



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

National Prescribing Indicators 2015–2016

Analysis of Prescribing Data to March 2016





**All Wales Therapeutics
and Toxicology Centre**

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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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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, 13 NPIs focussed on eight areas of prescribing and the reporting of adverse events (Yellow Cards). Two of the indicators, proton pump inhibitors and inhaled corticosteroids, were new for 2015–2016. For full details, including unit of measure and target for each indicator, please see Appendix 1.
- A threshold level of prescribing/reporting was set for 12 of the 13 NPIs.
- For each pre-existing NPI with a threshold there was an overall improvement in prescribing, measured by the Welsh average, compared to 2014–2015.
- There was no improvement in prescribing, measured by the Welsh average, for the two new indicators (proton pump inhibitors and inhaled corticosteroids) for 2015–2016, compared to 2014–2015.
- At a national level, two NPIs associated with antibiotic usage showed the largest changes in prescribing compared to the previous year – **co-amoxiclav** items per 1,000 patients (18% reduction) and **cephalosporin** items per 1,000 patients (16% reduction).
- **Co-amoxiclav** prescribing decreased in all of the health boards compared to the previous year. The largest decreases were seen in Cardiff and Vale and Cwm Taf University Health Boards (UHBs) (32% and 23% respectively).
- **Cephalosporin** prescribing decreased in all of the health boards compared to the previous year. The largest decreases were seen in Cardiff and Vale and Aneurin Bevan UHBs (28% and 25% respectively).
- **Total antibiotic** prescribing fell by 6% across Wales compared to the previous year.
- **Hypnotic and anxiolytic** prescribing fell by 8% across Wales compared to the previous year. Hypnotic and anxiolytic prescribing decreased across all of the health boards compared to the previous year. The largest decrease was seen in Cardiff and Vale UHB (13%).
- **Tramadol** prescribing decreased across all of the health boards compared to the previous year. The largest decrease was seen in Aneurin Bevan UHB (10%). Across Wales, tramadol prescribing fell by 7% compared to the previous year.
- **Non-steroidal anti-inflammatory drug** (NSAID) prescribing decreased in all of the health boards compared to the previous year. The largest decrease was seen in Powys Teaching Health Board (7%).
- **Yellow Card** reporting by GPs increased by 35.7% for 2015–2016 compared to 2014–2015.

Practices achieving the indicator thresholds

Table 1 shows the extent to which practices in each health board met the indicator thresholds:

- The percentage figure and cell colour represent the proportion of practices in each health board meeting the indicator threshold in the quarter ending March 2016.
- The number below the percentage figure represents the net change in the number of practices meeting the threshold in the quarter ending March 2016, compared with the equivalent quarter of the previous year.

Table 1. Practices achieving the indicator threshold – Quarter to March 2016

2015/16 Qtr 4 vs 2014/15 Qtr 4								
Indicator	Target	ABMU	Aneurin Bevan	BCU	Cardiff and Vale	Cwm Taf	Hywel Dda	Powys
Cephalosporin items as % of antibacterial items	2.3	42% -4	52% -6	16% 1	64% 1	9% -6	35% -5	59% 2
Co-amoxiclav items as % of antibacterial items	2.3	16% -1	31% -7	52% -17	39% -8	14% 3	4% -2	24% 0
Fluoroquinolone items as % of antibacterial items	1.2	16% -9	52% -3	23% -3	27% -9	44% 4	15% -8	29% 3
Hypnotics and anxiolytics ADQs per 1000 STAR-PU(13)	2,655	30% -5	42% 3	30% 5	56% 5	28% 0	20% 2	65% 0
Ibuprofen and naproxen items as % of NSAIDs	85	23% -2	36% 0	40% -3	48% -2	70% 0	35% 1	41% 0
LAC statins as % of all statins	96	40% -2	45% 0	41% 4	30% 0	21% -3	24% -1	35% -1
Morphine items as % of strong opioid items	65	67% 1	43% -6	35% -13	14% -9	5% -2	28% -6	29% -3
NSAID ADQs per 1000 STAR-PU(13)	1,364	29% 3	32% -1	41% 6	47% 4	35% 1	24% 1	41% 1
Tramadol DDDs per 1000 patients	503	25% -1	31% -7	40% -4	50% -3	16% 2	35% 1	88% 1

2015/16 full year vs 2014/15 full year								
Yellow Card reporting	1 per 2000 Practice Population	34% -11	2% -3	32% -2	36% 24	7% -1	22% 12	12% 1

% Practices achieving threshold in latest quarter



For graphs showing GP cluster prescribing in relation to the threshold, and movement from the previous year, please see Appendix 2. Appendix 3 shows Welsh health board prescribing compared to England and North East (NE) England clinical commissioning groups (CCGs).

1.0 PROTON PUMP INHIBITORS

Proton pump inhibitor (PPI) prescribing is continuing to increase across Wales. In the quarter to March 2016, prescribing in Wales was 16% higher than that seen in England.

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

- PPI usage increased by approximately 3% across Wales from 2014–2015 to 2015–2016, contrary to the aim of the NPI.
- Prescribing increased across all of the health boards. The smallest percentage increase was seen in Powys Teaching Health Board (HB) and the largest increase was seen in Hywel Dda University Health Board (UHB).
- In 2015–2016, the health board with the lowest prescribing was Hywel Dda UHB whilst the highest prescribing was seen in Betsi Cadwaladr UHB.

Table 2. PPI DDDs per 1,000 PUs

	2014–2015	2015–2016	% change
Powys	28,012	28,462	1.61%
Aneurin Bevan	29,399	30,041	2.18%
Betsi Cadwaladr	30,321	31,201	2.90%
Cardiff and Vale	25,914	26,822	3.51%
Abertawe Bro Morgannwg	26,835	27,786	3.54%
Cwm Taf	26,676	27,635	3.59%
Hywel Dda	25,115	26,220	4.40%
Wales	27,787	28,655	3.12%

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

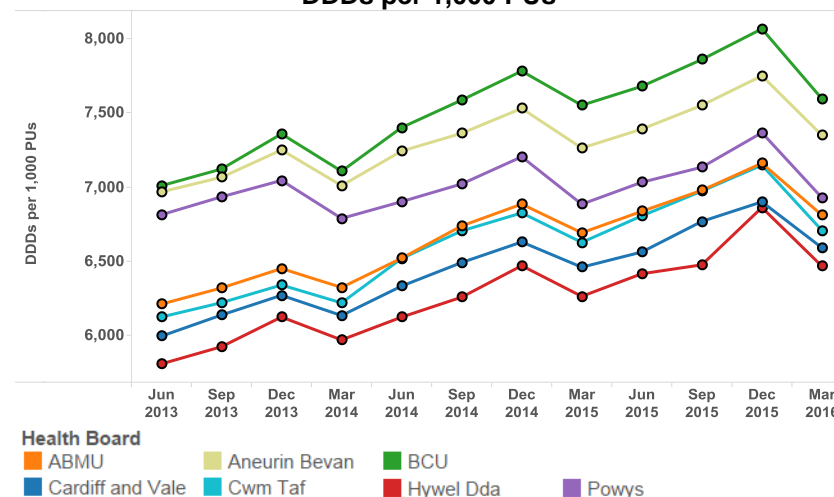
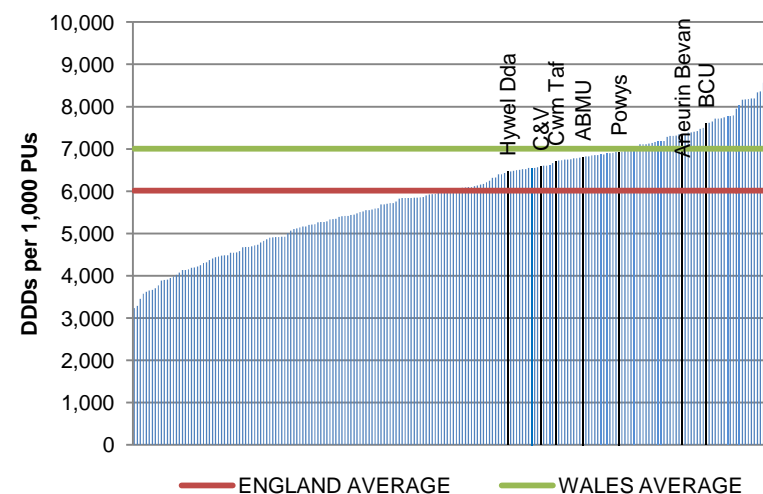


Figure 2. PPI prescribing in Welsh health boards and English CCGs – Quarter ending March 2016



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 increased by 0.2% across Wales from 2014–2015 to 2015–2016, in line with the aim of the indicator.
- Prescribing increased across all of the health boards. The largest percentage increase was seen in Powys Teaching HB and the smallest percentage increases were seen in Hywel Dda and Abertawe Bro Morgannwg UHBs.
- In 2015–2016, the health board with the highest percentage was Aneurin Bevan UHB whilst the lowest percentage was seen in Powys Teaching HB.

Table 3. LAC statins as a percentage of all statin, ezetimibe and simvastatin/ezetimibe combination prescribing

	2014–2015	2015–2016	% change
Powys	92.3	92.8	0.58%
Betsi Cadwaladr	94.9	95.3	0.41%
Cardiff and Vale	93.7	93.9	0.23%
Aneurin Bevan	95.2	95.4	0.20%
Cwm Taf	94.0	94.2	0.14%
Hywel Dda	94.0	94.0	0.01%
Abertawe Bro Morgannwg	95.1	95.1	0.01%
Wales	94.5	94.7	0.20%

Figure 3. Trend in LAC statin prescribing as a percentage of all statin, ezetimibe and simvastatin/ezetimibe combination prescribing

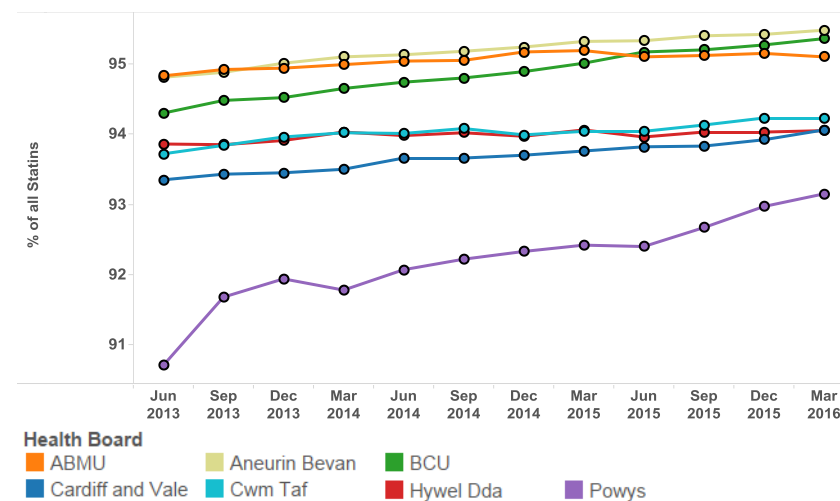
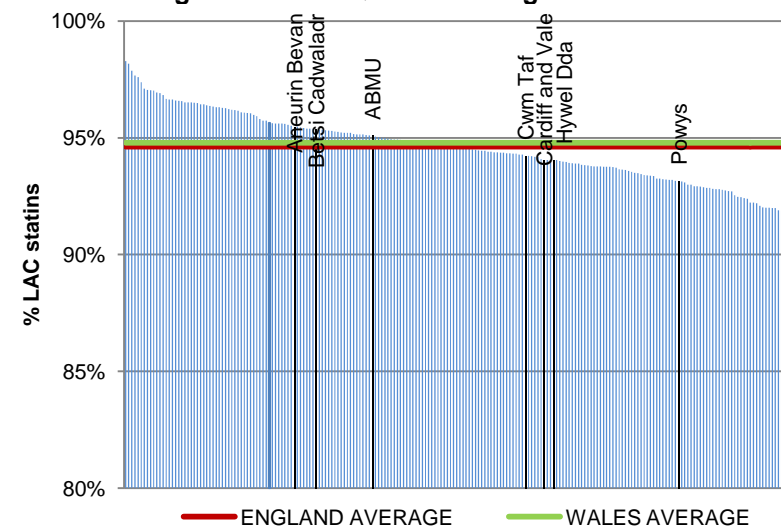


Figure 4. LAC statin prescribing in Welsh health boards and English CCGs – Quarter ending March 2016



3.0 INHALED CORTICOSTEROIDS

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 stepping down when clinically appropriate and thus increasing the proportion of low strength ICS usage as a percentage of total ICS usage.

- The proportion of low strength ICS prescribing fell by almost 2% across Wales from 2014–2015 to 2015–2016.
- Prescribing increased in line with the aim of this indicator in two health boards compared to the previous year; Abertawe Bro Morgannwg and Cardiff and Vale UHBs. However, prescribing in the remaining health boards was lower than that seen in the previous year.
- 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.

Table 4. Low strength ICS prescribing as a percentage of all ICS prescribing

	2014–2015	2015–2016	% change
Abertawe Bro Morgannwg	36.9	36.9	0.21%
Cardiff and Vale	49.7	49.7	0.06%
Hywel Dda	40.3	39.8	-1.17%
Cwm Taf	39.3	38.4	-2.29%
Aneurin Bevan	35.3	34.5	-2.43%
Betsi Cadwaladr	34.1	32.6	-4.40%
Powys	40.6	38.1	-6.04%
Wales	38.4	37.6	-1.99%

Figure 5. Trend in low strength ICS prescribing as a percentage of all ICS prescribing

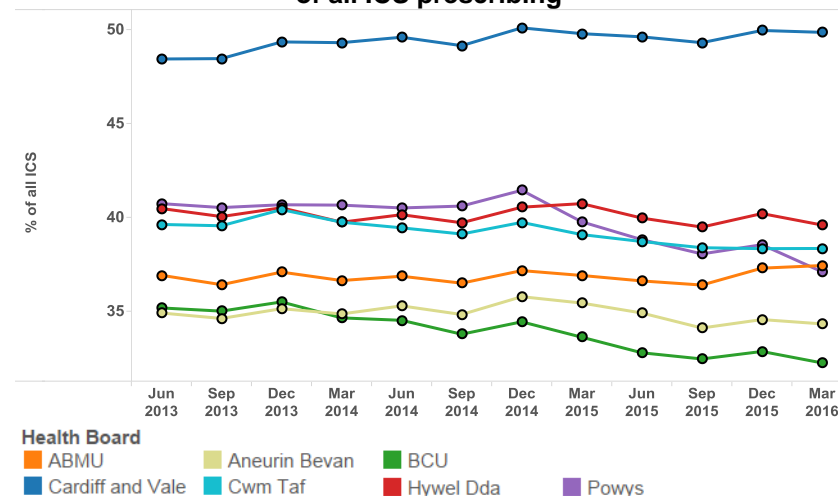
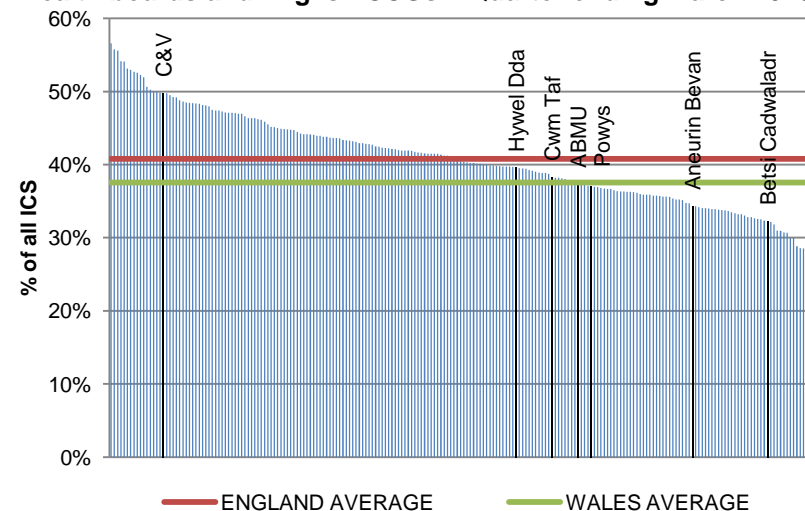


Figure 6. Percentage of low strength ICS prescribing in Welsh health boards and English CCGs – Quarter ending March 2016



4.0 HYPNOTICS AND ANXIOLYTICS

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 remained 50% higher than in England for the quarter to March 2016.

- Hypnotic and anxiolytic usage fell by approximately 7.5% across Wales from 2014–2015 to 2015–2016.
- Prescribing reduced across all of the health boards. The largest percentage decrease was seen in Cardiff and Vale UHB and the smallest decrease was seen in Abertawe Bro Morgannwg UHB.
- In 2015–2016, the health board with the lowest prescribing was Powys Teaching HB whilst the highest prescribing was seen in Cwm Taf UHB.

Table 5. Hypnotic and anxiolytic ADQs per 1,000 STAR-PU (13)

	2014–2015	2015–2016	% change
Cardiff and Vale	12,958	11,311	-12.7%
Betsi Cadwaladr	16,790	15,222	-9.34%
Cwm Taf	17,768	16,442	-7.46 %
Hywel Dda	16,031	15,032	-6.23%
Aneurin Bevan	15,052	14,164	-5.90%
Powys	10,073	9,524	-5.45%
Abertawe Bro Morgannwg	14,826	14,168	-4.44%
Wales	15,261	14,111	-7.54%

Figure 7. Trend in hypnotic and anxiolytic prescribing ADQs per 1,000 STAR-PU (13)

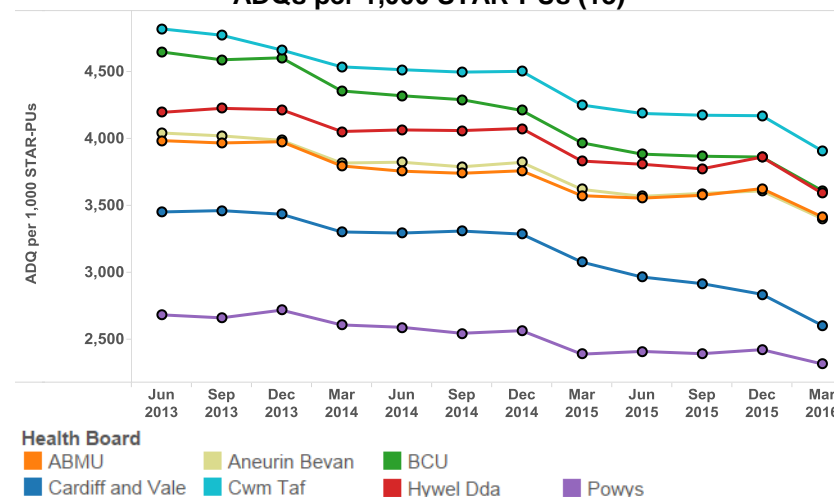
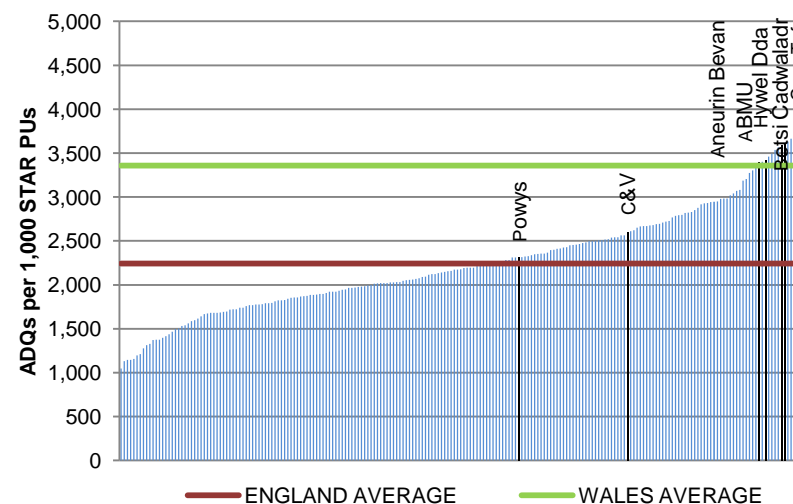


Figure 8. Hypnotic and anxiolytic prescribing in Welsh health boards and English CCGs – Quarter ending March 2016



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

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

- The proportion of morphine prescribing as a percentage of strong opioids increased by approximately 5% across Wales from 2014–2015 to 2015–2016.
- Prescribing increased across all of the health boards. The largest percentage increase was in Abertawe Bro Morgannwg UHB, whilst the smallest percentage increase was seen in Cardiff and Vale UHB.
- In 2015–2016, the health board with the highest percentage usage was Abertawe Bro Morgannwg UHB whilst the lowest percentage was seen in Cwm Taf UHB.

Table 6. Morphine as a percentage of strong opioid prescribing

	2014–2015	2015–2016	% change
Abertawe Bro Morgannwg	61.4	66.9	8.89%
Aneurin Bevan	58.4	63.3	8.42%
Cwm Taf	41.2	43.8	6.38%
Powys	53.5	55.8	4.16%
Betsi Cadwaladr	57.6	59.9	3.86%
Hywel Dda	54.9	57.0	3.76%
Cardiff and Vale	50.4	52.2	3.70%
Wales	55.3	57.9	4.83%

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

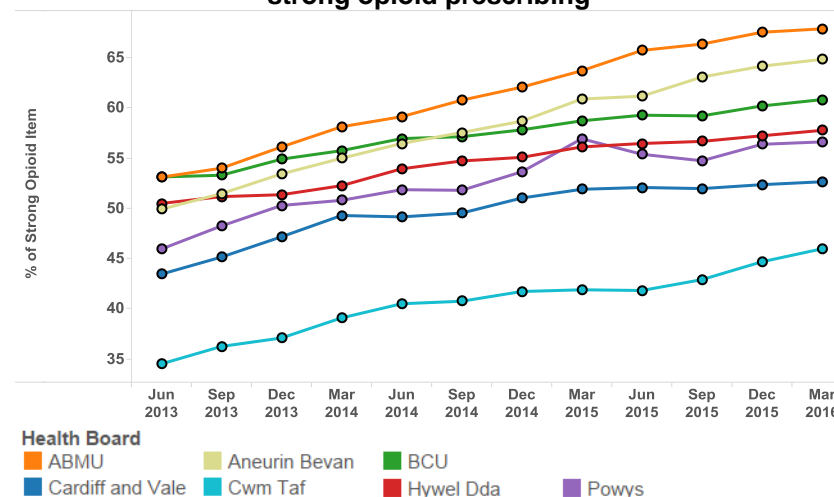
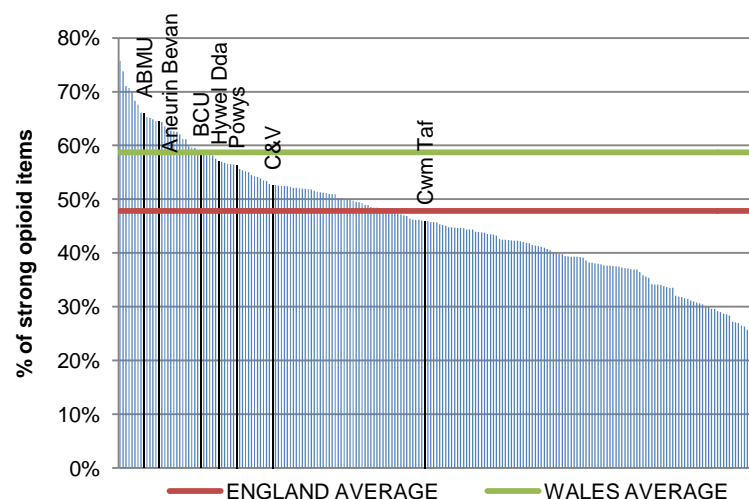


Figure 10. Percentage of morphine prescribing in Welsh health boards and English CCGs – Quarter ending March 2016



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.

- Tramadol usage fell by approximately 7% across Wales from 2014–2015 to 2015–2016.
- Prescribing was reduced across all of the health boards. The largest percentage decrease was seen in Aneurin Bevan UHB and the smallest decreases were seen in Betsi Cadwaladr UHB and Powys Teaching HB.
- In 2015–2016, the health board with the lowest tramadol prescribing was Powys Teaching HB, whilst the highest prescribing was seen in Cwm Taf UHB.

Table 7. Tramadol DDDs per 1,000 patients

	2014–2015	2015–2016	% change
Aneurin Bevan	3,127	2,803	-10.4%
Abertawe Bro Morgannwg	3,263	3,022	-7.39%
Hywel Dda	3,180	2,972	-6.55%
Cwm Taf	3,515	3,287	-6.48%
Cardiff and Vale	2,607	2,468	-5.35%
Powys	1,938	1,845	-4.83%
Betsi Cadwaladr	2,903	2,764	-4.80%
Wales	3,010	2,804	-6.86%

Figure 11. Trend in tramadol prescribing DDDs per 1,000 patients

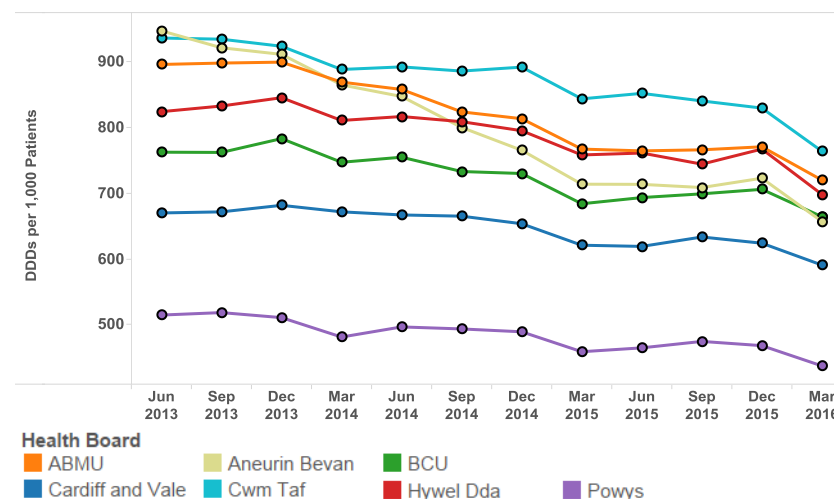
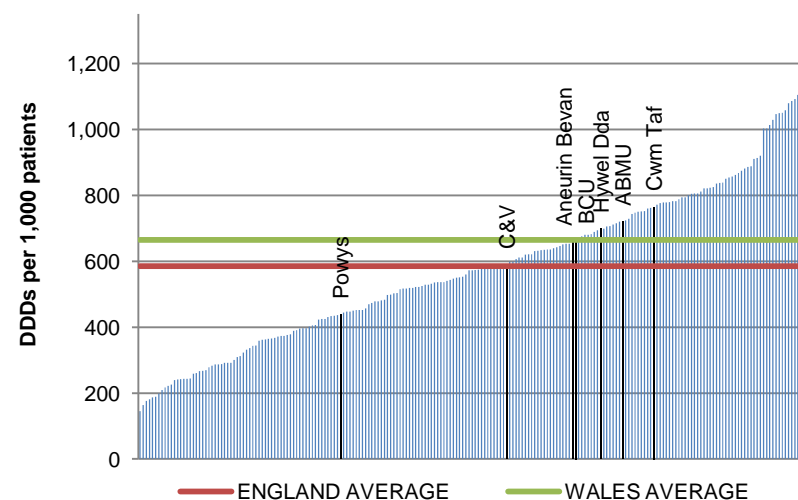


Figure 12. Tramadol prescribing in Welsh health boards and English CCGs – Quarter ending March 2016



6.0 ANTIBIOTICS

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.

- Antibacterial usage fell by approximately 6% across Wales from 2014–2015 to 2015–2016.
- Prescribing was reduced across all health boards. The largest percentage decrease was seen in Cardiff and Vale UHB and the smallest was seen in Cwm Taf UHB.
- In 2015–2016, the health board with the lowest prescribing was Powys Teaching HB whilst the highest prescribing was seen in Abertawe Bro Morgannwg UHB.

Table 8. Total antibacterial items per 1,000 STAR-PUs (13)

	2014–2015	2015–2016	% change
Cardiff and Vale	1,332	1,218	-8.53%
Betsi Cadwaladr	1,428	1,321	-7.49%
Powys	1,155	1,077	-6.74%
Hywel Dda	1,426	1,342	-5.90%
Abertawe Bro Morgannwg	1,509	1,423	-5.74%
Aneurin Bevan	1,385	1,320	-4.68%
Cwm Taf	1,459	1,397	-4.28%
Wales	1,409	1,321	-6.26%

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

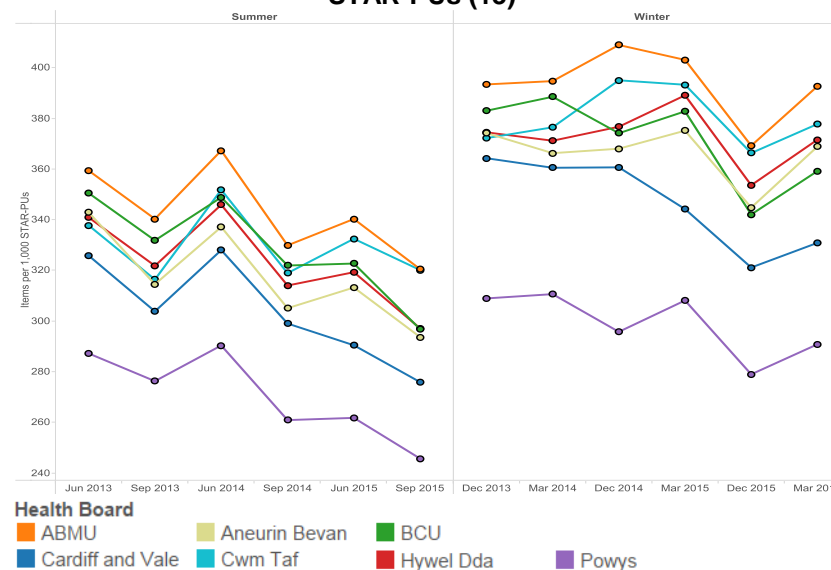
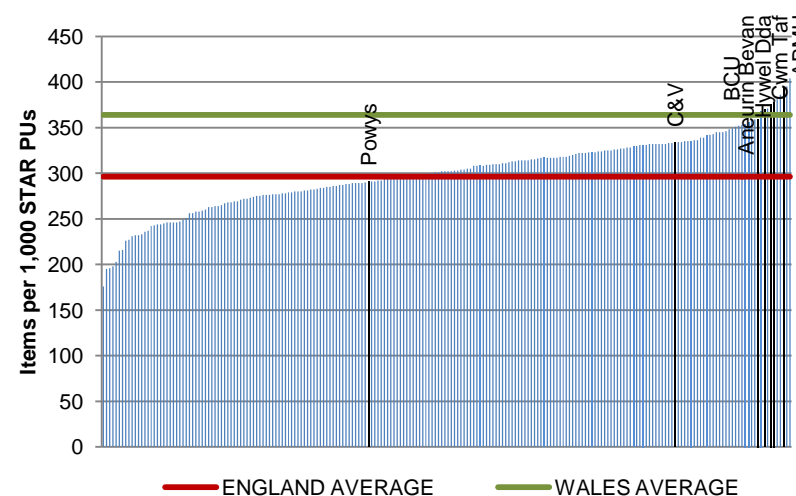


Figure 14. Antibiotic prescribing in Welsh health boards and English CCGs – Quarter ending March 2016



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:

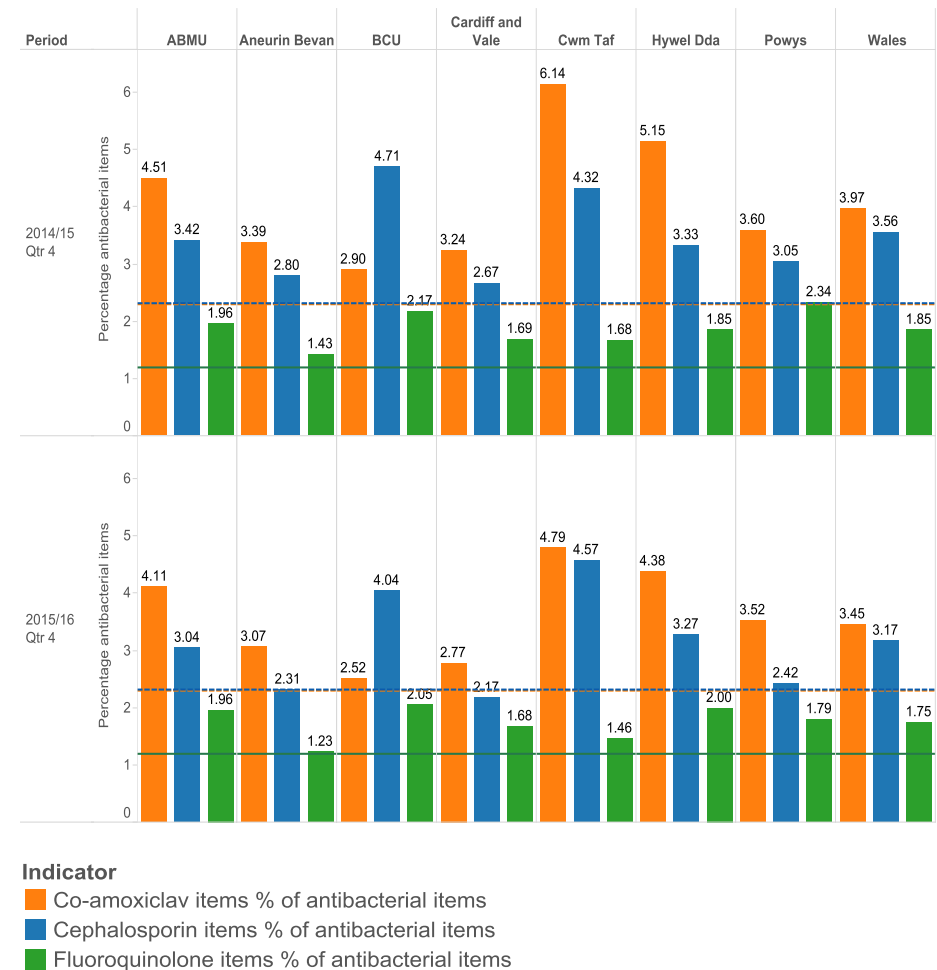
1. Items as a percentage of total antibacterial items
2. Items per 1,000 patients

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

Across Wales, prescribing of co-amoxiclav, cephalosporins and fluoroquinolones as a percentage of all antibacterial prescribing fell from 2014–2015 to 2015–2016 in line with the aim of this indicator.

- The proportion of co-amoxiclav prescribing fell by approximately 12% across Wales. The largest decrease was seen in Cardiff and Vale UHB (26%), and the smallest decrease was seen in Abertawe Bro Morgannwg UHB. There was an increase of 3% in Powys Teaching HB.
- The proportion of cephalosporin prescribing fell by approximately 10% across Wales. The largest decrease was seen in Aneurin Bevan UHB (22%), and the smallest decrease was seen in Abertawe Bro Morgannwg UHB. There were increases in Cwm Taf and Hywel Dda UHBs.
- The proportion of fluoroquinolone prescribing fell by approximately 3% across Wales. The largest decrease was seen in Powys Teaching UHB, and the smallest decrease was seen in Cwm Taf UHB. There were increases in Abertawe Bro Morgannwg and Hywel Dda UHBs.

Figure 15. Co-amoxiclav, cephalosporins and fluoroquinolones as a percentage of total antibacterial prescribing - Quarter ending March 2015 versus quarter ending March 2016



6.2.2 Co-amoxiclav items per 1,000 patients

The prescribing of co-amoxiclav continues to fall across Wales, in line with the aim of this indicator.

- Co-amoxiclav usage fell by approximately 18% across Wales from 2014–2015 to 2015–2016.
- Prescribing was reduced across all of the health boards. The largest percentage decrease was seen in Cardiff and Vale UHB and the smallest decrease was seen in Powys Teaching HB.
- In 2015–2016, co-amoxiclav prescribing ranged from 20.9 to 40.3 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.

Table 9. Co-amoxiclav items per 1,000 patients

	2014–2015	2015–2016	% change
Cardiff and Vale	30.0	20.9	-32.0%
Cwm Taf	52.3	40.3	-23.0%
Betsi Cadwaladr	26.8	21.3	-20.7%
Hywel Dda	46.7	38.6	-17.4%
Aneurin Bevan	28.4	25.6	-9.72%
Abertawe Bro Morgannwg	39.5	35.9	-9.22%
Powys	26.9	25.9	-3.64%
Wales	34.8	28.7	-17.6%

Figure 16. Trend in co-amoxiclav prescribing items per 1,000 patients

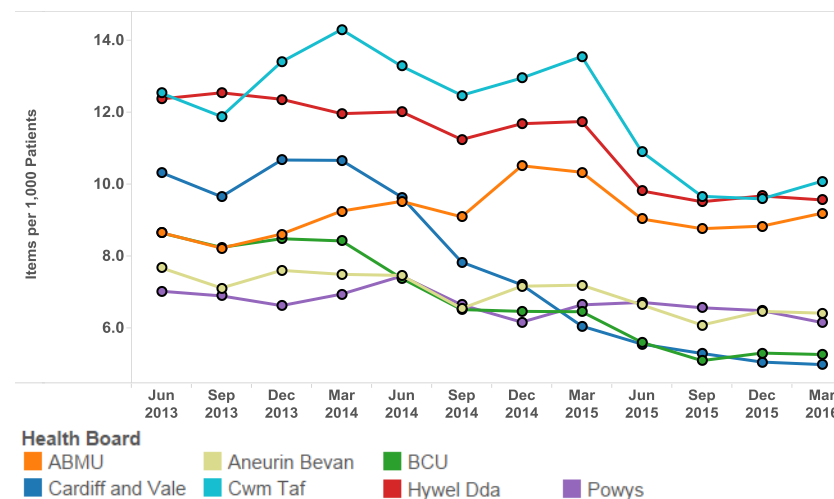
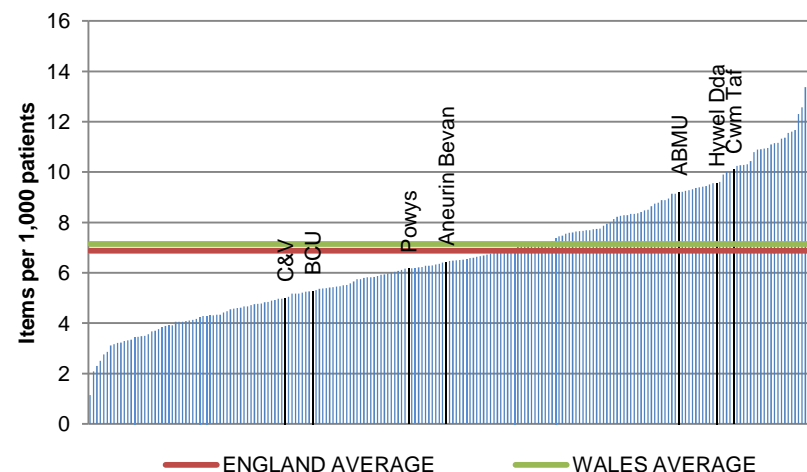


Figure 17. Co-amoxiclav prescribing in Welsh health boards and English CCGs – Quarter ending March 2016



6.2.3 Cephalosporin items per 1,000 patients

The prescribing of cephalosporins continues to fall across Wales, in line with the aim of this indicator.

- Cephalosporin usage fell by approximately 16% across Wales from 2014–2015 to 2015–2016.
- Prescribing was reduced across all of the health boards. The largest percentage decrease was seen in Cardiff and Vale UHB and the smallest decrease was seen in Cwm Taf UHB.
- In 2015–2016, cephalosporin prescribing ranged from 17.2 to 37.9 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.

Table 10. Cephalosporin items per 1,000 patients

	2014–2015	2015–2016	% change
Cardiff and Vale	23.8	17.2	-27.6%
Aneurin Bevan	27.8	20.8	-25.2%
Betsi Cadwaladr	45.1	36.0	-20.2%
Powys	22.9	19.2	-16.0%
Abertawe Bro Morgannwg	31.0	27.8	-10.4%
Hywel Dda	30.6	29.6	-3.07%
Cwm Taf	38.8	37.9	-2.29%
Wales	32.7	27.4	-16.1%

Figure 18. Trend in cephalosporin prescribing items per 1,000 patients

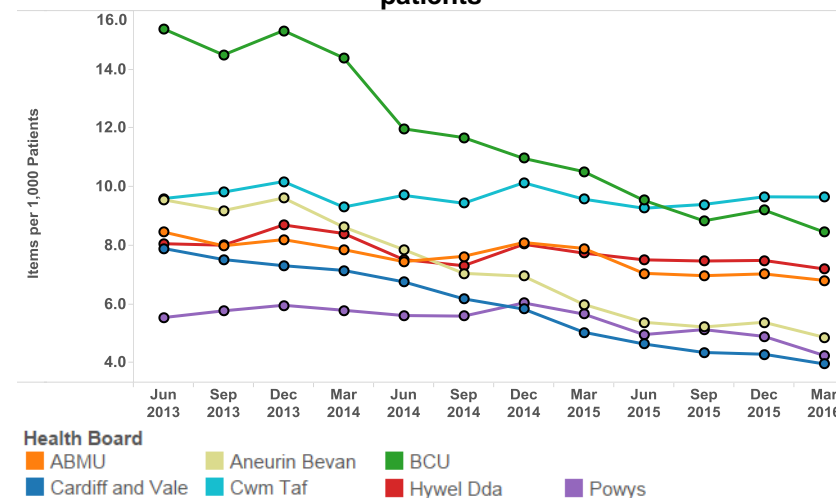
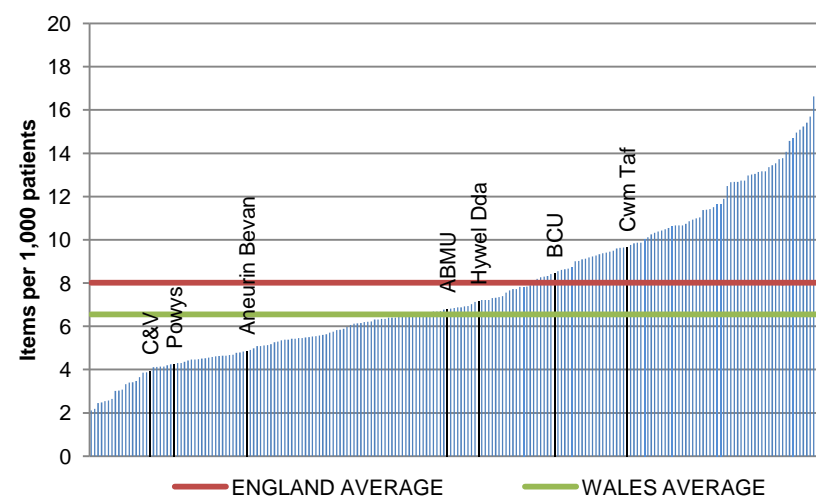


Figure 19. Cephalosporin prescribing in Welsh health boards and English CCGs – Quarter ending March 2016



6.2.4 Fluoroquinolone items per 1,000 patients

The prescribing of fluoroquinolones continues to fall in the majority of health boards in Wales, in line with the aim of this indicator.

- Fluoroquinolone usage fell by almost 9% across Wales from 2014–2015 to 2015–2016.
- Prescribing was reduced in six of the seven health boards. The largest percentage decrease was seen in Powys Teaching HB and the smallest decrease was seen in Abertawe Bro Morgannwg UHB. There was a small increase in prescribing in Hywel Dda UHB.
- In 2015–2016 fluoroquinolone prescribing ranged from 11.04 to 18.19 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.

Table 11. Fluoroquinolone items per 1,000 patients

	2014–2015	2015–2016	% change
Powys	16.8	14.0	-16.9%
Cardiff and Vale	14.3	12.2	-14.4%
Betsi Cadwaladr	20.0	17.2	-14.0%
Aneurin Bevan	12.4	11.0	-11.3%
Cwm Taf	14.5	13.4	-7.73%
Abertawe Bro Morgannwg	18.6	18.2	-2.05%
Hywel Dda	16.7	17.1	2.46%
Wales	16.4	14.9	-8.99%

Figure 20. Trend in fluoroquinolone prescribing items per 1,000 patients

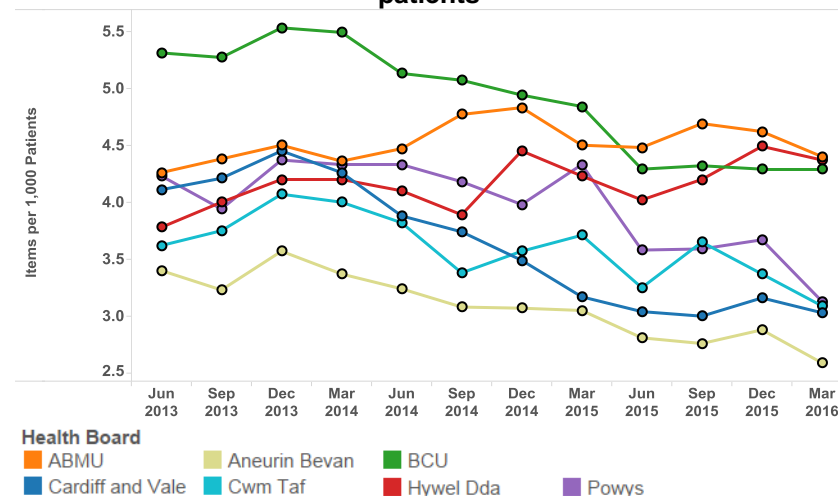
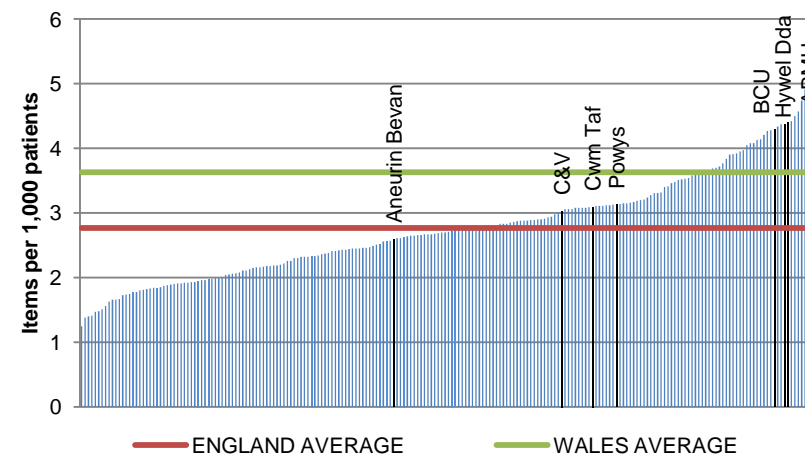


Figure 21. Fluoroquinolone prescribing in Welsh health boards and English CCGs – Quarter ending March 2016



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.

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

The aim of this indicator is to encourage a reduction in total NSAID prescribing.

- NSAID usage fell by approximately 5% across Wales from 2014–2015 to 2015–2016.
- Prescribing was reduced across all of the health boards. The largest percentage decrease was seen in Powys Teaching HB and the smallest decrease was seen in Abertawe Bro Morgannwg UHB.
- In 2015–2016, the health board with the lowest prescribing was Powys Teaching HB whilst the highest prescribing was seen in Cwm Taf UHB.

Table 12. NSAID ADQs per 1,000 STAR-PU (13)

	2014–2015	2015–2016	% change
Powys	7,213	6,678	-7.41%
Cardiff and Vale	7,276	6,775	-6.89%
Aneurin Bevan	7,394	6,970	-5.73%
Betsi Cadwaladr	7,251	6,902	-4.82%
Hywel Dda	7,257	6,934	-4.46%
Cwm Taf	7,771	7,486	-3.67%
Abertawe Bro Morgannwg	7,505	7,255	-3.33%
Wales	7,372	7,005	-4.98%

Figure 22. Trend in NSAID prescribing ADQs per 1,000 STAR-PU (13)

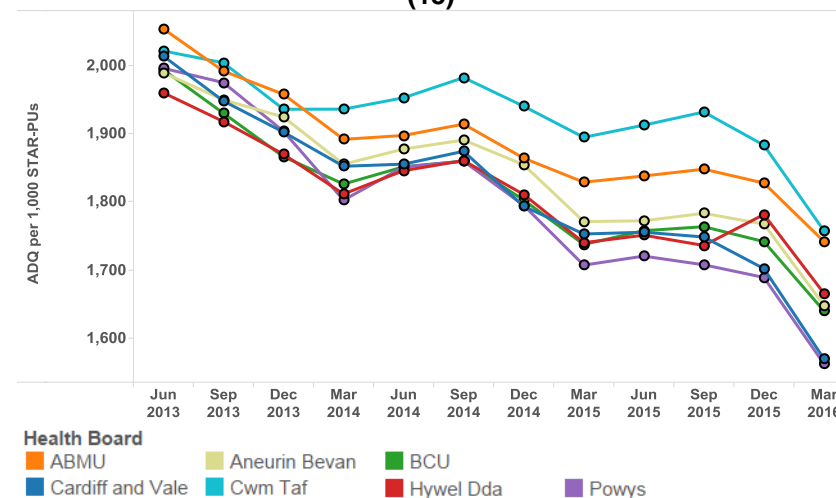
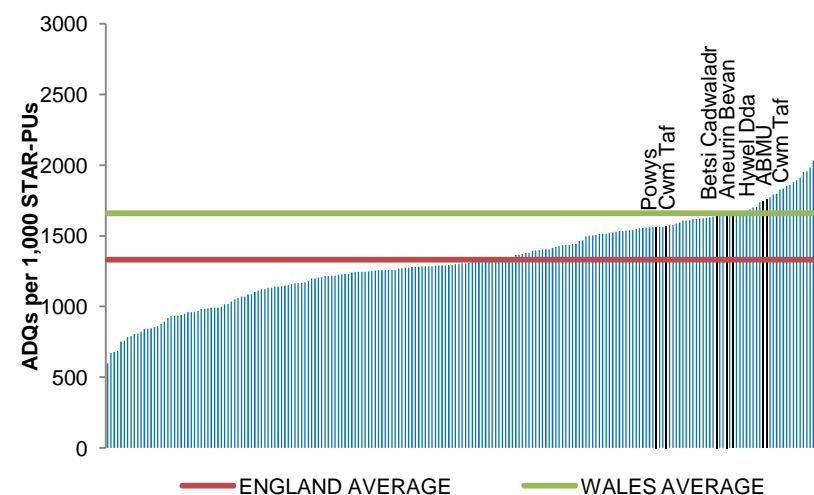


Figure 23. NSAID prescribing in Welsh health boards and English CCGs – Quarter ending March 2016



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 adverse cardiovascular events.

- The proportion of ibuprofen and naproxen prescribing as a percentage of NSAID usage increased by approximately 2% across Wales from 2014–2015 to 2015–2016.
- Prescribing increased across all of the health boards. The largest percentage increase was in Cardiff and Vale UHB, whilst the smallest percentage increase was seen in Betsi Cadwaladr UHB.
- In 2015–2016, the health board with the highest percentage usage was Cwm Taf UHB whilst the lowest percentage usage was seen in Abertawe Bro Morgannwg UHB.

Table 13. Ibuprofen and naproxen as a percentage of NSAID prescribing

	2014–2015	2015–2016	% change
Cardiff and Vale	81.0	83.4	2.99%
Powys	79.8	82.1	2.84%
Aneurin Bevan	79.2	81.3	2.71%
Hywel Dda	79.3	81.4	2.66%
Cwm Taf	82.7	84.8	2.54%
Abertawe Bro Morgannwg	76.4	78.3	2.47%
Betsi Cadwaladr	80.1	81.2	1.41%
Wales	79.5	81.5	2.39%

Figure 24. Trend in ibuprofen and naproxen prescribing as a percentage of NSAID prescribing

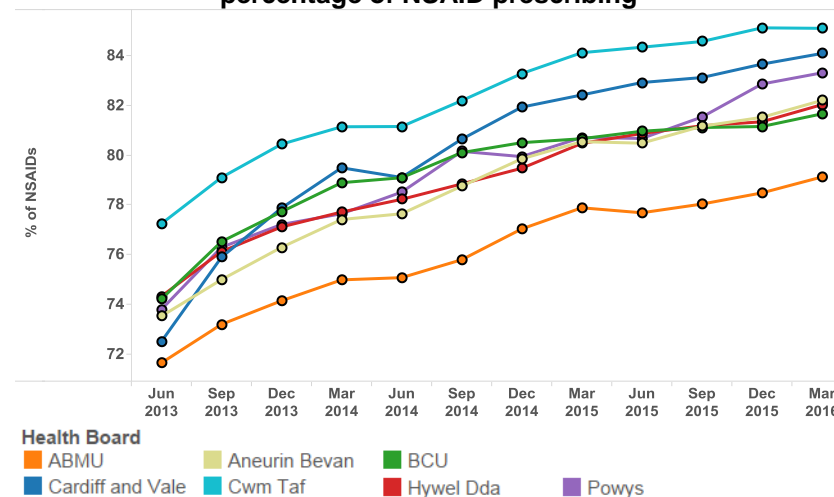
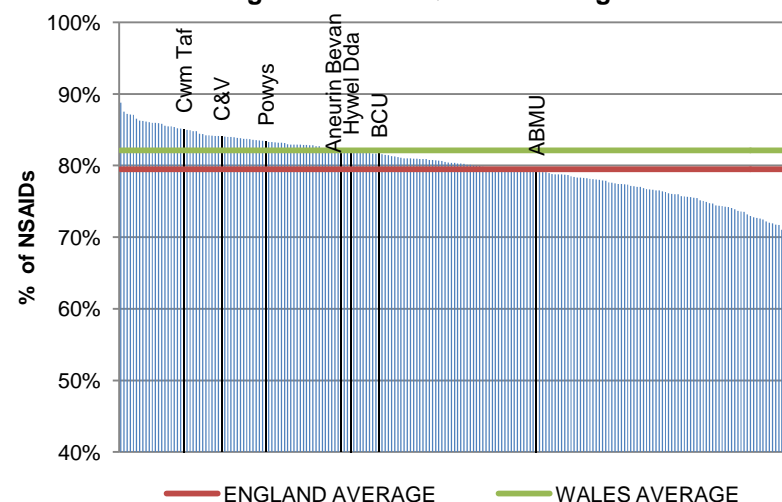


Figure 25. Percentage of ibuprofen and naproxen in Welsh health boards and English CCGs – Quarter ending March 2016



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 2,000 practice population.
2. Number of Yellow Cards submitted per health board.

The total number of Yellow Cards submitted by GPs in Wales increased by 35.7% (224 Yellow Card reports) compared to 2014–2015 (Table 14). The number of Yellow Cards submitted by all reporters in each health board is shown in Table 15.

Table 14. Number of Yellow Cards submitted by GPs

	2014–2015	2015–2016	Difference
Cardiff and Vale	19	196	177
Hywel Dda	15	84	69
Betsi Cadwaladr	247	252	5
Powys	21	24	3
Cwm Taf	42	43	1
Abertawe Bro Morgannwg	226	217	-9
Aneurin Bevan	57	35	-22
Wales	627	851	224

Figure 26. Number of GP reports per 100,000 health board population

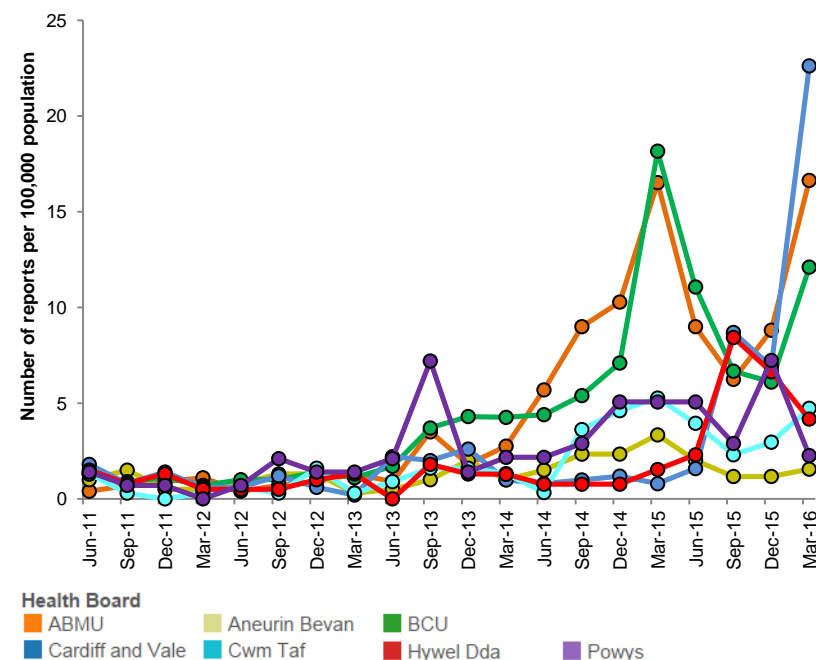


Table 15. Number of Yellow Cards submitted by health boards

	2014–2015	2015–2016	Difference
Cardiff and Vale	181	358	177
Hywel Dda	113	250	137
Powys	53	72	19
Cwm Taf	76	111	35
Aneurin Bevan	151	133	-18
Betsi Cadwaladr	531	554	23
Abertawe Bro Morgannwg	357	339	-18
Wales	1462	1817	355

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.

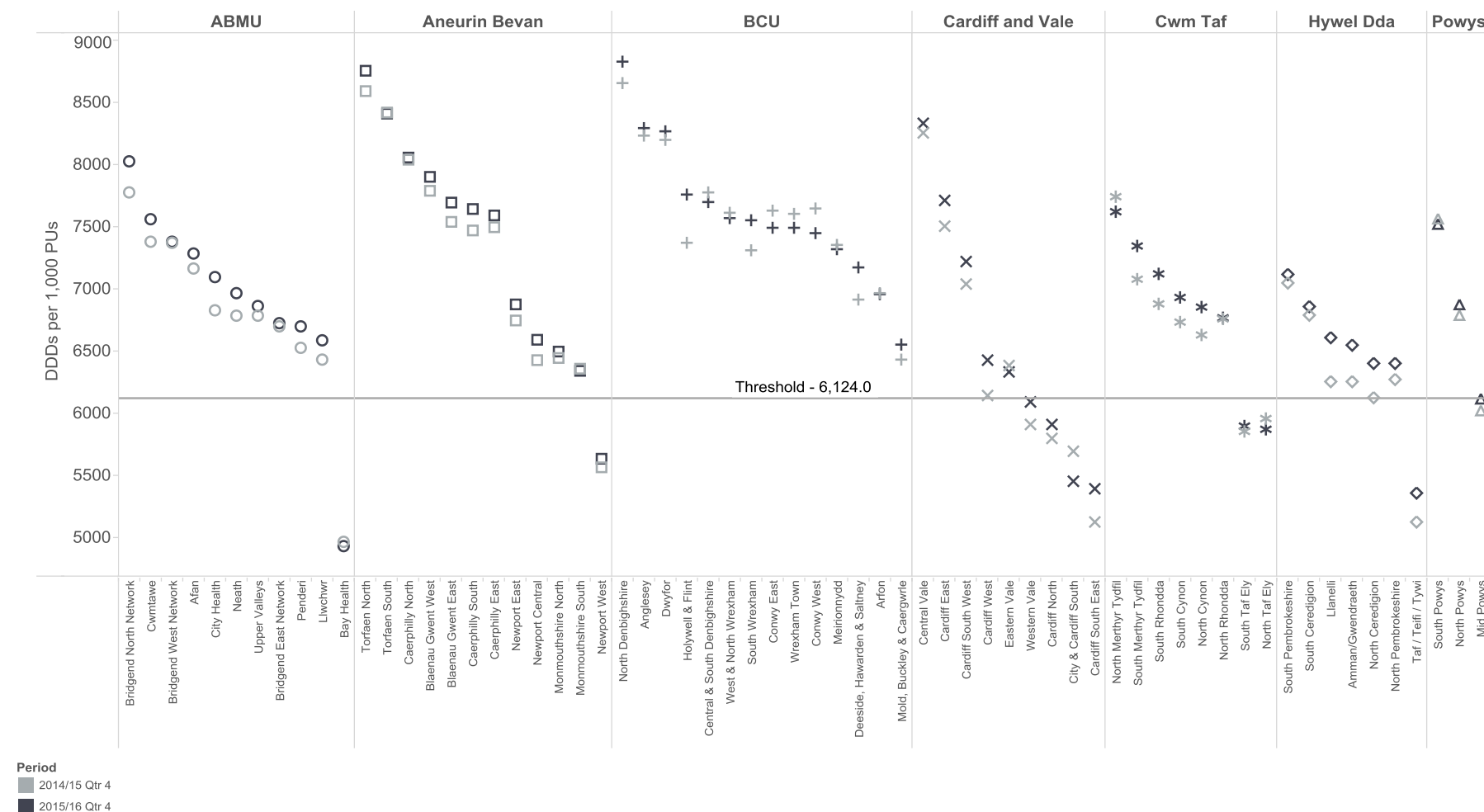
STAR-PU – Specific therapeutic group age-sex related prescribing units (STAR-PUs) are designed to measure prescribing weighted for age and sex of patients. There are differences in the age and sex of patients for whom medicines in specific therapeutic groups are usually prescribed. To make such comparisons, 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 March 2015 versus quarter ending March 2016



**Figure 2. LAC statin prescribing as a percentage of all statin, ezetimibe and simvastatin/ezetimibe combination prescribing
Quarter ending March 2015 versus quarter ending March 2016**

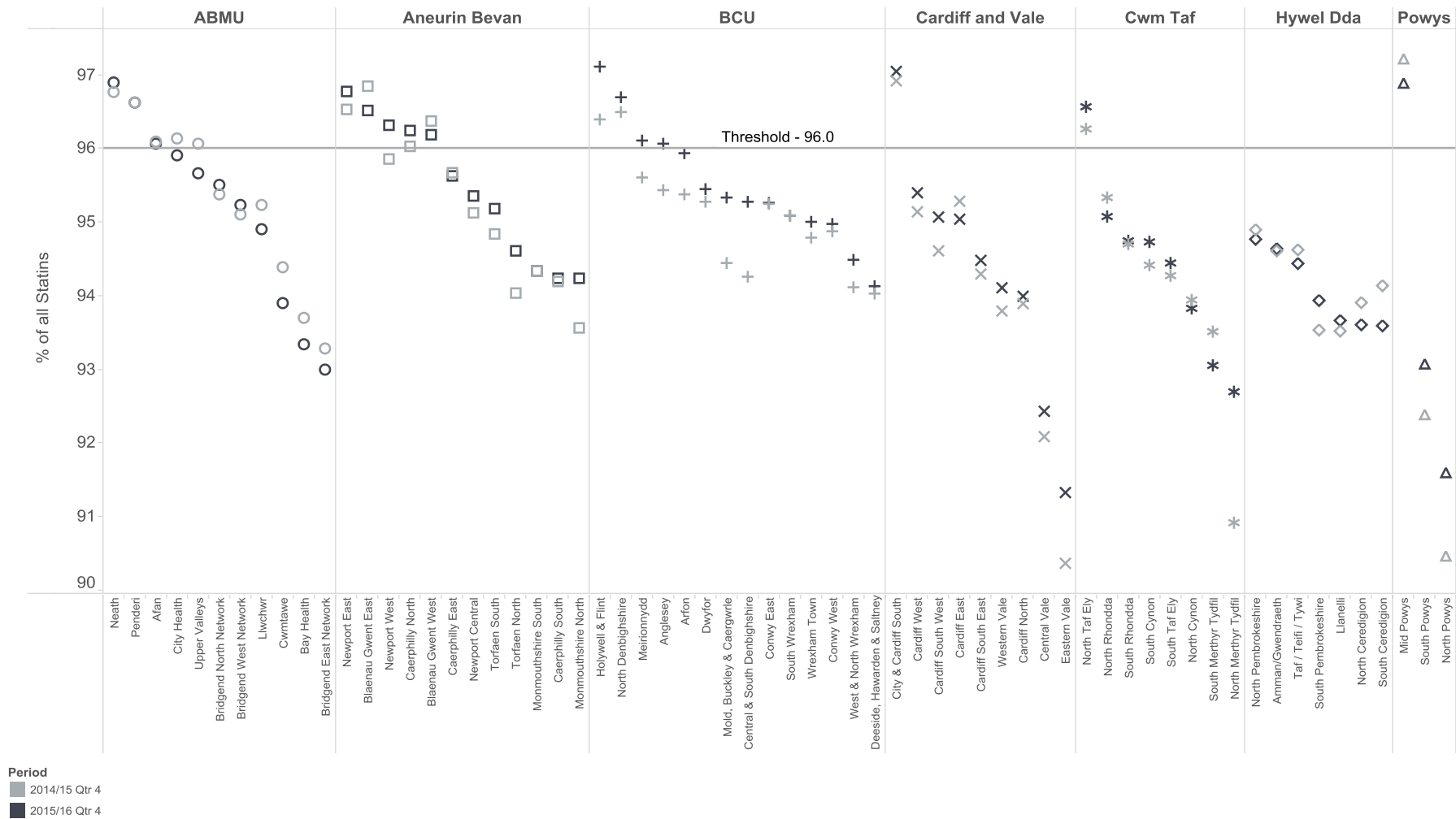


Figure 3. Low strength ICS prescribing as a percentage of all ICS prescribing
Quarter ending March 2015 versus quarter ending March 2016

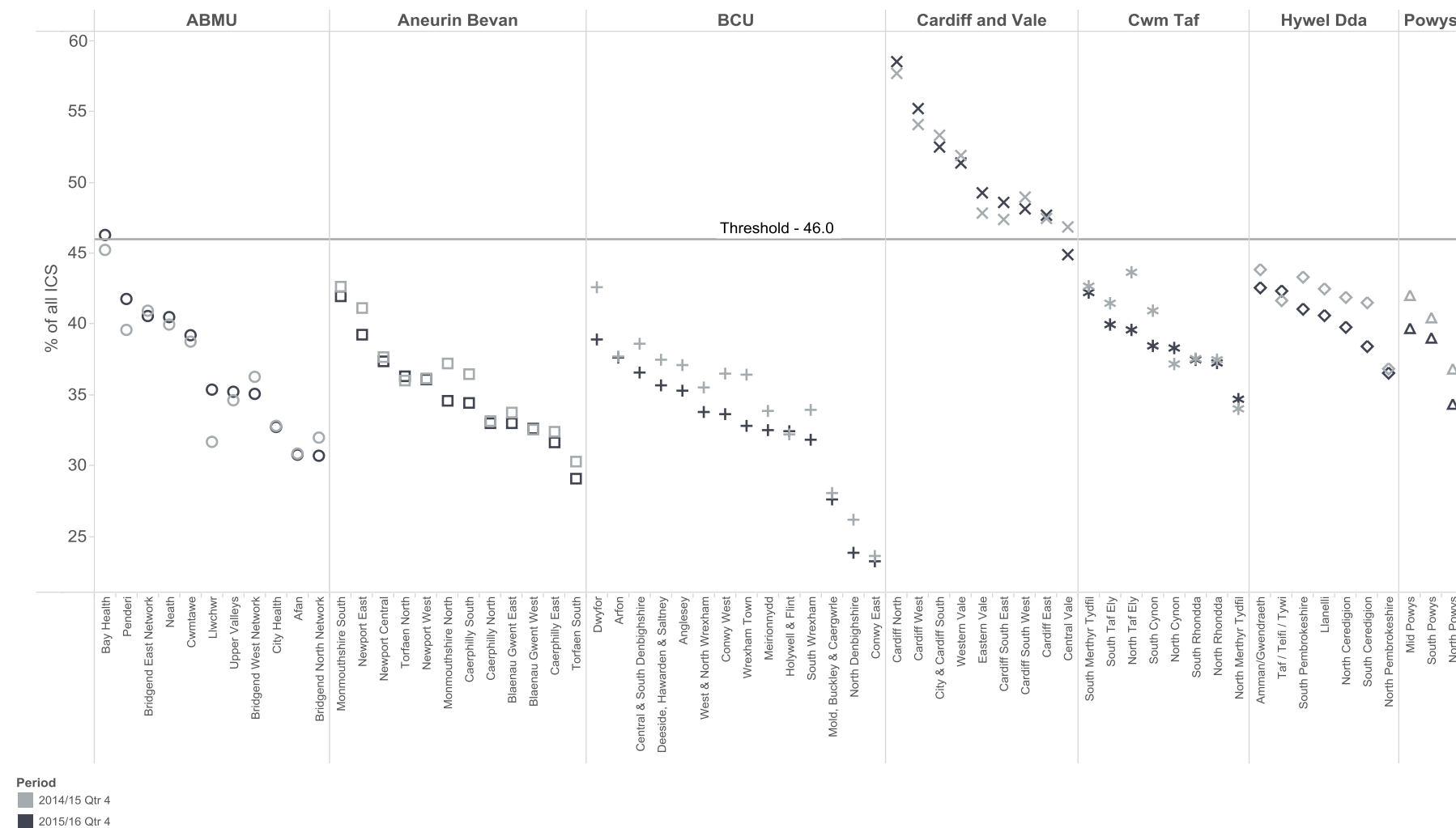
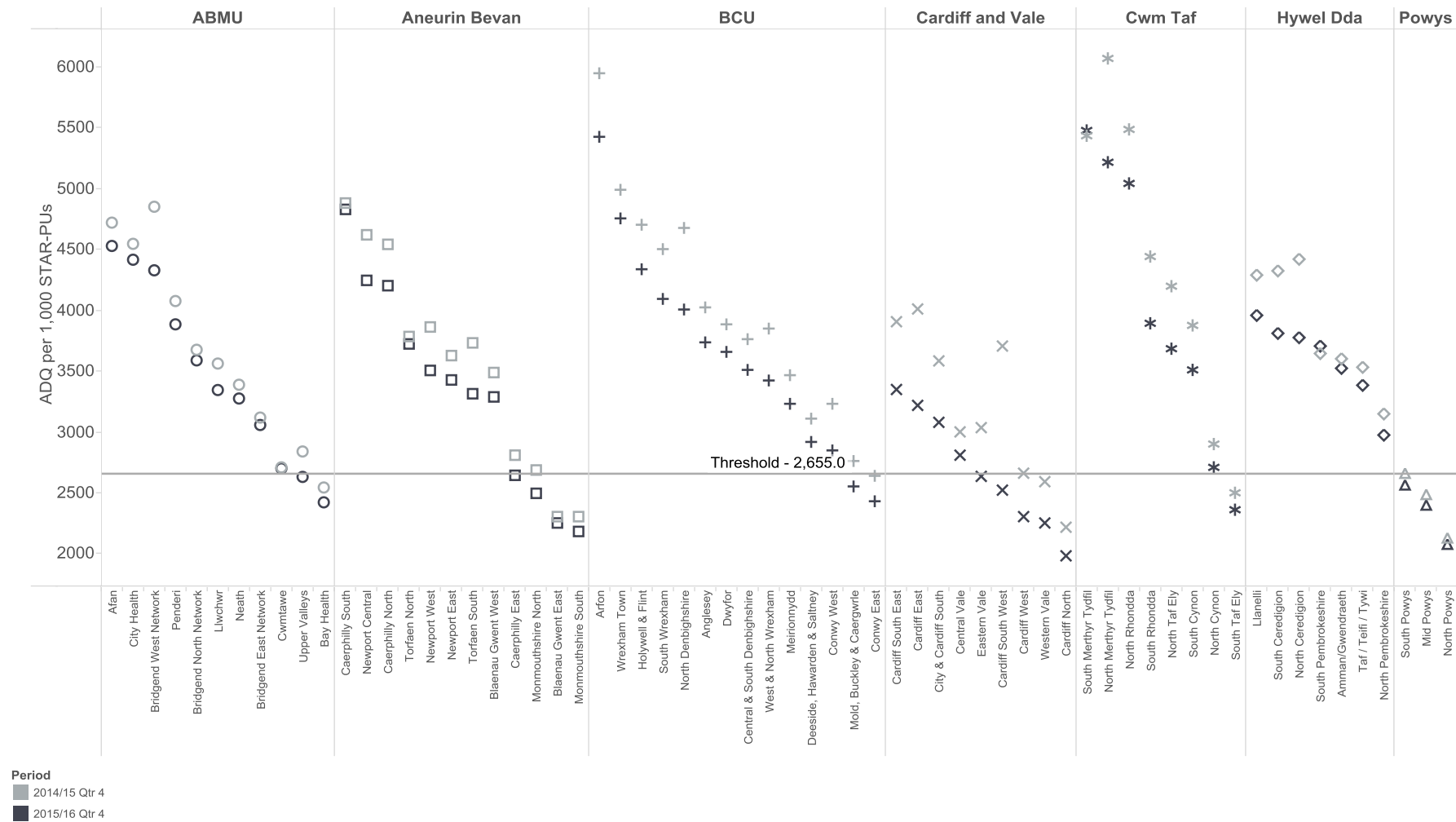


Figure 4. Hypnotic and anxiolytic prescribing
Quarter ending March 2015 versus quarter ending March 2016



**Figure 5. Morphine as a percentage of strong opioid prescribing
Quarter ending March 2015 versus quarter ending March 2016**

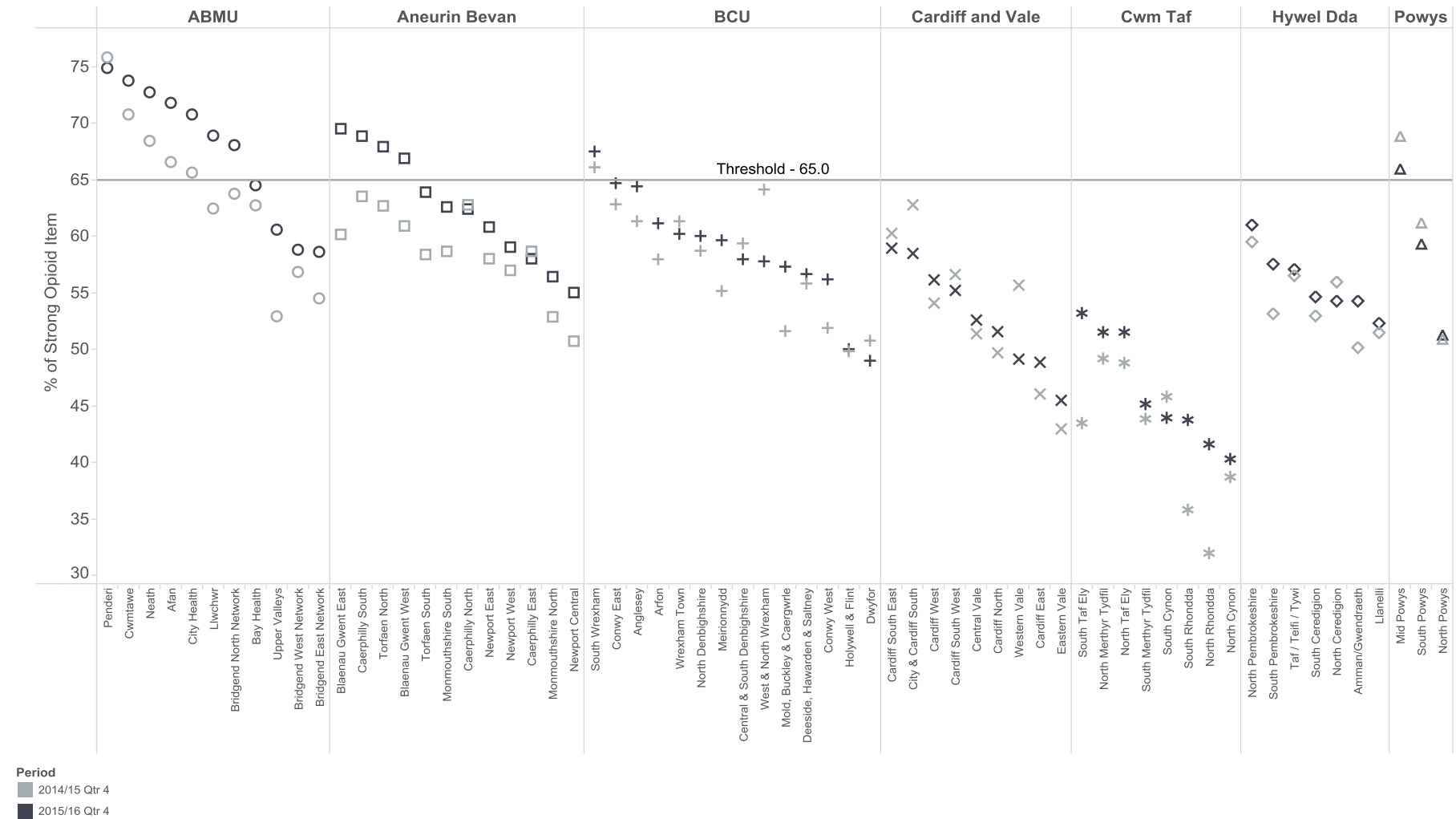


Figure 6. Tramadol prescribing
Quarter ending March 2015 versus quarter ending March 2016

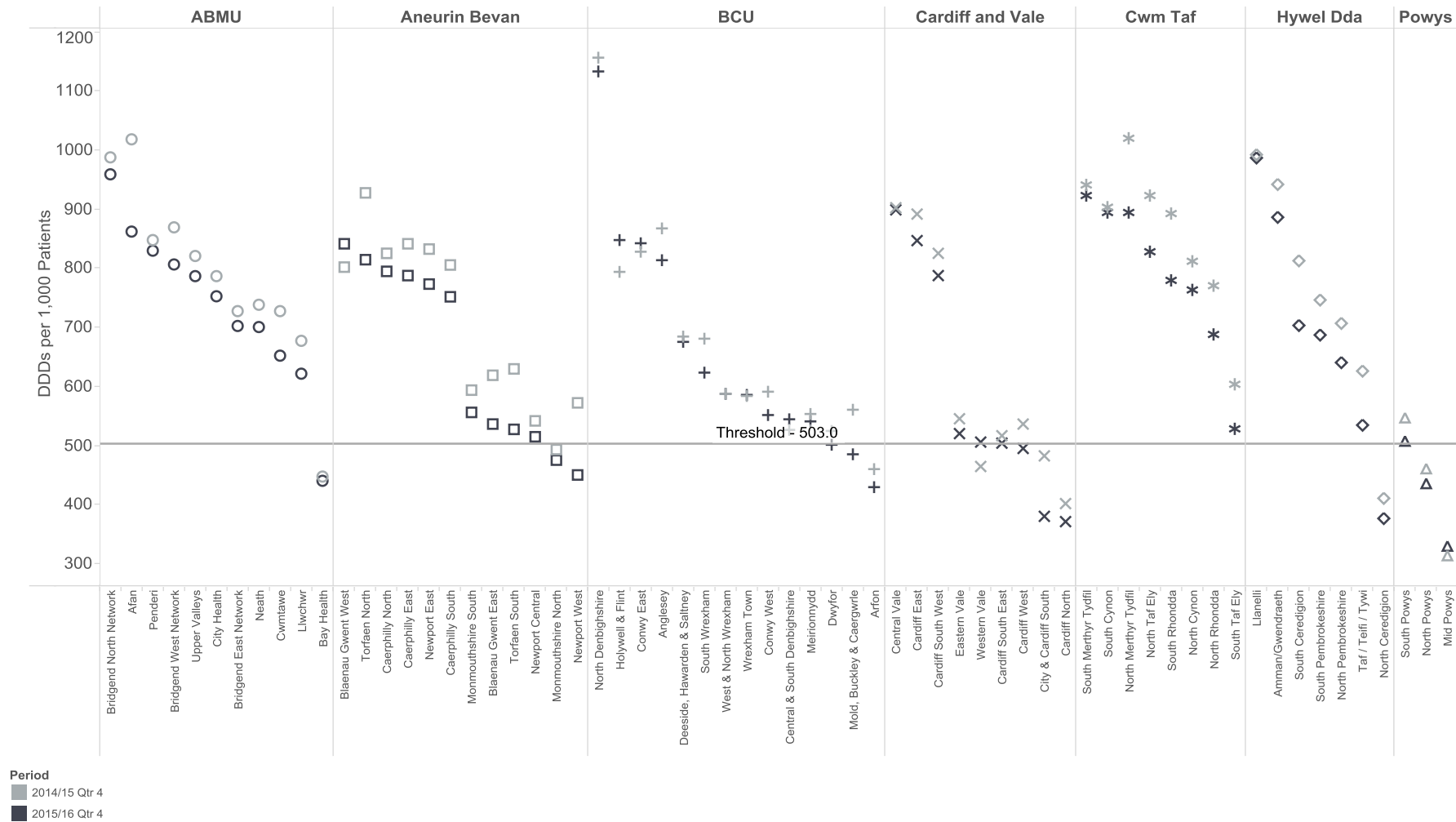


Figure 7. Antibiotic prescribing
Quarter ending March 2015 versus quarter ending March 2016

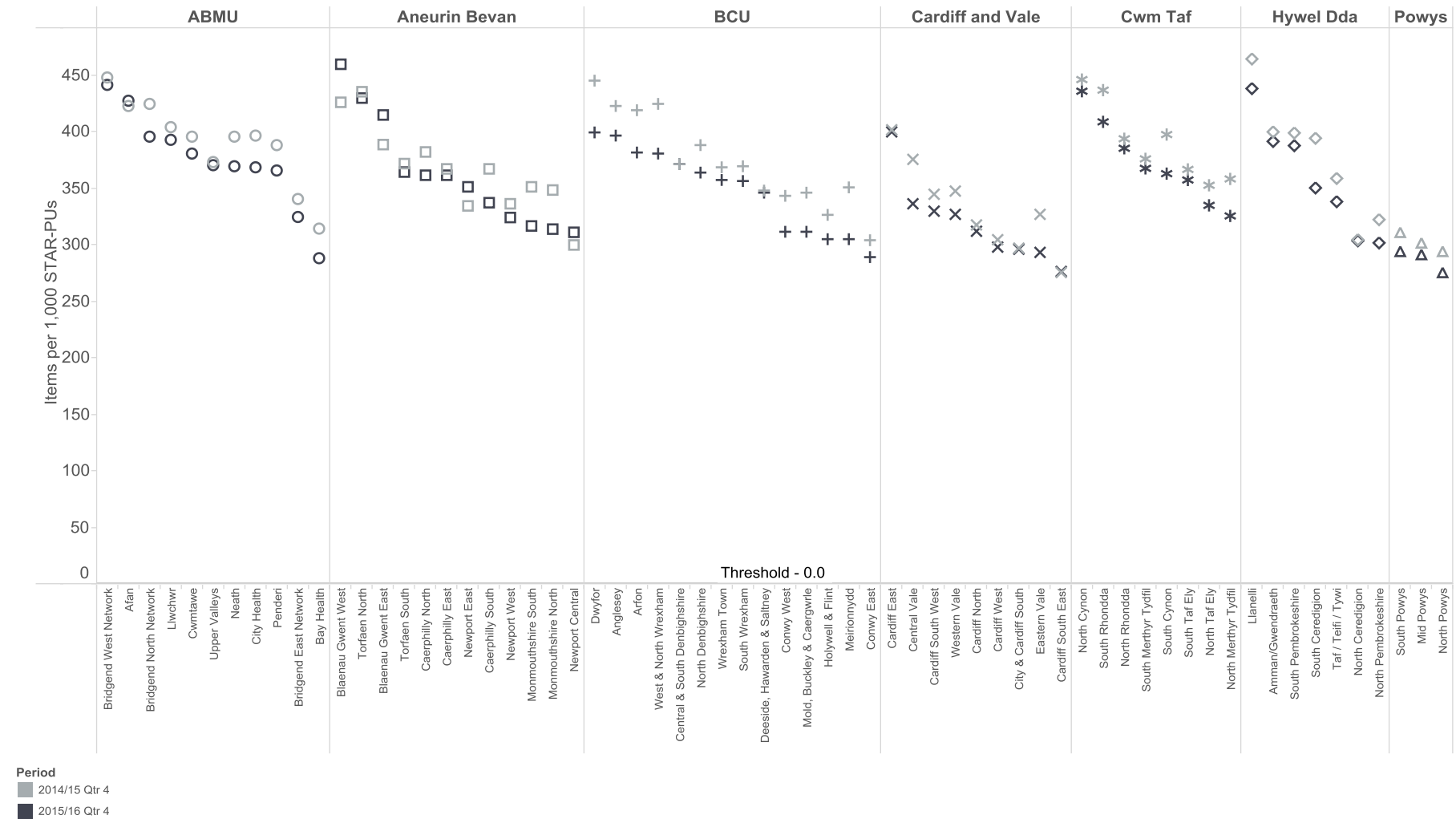


Figure 8. Co-amoxiclav prescribing
Quarter ending March 2015 versus quarter ending March 2016

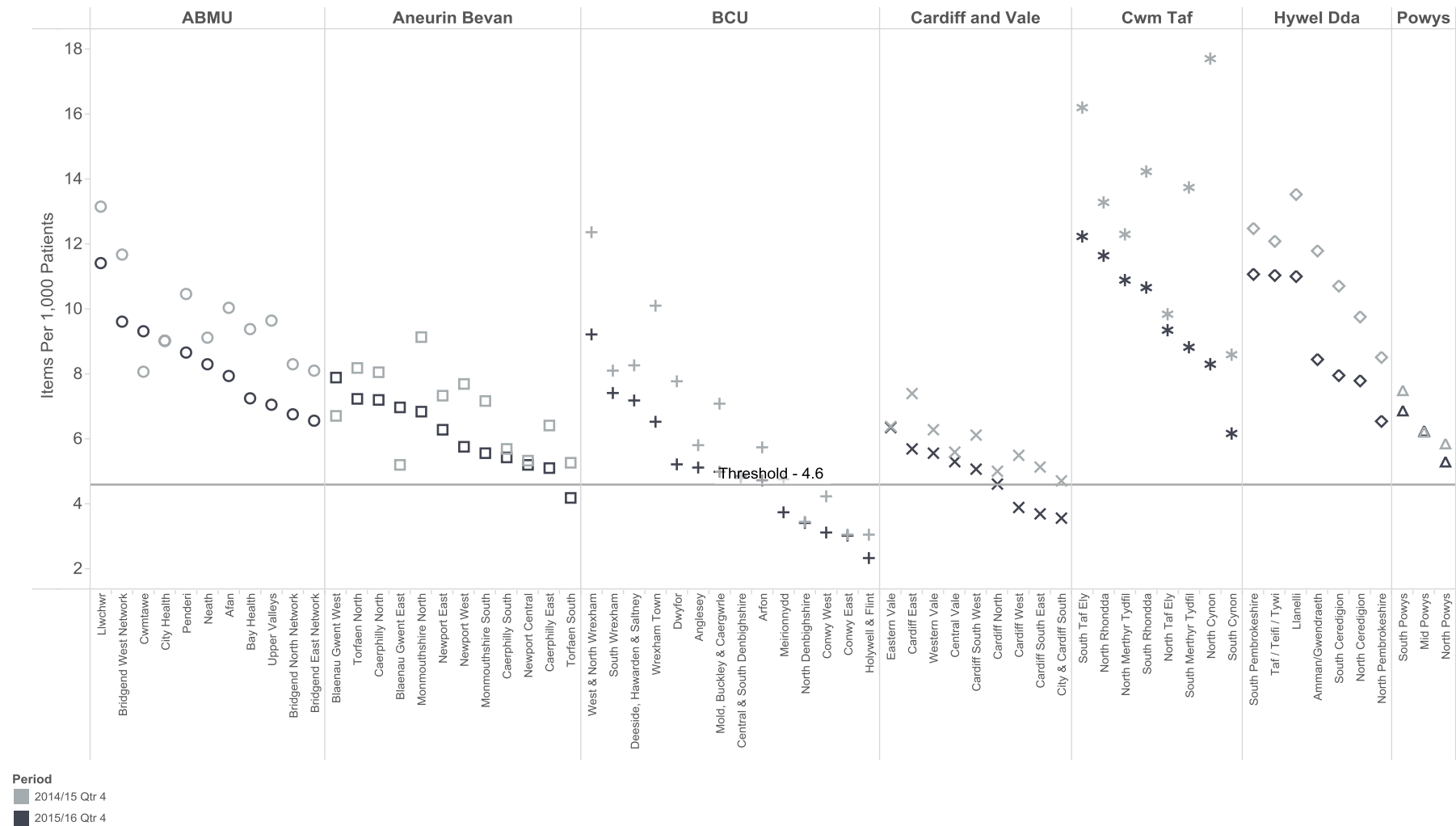


Figure 9. Co-amoxiclav as a percentage of total antibacterial items
Quarter ending March 2015 versus quarter ending March 2016

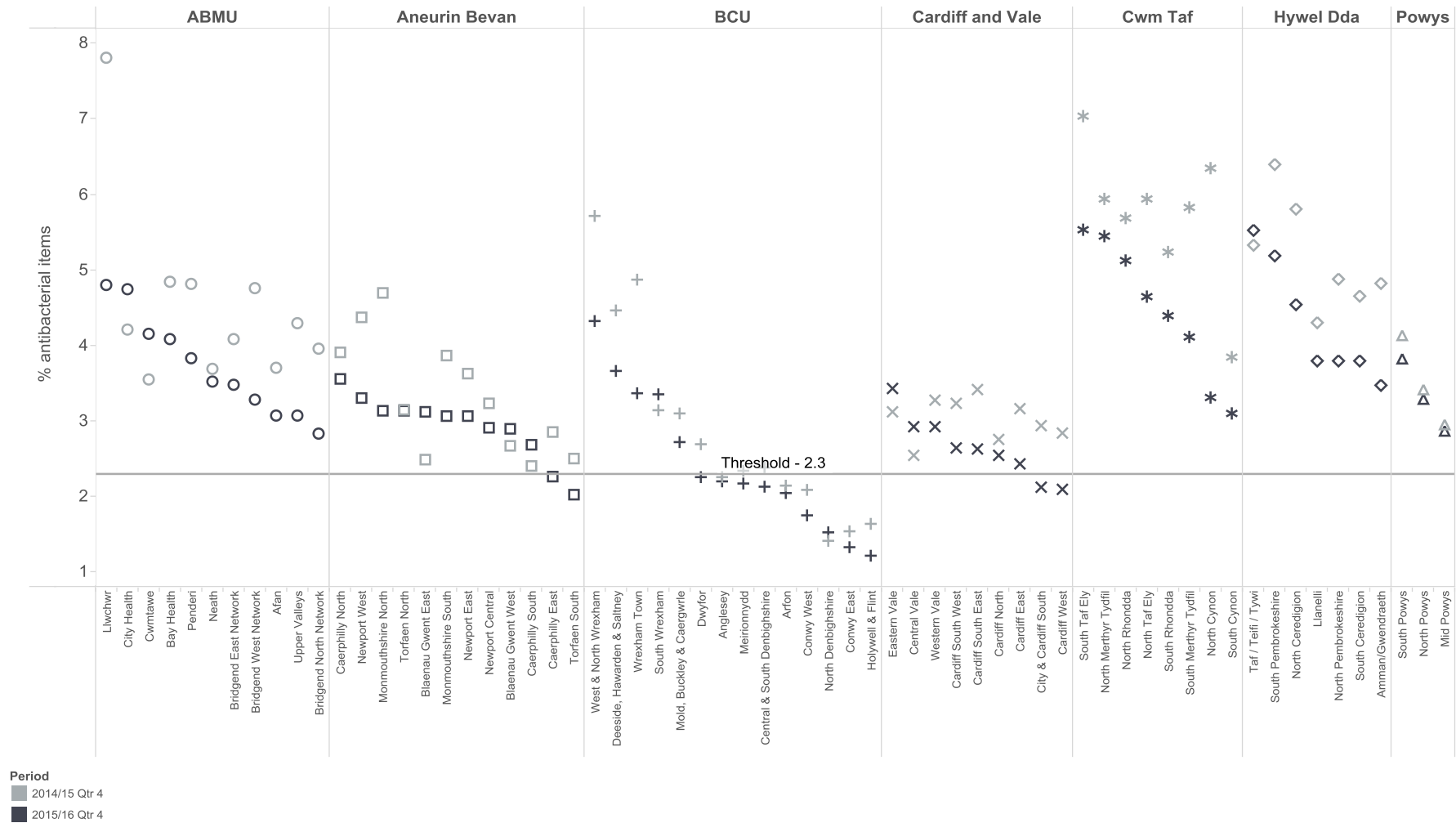


Figure 10. Cephalosporin prescribing
Quarter ending March 2015 versus quarter ending March 2016

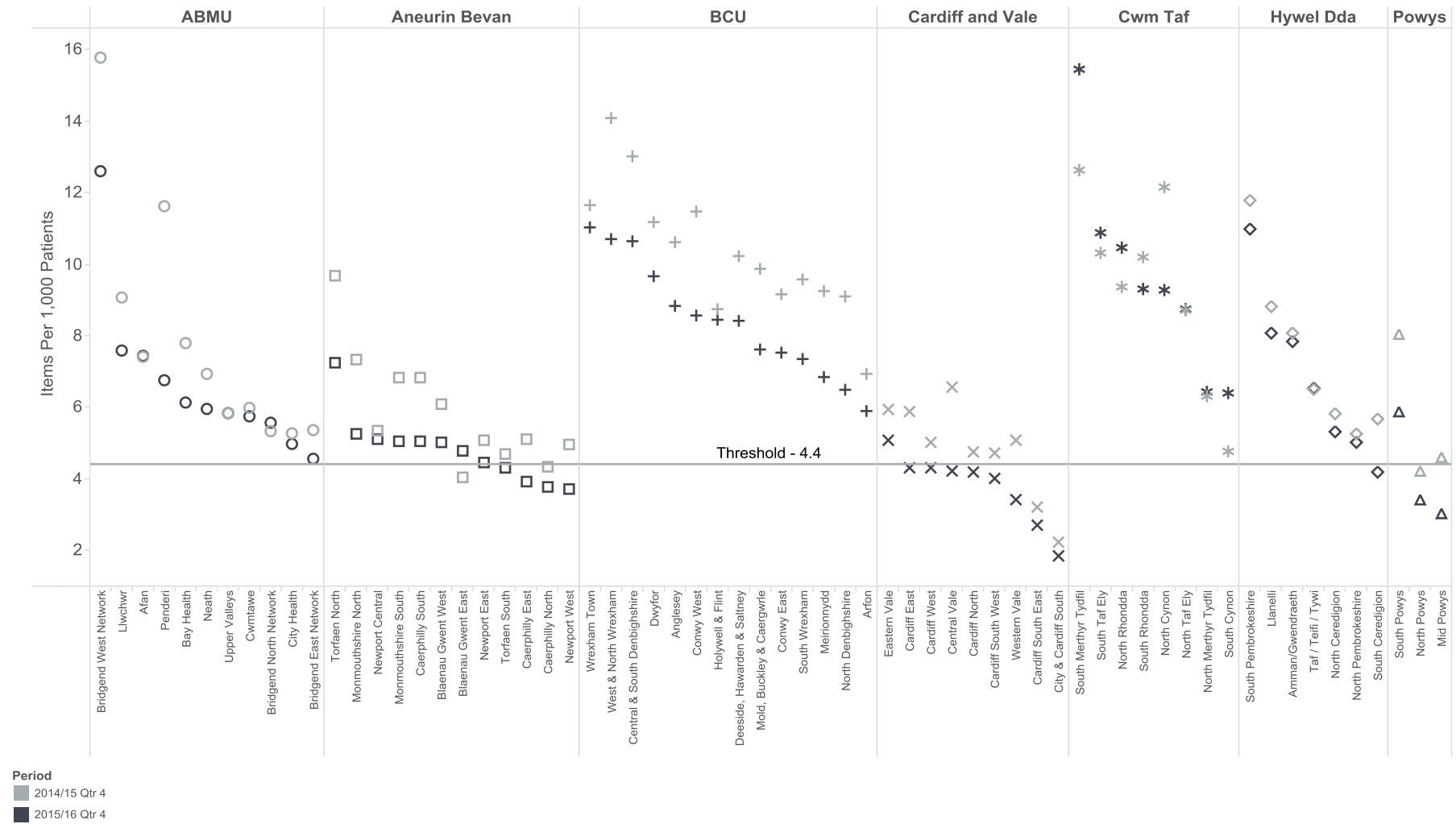


Figure 11. Cephalosporins as a percentage of total antibacterial items
Quarter ending March 2015 versus quarter ending March 2016

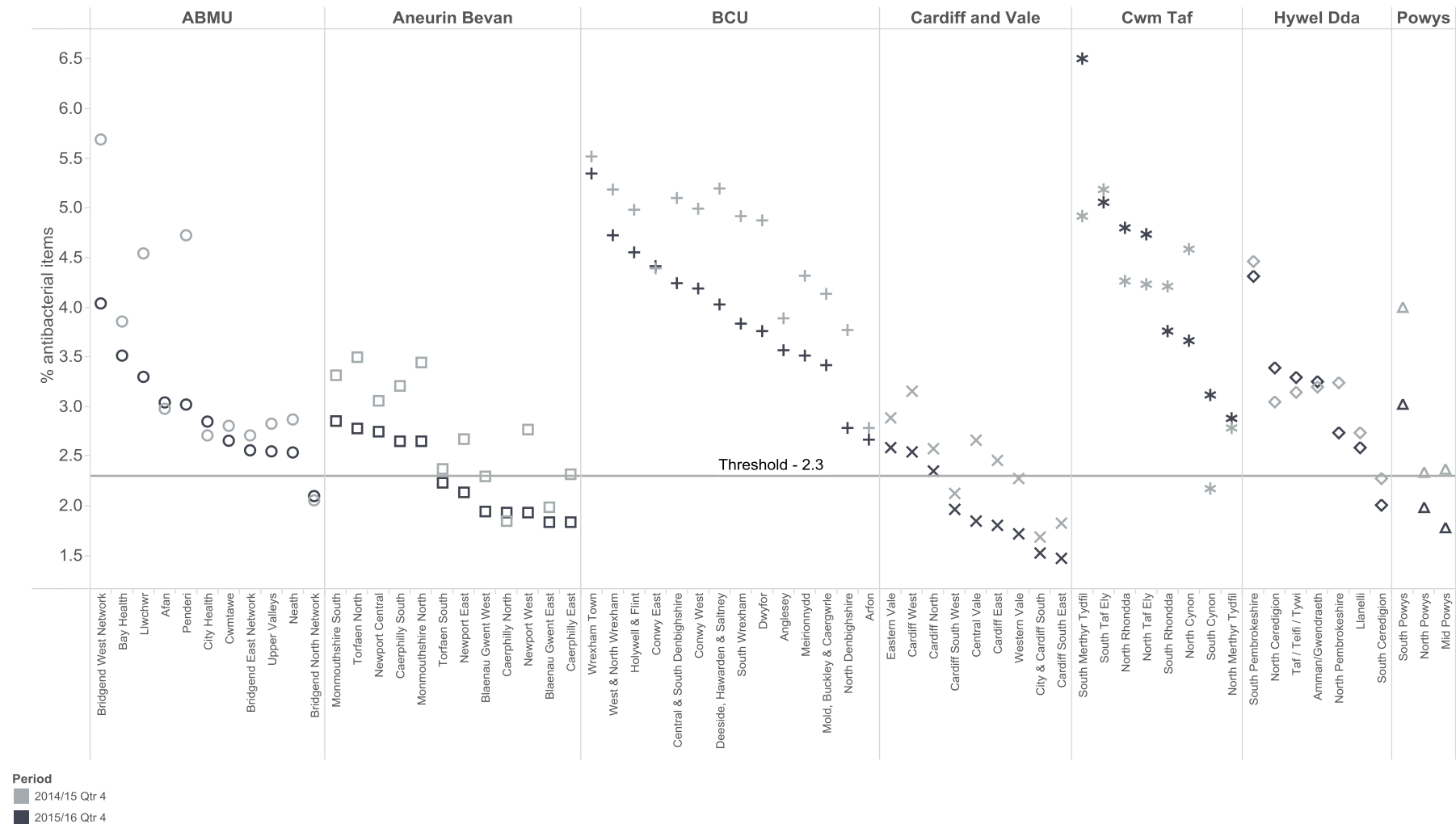


Figure 12. Fluoroquinolone prescribing
Quarter ending March 2015 versus quarter ending March 2016

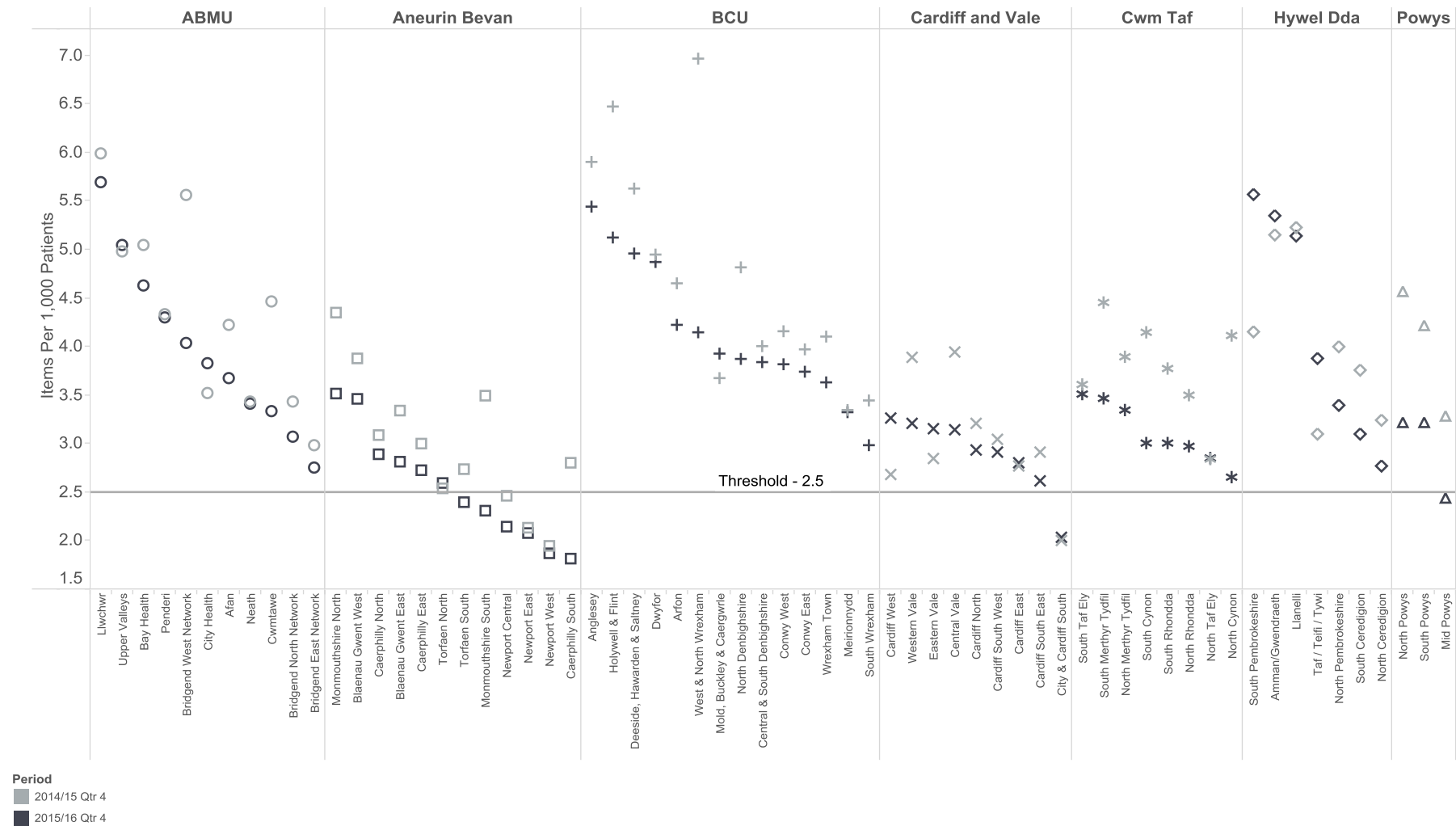


Figure 13. Fluoroquinolones as a percentage of total antibacterial items
Quarter ending March 2015 versus quarter ending March 2016

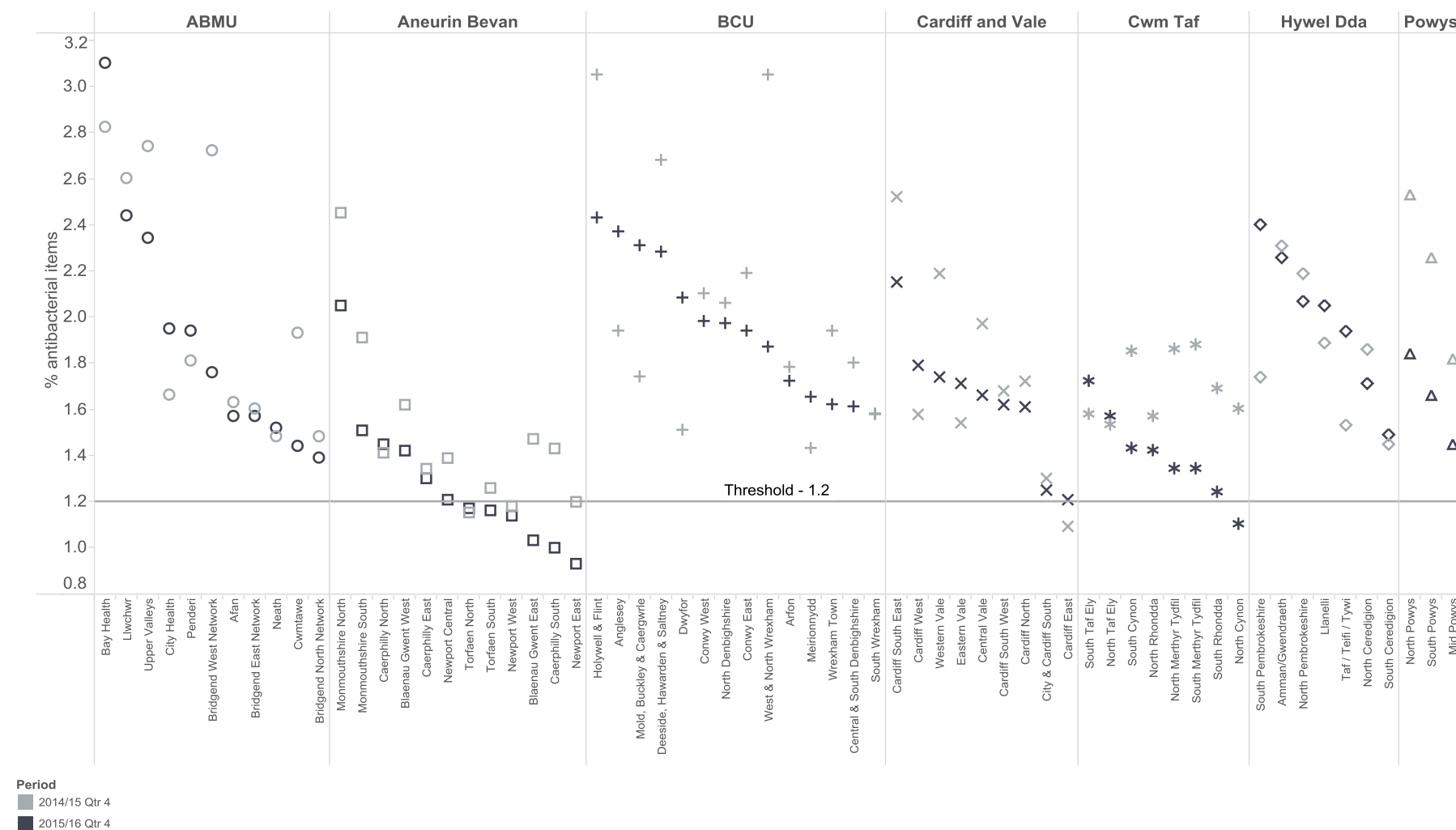


Figure 14. NSAID prescribing
Quarter ending March 2015 versus quarter ending March 2016

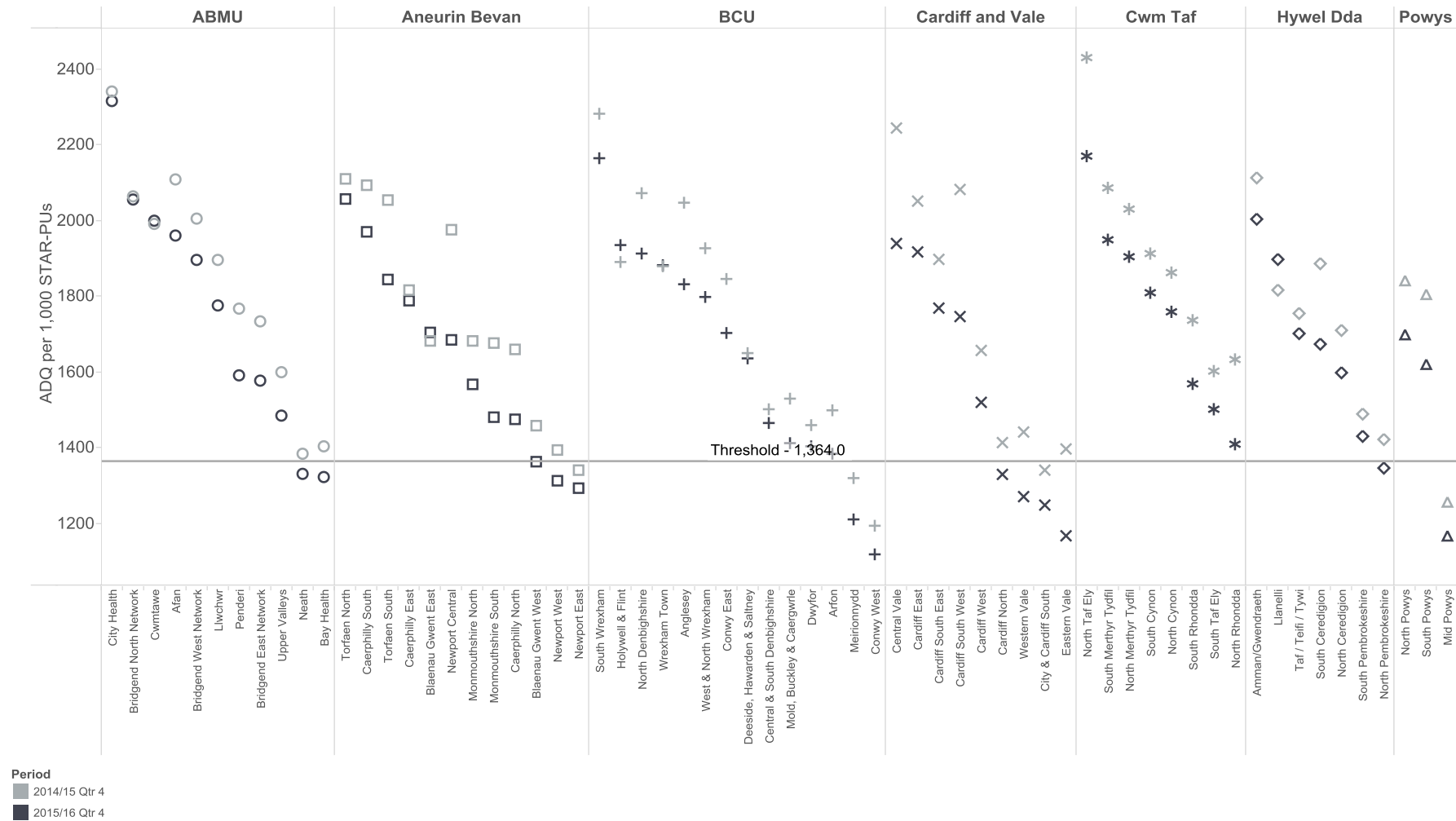
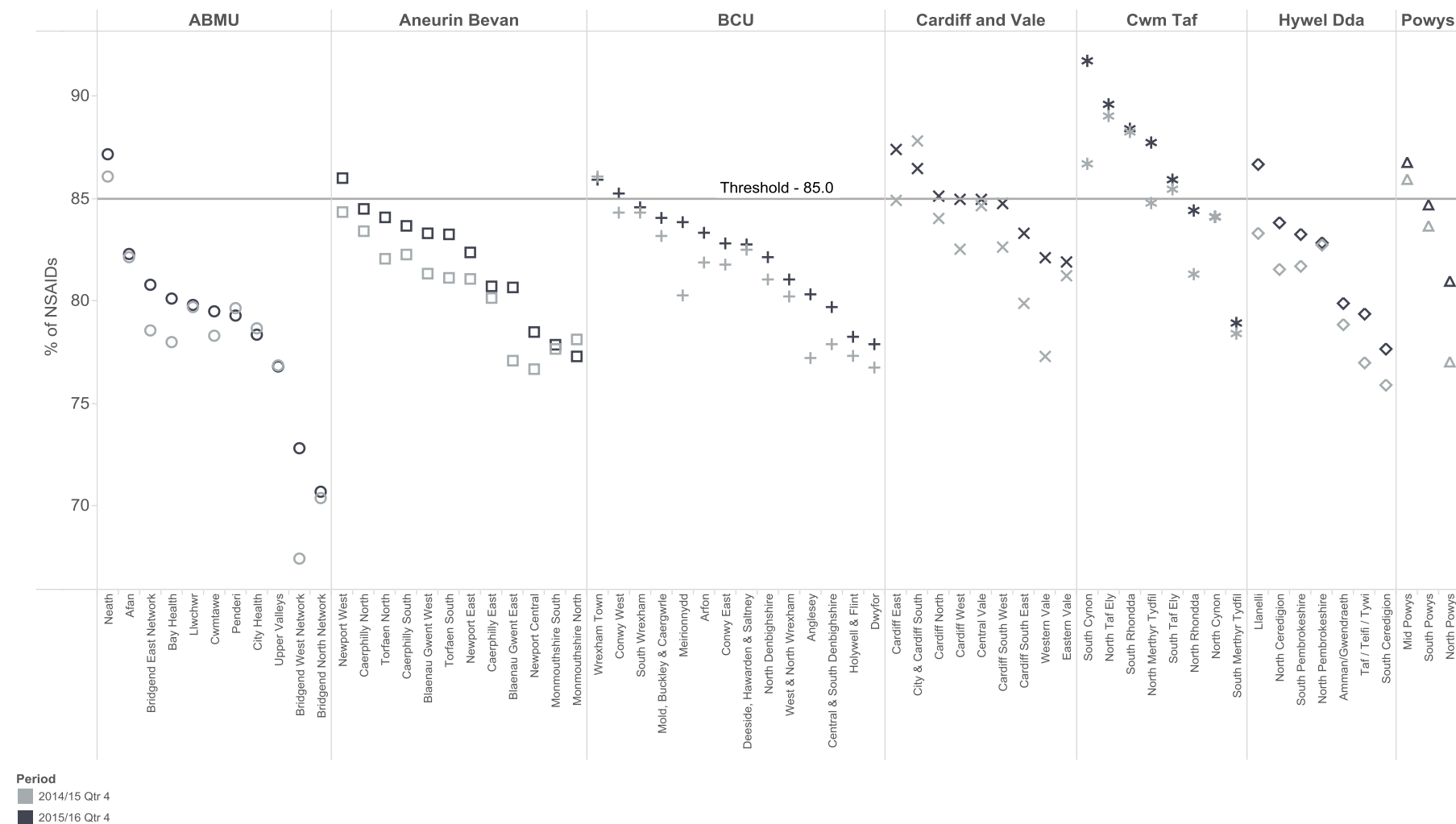
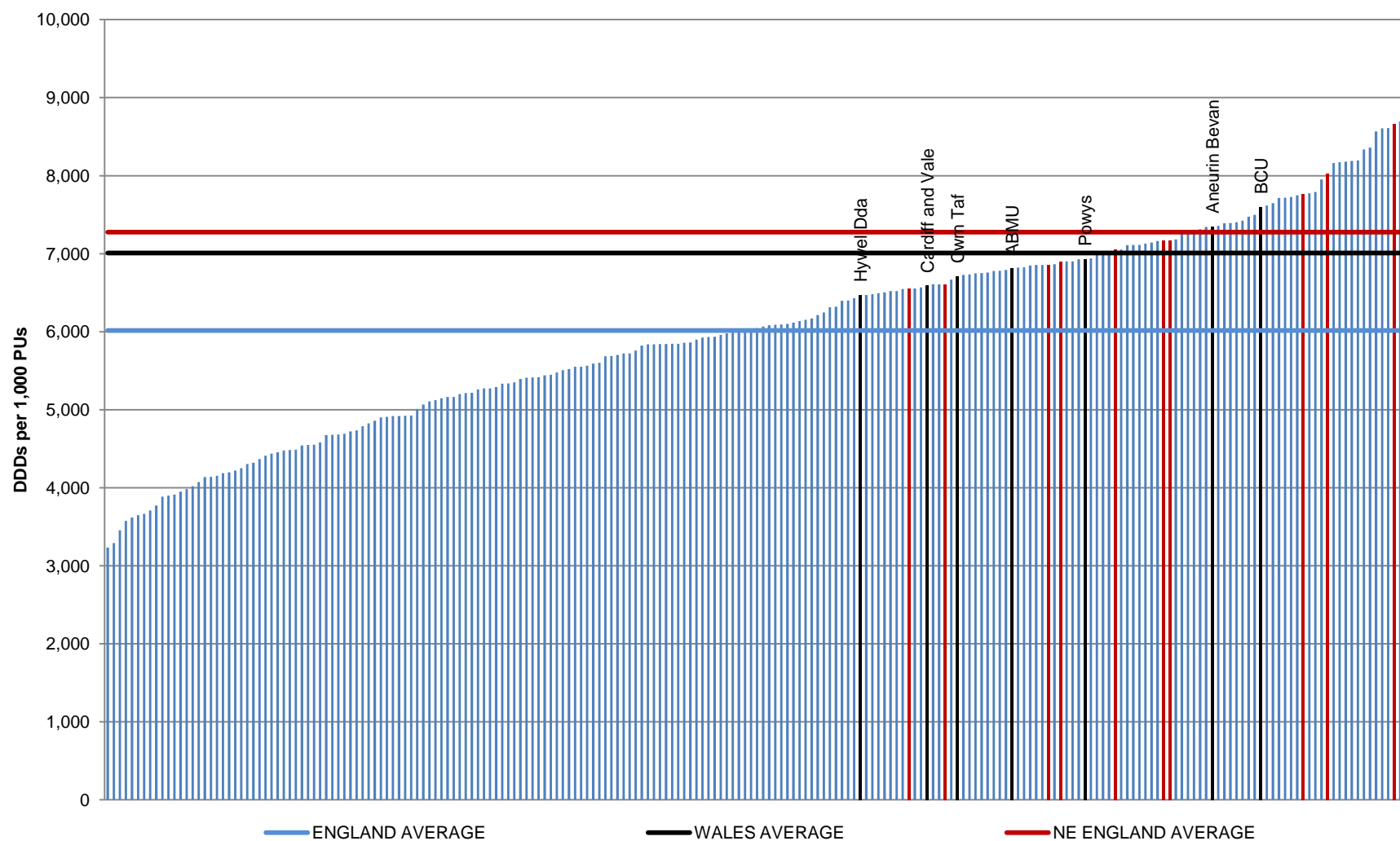


Figure 15. Ibuprofen and naproxen as a percentage of NSAID items
Quarter ending March 2015 versus quarter ending March 2016



APPENDIX 3. POSITION OF WELSH HEALTH BOARDS AGAINST CCGs IN ENGLAND AND NE ENGLAND*

Figure 1. PPI DDDs per 1,000 PUs
Quarter ending March 2016

* Welsh health boards are highlighted in black and CCGs in NE England are highlighted in red.

Figure 2. Items of LAC statin items as a percentage of all statin, ezetimibe, and simvastatin/ezetimibe combination prescribing
Quarter ending March 2016

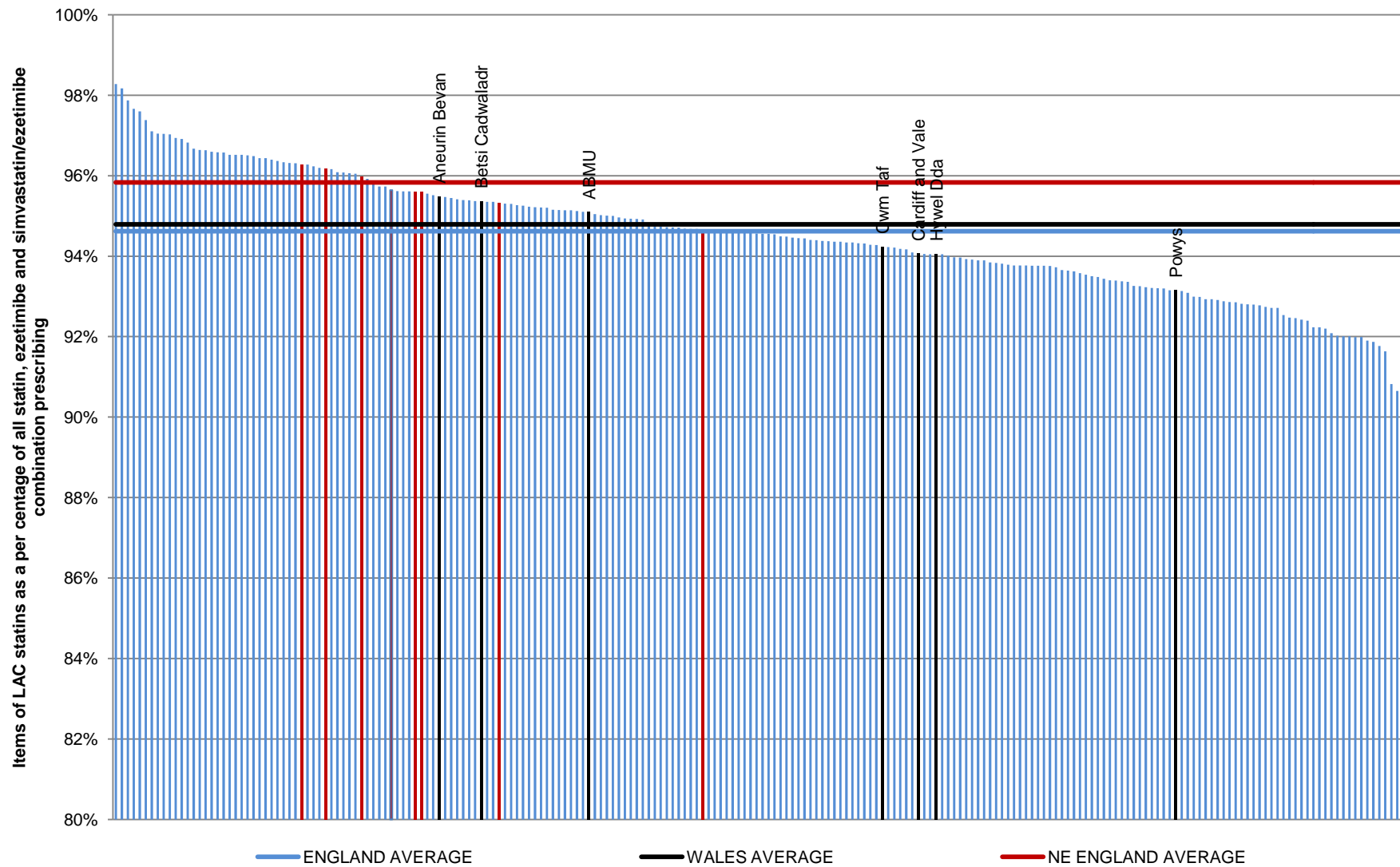


Figure 3. Low strength ICS items as a percentage of all ICS prescribing
Quarter ending March 2016

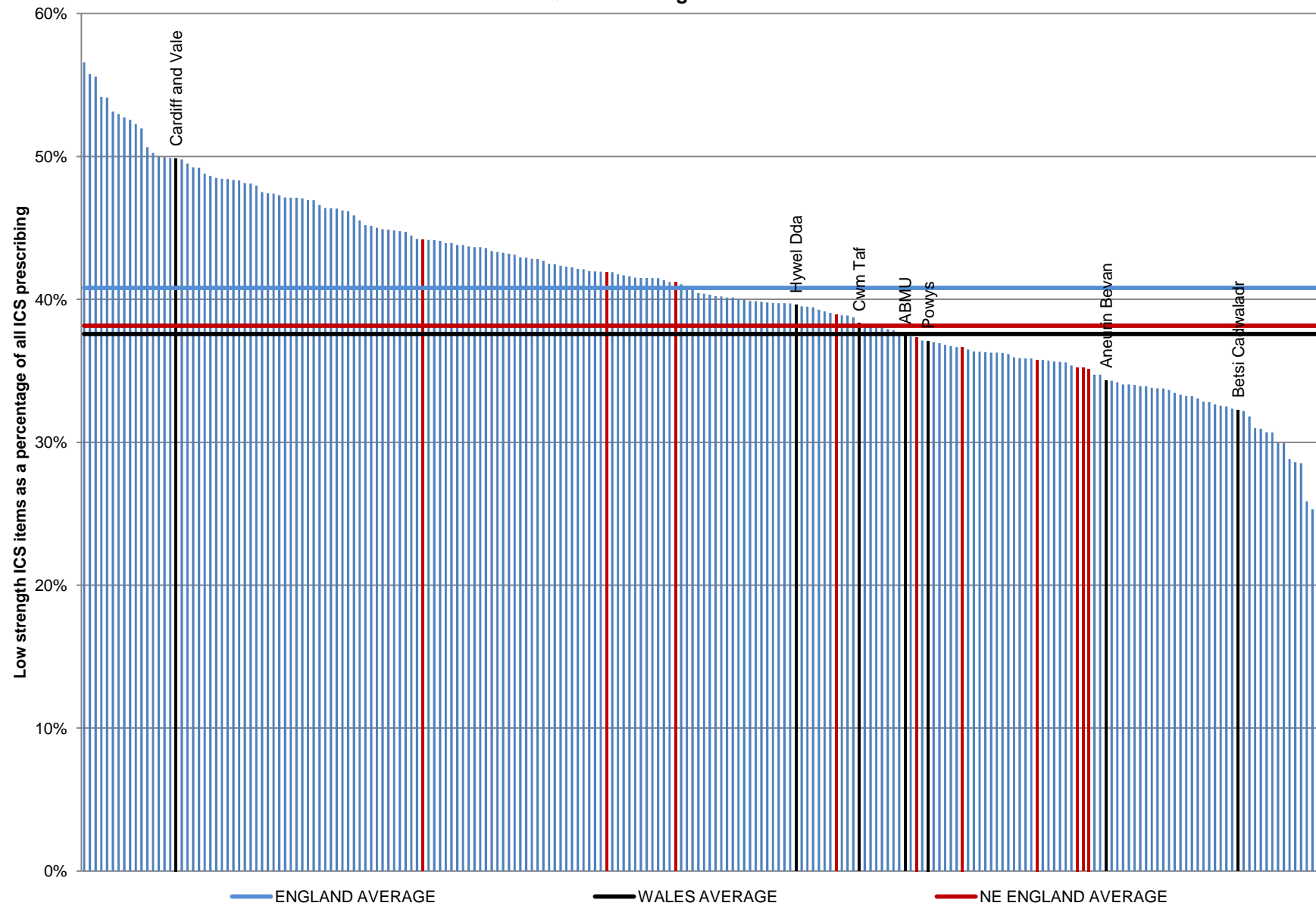


Figure 4. Hypnotic and anxiolytic ADQs per 1,000 STAR PUs
Quarter ending March 2016

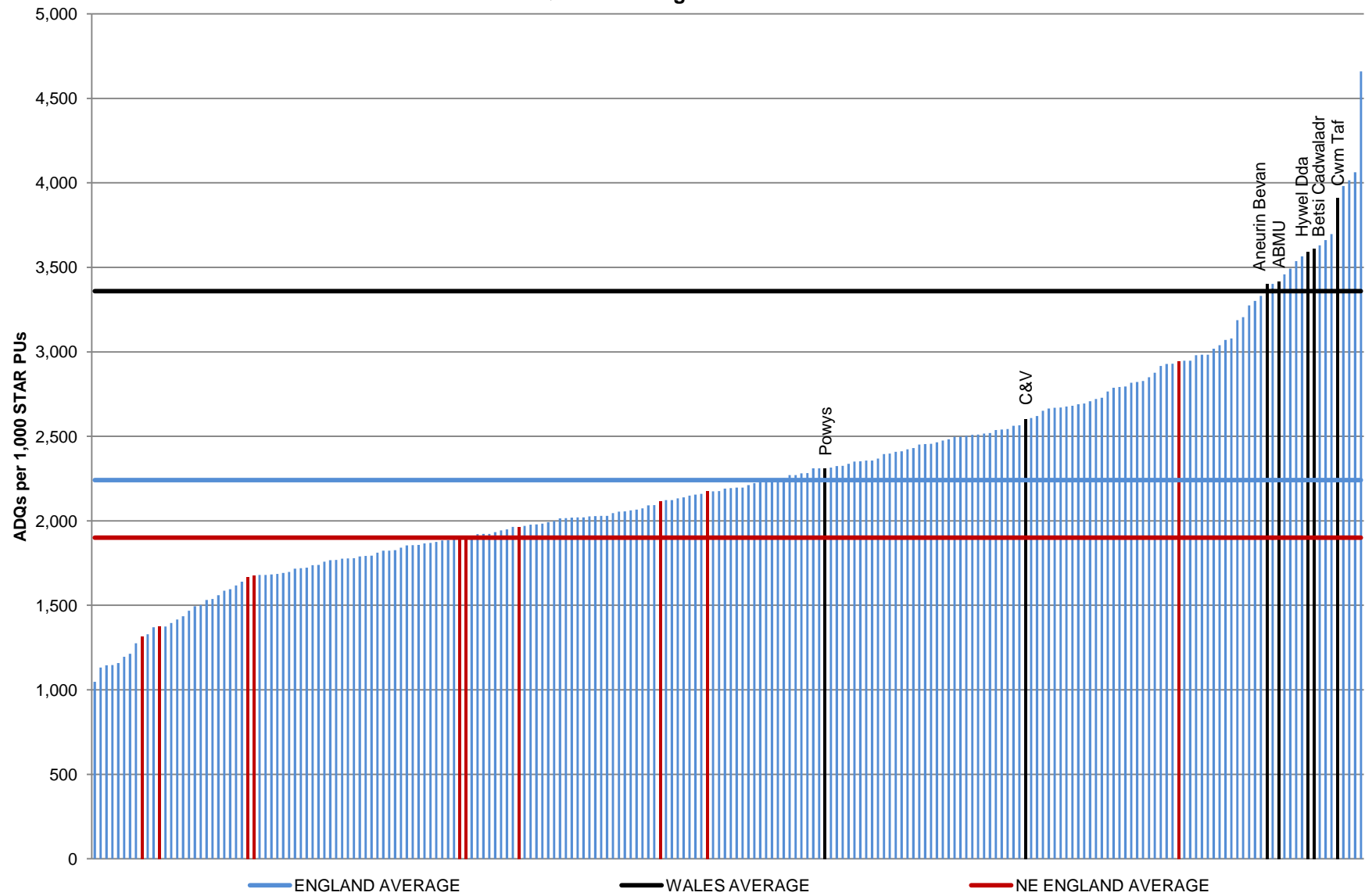


Figure 5. Morphine items as a percentage of strong opioid prescribing
Quarter ending March 2016

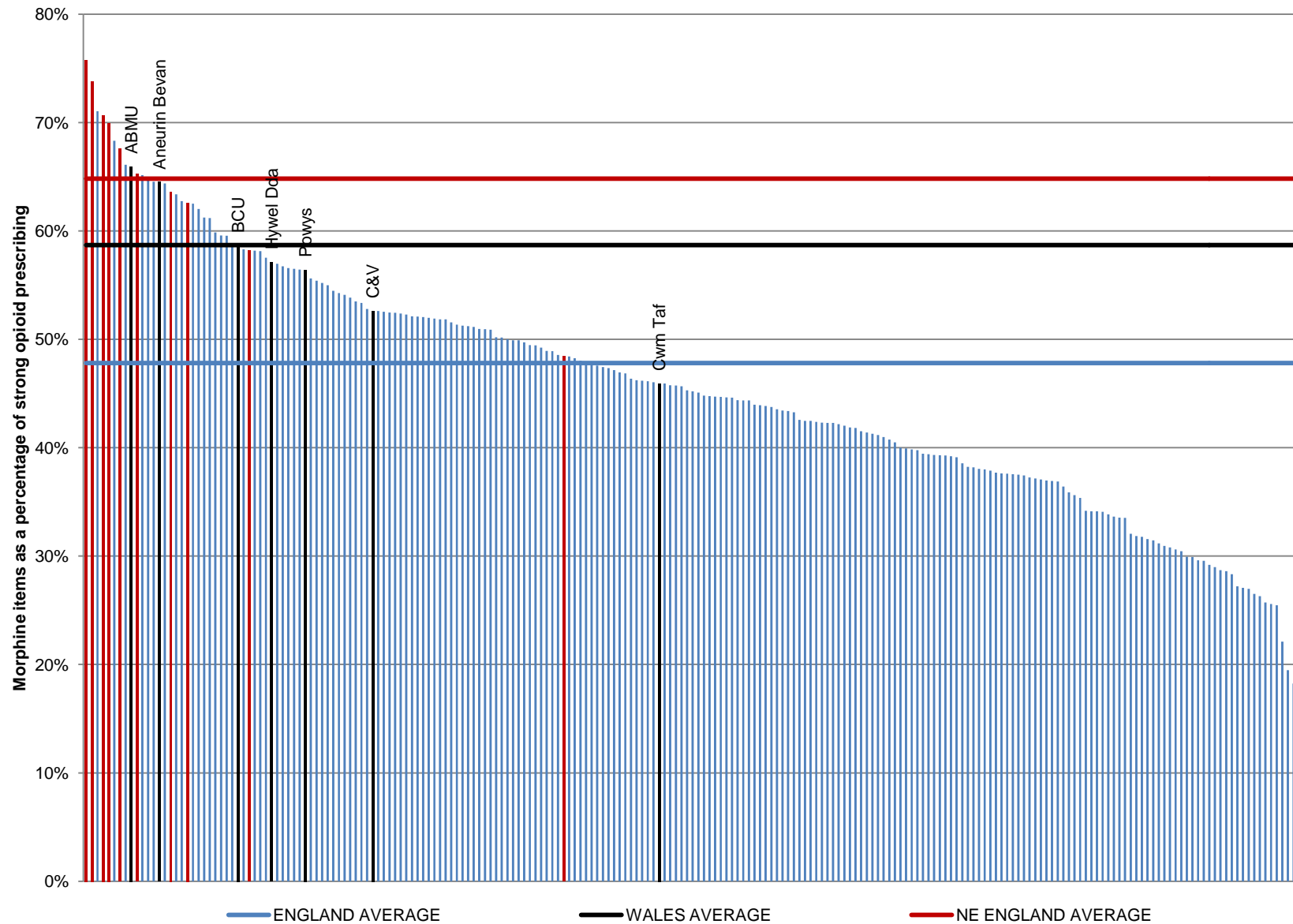
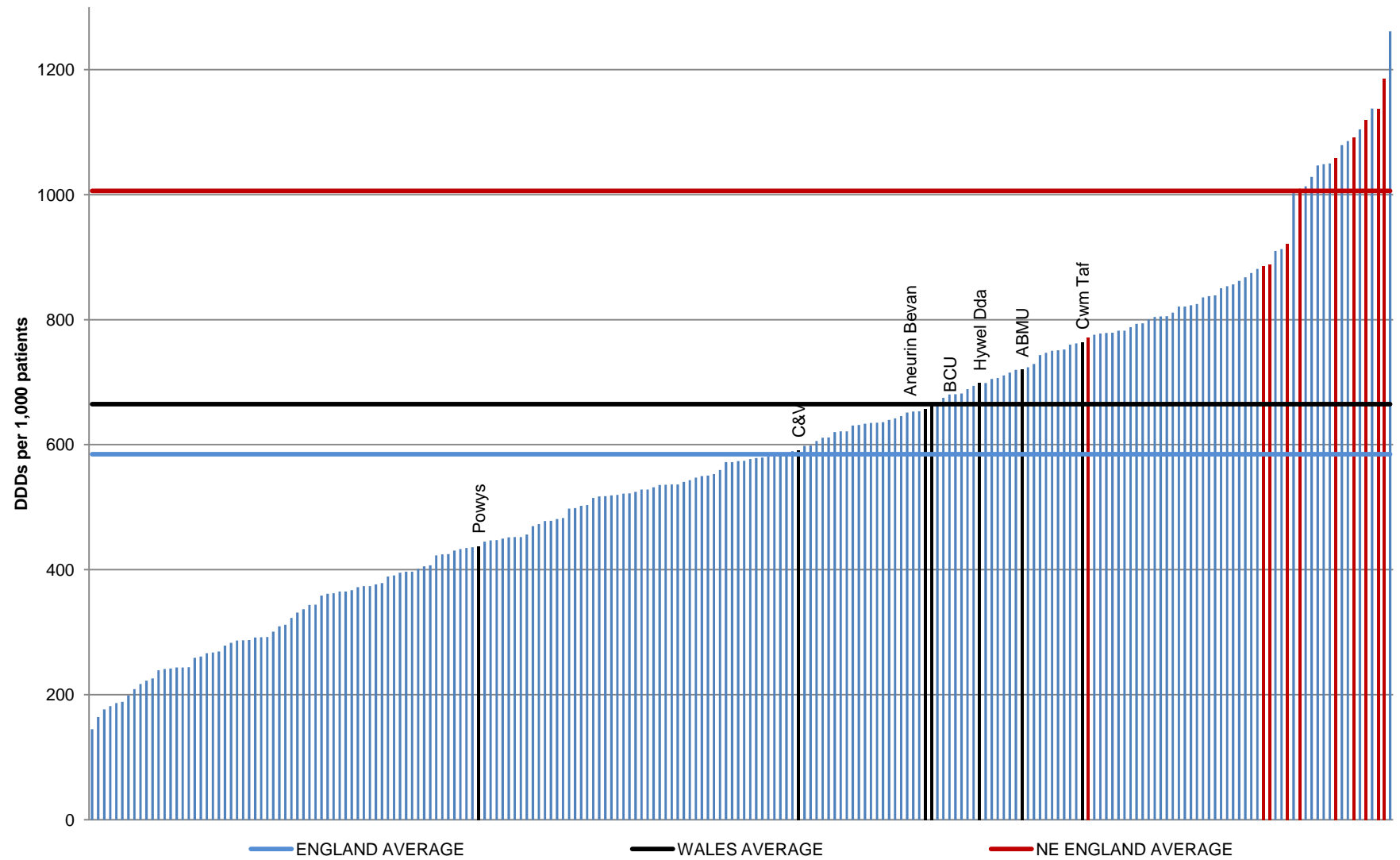


Figure 6. Tramadol DDDs per 1,000 patients
Quarter ending March 2016



**Figure 7. Total antibacterial items per 1,000 STAR PUs
Quarter ending March 2016**

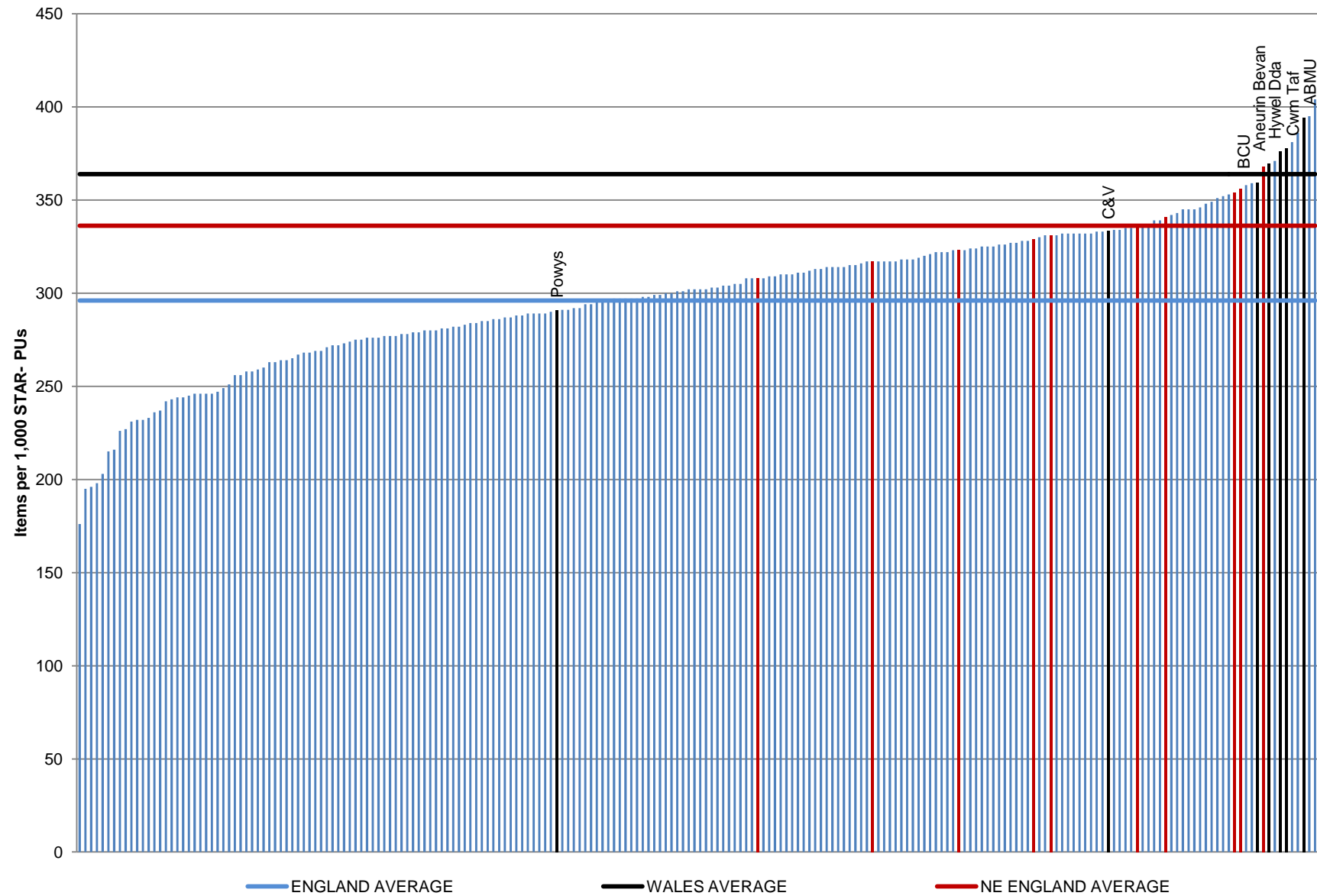


Figure 8. Co-amoxiclav items per 1,000 patients
Quarter ending March 2016

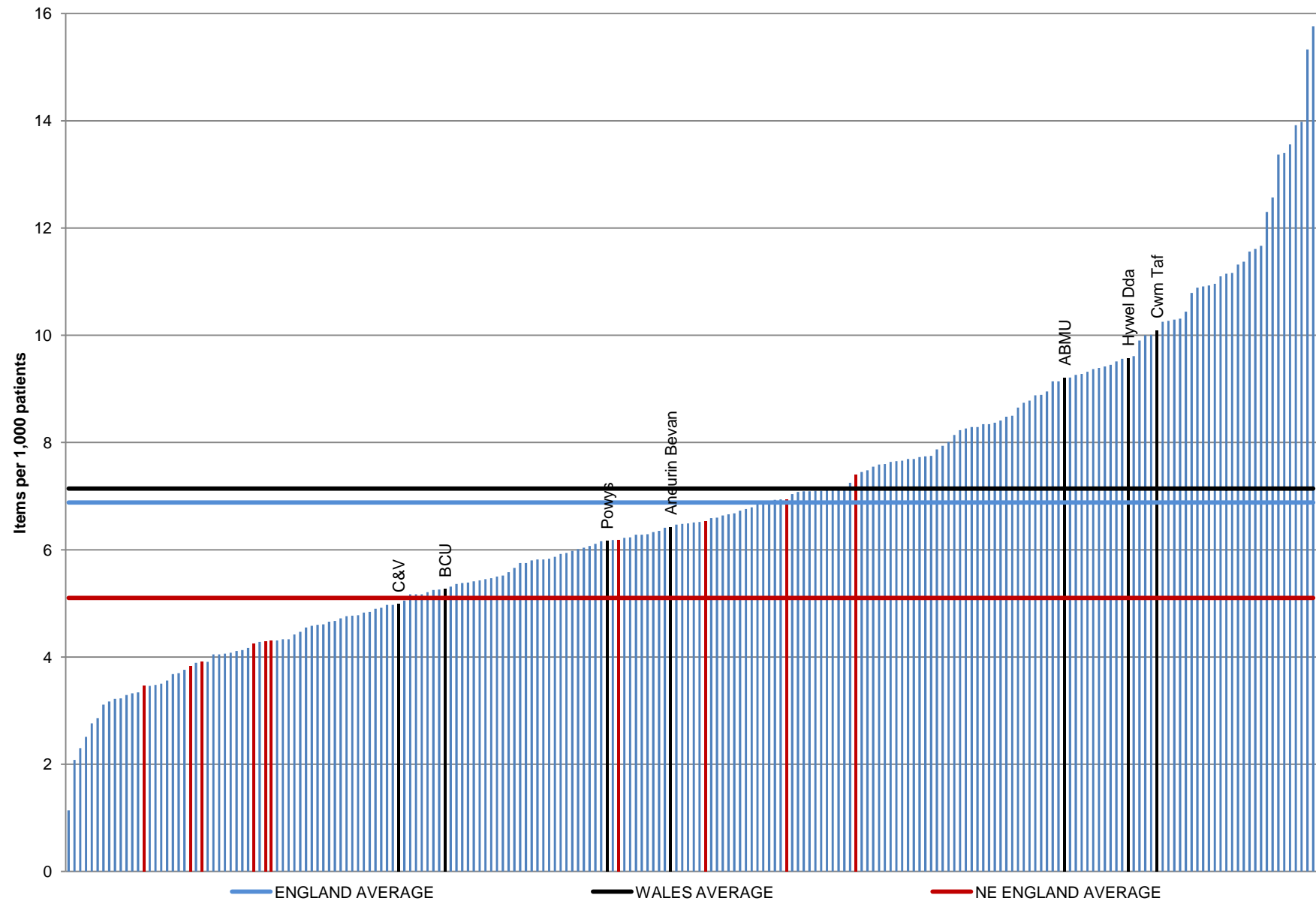


Figure 9. Cephalosporin items per 1,000 patients
Quarter ending March 2016

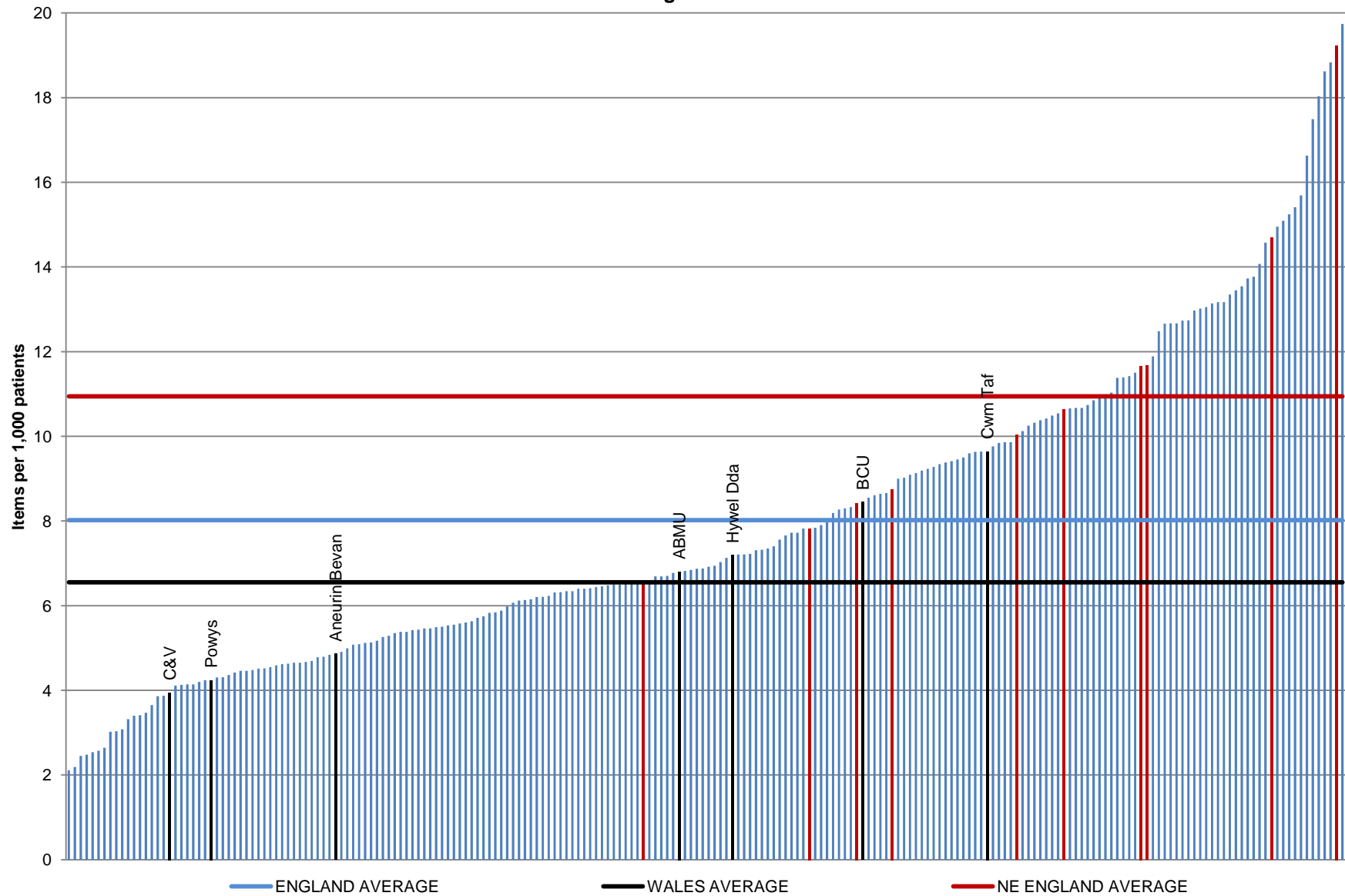


Figure 10. Fluoroquinolone items per 1,000 patients
Quarter ending March 2016

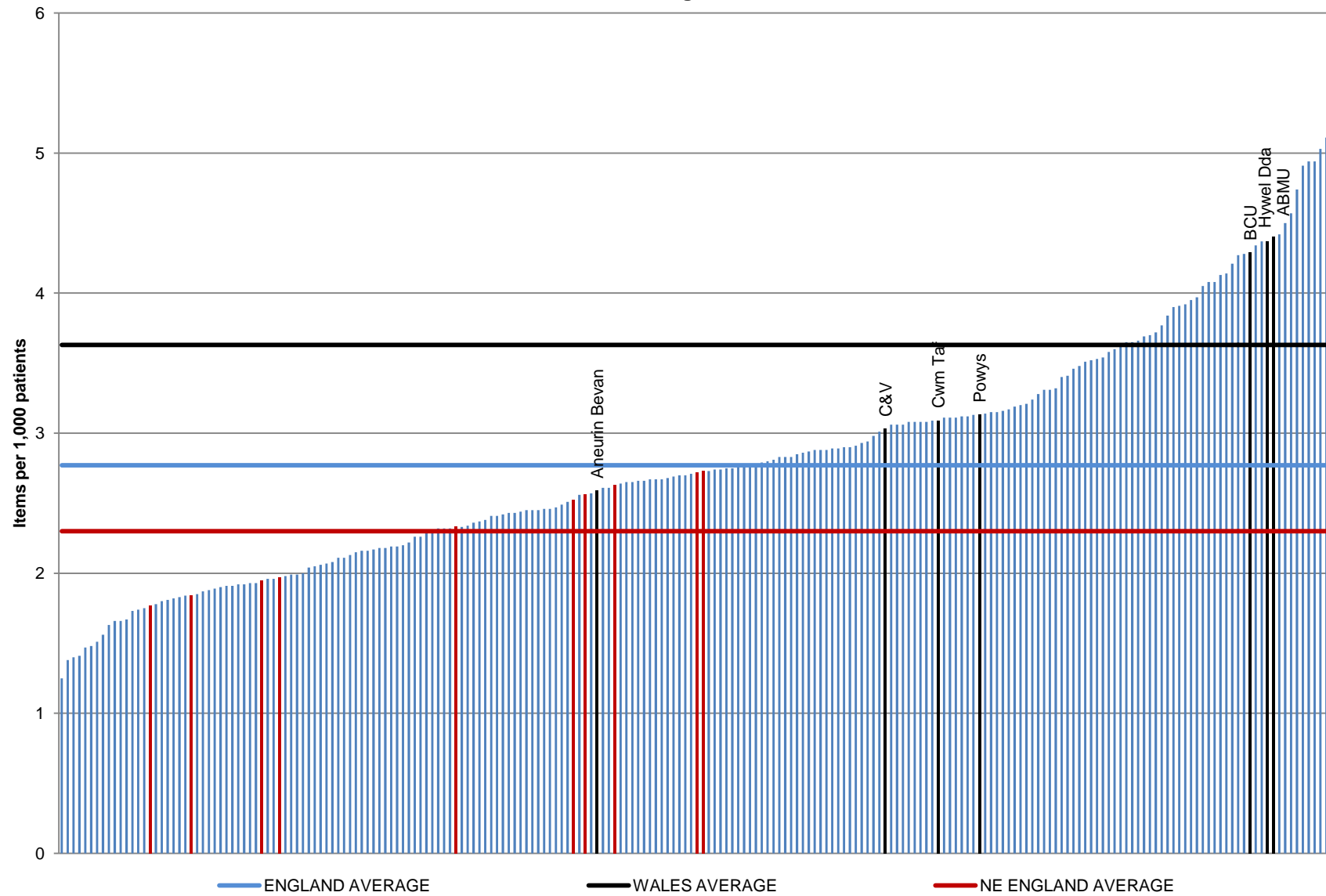


Figure 11. NSAID ADQs per 1,000 STAR PUs
Quarter ending March 2016

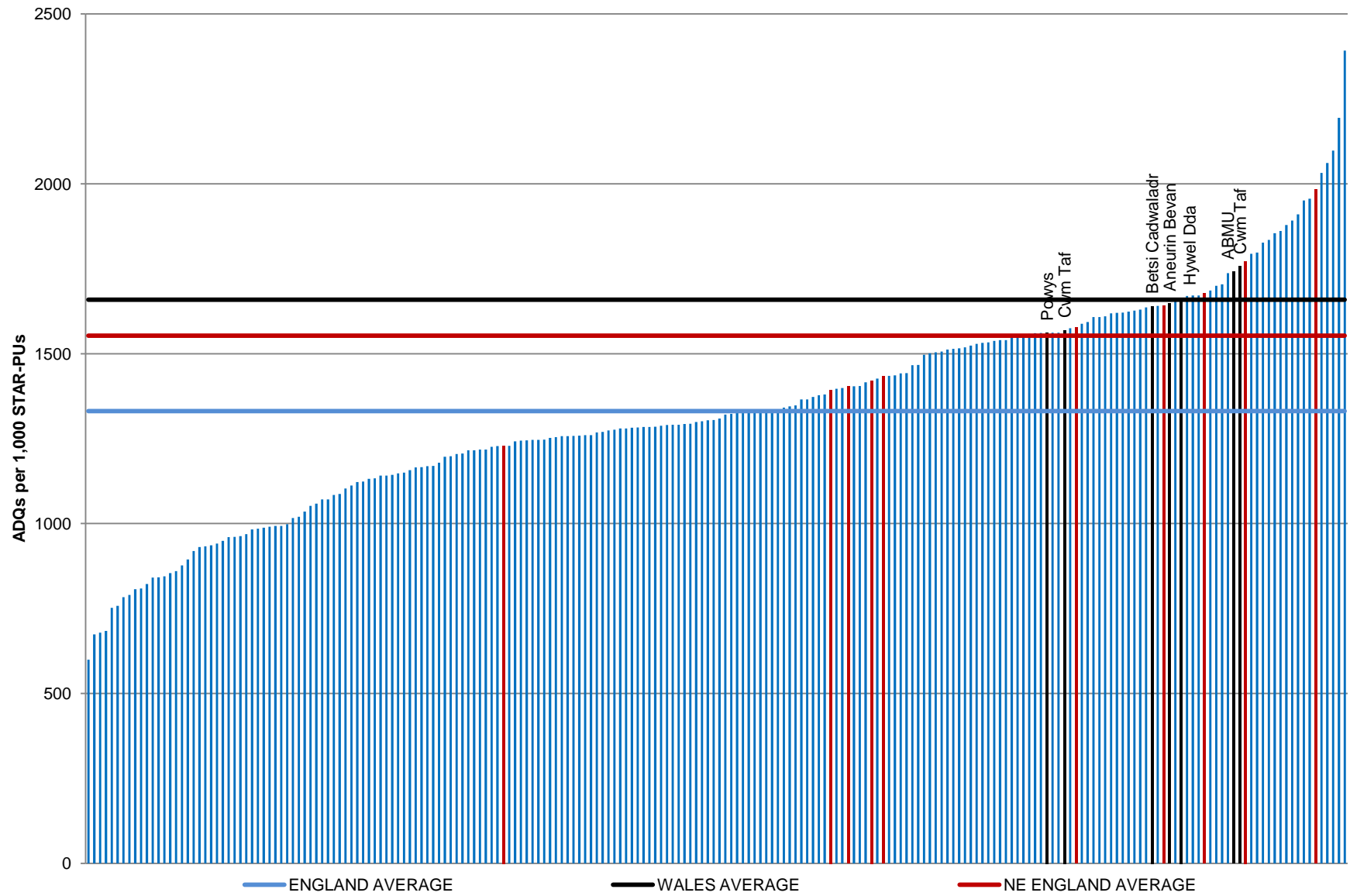


Figure 12. Ibuprofen and naproxen as a percentage of NSAID prescribing
Quarter ending March 2016

