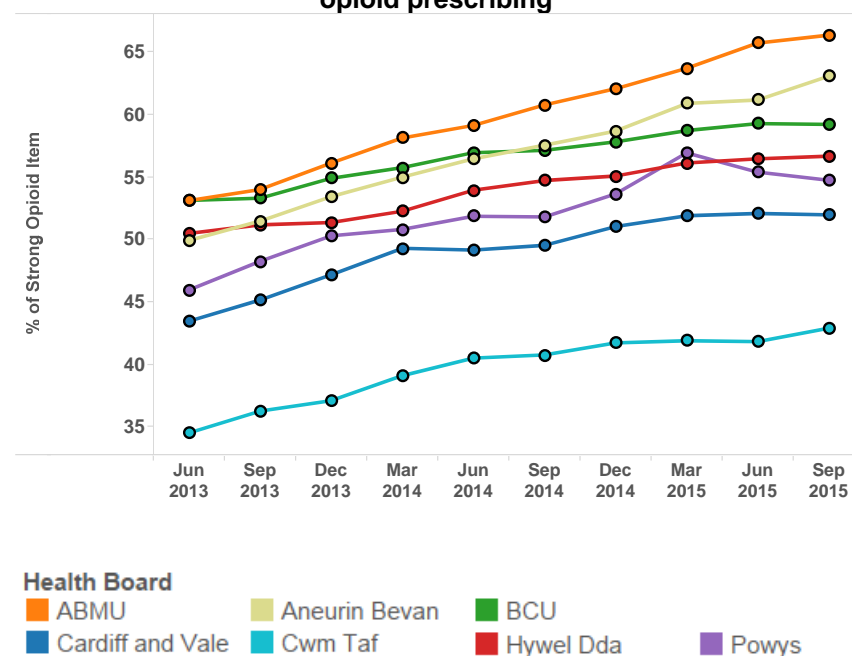
This NPI aims to encourage first line use of morphine for patients requiring a strong opioid analgesic.

- For the quarter ending September 2015, the proportion of morphine prescribing as a percentage of strong opioids ranged from 42.88 to 66.34 across the health boards.
- The health board prescribing the highest percentage of morphine items was Abertawe Bro Morgannwg UHB, whilst the lowest prescribing was seen in Cwm Taf UHB.
- The proportion of morphine prescribing increased compared to the equivalent quarter of the previous year in all of the health boards.
- The largest increase was seen in Aneurin Bevan UHB, and the smallest increase was seen in Hywel Dda UHB.

Table 5. Morphine as a percentage of strong opioid prescribing

	2014–2015 Qtr 2	2015–2016 Qtr 2	% Change
Aneurin Bevan	57.53	63.06	9.61%
ABMU	60.75	66.34	9.20%
Powys	51.78	54.72	5.68%
Cwm Taf	40.73	42.88	5.28%
Cardiff and Vale	49.51	51.95	4.93%
BCU	57.12	59.19	3.62%
Hywel Dda	54.70	56.65	3.56%
Wales	54.60	57.31	4.96%

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



5.2 Tramadol

Tramadol accounts for a significant number of deaths and reports to the National Poisons Information Service. It is subject to abuse and dependence and there are concerns with regard to drug interactions.

This NPI aims to encourage the appropriate use and review of tramadol.

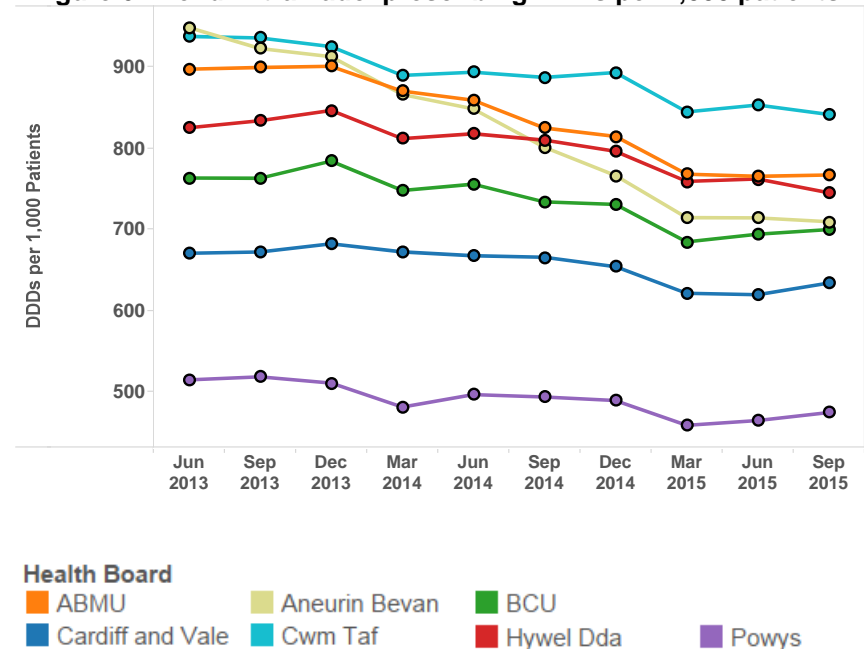
From September 2014 to September 2015 prescribing of tramadol decreased across Wales, in line with the aim of this indicator.

- For the quarter ending September 2015, tramadol prescribing ranged from 475 to 841 DDDs per 1,000 patients across the health boards.
- The health board with the lowest prescribing was Powys Teaching HB, whilst the highest prescribing was seen in Cwm Taf UHB.
- Tramadol prescribing decreased compared to the equivalent quarter of the previous year in all of the health boards.
- The largest decrease was seen in Aneurin Bevan UHB (11%) and the smallest decrease was seen in Powys Teaching HB.

Table 6. Tramadol DDDs per 1,000 patients

	2014–2015 Qtr 2	2015–2016 Qtr 2	% Change
Aneurin Bevan	800.4	708.9	-11.43%
Hywel Dda	809.2	744.5	-7.99%
ABMU	824.1	766.3	-7.01%
Cwm Taf	886.2	840.8	-5.13%
Cardiff and Vale	665.3	633.6	-4.76%
BCU	733.3	699.3	-4.63%
Powys	493.6	474.6	-3.85%
Wales	764.1	711.4	-6.91%

Figure 6. Trend in tramadol prescribing DDDs per 1,000 patients



6.0 ANTIBIOTICS

The development of NPIs for antibiotic prescribing supports one of the key elements of the Welsh Antimicrobial Resistance Programme: to inform, support and promote the prudent use of antimicrobials.

There are four antibiotic NPIs for 2015–2016:

1. Total antibacterial items
2. Co-amoxiclav
3. Cephalosporins
4. Fluoroquinolones

6.1 Total antibacterial items

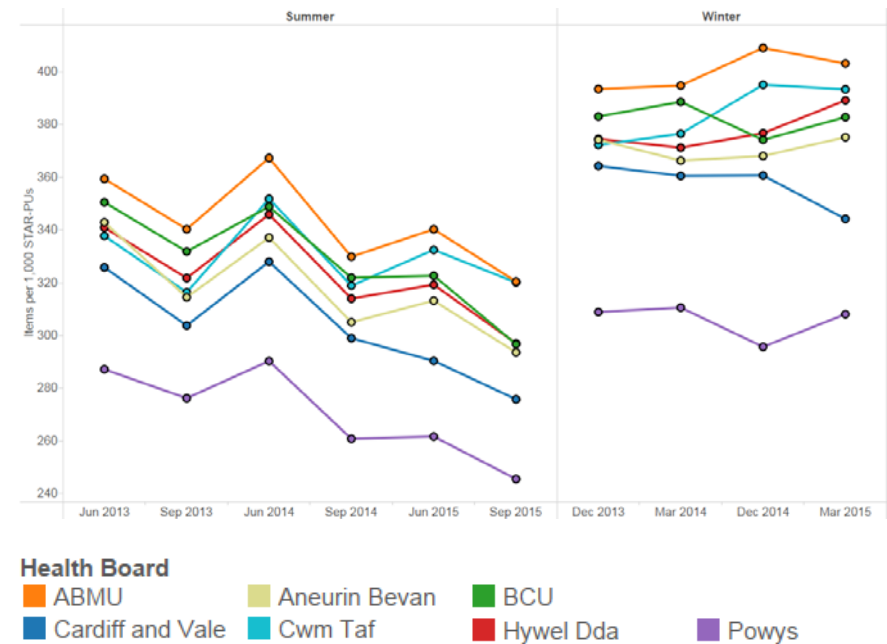
No target is set for this indicator due to seasonal variations in prescribing, although a reduction in prescribing year on year is encouraged – with measurement based on data from quarter ending December.

- For the quarter ending September 2015, the total number of antibacterial items per 1,000 STAR-PU (13) ranged from 246 to 320 across the health boards.
- The health board with the lowest prescribing was Powys Teaching HB, whilst the highest prescribing was seen in Abertawe Bro Morgannwg UHB.
- The total number of antibacterial items decreased compared to the equivalent quarter of the previous year in six of the seven health boards.
- The largest decrease was seen in Betsi Cadwaladr UHB, and the smallest decrease in Abertawe Bro Morgannwg UHB. There was a very small increase in Cwm Taf UHB.

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

	2014–2015 Qtr 2	2015–2016 Qtr 2	% Change
BCU	321.9	296.7	-7.82%
Cardiff and Vale	299.0	275.9	-7.74%
Powys	260.9	245.7	-5.83%
Hywel Dda	314.0	297.1	-5.39%
Aneurin Bevan	305.0	293.6	-3.74%
ABMU	329.9	320.4	-2.85%
Cwm Taf	318.9	320.1	0.38%
Wales	312.6	296.9	-5.00%

Figure 7. Trend in antibacterial prescribing items per 1,000 STAR-PU (13)



6.2 Co-amoxiclav, cephalosporins and fluoroquinolones

Prescribing of co-amoxiclav, cephalosporins and fluoroquinolones are monitored, as these antibacterials are associated with an increased risk of *Clostridium difficile* infection.

Each of these antibacterial indicators is monitored using two measures:

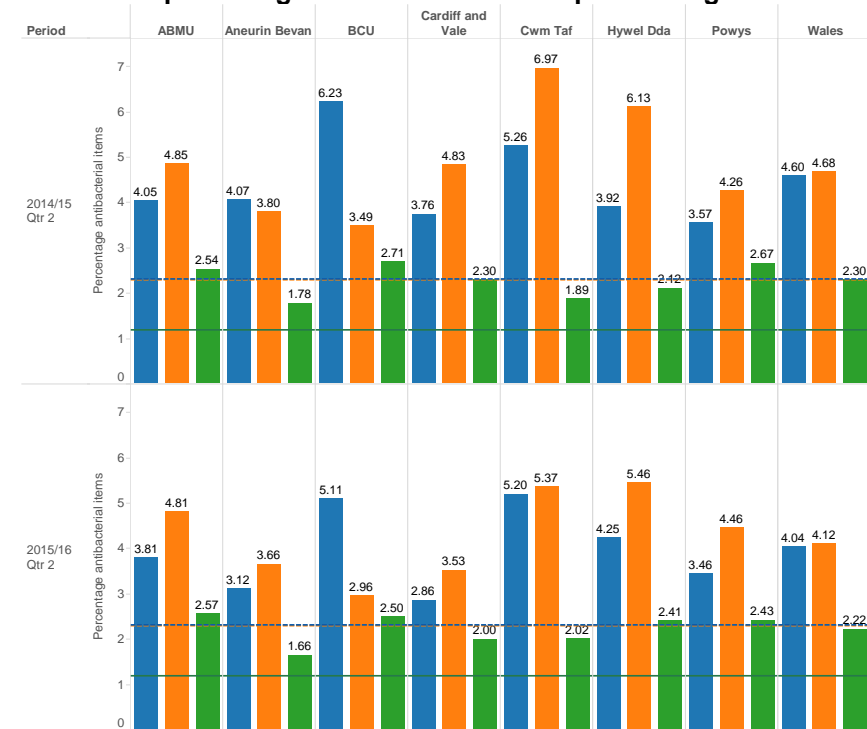
1. Items as a percentage of total antibacterial items
2. Items per 1,000 patients

6.2.1 Co-amoxiclav, cephalosporins and fluoroquinolones as a percentage of total antibacterial items

From September 2014 to September 2015 the number of items of each antibacterial or group of antibacterials as a percentage of all antibacterial prescribing decreased across Wales, in line with the aim of this indicator.

- The proportion of co-amoxiclav prescribing decreased compared to the equivalent quarter of the previous year in six of the seven health boards. The largest decrease was seen in Cardiff and Vale UHB (27%), and the smallest decrease was seen in Abertawe Bro Morgannwg UHB. There was an increase of 5% in Powys Teaching HB.
- The proportion of cephalosporin prescribing decreased compared to the equivalent quarter of the previous year in six of the seven health boards. The largest decrease was seen in Cardiff and Vale UHB (24%), and the smallest decrease was seen in Cwm Taf UHB. There was an increase in Hywel Dda UHB.
- The proportion of fluoroquinolone prescribing decreased compared to the equivalent quarter of the previous year in four of the seven health boards. The largest decrease was seen in Cardiff and Vale UHB, and the smallest decrease was seen in Aneurin Bevan UHB. There were increases in Abertawe Bro Morgannwg, Cwm Taf and Hywel Dda UHBs.

Figure 8. Co-amoxiclav, cephalosporins and fluoroquinolones as a percentage of total antibacterial prescribing



Indicator

- Cephalosporin items % of antibacterial items
- Co-amoxiclav items % of antibacterial items
- Fluoroquinolone items % of antibacterial items

6.2.2 Co-amoxiclav items per 1,000 patients

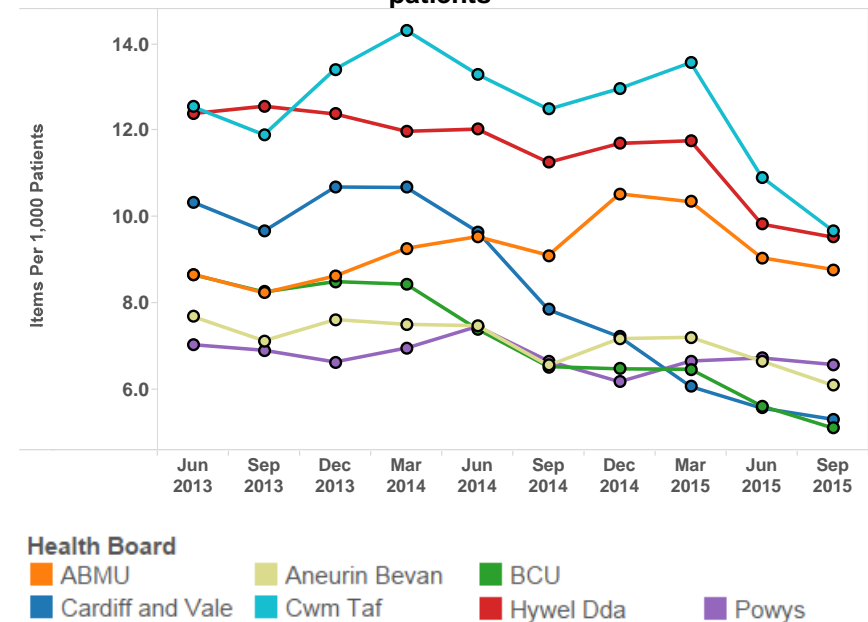
From September 2014 to September 2015 prescribing of co-amoxiclav items per 1,000 patients decreased across Wales by approximately 16%, in line with the aim of this indicator.

- For the quarter ending September 2015, co-amoxiclav prescribing ranged from 5.1 to 9.7 items per 1,000 patients across the health boards.
- The health board with the lowest prescribing was Betsi Cadwaladr UHB, whilst the highest prescribing was seen in Cwm Taf UHB.
- Co-amoxiclav prescribing decreased compared to the equivalent quarter of the previous year in all of the seven health boards.
- The largest decrease was seen in Cardiff and Vale UHB (32%), and the smallest decrease was seen in Powys Teaching HB.

Table 8. Co-amoxiclav items per 1,000 patients

	2014–2015 Qtr 2	2015–2016 Qtr 2	% Change
Cardiff and Vale	7.84	5.30	-32.40%
Cwm Taf	12.48	9.67	-22.52%
BCU	6.52	5.10	-21.78%
Hywel Dda	11.25	9.52	-15.38%
Aneurin Bevan	6.55	6.09	-7.02%
ABMU	9.10	8.77	-3.63%
Powys	6.65	6.57	-1.20%
Wales	8.33	6.98	-16.21%

Figure 9. Trend in co-amoxiclav prescribing items per 1,000 patients



6.2.3 Cephalosporin items per 1,000 patients

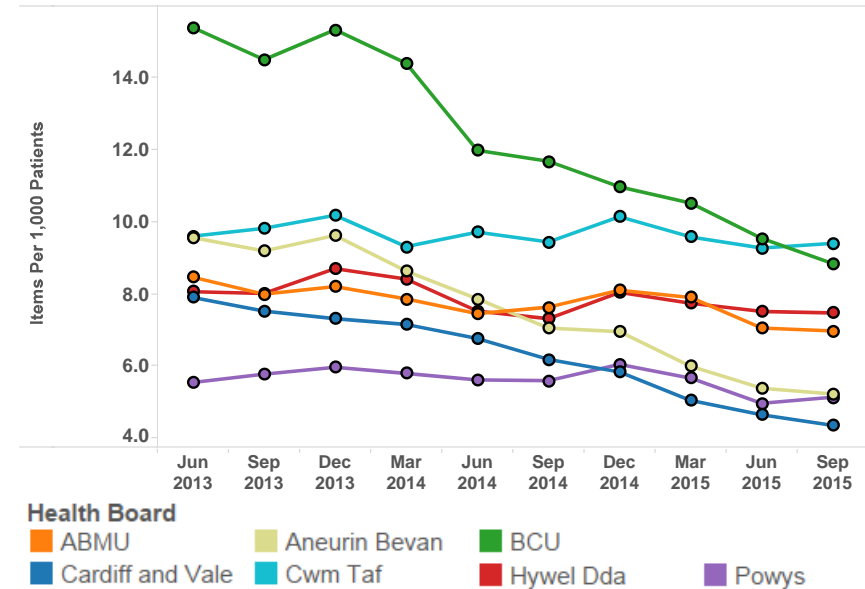
From September 2014 to September 2015 prescribing of cephalosporin items per 1,000 patients decreased across Wales by 17%, in line with the aim of this indicator.

- For the quarter ending September 2015, cephalosporin prescribing ranged from 4.34 to 9.39 items per 1,000 patients across the health boards.
- The health board with the lowest prescribing was Cardiff and Vale UHB, whilst the highest prescribing was seen in Cwm Taf UHB.
- Cephalosporin prescribing decreased compared to the equivalent quarter of the previous year in all but one of the seven health boards.
- The largest decreases were seen in Cardiff and Vale, Aneurin Bevan and Betsi Cadwaladr UHBs (30%, 26% and 24% respectively). A small increase was seen in Hywel Dda UHB.

Table 9. Cephalosporin items per 1,000 patients

	2014–2015 Qtr 2	2015–2016 Qtr 2	% Change
Cardiff and Vale	6.17	4.34	-29.66%
Aneurin Bevan	7.04	5.21	-25.99%
BCU	11.67	8.83	-24.34%
ABMU	7.62	6.96	-8.66%
Powys	5.58	5.12	-8.24%
Cwm Taf	9.43	9.39	-0.42%
Hywel Dda	7.30	7.46	2.19%
Wales	8.22	6.84	-16.79%

Figure 10. Trend in cephalosporin prescribing items per 1,000 patients



6.2.4 Fluoroquinolone items per 1,000 patients

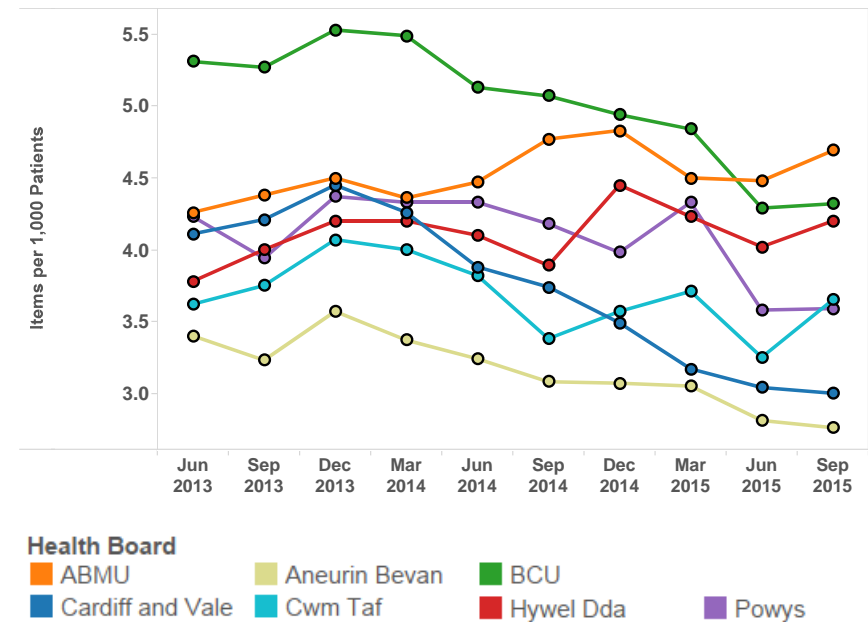
From September 2014 to September 2015 the prescribing of fluoroquinolone items decreased across Wales by 8%, in line with the aim of this indicator.

- For the quarter ending September 2015, fluoroquinolone prescribing ranged from 2.76 to 4.69 items per 1,000 patients across the health boards.
- The health board with the lowest prescribing was Aneurin Bevan UHB, whilst the highest prescribing was seen in Abertawe Bro Morgannwg UHB.
- Fluoroquinolone prescribing decreased compared to the equivalent quarter of the previous year in five of the seven health boards.
- The largest decrease was seen in Cardiff and Vale UHB (approximately 20%). There were increases of approximately 8% seen in Hywel Dda and Cwm Taf UHBs.

Table 10. Fluoroquinolone items per 1,000 patients

	2014–2015 Qtr 2	2015–2016 Qtr 2	% Change
Cardiff and Vale	3.74	3.00	-19.79%
BCU	5.07	4.32	-14.79%
Powys	4.18	3.59	-14.11%
Aneurin Bevan	3.08	2.76	-10.39%
ABMU	4.77	4.69	-1.68%
Hywel Dda	3.89	4.20	7.97%
Cwm Taf	3.38	3.65	7.99%
Wales	4.09	3.77	-7.82%

Figure 11. Trend in fluoroquinolone prescribing items per 1,000 patients



7.0 NON-STEROIDAL ANTI-INFLAMMATORY DRUGS

There are two non-steroidal anti-inflammatory drug (NSAID) NPIs for 2015–2016.

1. NSAID ADQs per 1,000 STAR-PU (13)
2. Ibuprofen and naproxen items as a percentage of NSAID prescribing.

The aim of the indicators is to ensure that the risks associated with NSAIDs are minimised by appropriate choice and use.

7.1 NSAID ADQs per 1,000 STAR-PU (13)

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

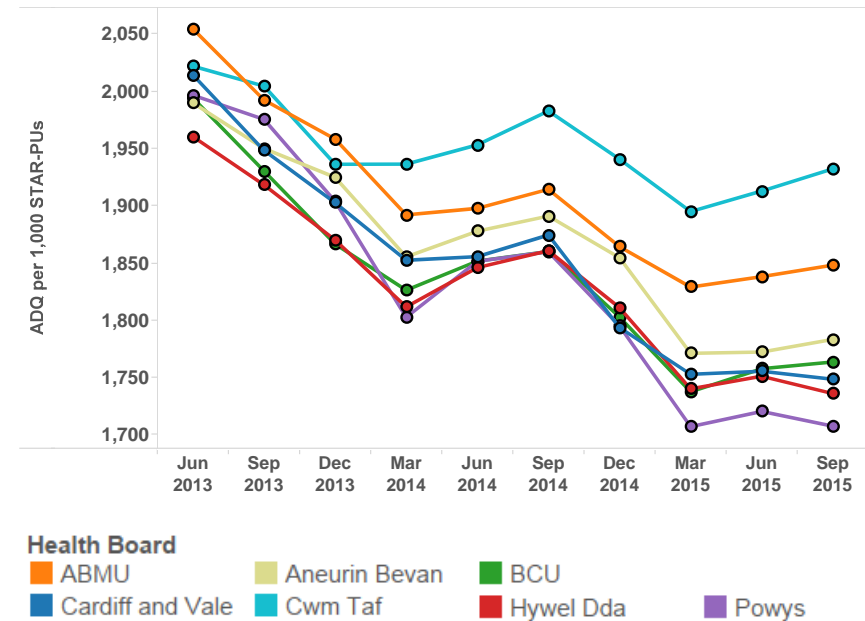
Since the introduction of this indicator, total NSAID prescribing has fallen across Wales, in line with the aim of the indicator.

- For the quarter ending September 2015, total NSAID prescribing ranged from 1,707 to 1,932 ADQs per 1,000 STAR-PU (13) across the health boards.
- The health board with the lowest prescribing was Powys Teaching HB, whilst the highest prescribing was seen in Cwm Taf UHB.
- Total NSAID prescribing decreased compared to the equivalent quarter of the previous year in all of the health boards.
- The largest decrease was seen in Powys Teaching HB, and the smallest decrease was seen in Cwm Taf UHB.

Table 11. NSAID ADQs per 1,000 STAR-PU (13)

	2014–2015 Qtr 2	2015–2016 Qtr 2	% Change
Powys	1,860	1,707	-8.19%
Cardiff and Vale	1,874	1,748	-6.72%
Hywel Dda	1,861	1,736	-6.71%
Aneurin Bevan	1,891	1,783	-5.69%
BCU	1,860	1,763	-5.19%
ABMU	1,914	1,848	-3.46%
Cwm Taf	1,983	1,932	-2.55%
Wales	1,889	1,789	-5.28%

Figure 12. Trend in NSAID prescribing ADQs per 1,000 STAR-PU (13)



7.2 Ibuprofen and naproxen items as a percentage of NSAID prescribing

This indicator aims to promote the prescribing of ibuprofen and naproxen at appropriate doses over other NSAIDs, as they are associated with a lower risk of cardiovascular adverse events.

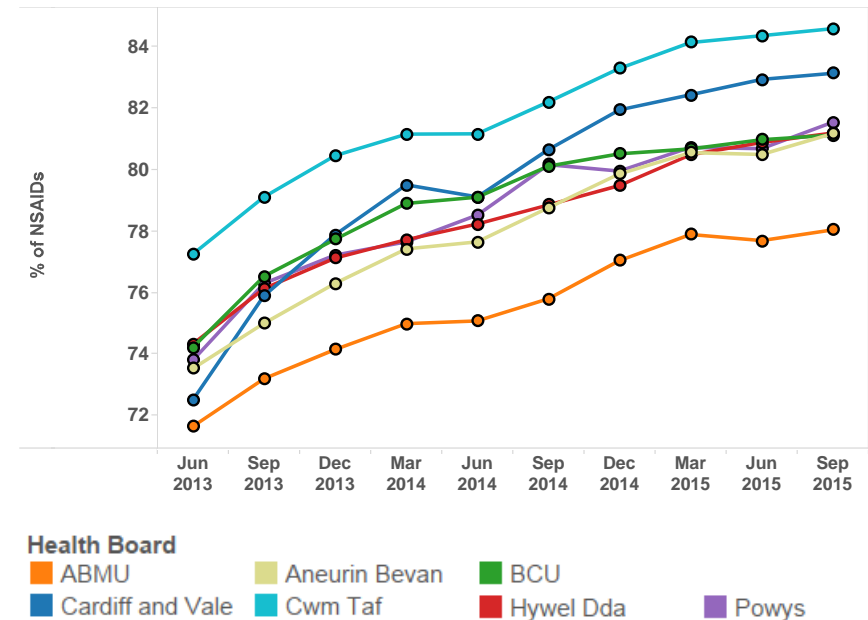
Since the introduction of this indicator, the proportion of ibuprofen and naproxen prescribing as a percentage of total NSAID usage has increased in line with the aim of this indicator.

- For the quarter ending September 2015, the proportion of ibuprofen and naproxen prescribing ranged from 78.0% to 84.6% across the health boards.
- The health board with the highest prescribing was Cwm Taf UHB, whilst the lowest prescribing was seen in Abertawe Bro Morgannwg UHB.
- The proportion of ibuprofen and naproxen prescribing increased compared to the equivalent quarter of the previous year in all of the health boards.
- The largest increase was seen in Cardiff and Vale UHB, and the smallest increase was seen in Betsi Cadwaladr UHB.

Table 12. Ibuprofen and naproxen as a percentage of NSAID prescribing

	2014–2015 Qtr 2	2015–2016 Qtr 2	% Change
Cardiff and Vale	80.64	83.12	3.08%
Aneurin Bevan	78.75	81.16	3.06%
Hywel Dda	78.84	81.18	2.97%
ABMU	75.79	78.03	2.96%
Cwm Taf	82.19	84.57	2.90%
Powys	80.15	81.53	1.72%
BCU	80.10	81.11	1.26%
Wales	79.22	81.23	2.54%

Figure 13. Trend in ibuprofen and naproxen prescribing as a percentage of NSAID prescribing



8.0 YELLOW CARDS

Adverse drug reactions (ADRs) are a significant clinical problem, increasing morbidity and mortality. Approximately 6.5% of hospital admissions in adults and 2.1% in children are attributed to ADRs.

The Yellow Card Scheme is vital in helping the Medicines and Healthcare Products Regulatory Agency (MHRA) monitor the safety of medicines and vaccines that are on the market.

The aim of this NPI is to increase the number of Yellow Cards submitted by GPs in Wales.

There are two measures for this indicator:

1. Number of Yellow Cards submitted by GPs per practice population.
2. Number of Yellow Cards submitted per health board.

The number of Yellow Cards submitted by GPs in Wales increased significantly (42%) compared to the equivalent quarter of the previous year (Table 13). The number of Yellow Cards submitted by each health board is shown in Table 14.

Table 13. Number of Yellow Cards submitted by GPs

	2014–2015 Qtr 2	2015–2016 Qtr 2	Change
Cardiff and Vale	5	44	39
Hywel Dda	3	33	30
BCU	38	47	9
Powys	4	4	0
Cwm Taf	11	7	-4
Aneurin Bevan	14	7	-7
ABMU	49	34	-15
Wales	124	176	52

Figure 14. Number of GP reports per 100,000 health board population

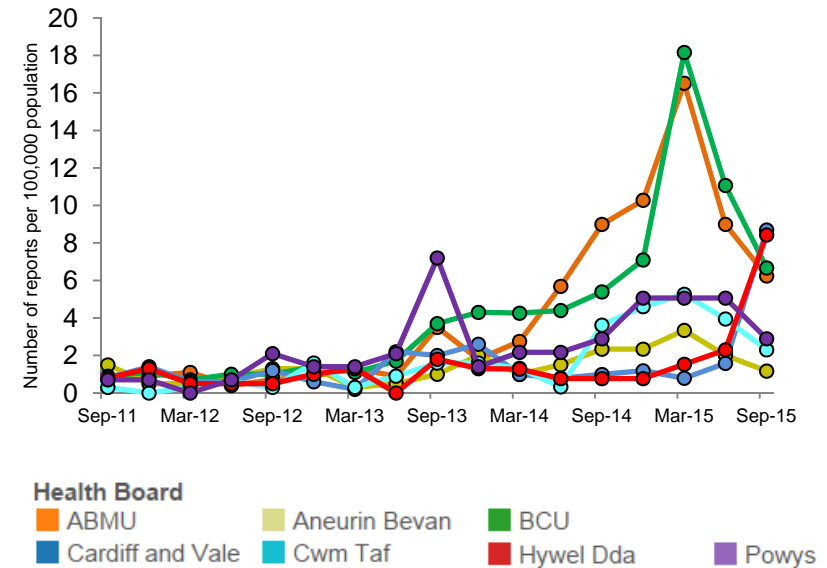


Table 14. Number of Yellow Cards submitted by health boards

	2014–2015 Qtr 2	2015–2016 Qtr 2	Change
Hywel Dda	15	66	51
Cardiff and Vale	39	83	44
BCU	112	121	9
Cwm Taf	14	22	8
Powys	9	10	1
Aneurin Bevan	32	29	-3
ABMU	78	59	-19
Wales	299	390	91

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 DDVs 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.

APPENDIX 1. AWMMSG NPIS 2015–2016

Indicator	Unit of measure	Target for 2015–2016
Proton pump inhibitors	PPI DDDs per 1,000 PUs	Maintain performance levels within the lower quartile, or show a reduction towards the quartile below
Lipid-modifying drugs	LAC statin items as a percentage of all statin, ezetimibe and simvastatin/ezetimibe combination prescribing	Maintain performance levels within the upper quartile, or show an increase towards the quartile above (threshold to remain as for 2013–2014 NPI).
Inhaled corticosteroids	Low strength ICS items as a percentage of all ICS prescribing	Maintain performance levels within the upper quartile, or show an increase towards the quartile above
Hypnotics and anxiolytics	Hypnotic and anxiolytic ADQs per 1,000 STAR-PUs	Maintain performance levels within the lower quartile, or show a reduction towards the quartile below
Opioid analgesics	Morphine items as a percentage of strong opioid prescribing	Maintain performance levels within the upper quartile, or show an increase towards the quartile above
	Tramadol DDDs per 1,000 patients	Maintain performance levels within the lower quartile, or show a reduction towards the quartile below
Antibiotics	Total antibacterial items per 1,000 STAR-PUs	No performance target set; aim for reduction in prescribing year on year, measuring quarter to December only
	Co-amoxiclav items per 1,000 patients Co-amoxiclav items as a percentage of total antibacterial items	Maintain performance levels within the lower quartile, or show a reduction towards the quartile below
	Cephalosporin items per 1,000 patients Cephalosporin items as a percentage of total antibacterial items	Maintain performance levels within the lower quartile, or show a reduction towards the quartile below
	Fluoroquinolone items per 1,000 patients Fluoroquinolone items as a percentage of total antibacterial items	Maintain performance levels within the lower quartile, or show a reduction towards the quartile below
Non-steroidal anti-inflammatory drugs (NSAIDs)	NSAID ADQs per 1,000 STAR-PUs	Maintain performance levels within the lower quartile, or show a reduction towards the quartile below
	Ibuprofen and naproxen items as a percentage of NSAID prescribing	Maintain performance levels within the upper quartile, or show an increase towards the quartile above
Yellow Cards	Number of Yellow Cards submitted per practice and per health board	Target for GP practice – GPs to submit one Yellow Card per 2,000 practice population. Target for each health board – submit Yellow Cards in excess of one per 2,000 health board population

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

APPENDIX 2. PRESCRIBING BY GP CLUSTER

Figure 1. PPI prescribing – Quarter ending September 2014 versus quarter ending September 2015

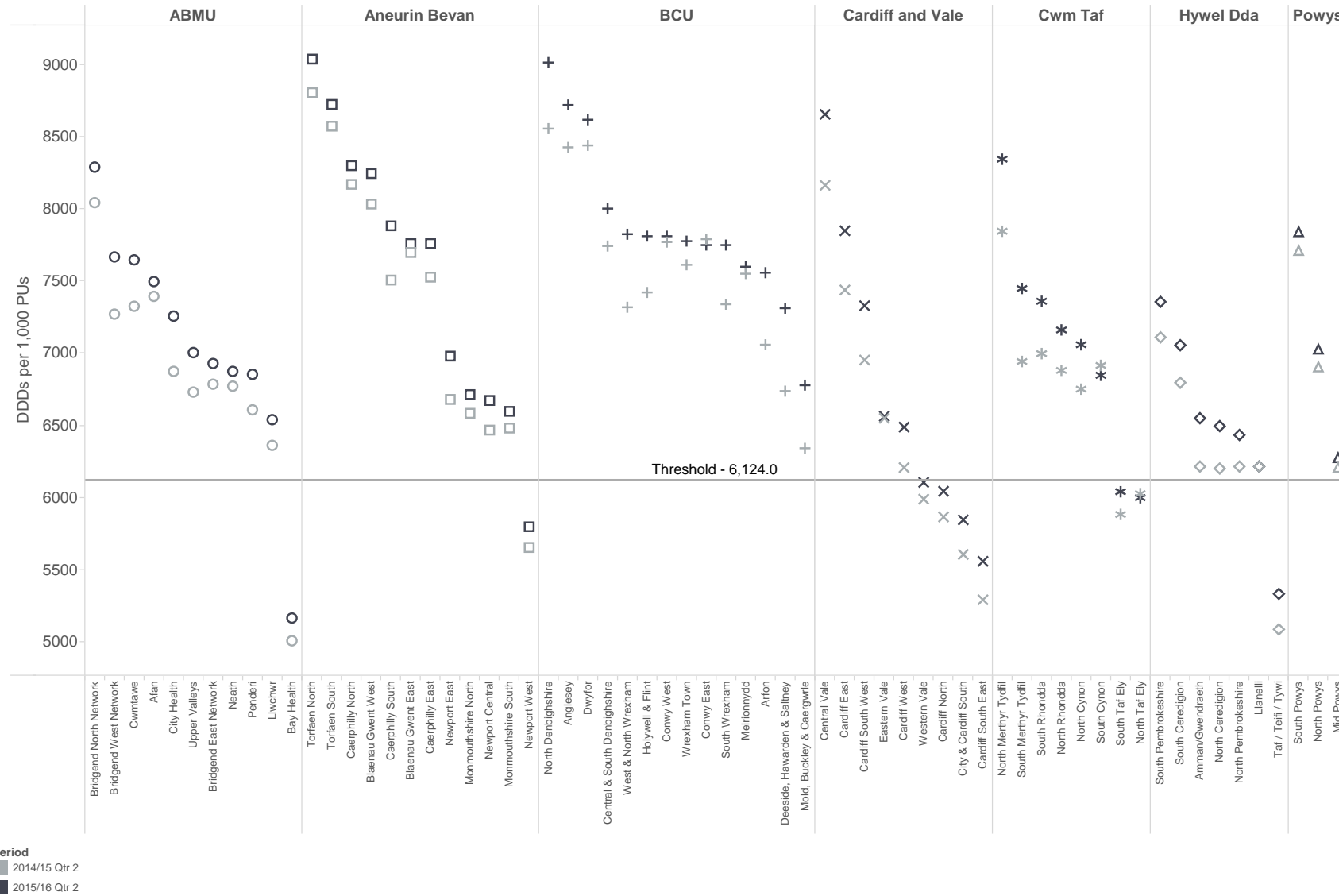


Figure 2. LAC statin prescribing as a percentage of all statin, ezetimibe and simvastatin/ezetimibe combination prescribing – Quarter ending September 2014 versus quarter ending September 2015

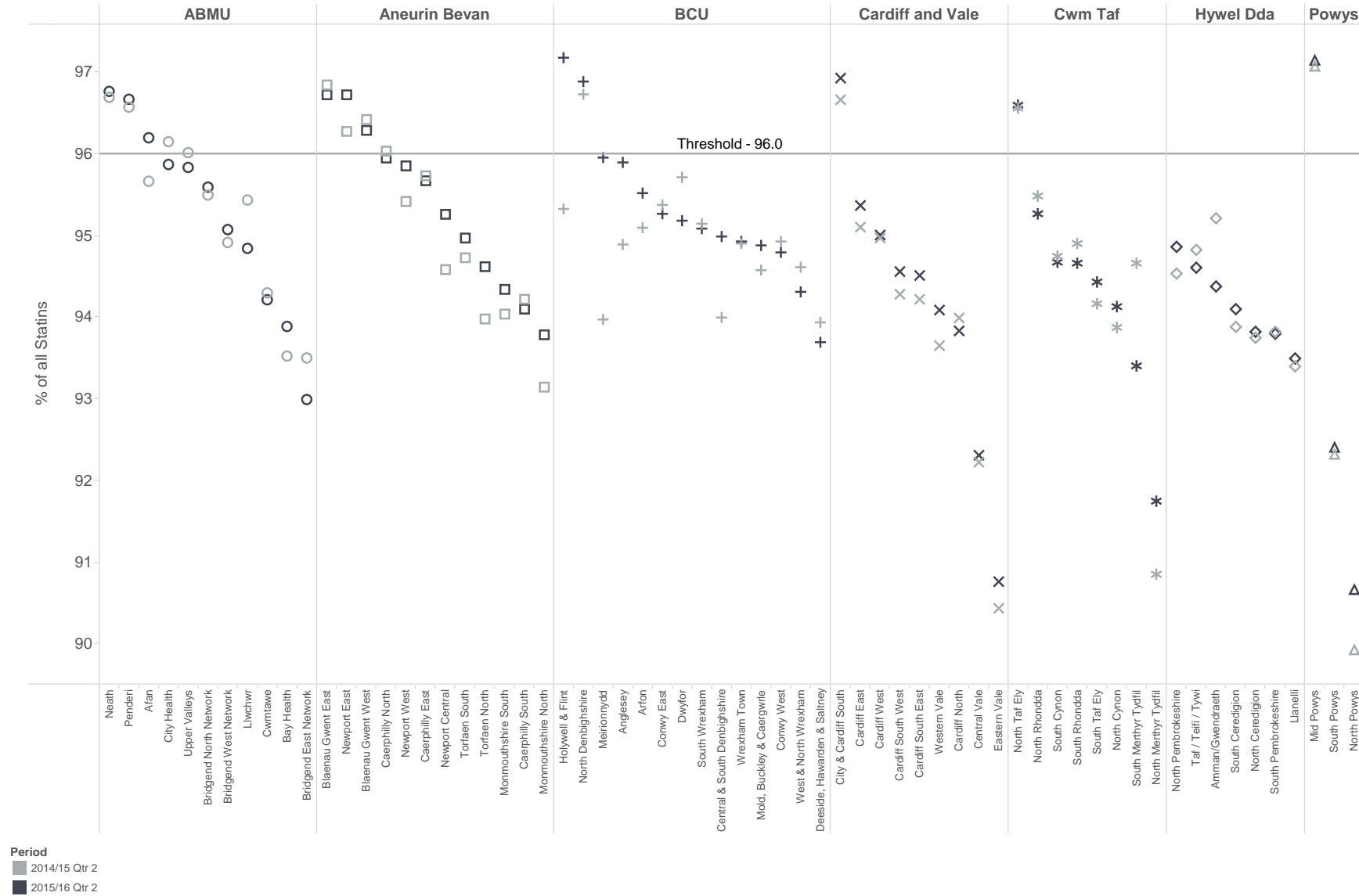


Figure 3. Low strength ICS prescribing as a percentage of all ICS prescribing – Quarter ending September 2014 versus quarter ending September 2015

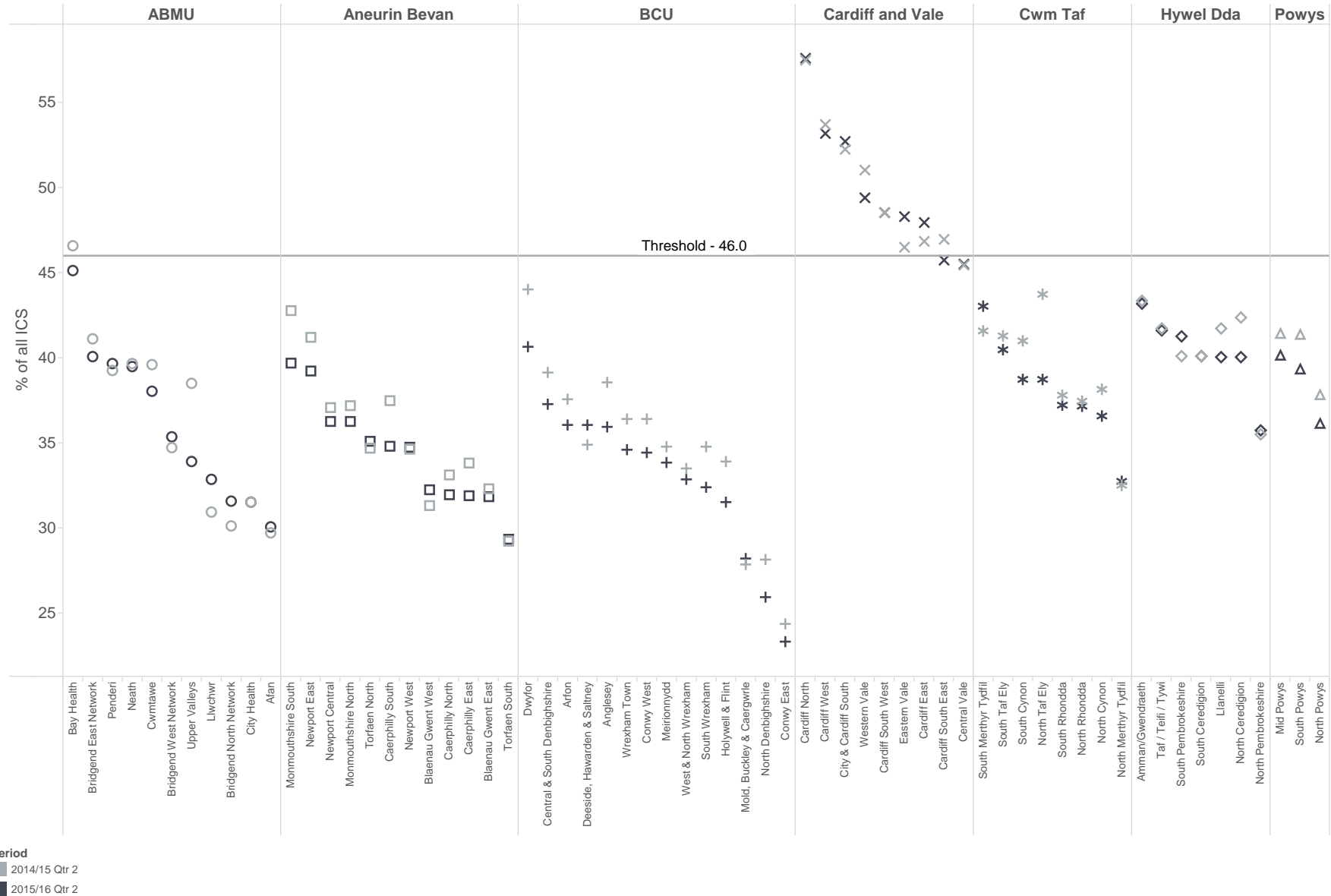


Figure 4. Hypnotic and anxiolytic prescribing – Quarter ending September 2014 versus quarter ending September 2015

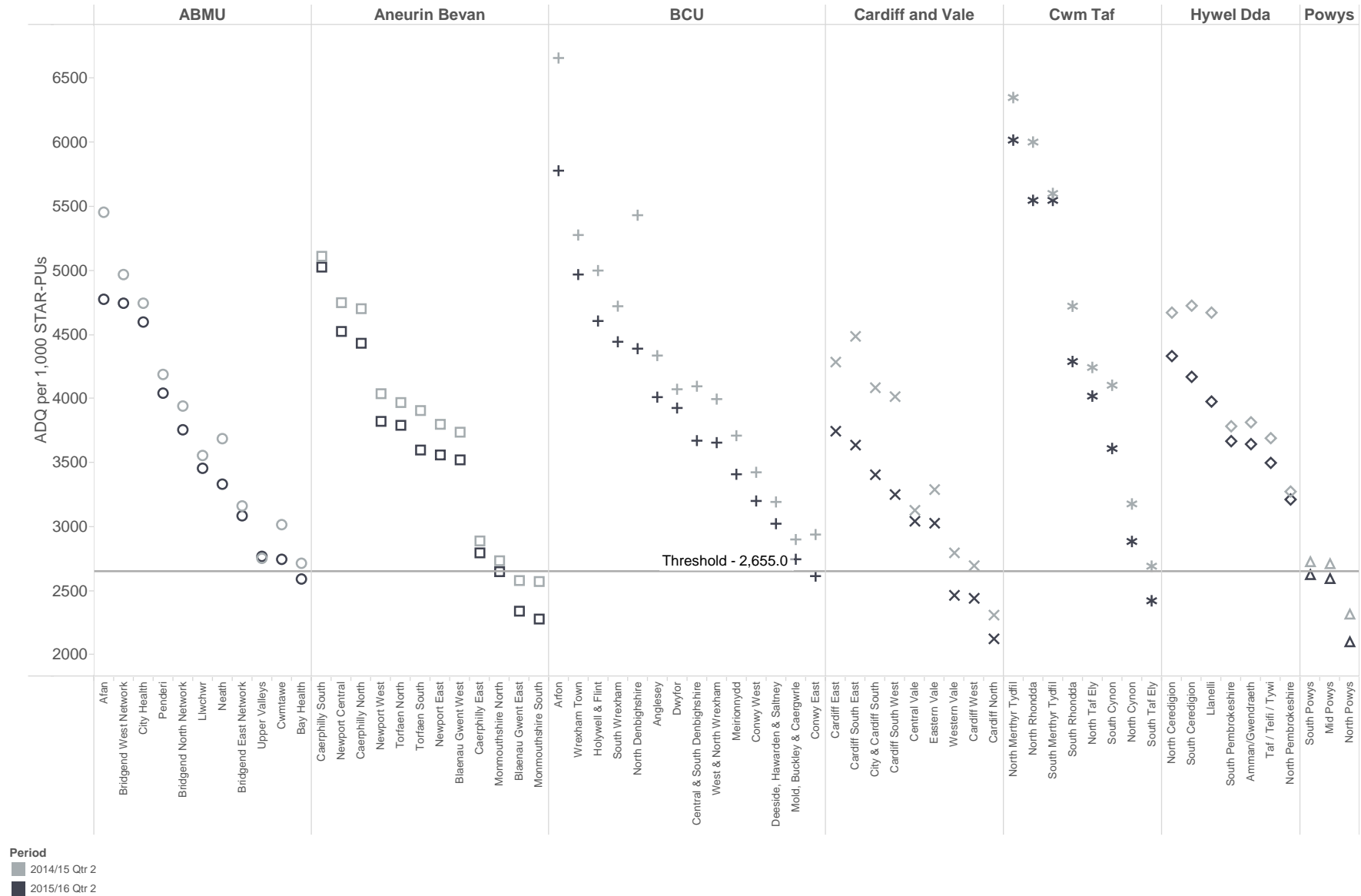


Figure 5. Morphine as a percentage of strong opioid prescribing – Quarter ending September 2014 versus quarter ending September 2015

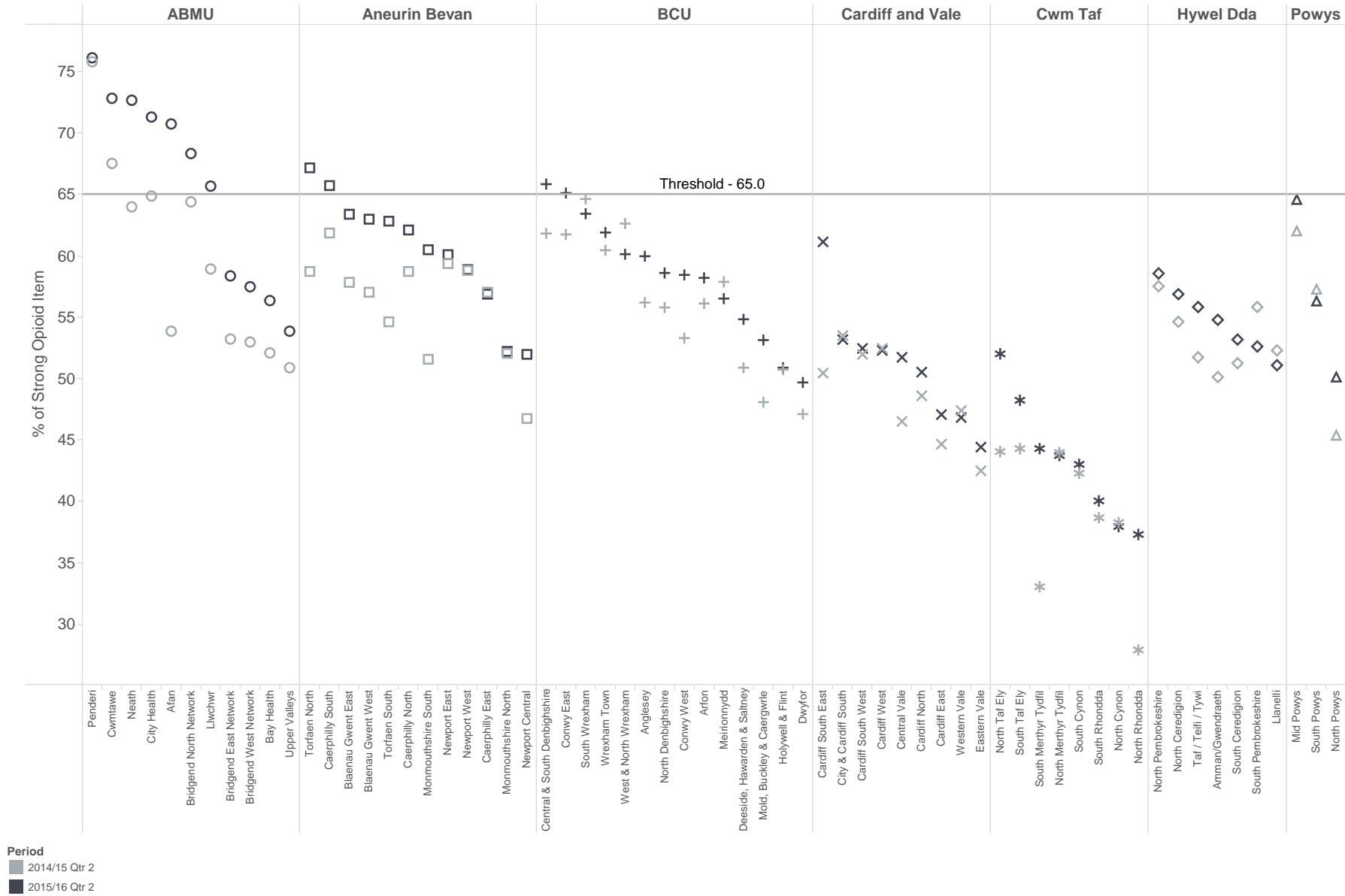


Figure 6. Tramadol prescribing – Quarter ending September 2014 versus quarter ending September 2015

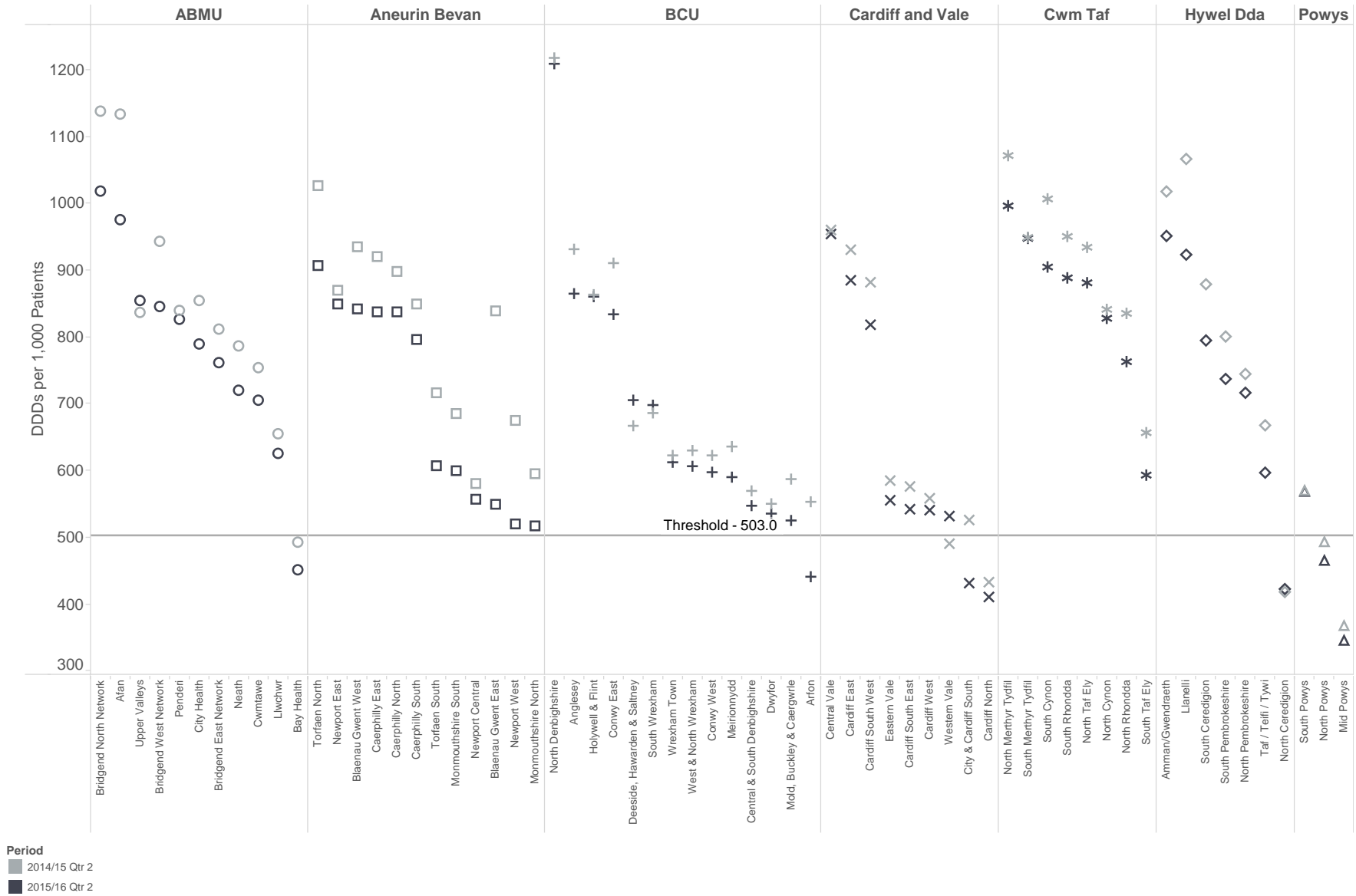


Figure 7. Antibiotic prescribing – Quarter ending September 2014 versus quarter ending September 2015

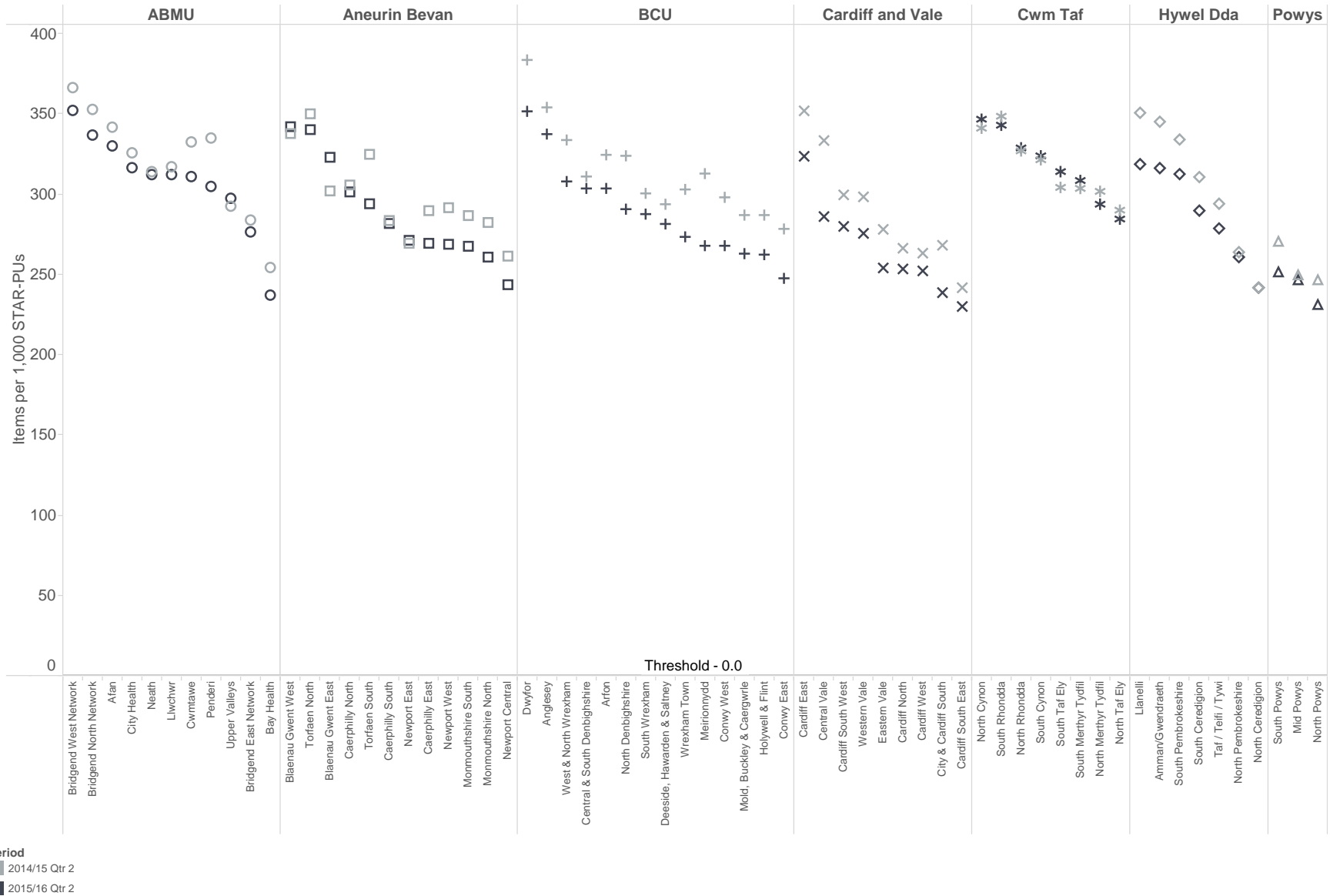


Figure 8. Co-amoxiclav prescribing – Quarter ending September 2014 versus quarter ending September 2015

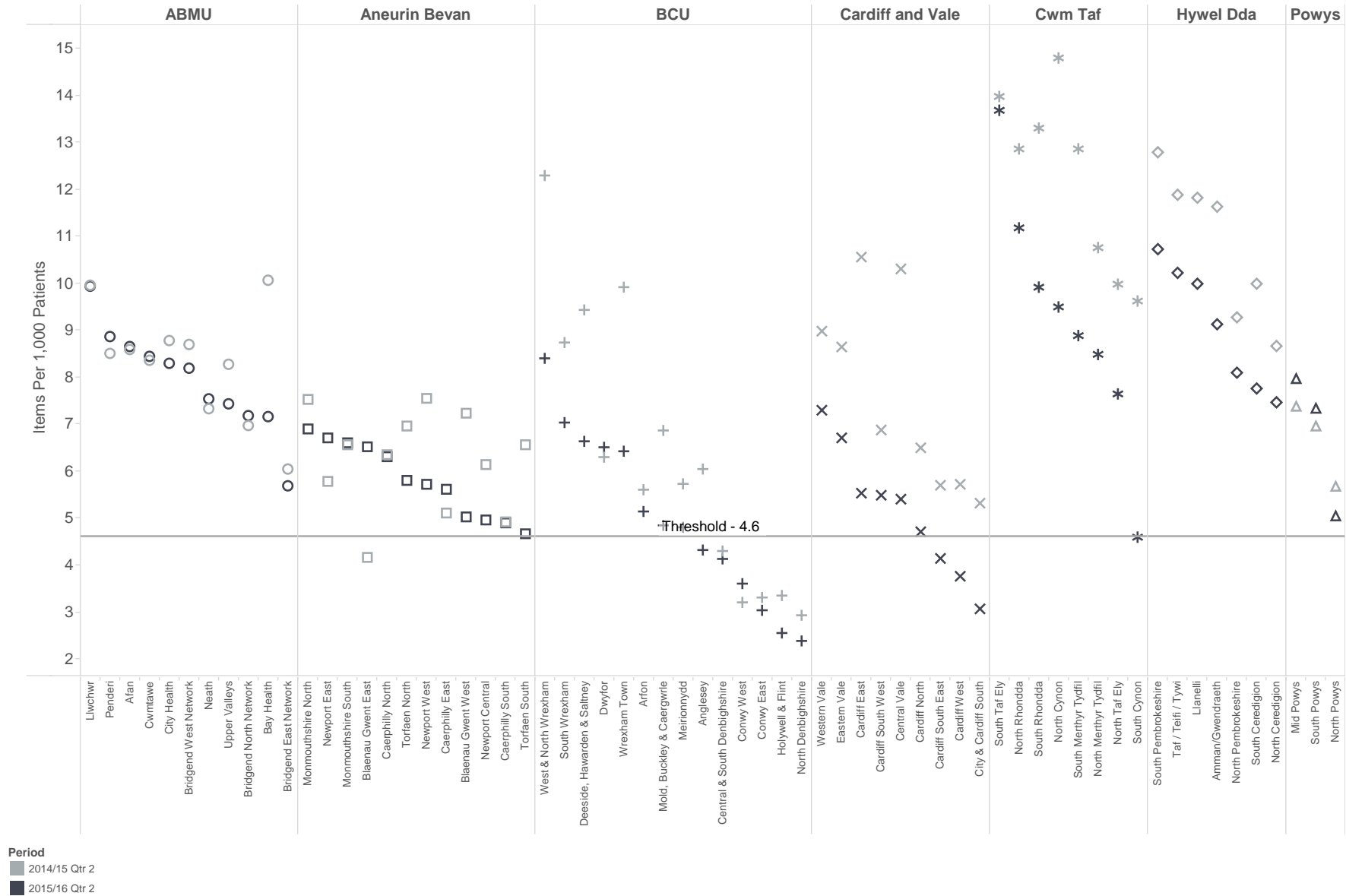


Figure 9. Co-amoxiclav as a percentage of total antibacterial items – Quarter ending September 2014 versus quarter ending September 2015

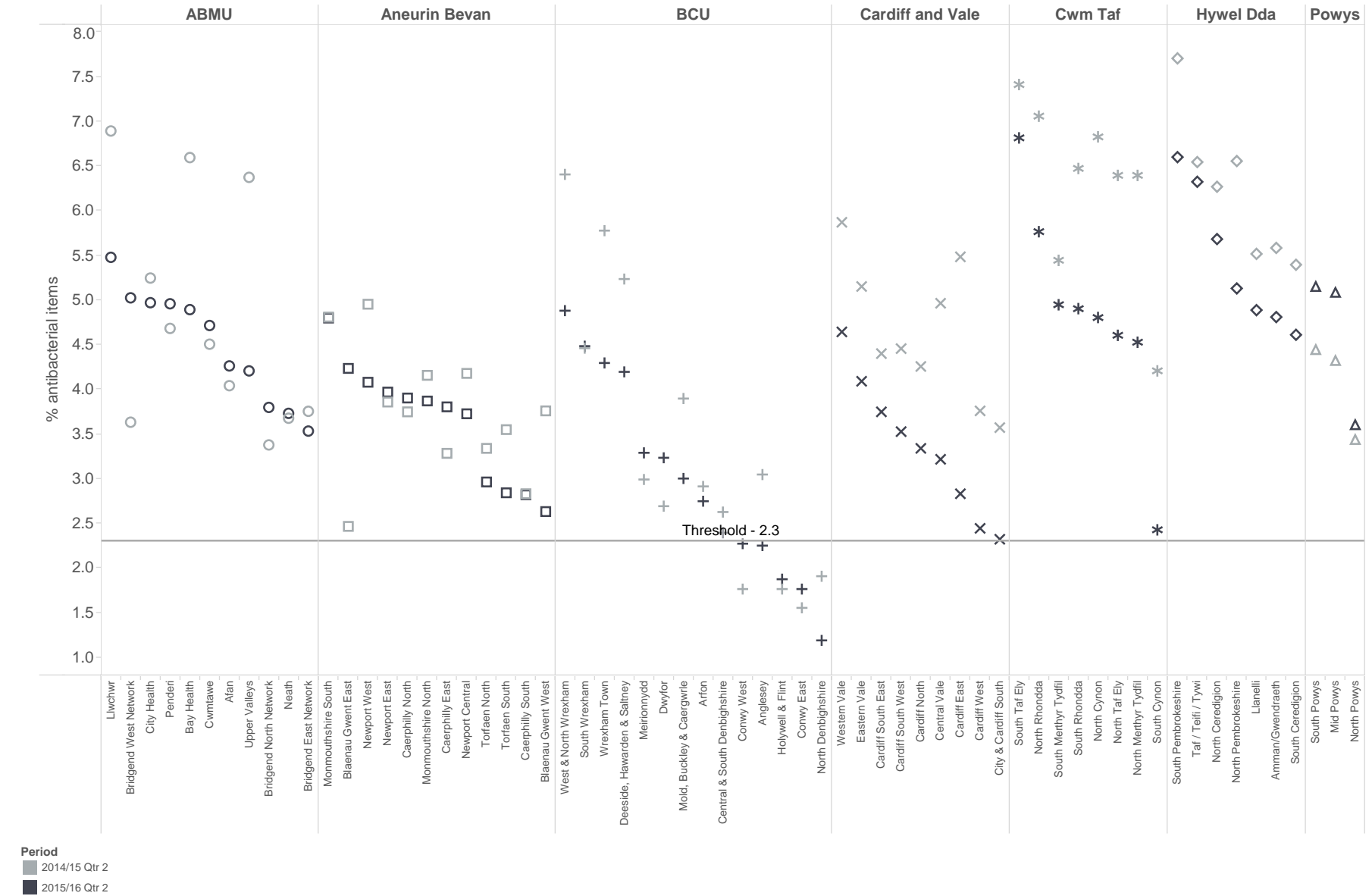


Figure 10. Cephalosporin prescribing – Quarter ending September 2014 versus quarter ending September 2015

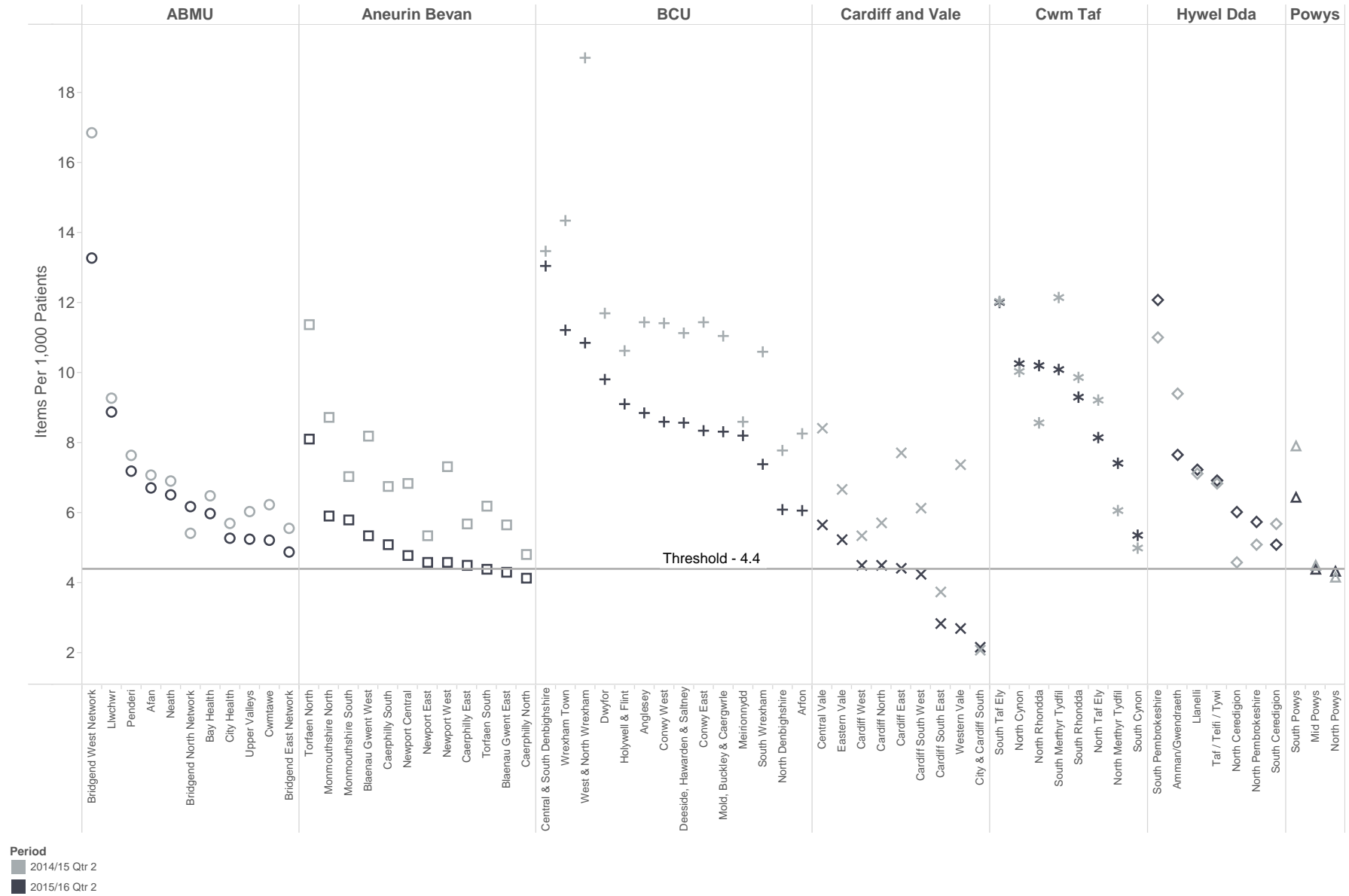


Figure 11. Cephalosporins as a percentage of total antibacterial items – Quarter ending September 2014 versus quarter ending September 2015

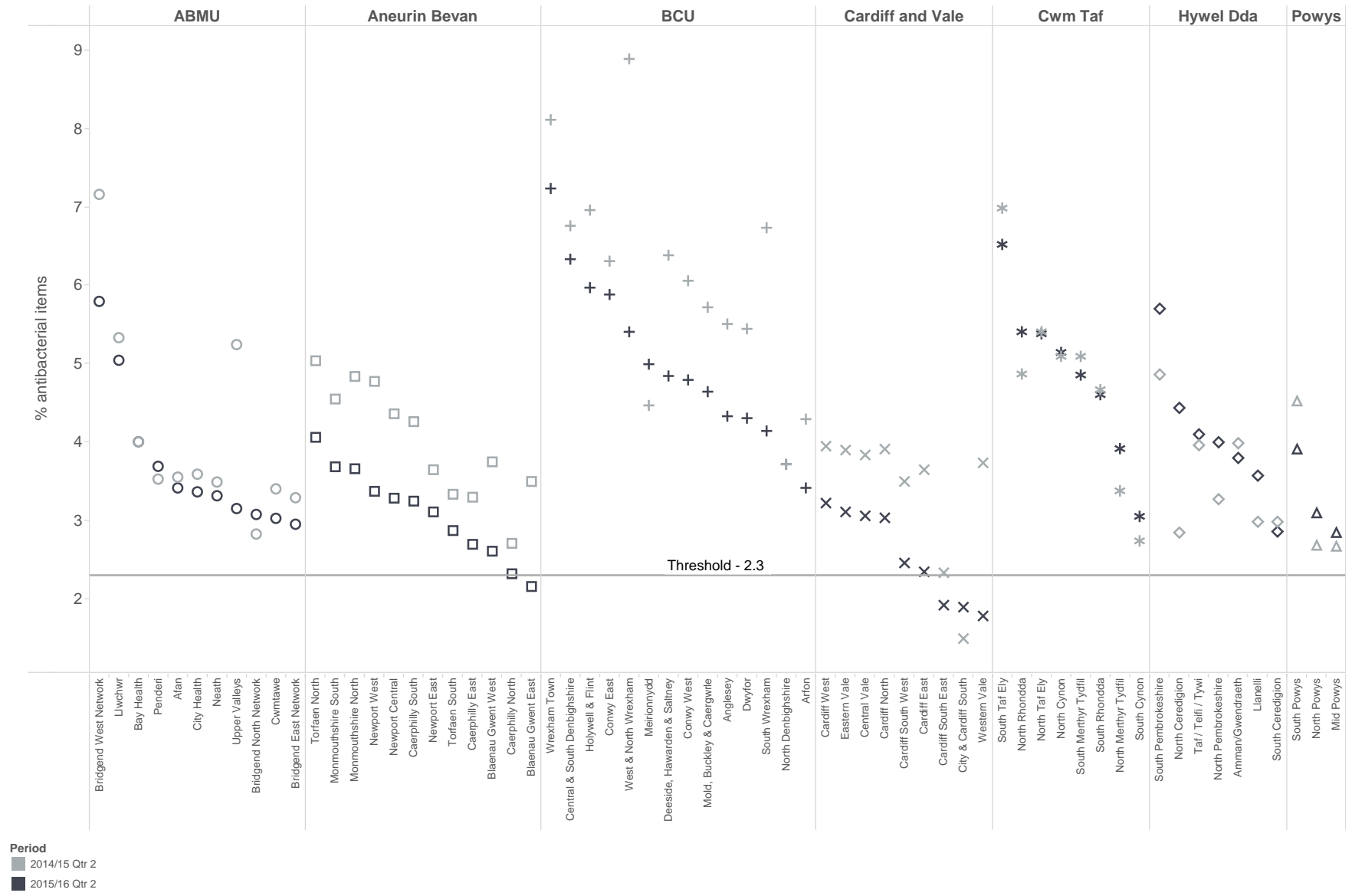
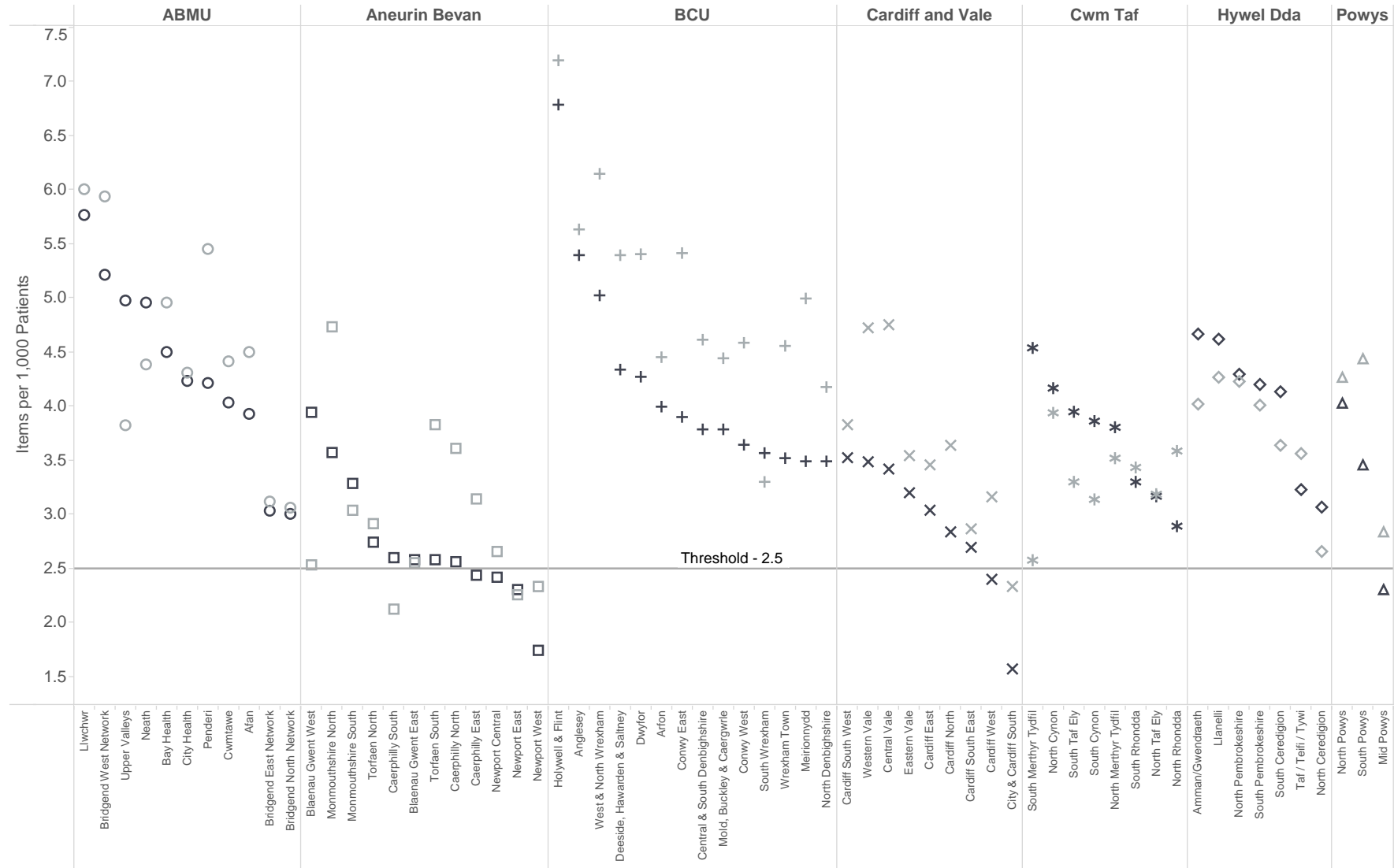


Figure 12. Fluoroquinolone prescribing – Quarter ending September 2014 versus quarter ending September 2015



Period
 2014/15 Qtr 2
 2015/16 Qtr 2

Figure 13. Fluoroquinolones as a percentage of total antibacterial items – Quarter ending September 2014 versus quarter ending September 2015

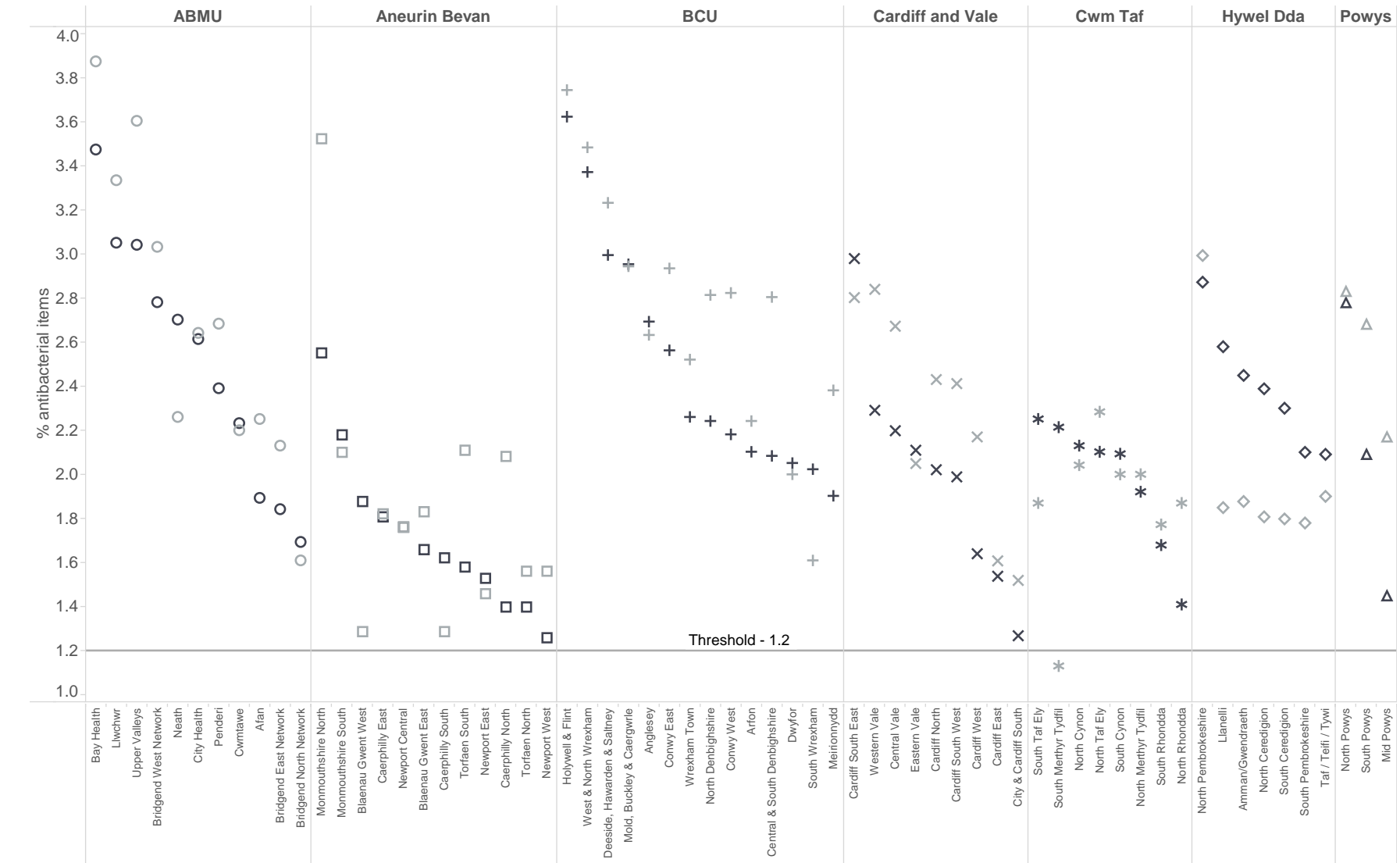


Figure 14. NSAID prescribing – Quarter ending September 2014 versus quarter ending September 2015

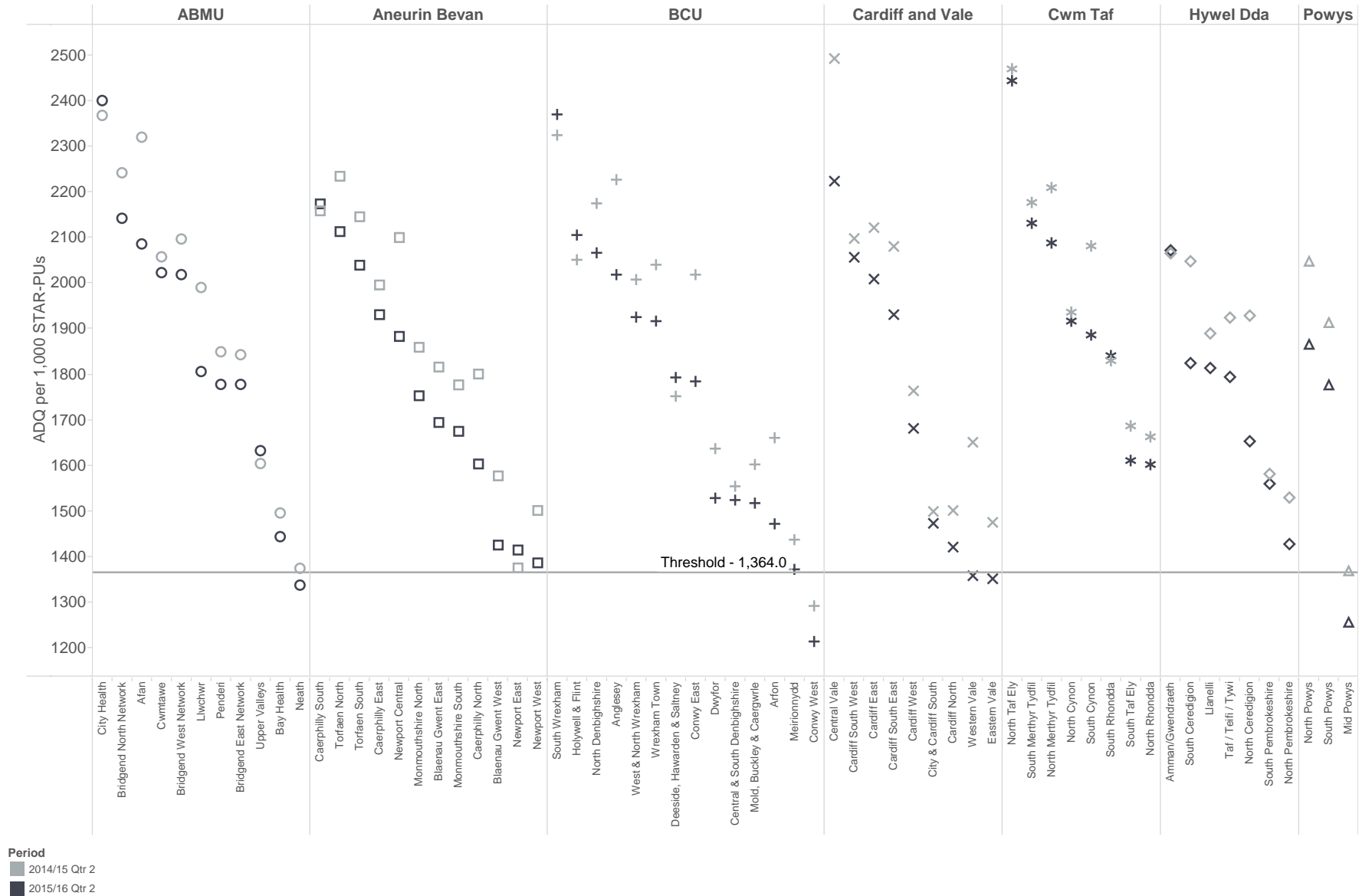


Figure 15. Ibuprofen and naproxen as a percentage of NSAID items – Quarter ending September 2014 versus quarter ending September 2015

