



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

# National Prescribing Indicators 2023–2024

Analysis of Prescribing Data to March 2024



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All Wales Therapeutics and Toxicology Centre. National Prescribing Indicators 2023–2024 – Analysis of Prescribing Data to March 2024. July 2024.

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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. The *National Prescribing Indicators 2022-2025: Supporting Safe and Optimised Prescribing* focus on four priority areas, supported by additional safety and efficiency domains.

Background information supporting the choice of NPIs is detailed in the document [National Prescribing Indicators 2022–2025](#). The [National Prescribing Indicators 2023–2024 Specifications](#) document details thresholds and targets for 2022–2023.

This report contains data relating to the NPIs for the fourth quarter of 2023–2024. Unit of measure and targets for each NPI are included in Appendix 1 and primary care NPI prescribing data for GP clusters is presented in Appendix 2.

The potential impact of COVID-19 on prescribing and Yellow Card reporting should be considered when reviewing the data contained within this report.

## Priority areas

For 2023–2024 there are four priority areas, covering a total of ten indicators.

### Analgesics in primary care

The unit of measure for both opioid burden and high strength opioids changed from average daily quantities (ADQs) to defined daily doses (DDDs) from April 2023 onwards.

- A data issue with certain DDD values has been identified and is currently being investigated. At the time of writing, it is not possible to include the opioid burden and high strength opioids data within this quarterly report. The data will be updated and analysed as soon as possible, and an updated version of this report will be published.
- Tramadol (DDDs per 1,000 patients) reduced by 8.15% across Wales, compared with the equivalent quarter of the previous year, in line with the aim of the indicator.
- Gabapentin and pregabalin (DDDs per 1,000 patients) demonstrated an increase of 0.33% across Wales, compared with the equivalent quarter of the previous year, despite the aim of the indicator being to reduce prescribing.
- A Good Practice Spotlight (p12) from Aneurin Bevan UHB highlights actions taken by GP practices to reduce pregabalin prescribing.

### Anticoagulants in atrial fibrillation (AF)

- The percentage of patients with AF, a CHA<sub>2</sub>DS<sub>2</sub>-VASc score of 2 or more and were prescribed an anticoagulant increased by 0.23% across Wales, compared with the equivalent quarter of the previous year, in line with the aim of the indicator.

- Across Wales, the number of patients diagnosed with AF who are prescribed an anticoagulant and have received an anticoagulant review within the last 12 months (as a percentage of all patients diagnosed with AF who are prescribed an anticoagulant) increased by 2.36% in the month of March 2023, compared with the equivalent month of the previous year, in line with the aim of the indicator.
- Across Wales, the number of patients diagnosed with AF who are prescribed antiplatelet monotherapy (as a percentage of all patients diagnosed with AF) decreased by 8.28% in the month of March 2023, compared with the equivalent month of the previous year, in line with the aim of the indicator.

### **Antimicrobial stewardship**

- Total antibacterial items per 1,000 STAR-PU's increased across Wales by 2.61% compared with the baseline of quarter 4 2019-2020, despite the aim of the indicator being to reduce prescribing.
- 4C (co-amoxiclav, cephalosporins, fluoroquinolones and clindamycin) items per 1,000 patients decreased across Wales by 15.0%, compared with equivalent quarter of the previous year, in line with the aim of the indicator.
- A Good Practice Spotlight (p22) from Betsi Cadwaladr UHB highlights a range of actions which have been implemented to reduce 4C prescribing.

### **Decarbonisation of inhalers**

- The proportion of DPI and SMI prescribing (as a percentage of all inhalers prescribed) increased by 15.1% across Wales, compared with the equivalent quarter of the previous year, in line with the aim of the indicator.

### **Supporting domain – Safety**

#### **Prescribing Safety Indicators**

- The aim of these indicators is to identify patients at high risk of adverse drug reactions and medicines related harm in primary care. There are no targets associated with these indicators.

#### **Hypnotics and anxiolytics**

- Prescribing of hypnotics and anxiolytics (ADQs per 1,000 STAR-PU's) in primary care reduced by 8.48% across Wales, compared with the equivalent quarter of the previous year. This is in line with the aim of the indicator.

#### **Yellow Cards**

- Annual targets have been set for these indicators, with the aim of increasing the number of Yellow Card reports submitted. Quarter 4 data demonstrates:
  - A 29% decrease in reporting by GP practices across Wales, compared with the equivalent quarter of the previous year.
  - A 18% increase in secondary care reporting across Wales, compared with the equivalent quarter of the previous year.
  - A 13% decrease in reporting by health boards / NHS Trusts across Wales, compared with the equivalent quarter of the previous year.
  - A 3% decrease in reporting by members of the public across Wales, compared with the equivalent quarter of the previous year.
- The figures for Yellow Cards submitted by community pharmacy are also included in the report; however, targets have not been set.

## Supporting domain – Efficiency

### Best value biological medicines

- Use of biosimilar medicines (adalimumab, etanercept, infliximab, ranibizumab, rituximab and trastuzumab) as a percentage of reported 'reference' biological medicines plus biosimilars combined, increased from 87% to 93% for the quarter ending March 2024 compared with the equivalent quarter of the previous year. This is in line with the aim of the indicator.
- There was an increase in the overall use adalimumab biosimilar compared with the equivalent quarter of the previous year, in line with the aim of the NPI.
- Five health boards reported usage of ranibizumab biosimilar.

### Low value for prescribing

- Overall spend on the low value for prescribing UDG (per 1,000 patients) decreased by 1.59% across Wales, compared with the equivalent quarter of the previous year. This is in line with the aim of the indicator.

The 2024–2025 NPI report for quarter ending June 2024 will be available on October 18<sup>th</sup> 2024.



[Find out more](#)

### Server for Prescribing Information Reporting and Analysis (SPIRA)

The SPIRA dashboard for the NPIs can be accessed by anyone on the NHS Wales network.

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## Health boards/practices achieving indicator targets/thresholds

The table below shows the extent to which practices in each health board met the target or indicator thresholds:

- The figure in the cell is the number of practices in each health board meeting the target or indicator threshold.
- The percentage figure and cell colour represent the proportion of practices in each health board meeting the target or indicator threshold.

The target for antibacterial items per 1,000 STAR-PU per 1,000 patients is by health board, therefore a tick demonstrates achievement. Please refer to the [National Prescribing Indicators 2023–2024 Specifications](#) document for details of thresholds and targets for 2023–2024.

### Health boards/practices achieving the indicator targets/thresholds – Quarter ending March 2024

Indicator Description	Aneurin Bevan	Betsi Cadwaladr	Cardiff And Vale	Cwm Taf Morgannwg	Hywel Dda	Powys	Swansea Bay
Tramadol DDDs per 1,000 patients	20 29%	23 24%	30 54%	8 18%	15 31%	6 38%	14 31%
Gabapentin and pregabalin DDDs per 1,000 patients	14 21%	20 21%	35 63%	2 4%	14 29%	1 6%	10 22%
Antibacterial items per 1,000 STAR-PU	✗	✗	✗	✗	✗	✗	✗
4C antibacterial items per 1,000 patients	15 22%	53 55%	24 43%	15 33%	11 23%	1 6%	24 53%
DPIs and SMIs as a percentage of all inhalers	35 51%	31 32%	40 71%	27 60%	46 96%	5 31%	15 33%
Hypnotics and anxiolytics ADQs per 1,000 STAR-PU	19 28%	25 26%	36 64%	7 16%	8 17%	8 50%	14 31%
Low Value for Prescribing (UDG) spend (£) per 1,000 patients	4 6%	34 35%	16 29%	4 9%	9 19%	5 31%	11 24%

Percentage of practices meeting threshold:



### Health boards/practices achieving the Yellow Card indicator targets – Full year 2023–2024

The targets for secondary care, health board and members of the public are by health board, therefore a tick demonstrates achievement.

Yellow Card Indicator	Aneurin Bevan	Betsi Cadwaladr	Cardiff And Vale	Cwm Taf Morgannwg	Hywel Dda	Powys Teaching	Swansea Bay	Velindre
GP practices	3 4%	84 87%	1 2%	11 24%	30 63%	0 0%	1 2%	-
Health boards	✓	✓	✓	✓	✓	✓	✓	—
Health boards: members of public	✗	✗	✗	✗	✗	✗	✗	—
Secondary care	✓	✓	✓	✓	✗	✗	✗	✗

Percentage of practices meeting threshold:



## 1.0 Priority areas

### 1.1 Analgesics

There are three NPIs monitoring the usage of medicines used for the treatment of pain for 2022–2025:

1. Opioid burden
2. Tramadol
3. Gabapentin and pregabalin

#### 1.1.1 Opioid burden

**Purpose:** To encourage the appropriate use and review of opioids in primary care, minimising the potential for dependence, diversion, misuse and adverse drug reactions (ADRs).

**Units of measure:**

- Opioid burden UDG DDDs per 1,000 patients
- High strength opioids UDG DDDs per 1,000 patients

**Aim:** To reduce prescribing

There is a lack of consistent good quality evidence to support strong clinical recommendation for the long-term use of opioid analgesics for patients with chronic non-cancer pain. Opioid analgesics have well established side effects and repeated administration may cause tolerance and dependence. Despite the lack of evidence for use in chronic non-cancer pain, research in the UK has found an escalation of strong opioid prescribing in primary care, predominantly for non-cancer patients. This NPI promotes a prudent approach to prescribing opioid analgesics, taking into account the indication, risks and benefits, and encouraging timely review of patients prescribed opioids for chronic pain.

**Please note – Data currently unavailable**

A data issue with certain DDD values has been identified and is currently being investigated. At the time of writing, it is not possible to include the opioid burden and high strength opioids data within this quarterly report. The data will be updated and analysed as soon as possible, and an updated version of this report will be published.

### 1.1.2 Tramadol

**Purpose:** To encourage the appropriate use and review of tramadol in primary care, minimising the potential dependence, diversion, misuse and ADRs.

**Unit of measure:** Tramadol DDDs per 1,000 patients.

**Aim:** To reduce prescribing

While there is a recognised place in pain management for tramadol, there are concerns regarding the risks associated with dependence, diversion, misuse and ADRs. This NPI promotes a prudent approach to prescribing tramadol, taking into account the risks and benefits, and encouraging timely review.

- Across Wales, prescribing of tramadol was 8.15% lower in the quarter ending March 2024 than in the equivalent quarter of the previous year. This is in line with the aim of the indicator.
- For the quarter ending March 2024, tramadol prescribing ranged from 288 to 431 DDDs 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 Morgannwg UHB.
- Tramadol prescribing decreased, compared with the equivalent quarter of the previous year, in all health boards.
- The largest percentage decrease was seen in Swansea Bay UHB and the smallest percentage decrease was seen in Powys Teaching HB, compared with the equivalent quarter of the previous year.

**Table 1. Tramadol DDDs per 1,000 patients**

	2022–2023 Qtr 4	2023–2024 Qtr 4	% Change
Swansea Bay	395	355	-9.94%
Aneurin Bevan	385	350	-8.94%
Betsi Cadwaladr	461	420	-8.85%
Hywel Dda	410	375	-8.53%
Cardiff And Vale	314	288	-8.32%
Cwm Taf Morgannwg	457	431	-5.57%
Powys	311	305	-1.98%
<b>Wales</b>	<b>401</b>	<b>369</b>	<b>-8.15%</b>

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

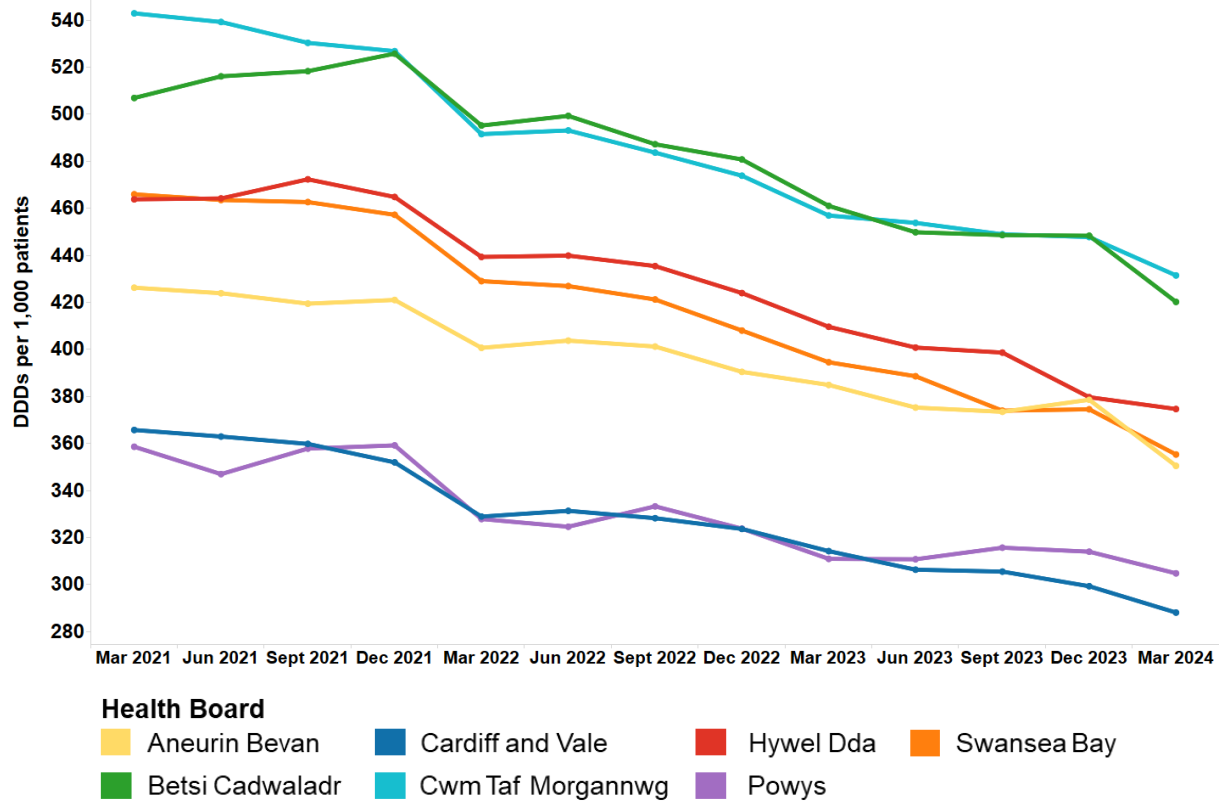
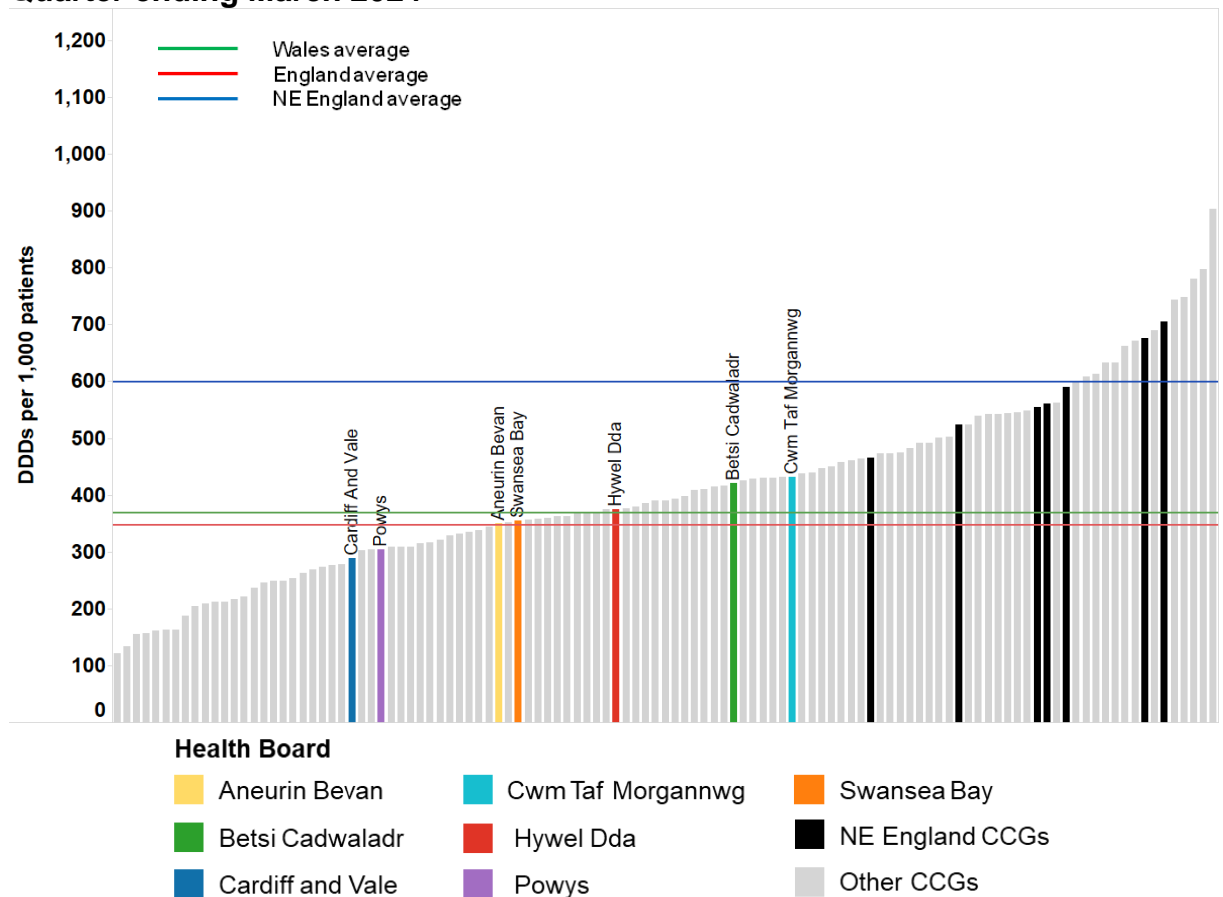


Figure 2. Tramadol prescribing in Welsh health boards and English CCGs – Quarter ending March 2024



### 1.1.3 Gabapentin and pregabalin

**Purpose:** To encourage the appropriate use and review of gabapentin and pregabalin in primary care, minimising the potential for dependence, diversion, misuse and ADRs.

**Unit of measure:** Gabapentin and pregabalin DDDs per 1,000 patients.

**Aim:** To reduce prescribing

Gabapentin and pregabalin have a well-defined role in the management of a number of conditions including epilepsy and neuropathic pain, and pregabalin also has a role in the treatment of generalised anxiety disorder. Both gabapentin and pregabalin have known psychiatric side effects and there is a potential risk of dependence, diversion, misuse and ADRs. Prescribers should make evidence-based, informed decisions on whether to prescribe, taking into account the risks and benefits of these medicines.

- Across Wales, for the quarter ending March 2024, prescribing of gabapentin and pregabalin increased by 0.33% compared with the same quarter of the previous year. This is contrary to the aim of the indicator.
- For the quarter ending March 2024, gabapentin and pregabalin prescribing ranged from 1,172 to 2,068 DDDs 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 Morgannwg UHB.
- Swansea Bay UHB and Aneurin Bevan UHB demonstrated a decrease in prescribing compared with the same quarter of the previous year.
- Powys Teaching HB demonstrated the largest percentage increase in prescribing, compared with the equivalent quarter of the previous year.

**Table 2. Gabapentin and pregabalin DDDs per 1,000 patients**

	2022–2023 Qtr 4	2023–2024 Qtr 4	% Change
Swansea Bay	1,606	1,531	-4.67%
Aneurin Bevan	1,791	1,739	-2.90%
Cardiff And Vale	1,162	1,172	0.85%
Cwm Taf Morgannwg	2,041	2,068	1.31%
Hywel Dda	1,539	1,567	1.83%
Betsi Cadwaladr	1,536	1,592	3.66%
Powys	1,354	1,436	6.03%
<b>Wales</b>	<b>1,597</b>	<b>1,602</b>	<b>0.33%</b>

Figure 3. Trend in gabapentin and pregabalin prescribing DDDs per 1,000 patients

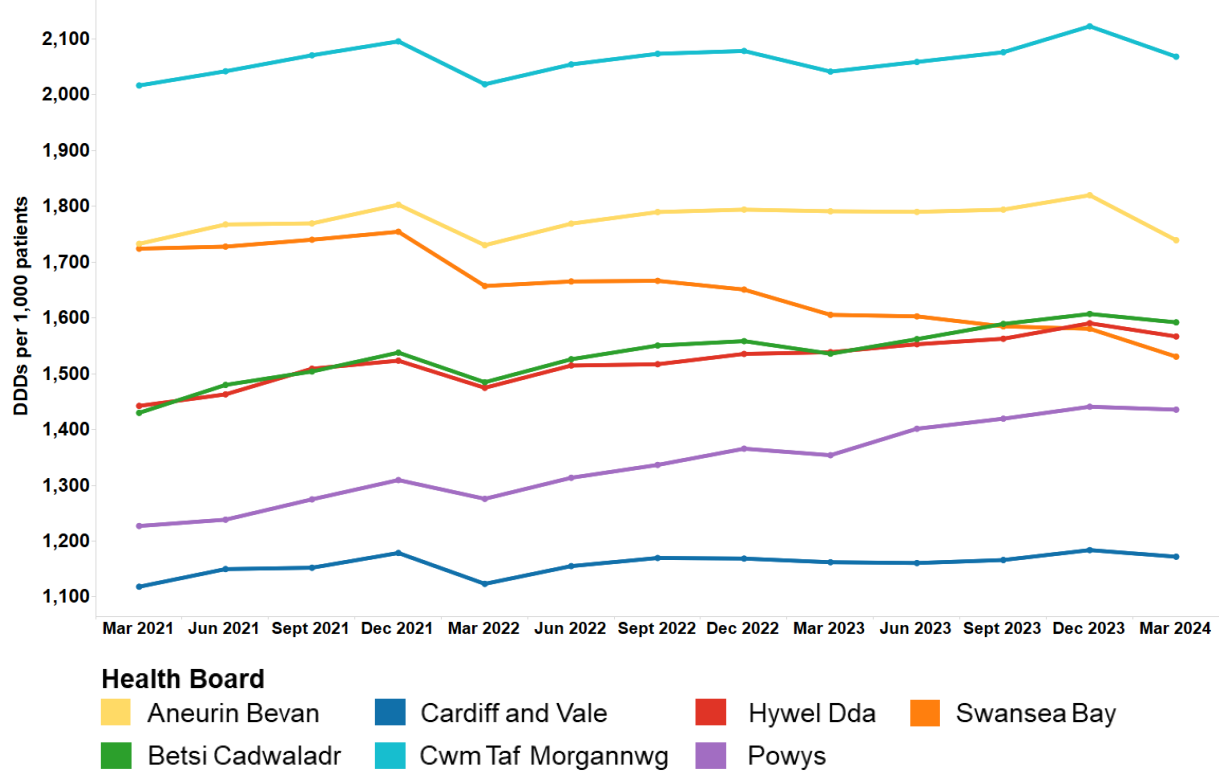
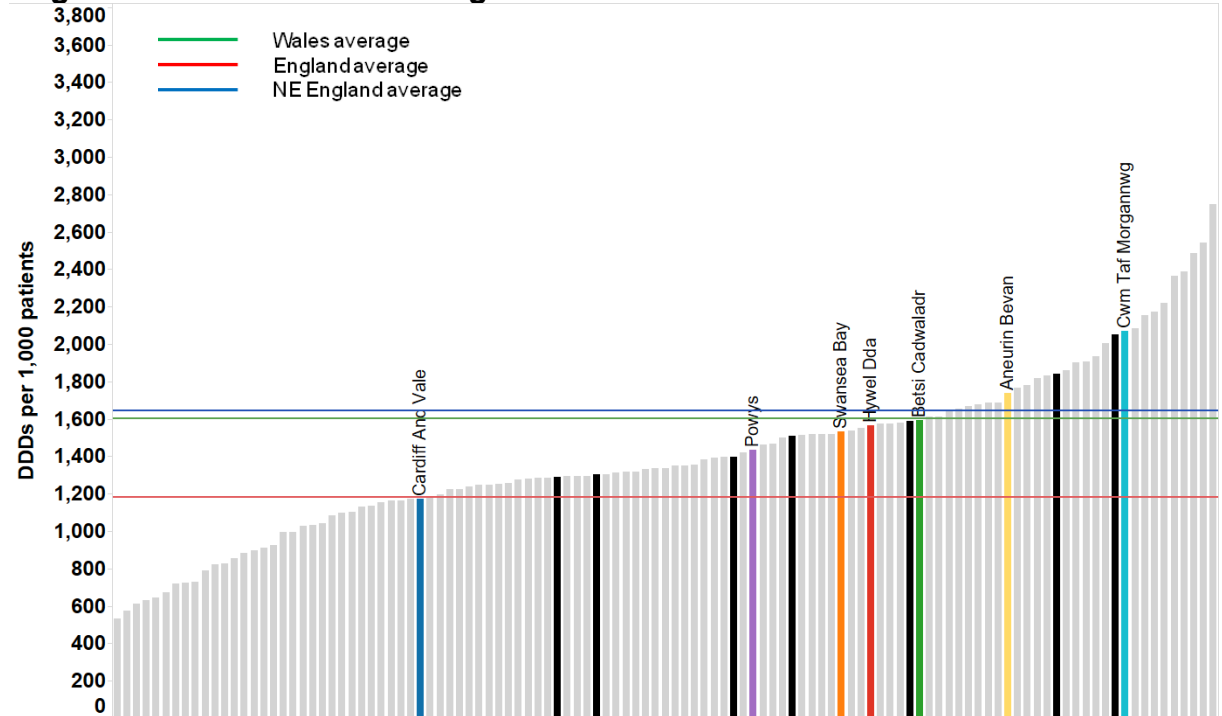


Figure 4. Gabapentin and pregabalin prescribing in Welsh health boards and English CCGs – Quarter ending March 2024



### Good practice spotlight

A Pregabalin Audit was created by the **Aneurin Bevan UHB** medicines management team with the aim of promoting safe prescribing of pregabalin in line with current guidelines; and piloted in a high prescribing practice in Caerphilly South. The Gabapentinoid Prescribing Resource Pack for pain was then created and approved by the health board.

The Aneurin Bevan UHB Pregabalin Audit is included as part of the health board's Practice Incentive Scheme (Clinical Effectiveness Prescribing Programme – CEPP). To assist GP practices implementing the audit, two learning at lunch sessions were organised in collaboration with expert speakers in this field. High prescribing practices were approached and meetings arranged with pain team consultants to discuss prescribing and offer further support.

The audit was completed by all GP practices across Aneurin Bevan UHB. GP practices were asked to audit 30/40 patients prescribed pregabalin, this was dependent on if the practice met the National Prescribing Indicator (NPI) target for the previous year. A total of 2,547 patients were included in the audit. Audits were completed by the Neighbourhood Care Network (NCN) and Practice Pharmacists.

For further information on this initiative, please contact [awttc@wales.nhs.uk](mailto:awttc@wales.nhs.uk)

## 1.2 Anticoagulants in atrial fibrillation

There are three NPIs monitoring anticoagulants in atrial fibrillation (AF) for 2022-2025:

1. Number of patients who have a CHA<sub>2</sub>DS<sub>2</sub>-VASc score of 2 or more who are currently prescribed an anticoagulant as a percentage of all patients diagnosed with AF.
2. Number of patients who are currently prescribed an anticoagulant and have received an anticoagulant review within the last 12 months, as a percentage of all patients diagnosed with AF who are prescribed an anticoagulant.
3. Number of patients who are prescribed antiplatelet monotherapy, as a percentage of all patients diagnosed with AF.

### 1.2.1 Anticoagulants in patients with AF

**Purpose:** To encourage the appropriate use of anticoagulants in patients with atrial fibrillation (AF).

**Unit of measure:** Number of patients with AF who have a CHA<sub>2</sub>DS<sub>2</sub>-VASc score of 2 or more who are currently prescribed an anticoagulant as a percentage of all patients diagnosed with AF.

**Aim:** To increase the number of patients with AF and a CHA<sub>2</sub>DS<sub>2</sub>-VASc of 2 or more prescribed an anticoagulant.

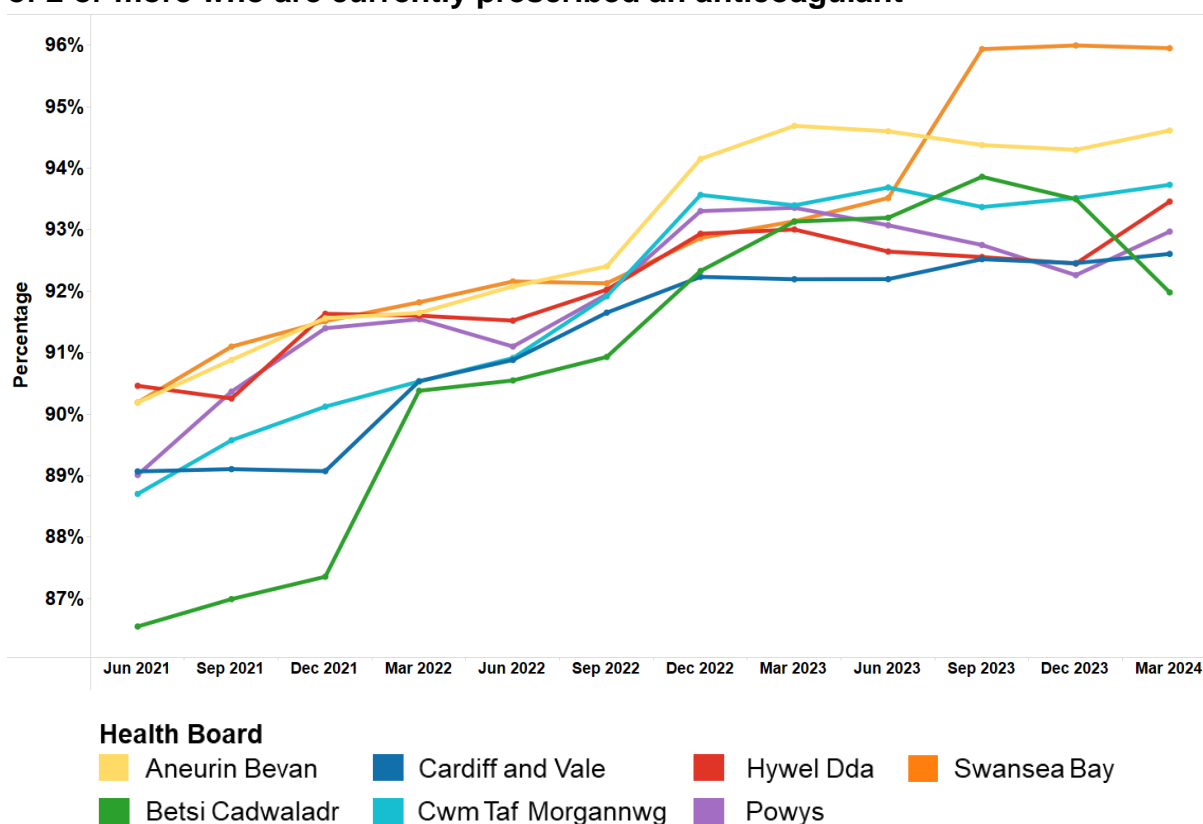
The CHA<sub>2</sub>DS<sub>2</sub>-VASc risk stratification score calculates stroke risk of patients with AF. Adults with non-valvular AF and a CHA<sub>2</sub>DS<sub>2</sub>-VASc score of 2 or above are at a much higher risk of having a stroke than the general population, however anticoagulation therapy can help to prevent strokes by reducing the likelihood of a blood clot forming. AF causes around 20% of strokes, however this can be reduced by about two thirds if people are anticoagulated.

- Across Wales, for the quarter ending March 2023, the percentage of patients with AF and a CHA<sub>2</sub>DS<sub>2</sub>-VASc score of 2 or more who were prescribed an anticoagulant increased by 0.23 %. This is in line with the aim of the indicator.
- For the quarter ending March 2024, the percentage of patients with AF and a CHA<sub>2</sub>DS<sub>2</sub>-VASc score of 2 or more and were prescribed an anticoagulant ranged from 96.0% to 92.0% across the health boards.
- The health board with the highest percentage of patients with AF and a CHA<sub>2</sub>DS<sub>2</sub>-VASc of 2 or more who were prescribed an anticoagulant was Swansea Bay UHB. The health board with the lowest percentage was Betsi Cadwaladr UHB.
- The largest percentage increase was seen in Swansea Bay UHB and the largest percentage decrease was seen in Betsi Cadwaladr UHB, compared with the equivalent quarter of the previous year.

Table 3. Percentage of patients with AF and a CHA<sub>2</sub>DS<sub>2</sub>-VASc score of 2 or more who are currently prescribed an anticoagulant\*

	2022–2023 Qtr 4	2023–2024 Qtr 4	% Change
Swansea Bay	93.1%	96.0%	3.02%
Hywel Dda	93.0%	93.5%	0.49%
Cardiff And Vale	92.2%	92.6%	0.45%
Cwm Taf Morgannwg	93.4%	93.7%	0.36%
Aneurin Bevan	94.7%	94.6%	-0.08%
Powys	93.4%	93.0%	-0.41%
Betsi Cadwaladr	93.1%	92.0%	-1.24%
<b>Wales</b>	<b>93.3%</b>	<b>93.5%</b>	<b>0.23%</b>

Figure 5. Trend in percentage of patients with AF and a CHA<sub>2</sub>DS<sub>2</sub>-VASc score of 2 or more who are currently prescribed an anticoagulant



### 1.2.2 Anticoagulant review

**Purpose:** To encourage the appropriate review of patients currently prescribed anticoagulants.

**Unit of measure:** Number of patients who are currently prescribed an anticoagulant and have received an anticoagulant review within the last 12 months, as a percentage of all patients diagnosed with AF who are prescribed an anticoagulant.

**Aim:** To increase the number of patients with AF who are prescribed an anticoagulant and have received an anticoagulant review within the last 12 months.

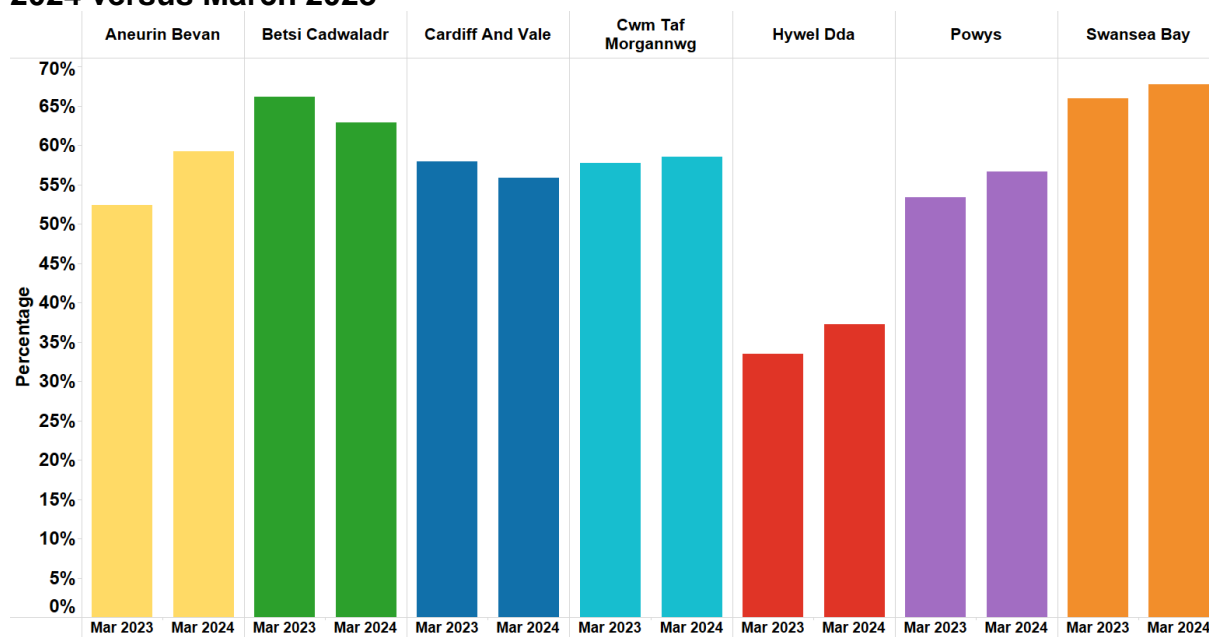
Patients with AF who are prescribed an anticoagulant should have a review of their treatment annually. Anticoagulants are associated with drug-drug and drug-food interactions that may increase the risk of serious bleeding or diminish stroke prevention. A review of treatment will reinforce the importance of adherence and enable patients to be reminded of potential interactions.

- Across Wales, the number of patients who are currently prescribed an anticoagulant and have received an anticoagulant review within the last 12 months (as a percentage of all patients diagnosed with AF who are prescribed an anticoagulant) increased by 2.36% compared with the equivalent month of the previous year. This is in line with the aim of the indicator.
- For the month of March 2024, the percentage patients who had received an anticoagulant review in the last 12 months ranged from 37.2% to 67.7% across the health boards.
- The health board with the highest percentage of reviews was Swansea Bay UHB. The health board with the lowest percentage of reviews was Hywel Dda UHB.
- The largest percentage increase was seen in Aneurin Bevan UHB. Cardiff and Vale UHB and Betsi Cadwaladr UHB demonstrated a decrease compared with the same month of the previous year.

**Table 4. Percentage of patients who are currently prescribed an anticoagulant and have received an anticoagulant review within the last 12 months**

	2022–2023 March 2023	2023–2024 March 2024	% Change
Aneurin Bevan	52.4%	59.2%	13.0%
Hywel Dda	33.5%	37.2%	11.3%
Powys	53.4%	56.7%	6.08%
Swansea Bay	66.0%	67.7%	2.61%
Cwm Taf Morgannwg	57.7%	58.5%	1.40%
Cardiff And Vale	57.9%	55.8%	-3.64%
Betsi Cadwaladr	66.1%	62.9%	-4.89%
<b>Wales</b>	<b>55.7%</b>	<b>57.0%</b>	<b>2.36%</b>

**Figure 6. Percentage of patients who are currently prescribed an anticoagulant and have received an anticoagulant review within the last 12 months – March 2024 versus March 2023**



### 1.2.3 Patients who are prescribed antiplatelet monotherapy

**Purpose:** To discourage the inappropriate use of antiplatelet monotherapy in patients with atrial fibrillation (AF).

**Unit of measure:** Number of patients who are prescribed antiplatelet monotherapy, as a percentage of all patients diagnosed with AF.

**Aim:** To reduce the number of patients with AF prescribed antiplatelet monotherapy.

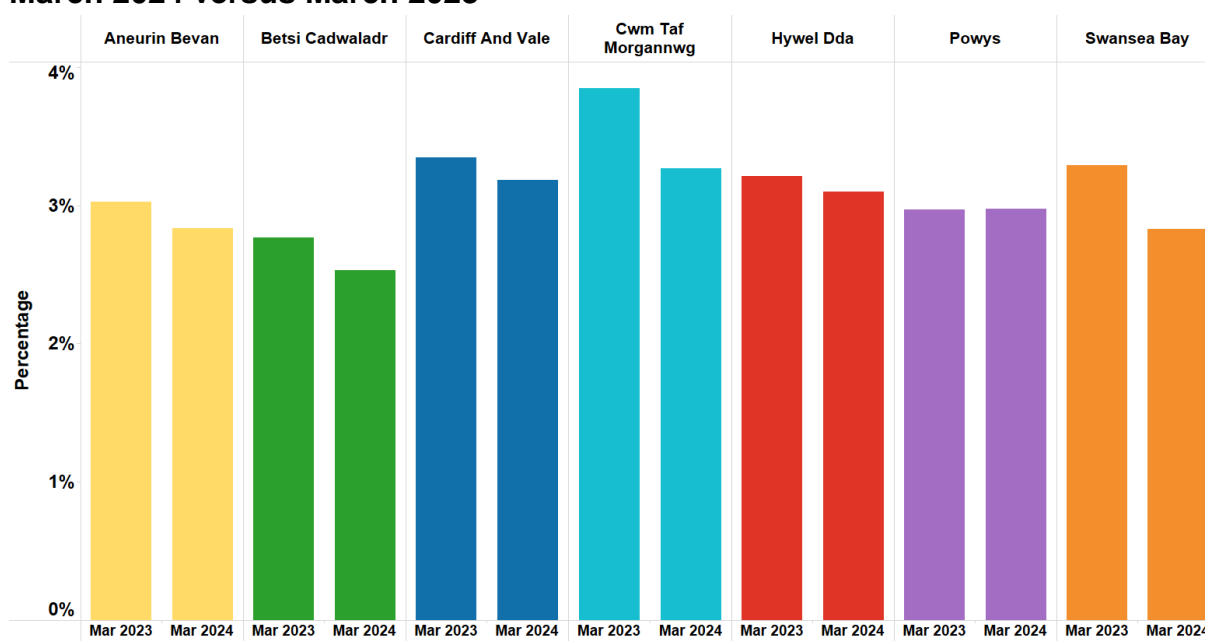
Antiplatelet medication, i.e. aspirin or clopidogrel, is no longer recommended in patients with AF. Quality Statement 2 within the NICE Quality Standard for Atrial fibrillation states that adults with AF should not be prescribed aspirin monotherapy, as the risks of taking aspirin outweigh any benefits. However, prescribers should be aware that adults with AF may need to take aspirin for other indications.

- Across Wales, the number of patients who are prescribed antiplatelet monotherapy (as a percentage of all patients diagnosed with AF) decreased by 8.28% compared with the equivalent month of the previous year. This is in line with the aim of the indicator.
- For the month of March 2024, the percentage of patients receiving antiplatelet monotherapy ranged from 2.53% to 3.27% across the health boards.
- The health board with the lowest percentage of antiplatelet monotherapy was Betsi Cadwaladr UHB. The health board with the highest percentage of antiplatelet monotherapy was Cwm Taf Morgannwg UHB.
- The largest percentage decrease was seen in Cwm Taf Morgannwg UHB. Powys Teaching HB demonstrated a percentage increase.

Table 5. Percentage of patients who are prescribed antiplatelet monotherapy

	2022–2023 March 2023	2023–2024 March 2024	% Change
Cwm Taf Morgannwg	3.85%	3.27%	-15.0%
Swansea Bay	3.29%	2.83%	-14.0%
Betsi Cadwaladr	2.77%	2.53%	-8.57%
Aneurin Bevan	3.03%	2.83%	-6.38%
Cardiff And Vale	3.35%	3.19%	-4.86%
Hywel Dda	3.21%	3.10%	-3.56%
Powys	2.97%	2.98%	0.30%
Wales	3.18%	2.92%	-8.28%

Figure 7. Percentage of patients who are prescribed antiplatelet monotherapy – March 2024 versus March 2023



### 1.3 Antimicrobial stewardship

There are two antimicrobial NPIs for 2022–2025:

1. Total antibacterial items per 1,000 STAR-PU
2. 4C antimicrobials (co-amoxiclav, cephalosporins, fluoroquinolones and clindamycin) items per 1,000 patients

#### 1.3.1 Total antibacterial items

**Purpose:** To encourage the appropriate prescribing of all antibiotics in primary care.

**Unit of measure:** Total antibacterial items per 1,000 STAR-PU.

**Aim:** To reduce prescribing

- Across Wales, for the quarter ending March 2024, total antibacterial items per 1,000 STAR-PU increased by 2.61%, compared with the quarter ending March 2020. This is contrary to the aim of the indicator.
- For the quarter ending March 2024, the total number of antibacterial items per 1,000 STAR-PU ranged from 275 to 347 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 Morgannwg UHB.
- For the quarter ending March 2024, none of the health boards achieved the target of a 5%, or greater, reduction against the baseline of quarter 4 2019–2020.
- Cardiff and Vale UHB and Cwm Taf Morgannwg UHB demonstrated a reduction in prescribing, compared with the quarter ending March 2020.
- Powys Teaching HB demonstrated the greatest increase in prescribing, compared with the quarter ending March 2020.

**Table 6. Total antibacterial items per 1,000 STAR-PU**

	2019–2020 Qtr 4	2023–2024 Qtr 4	% Change
Cardiff And Vale	279	275	-1.40%
Cwm Taf Morgannwg	348	347	-0.44%
Hywel Dda	310	313	0.77%
Aneurin Bevan	315	324	2.62%
Swansea Bay	324	337	4.04%
Betsi Cadwaladr	293	311	6.14%
Powys	261	293	12.3%
<b>Wales</b>	<b>307</b>	<b>316</b>	<b>2.61%</b>

Figure 8. Trend in antibacterial prescribing items per 1,000 STAR-PU

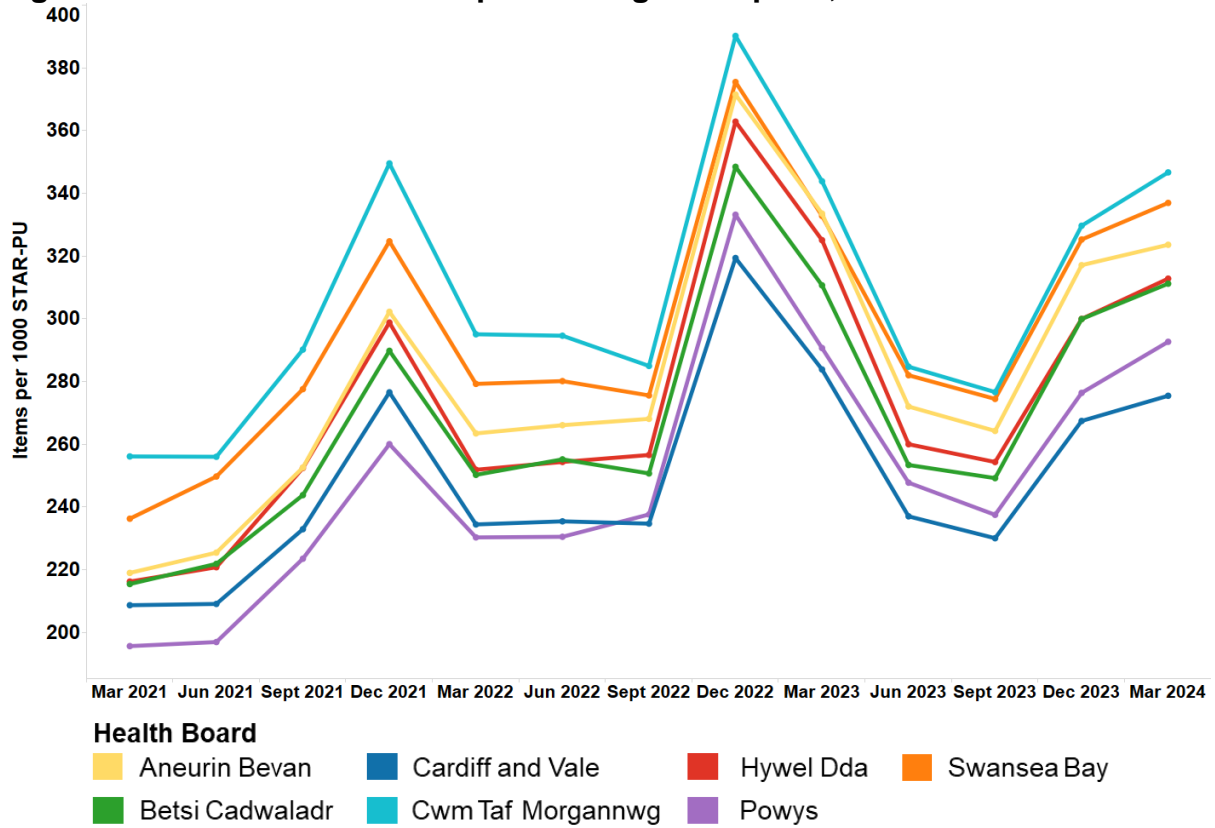
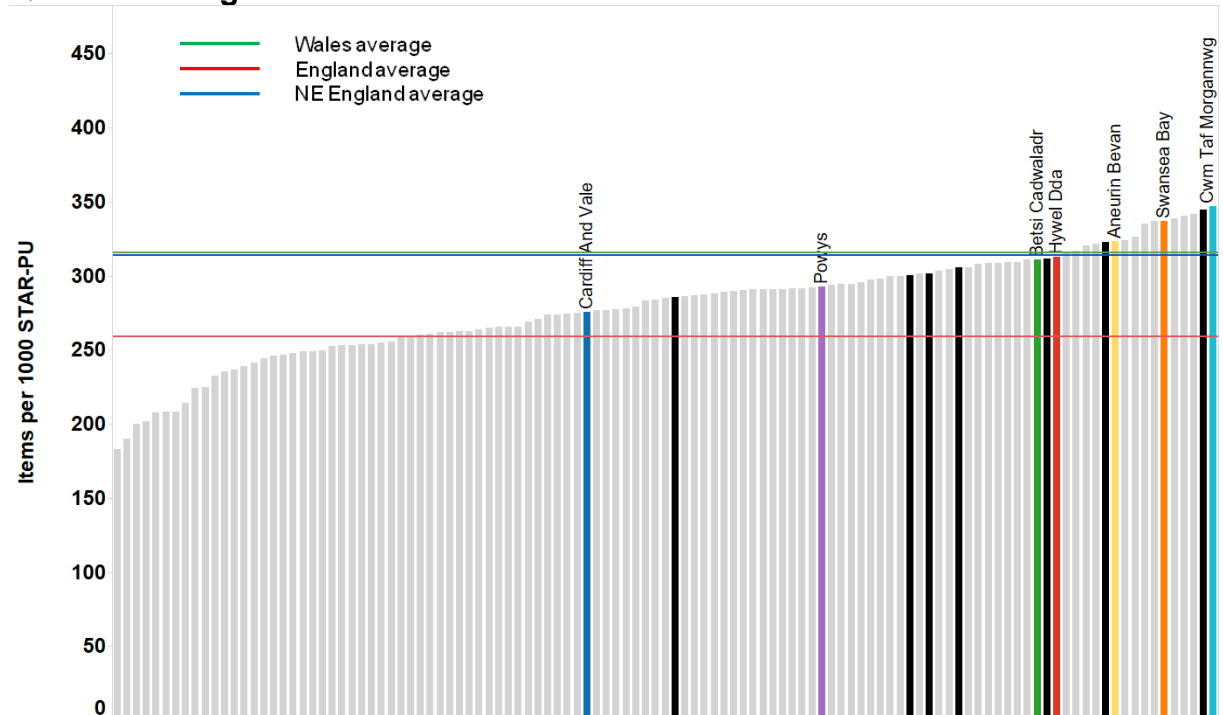


Figure 9. Antibacterial prescribing in Welsh health boards and English CCGs – Quarter ending March 2024



### 1.3.2 4C antimicrobials

**Purpose:** To encourage a reduction in variation and reduce overall prescribing of the 4C antimicrobials (co-amoxiclav, cephalosporins, fluoroquinolones and clindamycin) in primary care.

**Unit of measure:** 4C items per 1,000 patients

**Aim:** To reduce prescribing

The use of simple generic antibiotics and the avoidance of these broad-spectrum antibiotics preserve them from resistance and reduce the risk of *C. difficile*, MRSA and resistant urinary tract infections.

- Across Wales, for the quarter ending March 2024, the number of 4C antimicrobial items per 1,000 patients decreased by 15.0%, compared with the quarter ending March 2023, in line with the aim of the indicator.
- For the quarter ending March 2024, 4C prescribing ranged from 7.65 to 10.8 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 Powys Teaching HB.
- Prescribing of 4C antimicrobials decreased, compared with the equivalent quarter of the previous year, in all health boards.
- The largest percentage decrease was seen in Betsi Cadwaladr UHB and the smallest percentage decrease was seen in Aneurin Bevan UHB, compared with the equivalent quarter of the previous year.

**Table 7. 4C antimicrobial items per 1,000 patients**

	2022–2023 Qtr 4	2023–2024 Qtr 4	% Change
<b>Betsi Cadwaladr</b>	9.95	7.65	-23.1%
<b>Hywel Dda</b>	11.3	9.28	-18.1%
<b>Cwm Taf Morgannwg</b>	10.1	8.42	-16.3%
<b>Powys</b>	12.5	10.8	-13.1%
<b>Swansea Bay</b>	8.70	7.70	-11.4%
<b>Cardiff And Vale</b>	9.81	8.82	-10.1%
<b>Aneurin Bevan</b>	10.6	9.60	-9.38%
<b>Wales</b>	<b>10.2</b>	<b>8.67</b>	<b>-15.0%</b>

Figure 10. Trend in 4C antimicrobial items per 1,000 patients

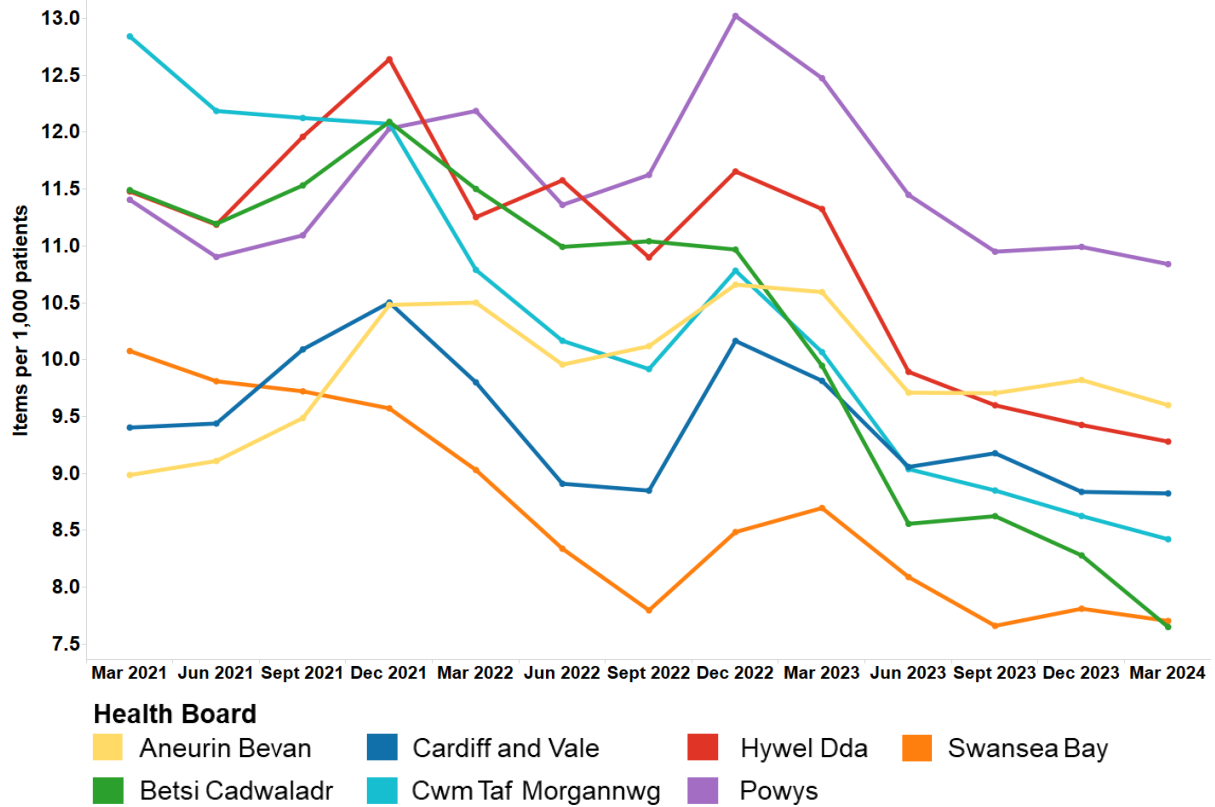
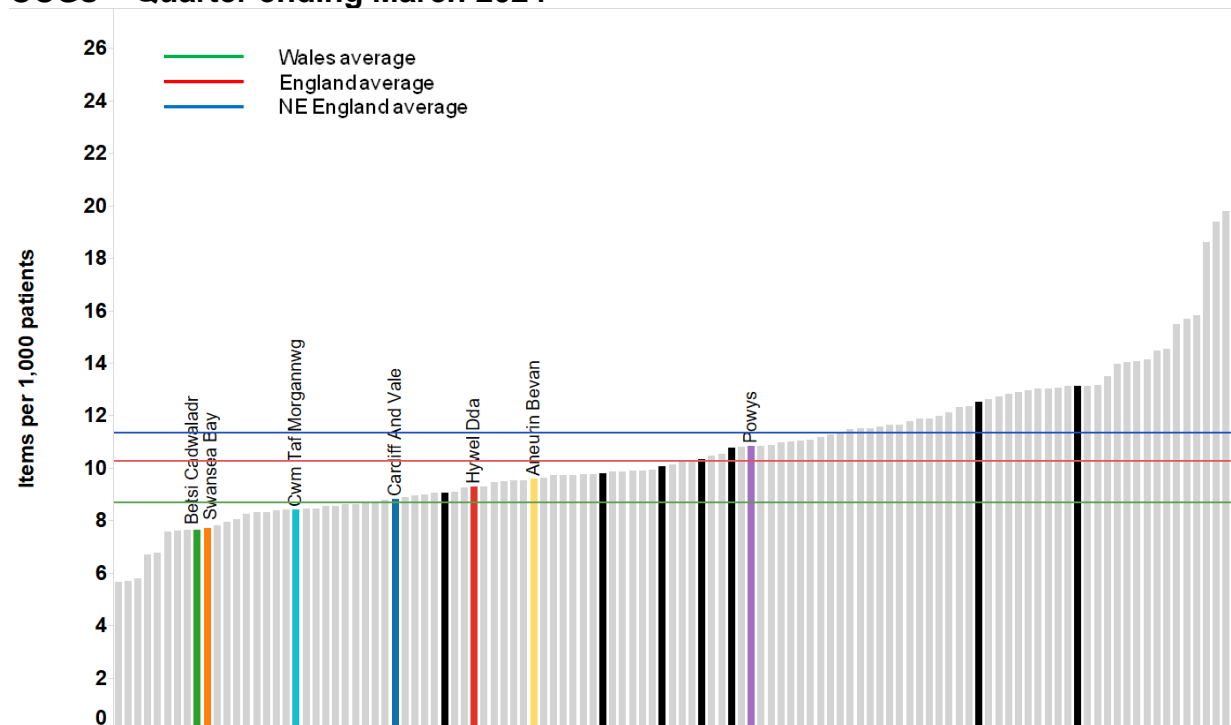


Figure 11. 4C antimicrobial prescribing in Welsh health boards and English CCGs – Quarter ending March 2024



### Good practice spotlight

The Prescribing Support team in **Betsi Cadwaladr UHB** have implemented a number of strategies to reduce 4C prescribing.

- In 2022, 4Cs were removed from MicroGuide where there were clinically appropriate alternative options.
- A local bespoke antimicrobial data usage dashboard developed by the Betsi Cadwaladr UHB data analyst team supports targeted feedback for practices.
- Good engagement between GPs, antimicrobial pharmacists and the wider pharmacy team supports communication, auditing and individualised feedback.
- Collaborative working between the pharmacy team and GPs to review antimicrobials on repeat (in particular for UTIs lasting longer than 6 months), which was supported by urology clinical lead. Cefalexin is not routinely reported on urine cultures unless paediatrics, pregnancy or no alternatives are available.

For further information on this initiative, please contact [awttc@wales.nhs.uk](mailto:awttc@wales.nhs.uk)

## 1.4 Decarbonisation of inhalers

**Purpose:** To encourage an increase in the use of low Global Warming Potential (GWP) inhalers (dry powder inhalers (DPI) and soft mist inhalers (SMI)), to reduce the carbon footprint of inhaler prescribing in Wales.

**Units of measure:** The number of DPIs and SMIs as a percentage of all inhalers prescribed.

**Aim:** To increase the proportion of DPI and SMI prescribing.

Metered dose inhalers (MDIs) are estimated to be responsible for 4% of the NHS's entire carbon footprint. One of the key actions within the NHS Wales Decarbonisation Strategic Delivery Plan is to transition patients on MDIs to inhalers with a lower carbon footprint, but only where patient care will not be impacted. The target is a shift to 80% of inhalers being low GWP alternatives (for example, DPIs or SMIs) by 2025. It is crucial that while efforts are made to reduce the emissions associated with inhalers, patient choice is maintained and that changes are only made where clinically appropriate.

- Across Wales, the proportion of DPI and SMI prescribing (as a percentage of all inhalers prescribed) increased by 15.1% in the quarter ending March 2024 compared with the equivalent quarter of the previous year. This is in line with the aim of the indicator.
- For the quarter ending March 2024, the proportion of DPI and SMI prescribing ranged from 33.2% to 48.7% across the health boards.
- The health board with the highest proportion of DPI and SMI prescribing was Hywel Dda UHB, whilst the lowest proportion of DPI and SMI prescribing was seen in Betsi Cadwaladr UHB.
- DPI and SMI prescribing increased, compared with the equivalent quarter of the previous year, in all health boards.
- Hywel Dda UHB demonstrated the largest percentage increase and Aneurin Bevan UHB demonstrated the smallest percentage increase, compared with the equivalent quarter of the previous year.

**Table 8. DPIs and SMIs as a percentage of all inhalers prescribed**

	2022–2023 Qtr 4	2023–2024 Qtr 4	% Change
Hywel Dda	38.9	48.7	25.3%
Swansea Bay	27.5	33.4	21.2%
Betsi Cadwaladr	28.2	33.2	17.9%
Powys	30.8	35.8	16.2%
Cwm Taf Morgannwg	36.4	40.4	11.0%
Cardiff And Vale	41.1	45.2	10.0%
Aneurin Bevan	36.4	39.9	9.65%
Wales	33.9	39.1	15.1%

Figure 12. Trend in the percentage of DPIs and SMIs as a percentage of all inhalers prescribed

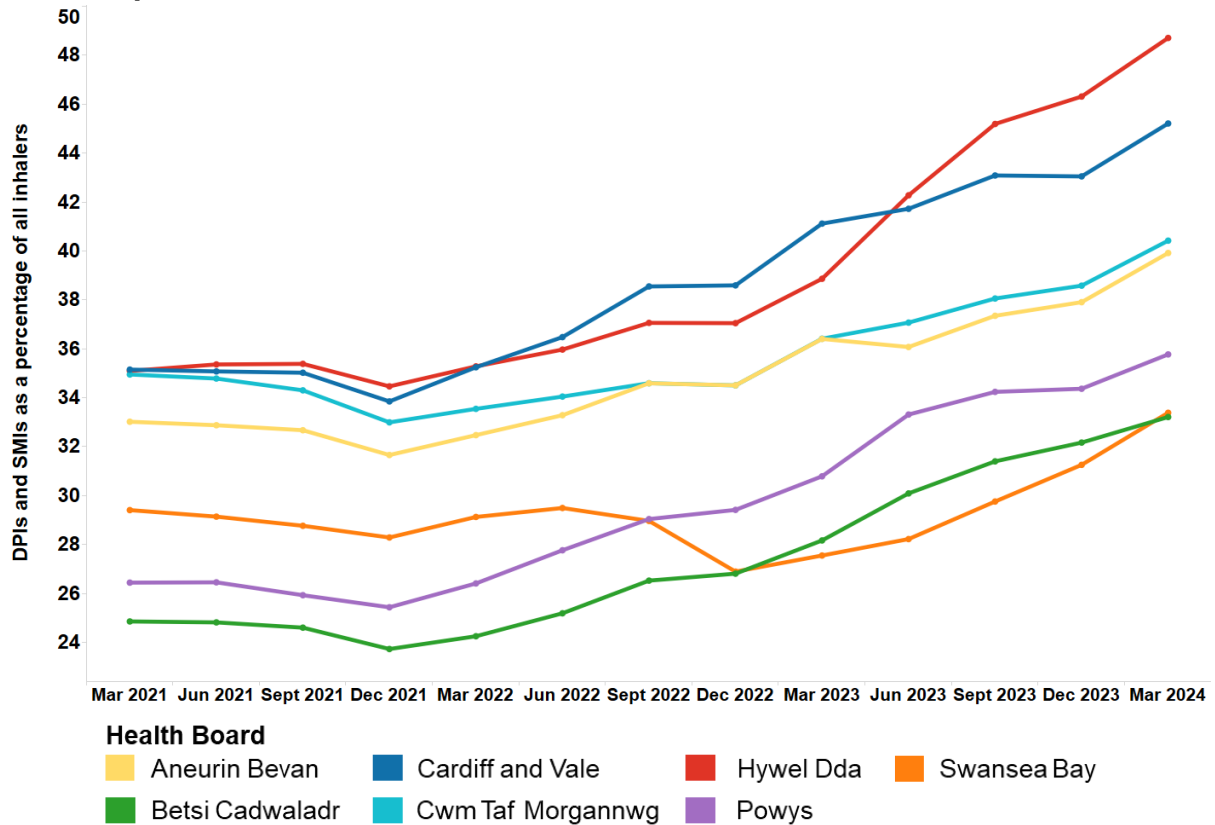
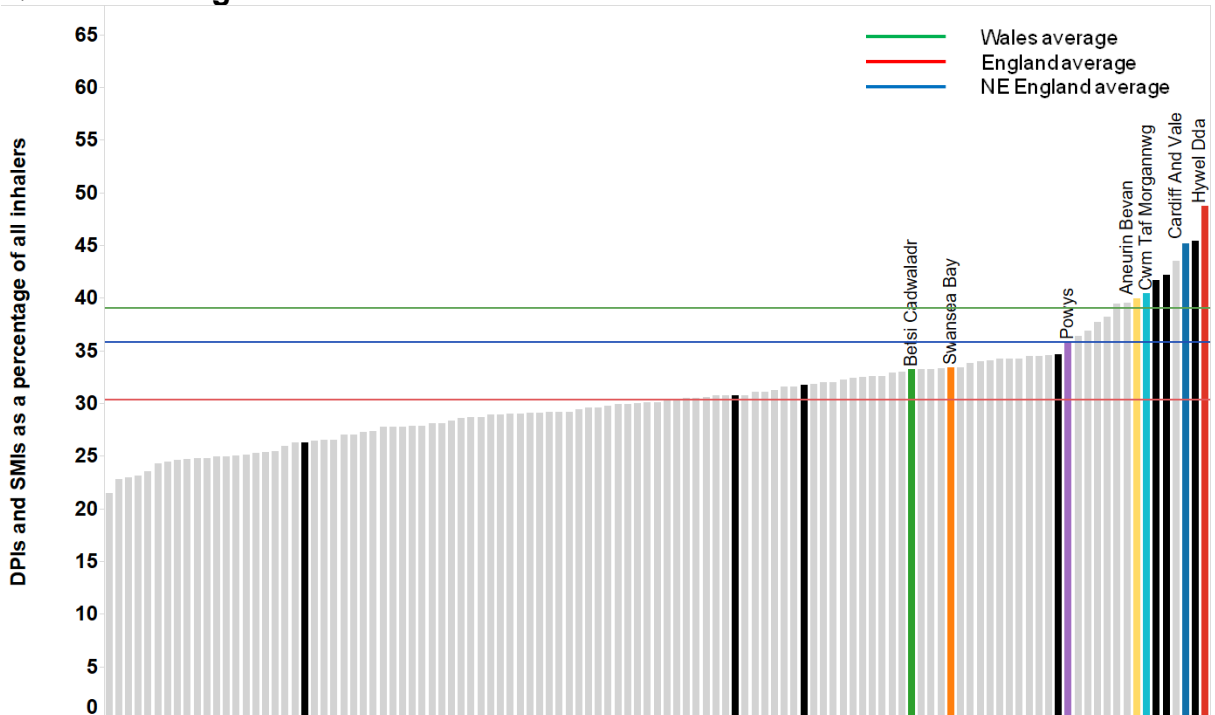


Figure 13. DPI and SMI prescribing in Welsh health boards and English CCGs – Quarter ending March 2024



## 2.0 Supporting domains

### 2.1 Safety

#### 2.1.1 Prescribing Safety Indicators

**Purpose:** To identify patients at high risk of adverse drug reactions (ADRs) and medicines-related harm in primary care.

**Units of measure:**

**Prescribing Safety Indicators related to acute kidney injury (AKI)**

- Number of patients on the CKD register (CKD stage 3–5) who have received a repeat prescription for an NSAID within the last 3 months.
- Number of patients who are not on the CKD register but have an eGFR of < 59 ml/min and have received a repeat prescription for an NSAID within the last 3 months.
- Number of patients with concurrent prescriptions of an NSAID, renin-angiotensin system (RAS) drug and a diuretic.
- Number of patients aged 75 years and over with a current prescription for an ACE Inhibitor or loop diuretic without a check of renal function and electrolytes in the previous 15 months.

**Prescribing Safety Indicators related to bleeds**

- Number of patients with a peptic ulcer who have been prescribed NSAIDs without a PPI.
- Number of patients with concurrent prescriptions of warfarin and an oral NSAID.
- Number of patients with concurrent prescriptions for a DOAC and an oral NSAID.
- Number of patients aged 65 years or over who are prescribed an NSAID plus aspirin and/or clopidogrel but without gastroprotection (PPI or H<sub>2</sub>-receptor antagonist).
- Number of patients with concurrent prescriptions of an oral anticoagulant (warfarin or DOAC) and an SSRI.

**Prescribing Safety Indicators related to cognition**

- Number of patients aged 65 years or over prescribed an antipsychotic.
- Number of patients aged 75 years and over with an Anticholinergic Effect on Cognition (AEC) score of three or more for items on active repeat.

**Prescribing Safety Indicators specific to females**

- Number of female patients with a current prescription of oestrogen-only hormone replacement therapy (HRT) without any hysterectomy READ/SNOMED codes.
- Number of female patients with a past medical history of venous or arterial thrombosis who have been prescribed combined hormonal contraceptives.
- Number of female patients aged 14–55 years with a prescription for sodium valproate.
- Number of female patients aged 14–55 years with a prescription for oral retinoids.

### Prescribing Safety Indicators related to 'other'

- Number of patients under 16 years with a current prescription of aspirin.
- Number of patients with asthma who have been prescribed a beta-blocker.
- Number of patients with concurrent prescriptions of verapamil and a beta-blocker.

**Aim:** To review patients identified as being at high risk of ADRs and reduce inappropriate prescribing.

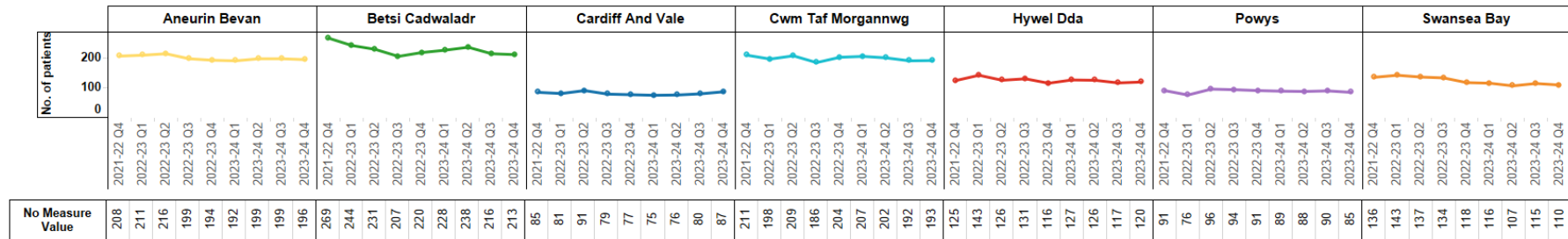
In the UK, it is estimated that around 6.5% of hospital admissions are related to adverse drug reactions (ADRs). ADRs can often be predictable making it possible to identify potential causes and address them before actual patient harm occurs. This NPI provides a process of identifying patients electronically, enabling intervention and helping to avoid patient harm.

No target has been set for this NPI and it is not intended that comparisons are made between health boards. However, data can provide a baseline for future quarters to enable monitoring within health boards.

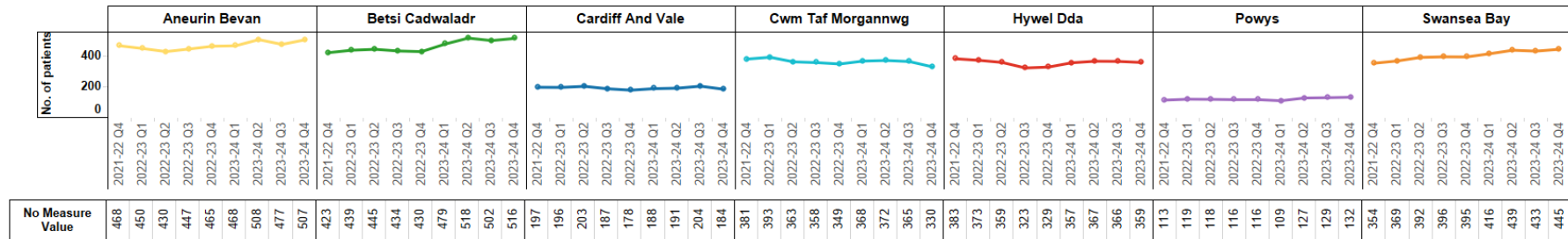
Figure 14. Prescribing Safety Indicators

Prescribing Safety Indicators related to acute kidney injury (AKI)

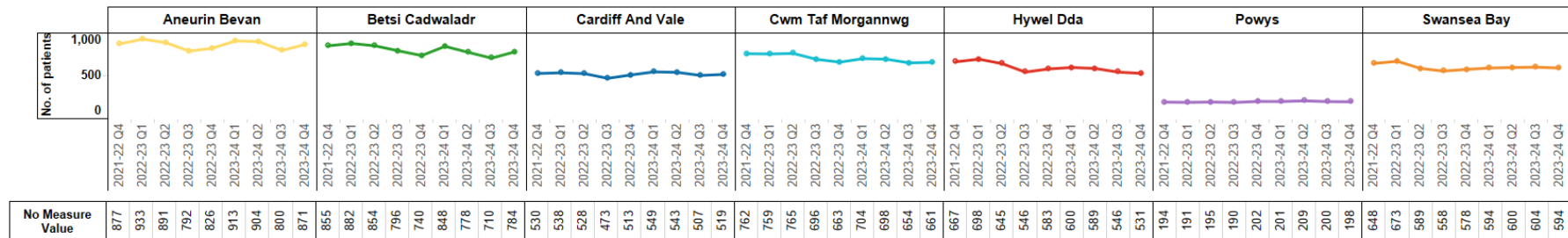
01. Number of patients on the CKD register (CKD stage 3–5) who have received a repeat prescription for an NSAID within the last 3 months.



02. Number of patients who are not on the CKD register but have an eGFR of < 59 ml/min and have received a repeat prescription for an NSAID within the last 3 months.

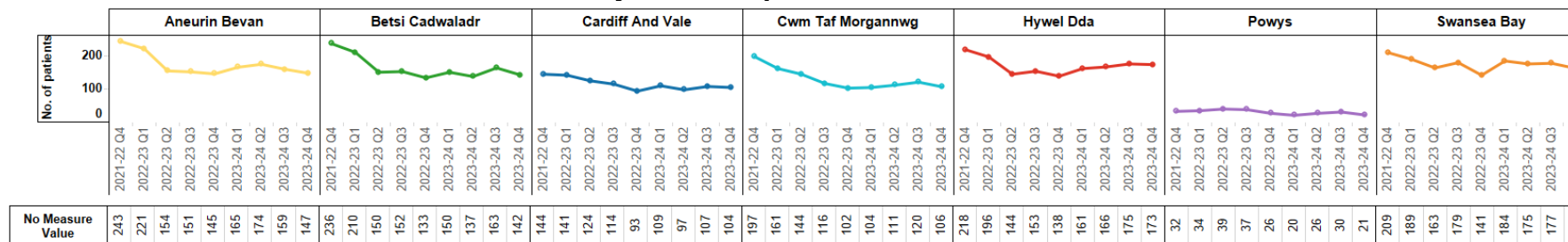


03. Number of patients with concurrent prescriptions of an NSAID, renin-angiotensin system (RAS) drug and a diuretic.



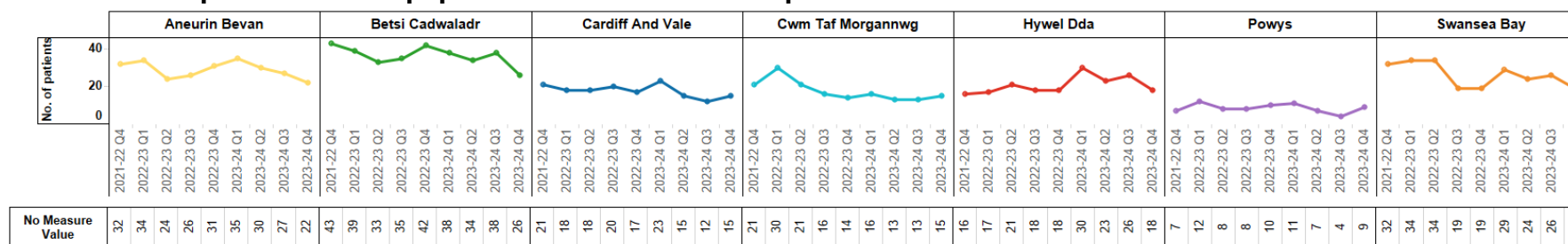
## Welsh Analytical Prescribing Support Unit

### 04. Number of patients aged 75 years and over with a current prescription for an ACE Inhibitor or loop diuretic without a check of renal function and electrolytes in the previous 15 months.

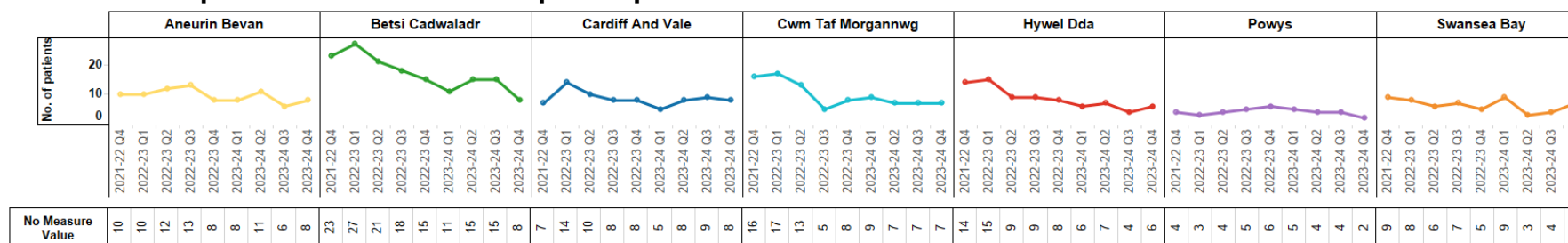


### Prescribing Safety Indicators related to bleeds

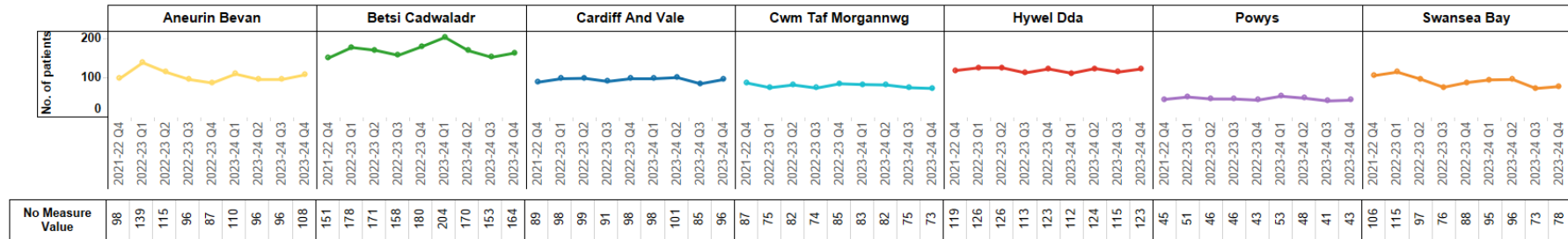
### 05. Number of patients with a peptic ulcer who have been prescribed NSAIDs without a PPI.



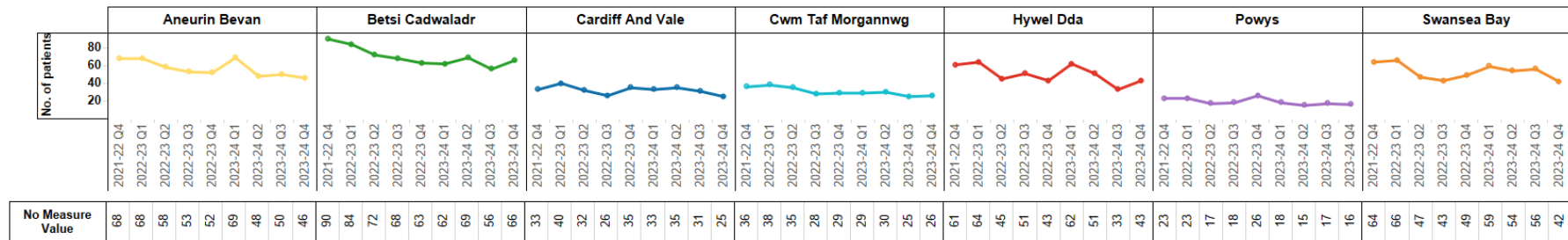
### 06. Number of patients with concurrent prescriptions of warfarin and an oral NSAID.



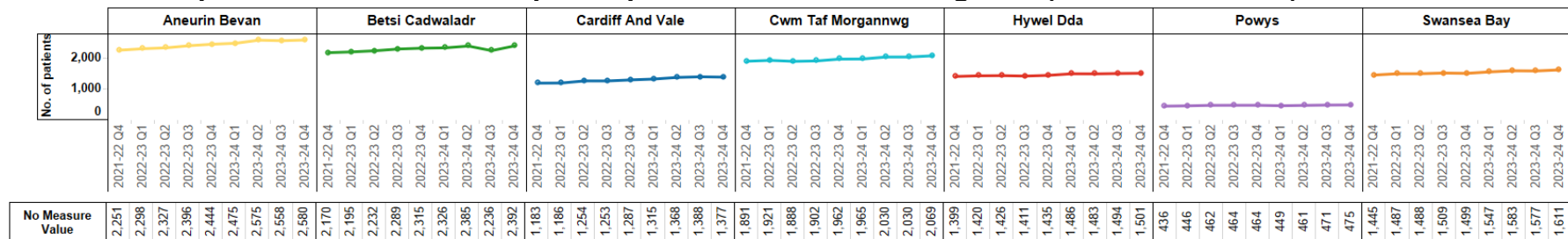
07. Number of patients with concurrent prescriptions for a DOAC and an oral NSAID.



08. Number of patients aged 65 years or over prescribed an NSAID plus aspirin and/or clopidogrel but without gastroprotection (PPI or H<sub>2</sub> receptor antagonist).

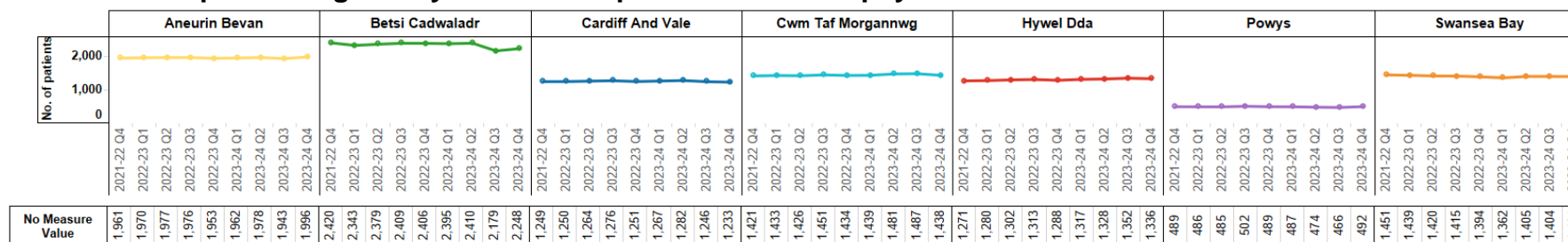


09. Number of patients with concurrent prescriptions of an oral anticoagulant (warfarin or DOAC) and an SSRI.

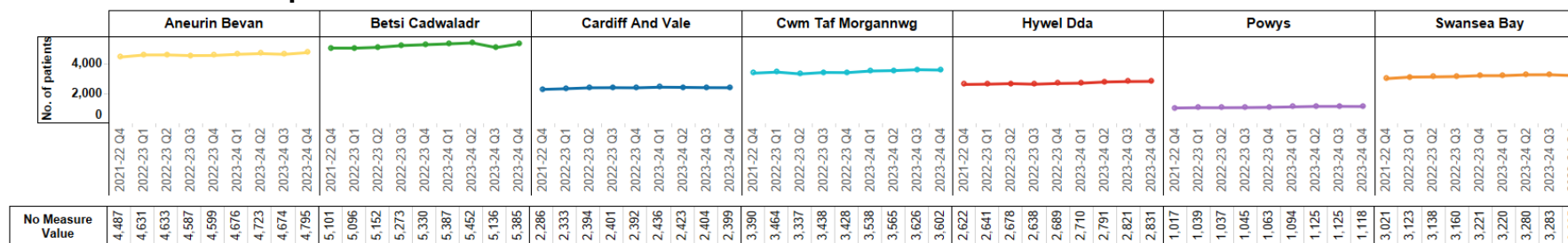


**Prescribing Safety Indicators related to cognition**

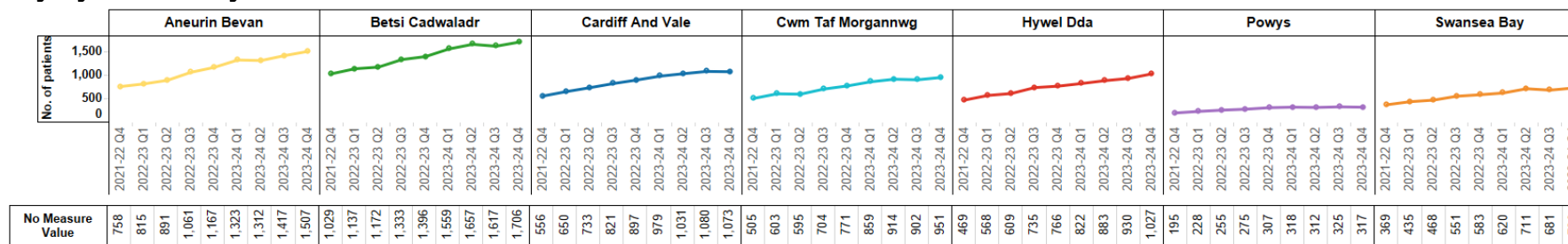
**10. Number of patients aged 65 years or over prescribed an antipsychotic.**



**11. Number of patients aged 75 years and over with an Anticholinergic Effect on Cognition (AEC) score of 3 or more for items on active repeat.**

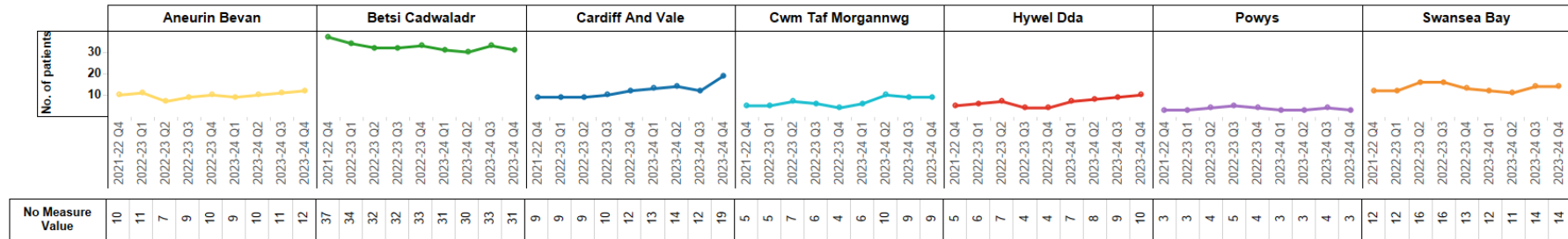


**12. Number of female patients with a current prescription of oestrogen-only hormone replacement therapy without any hysterectomy Read/SNOMED codes.**

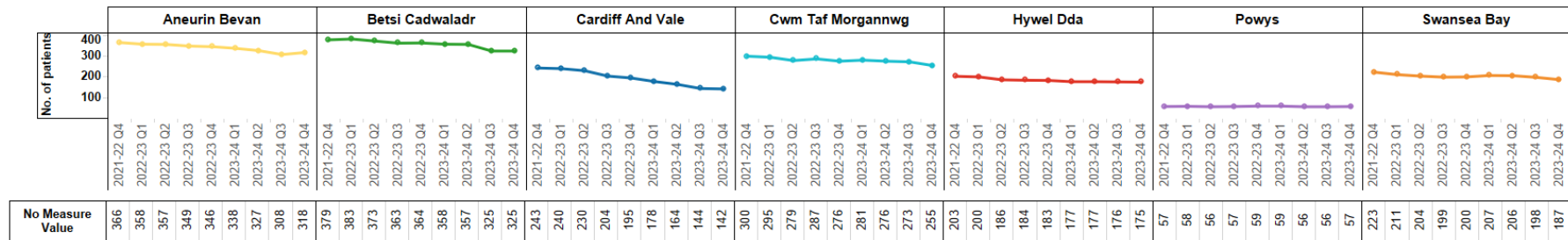


**Prescribing Safety Indicators specific to females**

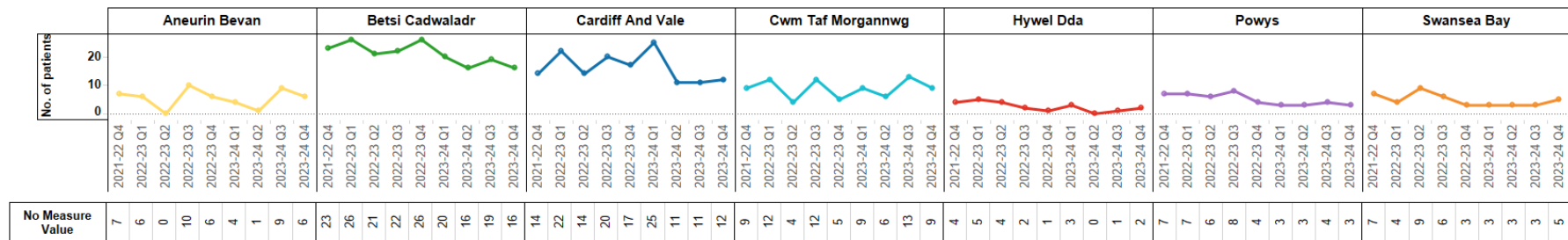
**13. Number of female patients with a past medical history of venous or arterial thrombosis who have been prescribed combined hormonal contraceptives.**



**14. Number of female patients aged 14–55 years with a prescription for sodium valproate.**

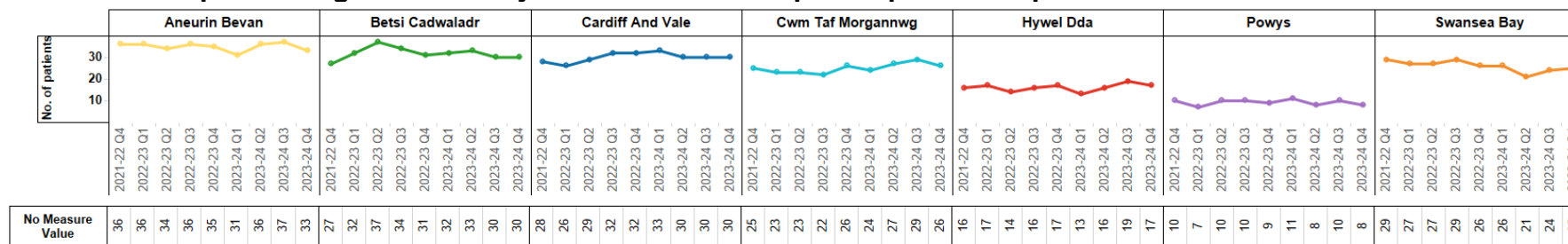


**15. Number of female patients aged 14-55 years with a prescription for oral retinoids.**

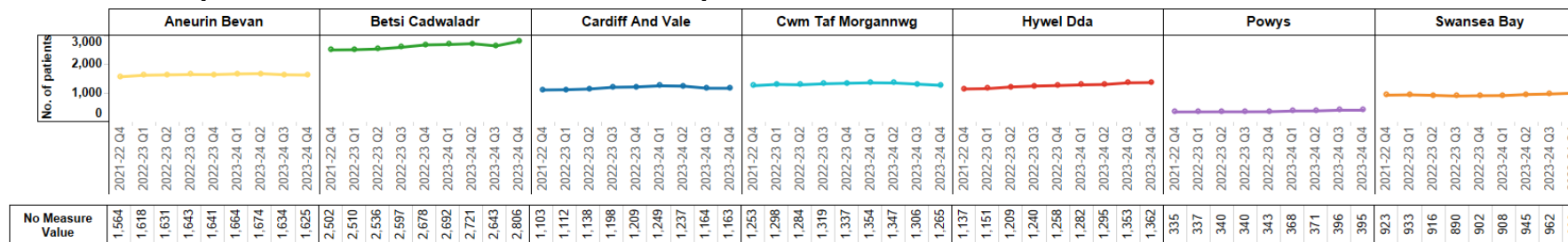


**Prescribing Safety Indicators related to 'other'**

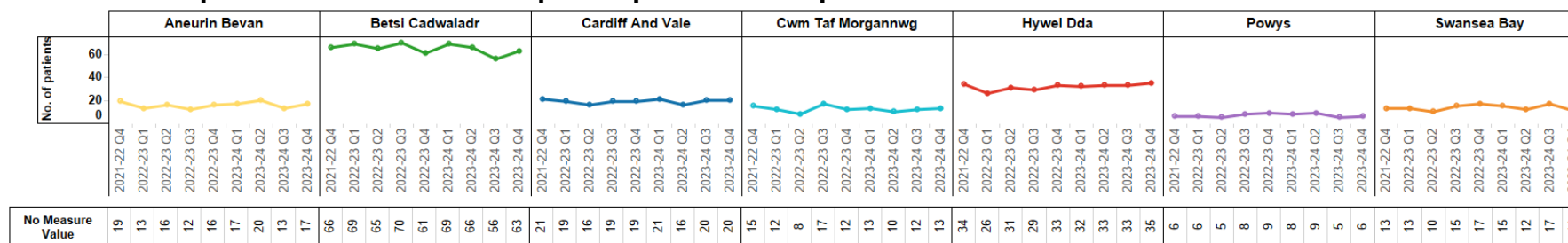
**16. Number of patients aged under 16 years with a current prescription of aspirin.**



**17. Number of patients with asthma who have been prescribed a beta-blocker.**



**18. Number of patients with concurrent prescriptions of verapamil and a beta-blocker.**



## 2.1.2 Hypnotics and anxiolytics

**Purpose:** To encourage a reduction in the inappropriate prescribing of hypnotics and anxiolytics in primary care.

**Unit of measure:** Hypnotic and anxiolytic UDG ADQs per 1,000 STAR-PU.

**Aim:** To reduce prescribing

There has been concern with regard to the high level of hypnotic and anxiolytic prescribing in 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.

- Across Wales, the prescribing of hypnotics and anxiolytics decreased by 8.48% for the quarter ending March 2024 compared with the equivalent quarter of the previous year, in line with the aim of this indicator.
- For the quarter ending March 2024, hypnotic and anxiolytic prescribing ranged from 1,159 to 2,186 ADQs per 1,000 STAR-PU 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 Morgannwg UHB.
- Hypnotic and anxiolytic prescribing decreased, compared with the equivalent quarter of the previous year, in all of the health boards.
- The largest percentage decrease was seen in Swansea Bay UHB, and the smallest percentage decrease was seen in Cardiff and Vale UHB.

**Table 9. Hypnotic and anxiolytic ADQs per 1,000 STAR-PU**

	2022–2023 Qtr 4	2023–2024 Qtr 4	% Change
Swansea Bay	2,245	2,025	-9.79%
Cwm Taf Morgannwg	2,417	2,186	-9.56%
Powys	1,623	1,477	-8.97%
Aneurin Bevan	2,026	1,846	-8.88%
Betsi Cadwaladr	2,233	2,055	-7.97%
Hywel Dda	2,249	2,087	-7.20%
Cardiff And Vale	1,244	1,159	-6.79%
<b>Wales</b>	<b>2,056</b>	<b>1,881</b>	<b>-8.48%</b>

Figure 15. Trend in hypnotic and anxiolytic prescribing ADQs per 1,000 STAR-PU

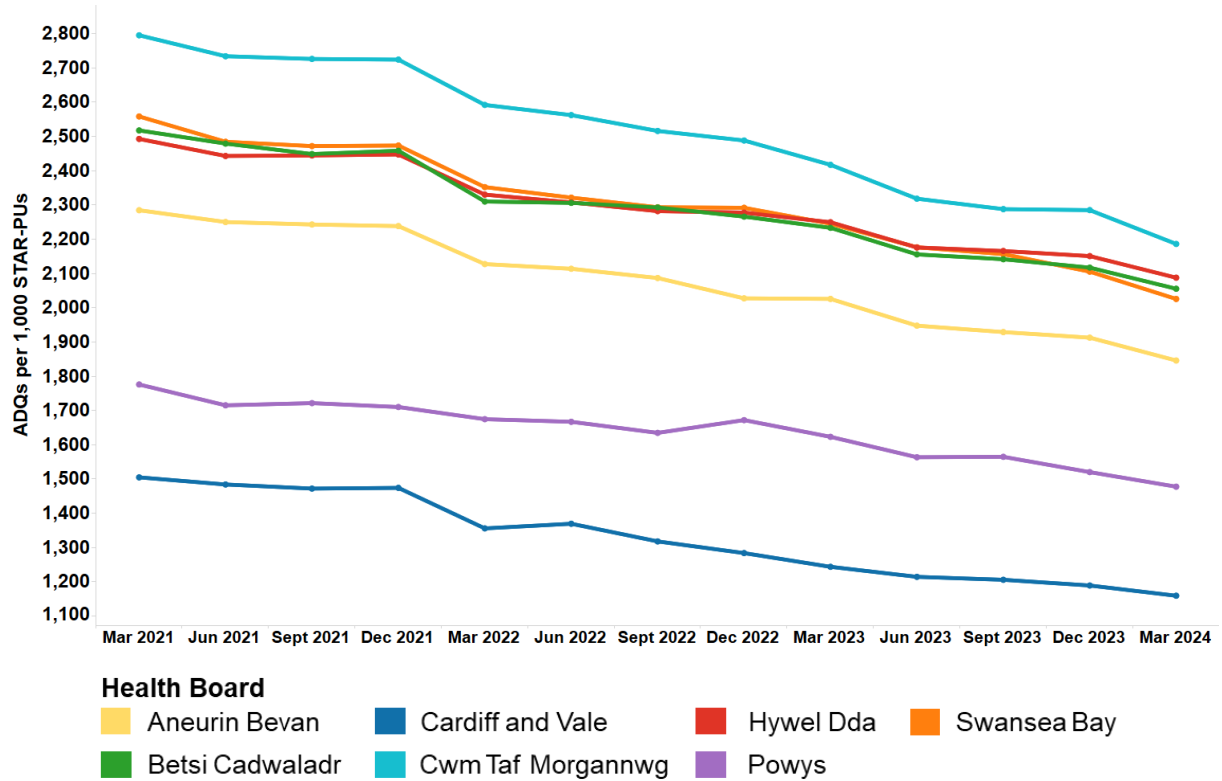
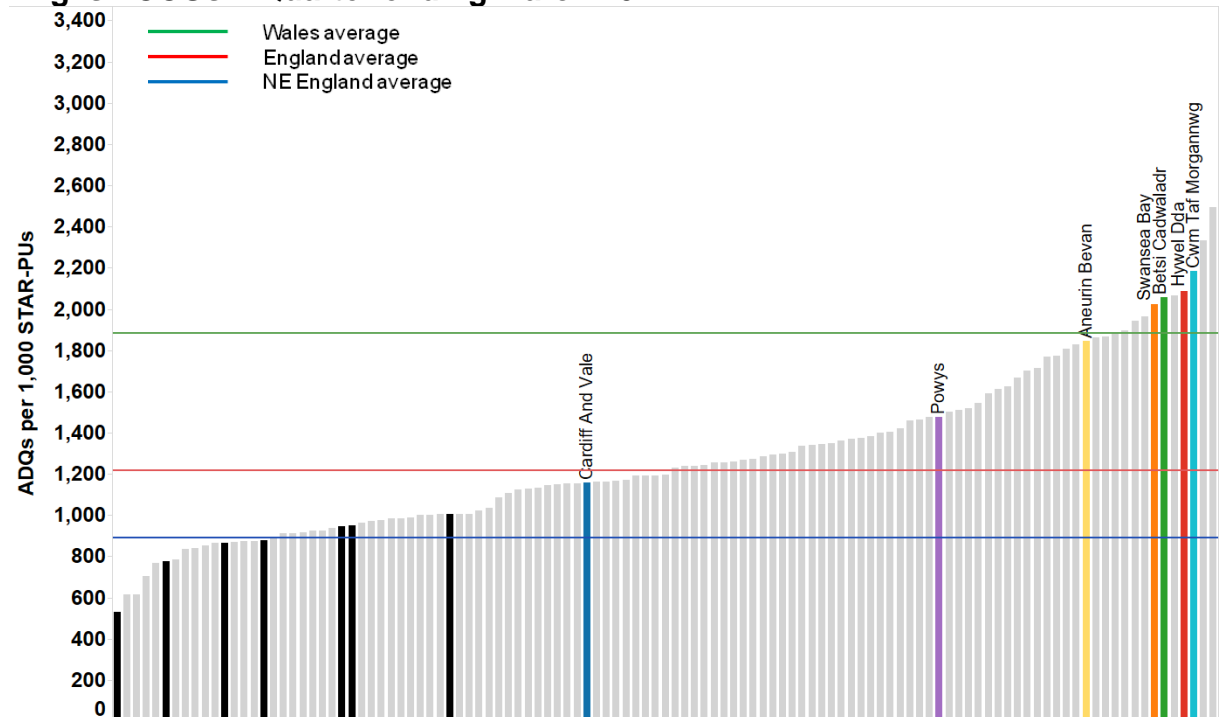


Figure 16. Hypnotic and anxiolytic prescribing in Welsh health boards and English CCGs – Quarter ending March 2024



### 2.1.3 Yellow Cards

**Purpose:** To encourage an increase in the number of Yellow Cards submitted in Wales.

**Unit of measure:** Number of Yellow Cards submitted per GP practice, per hospital, per health board and by members of the public.  
Number of Yellow Cards submitted by community pharmacies, by health board.

**Aim:** To increase reporting

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.

Yellow Card reporting supports the identification and collation of ADRs, which might not have been known about before.

A strong safety culture requires good reporting of adverse events and critical incidents from across all professions and healthcare settings, as well as from patients.

Please note: From quarter 2 2022–2023, Yellow Card data now include reports related to COVID-19 vaccines.

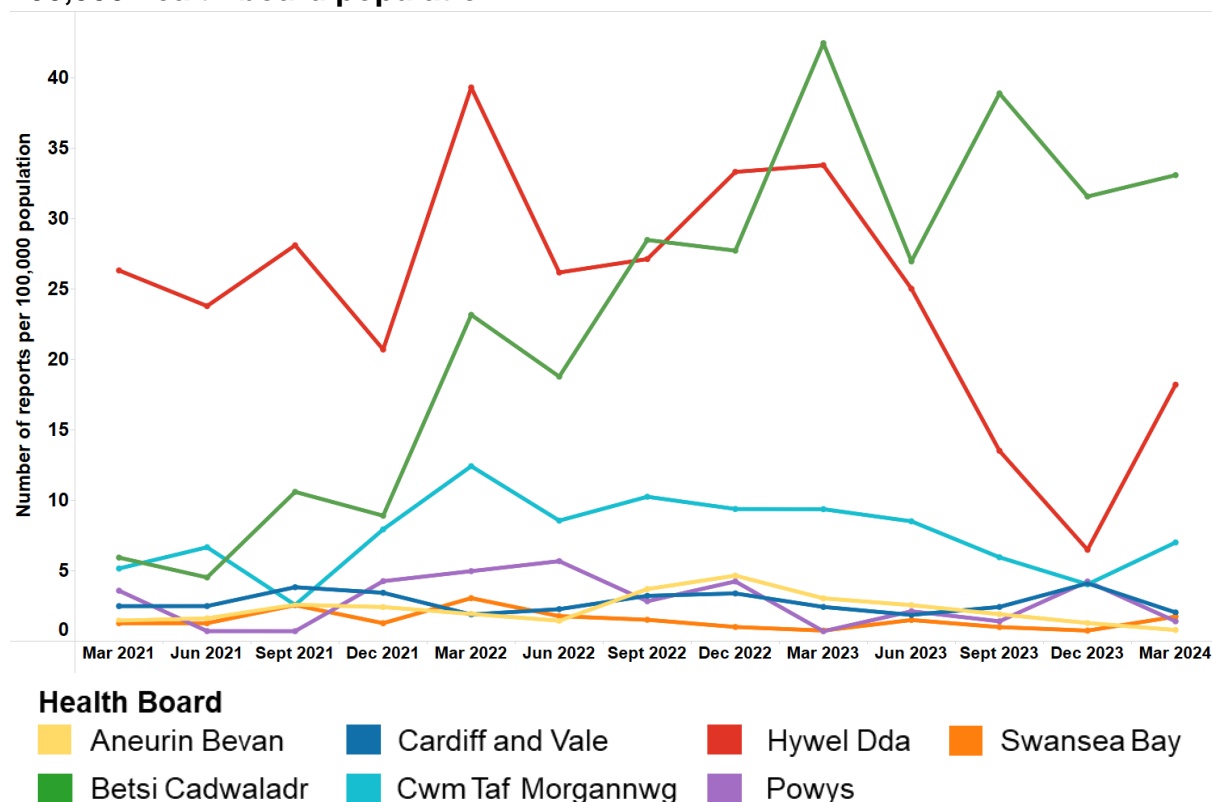
#### GP practices

- The number of Yellow Cards submitted by GP practices across Wales decreased by 29% compared with the equivalent quarter of the previous year, contrary to the aim of the indicator.
- The largest percentage increase in GP practice reporting was seen in Swansea Bay UHB. The largest percentage decrease was seen in Aneurin Bevan UHB.

**Table 10. Number of Yellow Cards submitted by GP practices**

	2022–2023 Qtr 4	2023–2024 Qtr 4	% Change
Swansea Bay	3	7	133%
Powys	1	2	100%
Cardiff And Vale	13	11	-15%
Betsi Cadwaladr	302	236	-22%
Cwm Taf Morgannwg	44	33	-25%
Hywel Dda	135	73	-46%
Aneurin Bevan	19	5	-74%
<b>Wales</b>	<b>517</b>	<b>367</b>	<b>-29%</b>

Figure 17. Trend in number of Yellow Cards submitted by GP practices per 100,000 health board population



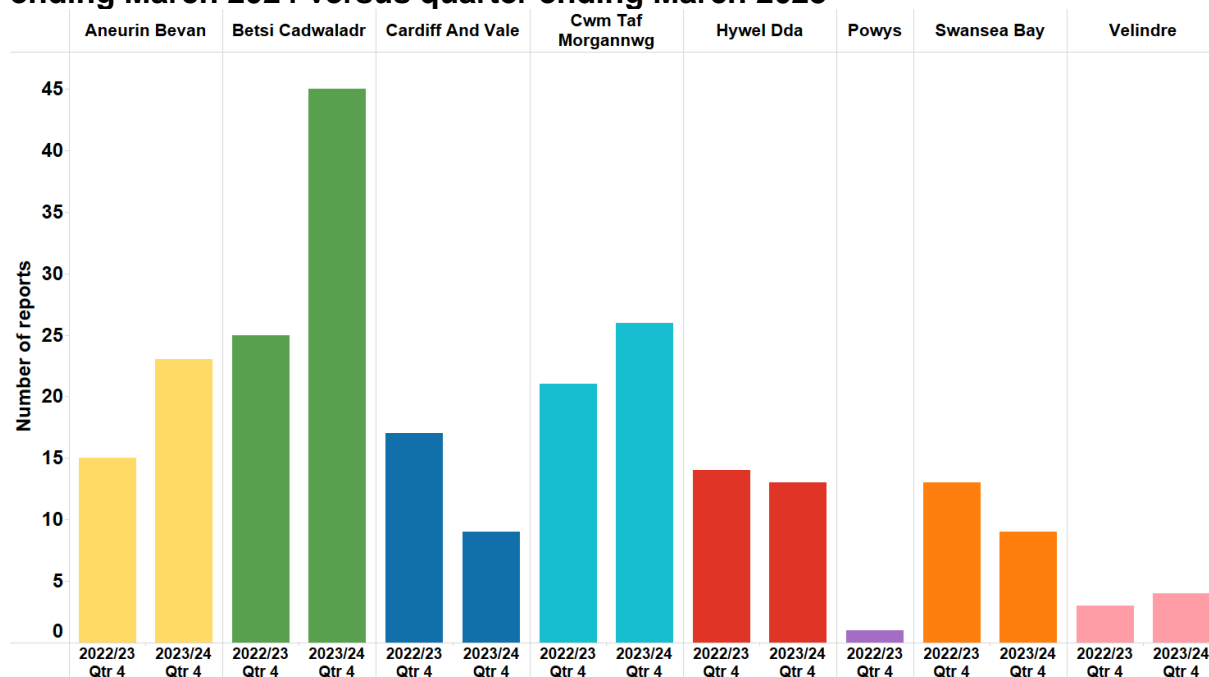
### Secondary care

- The number of Yellow Cards submitted by secondary care increased by 18% compared with the equivalent quarter of the previous year.
- The largest percentage increase in secondary care reporting was seen in Betsi Cadwaladr UHB. The largest percentage decrease was seen in Powys Teaching HB.

Table 11. Number of Yellow Cards submitted by secondary care

	2022–2023 Qtr 4	2023–2024 Qtr 4	% Change
<b>Betsi Cadwaladr</b>	25	45	80%
<b>Aneurin Bevan</b>	15	23	53%
<b>Velindre</b>	3	4	33%
<b>Cwm Taf Morgannwg</b>	21	26	24%
<b>Hywel Dda</b>	14	13	-7%
<b>Swansea Bay</b>	13	9	-31%
<b>Cardiff And Vale</b>	17	9	-47%
<b>Powys</b>	1	0	-100%
<b>Wales</b>	<b>109</b>	<b>129</b>	<b>18%</b>

Figure 18. Number of Yellow Cards submitted by secondary care – Quarter ending March 2024 versus quarter ending March 2023



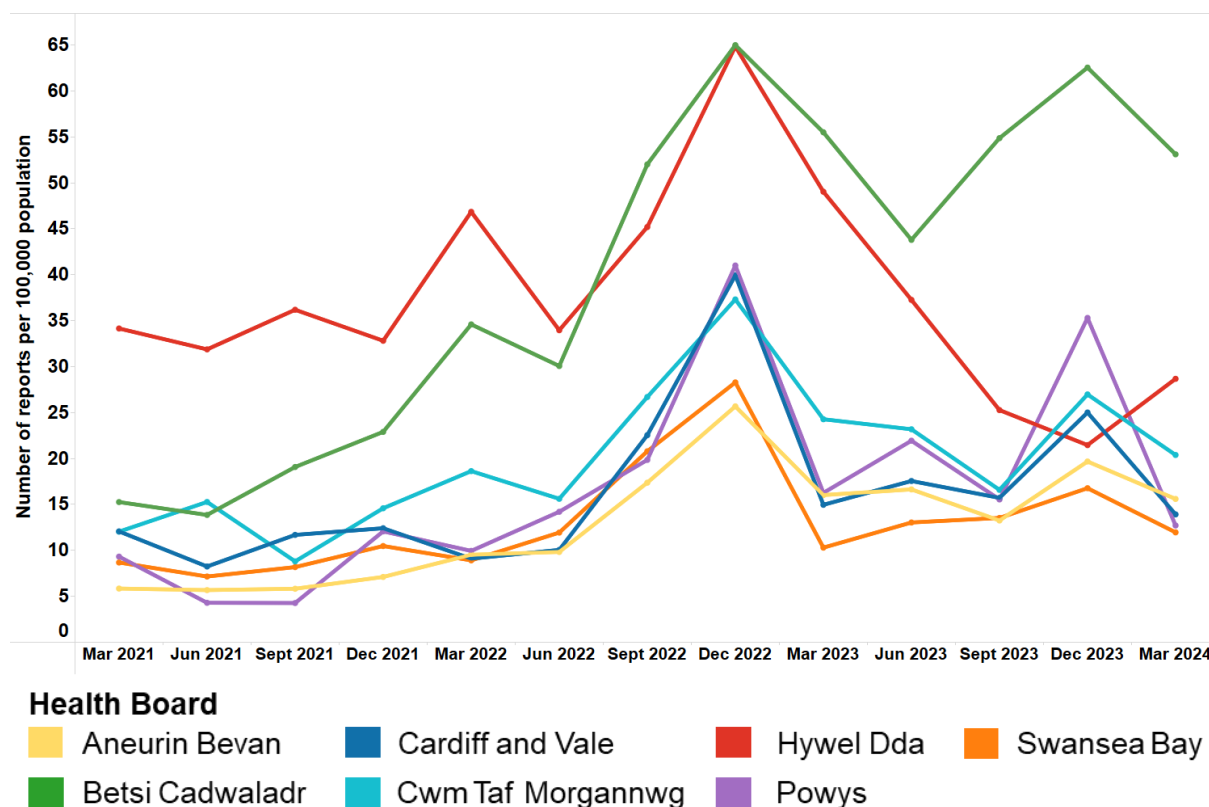
#### Health boards/NHS Trust

- The number of Yellow Cards submitted by health boards decreased by 13% compared with the equivalent quarter of the previous year.
- The largest percentage increase was seen in Velindre NHS Trust.
- The largest percentage decrease was seen in Hywel Dda UHB.

Table 12. Number of Yellow Cards submitted by health board/NHS Trust

	2022–2023 Qtr 4	2023–2024 Qtr 4	% Change
Velindre	3	4	33%
Swansea Bay	41	48	17%
Aneurin Bevan	100	98	-2%
Betsi Cadwaladr	395	379	-4%
Cardiff And Vale	80	75	-6%
Cwm Taf Morgannwg	114	96	-16%
Powys	23	18	-22%
Hywel Dda	196	115	-41%
<b>Wales</b>	<b>952</b>	<b>833</b>	<b>-13%</b>

Figure 19. Trend in number of Yellow Cards submitted by health boards per 100,000 health board population



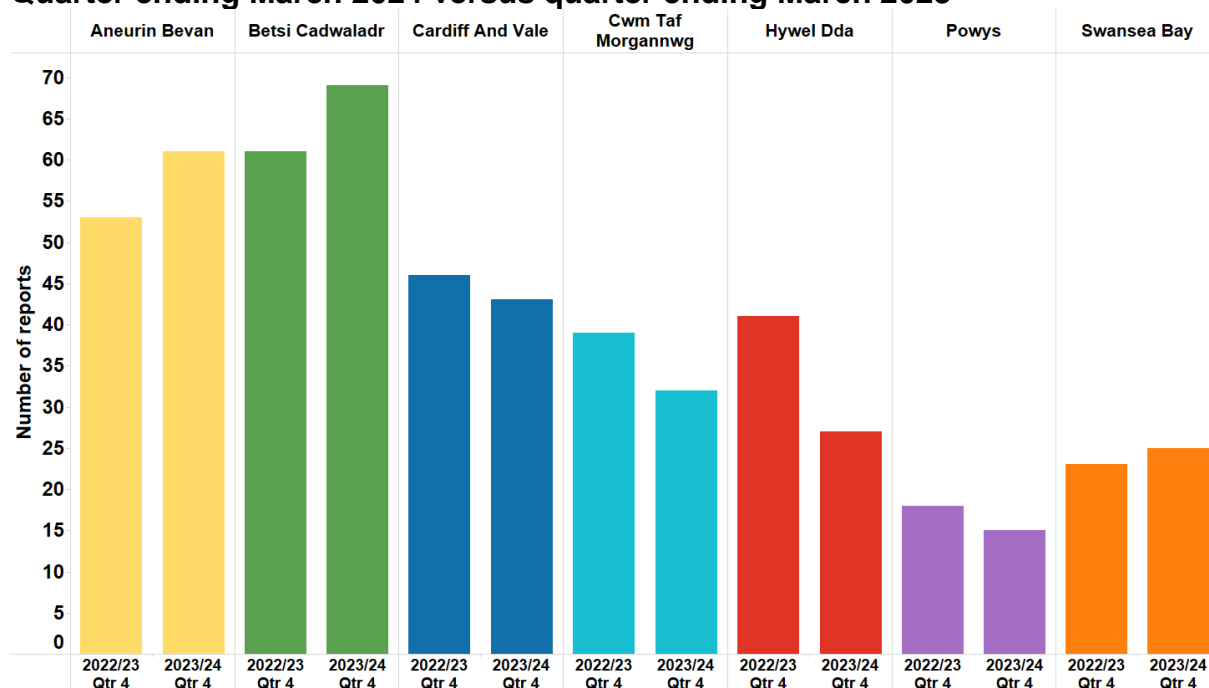
**Members of the public**

- The number of Yellow Cards submitted by members of the public across Wales decreased by 3% compared with the equivalent quarter of the previous year.
- The largest percentage increase in member of the public reporting was seen in Aneurin Bevan UHB. The largest percentage decrease was seen in Hywel Dda UHB.

Table 13. Number of Yellow Cards submitted by members of the public

	2022–2023 Qtr 4	2023–2024 Qtr 4	% Change
Aneurin Bevan	53	61	15%
Betsi Cadwaladr	61	69	13%
Swansea Bay	23	25	9%
Cardiff And Vale	46	43	-7%
Powys	18	15	-17%
Cwm Taf Morgannwg	39	32	-18%
Hywel Dda	41	27	-34%
<b>Wales</b>	<b>281</b>	<b>272</b>	<b>-3%</b>

Figure 20. Number of Yellow Cards submitted by members of the public – Quarter ending March 2024 versus quarter ending March 2023



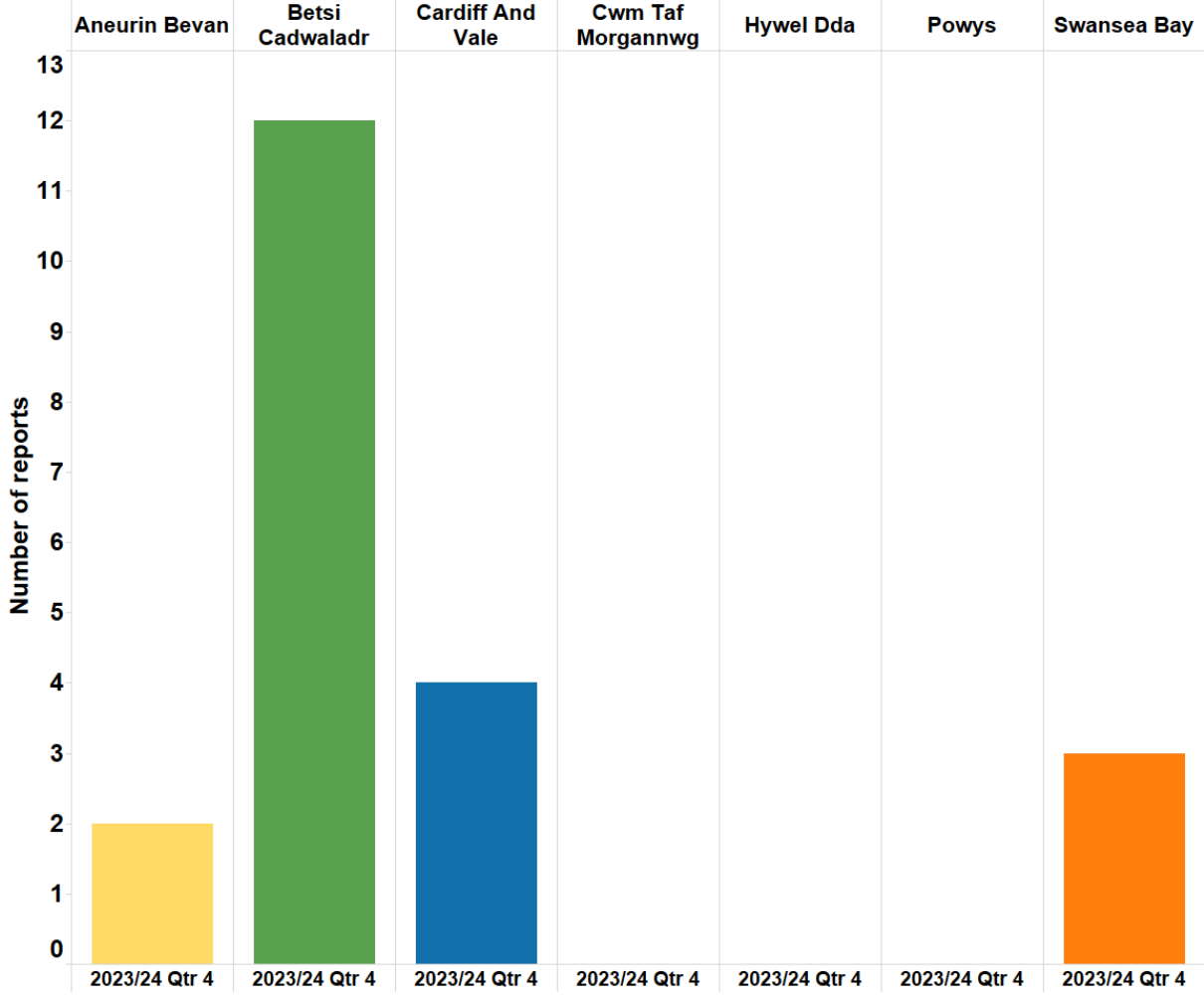
### Community pharmacy

- Across Wales, a total of 21 Yellow Card reports were submitted by community pharmacies during the quarter ending March 2024.
- The number of Yellow Card reports submitted by community pharmacies in health boards across Wales ranged from 0 to 12.

Table 14. Number of Yellow Cards submitted by community pharmacies

	2023–2024 Qtr 4
<b>Betsi Cadwaladr</b>	12
<b>Cardiff And Vale</b>	4
<b>Swansea Bay</b>	3
<b>Aneurin Bevan</b>	2
<b>Cwm Taf Morgannwg</b>	0
<b>Hywel Dda</b>	0
<b>Powys</b>	0
<b>Wales</b>	<b>21</b>

Figure 21. Number of Yellow Cards submitted by community pharmacy – Quarter ending March 2024



## 2.2 Efficiency indicators

### 2.2.1 Best value biological medicines

**Purpose:** To ensure prescribing of best value biological medicines supports cost-efficient prescribing in primary and secondary care in Wales.

**Unit of measure:** Quantity of best value biological medicines prescribed as a percentage of total 'biosimilar' plus 'reference' product.

**Aim:** Increase the appropriate use of cost-efficient biological medicines, including biosimilar medicines.

Biological medicines are those that are made or derived from a biological source and, as such, are complex, with inherent variability in their structure. A biosimilar medicine is a biological medicine that is developed to be highly similar and clinically equivalent to an existing biological medicine (i.e. 'reference' medicine or 'originator' medicine). Continuing development of biosimilar medicines offers an increased choice for patients and clinicians.

There is an increasing range of biosimilar products becoming available and therefore new products will be monitored and reported on in this section of the NPI report as they begin to be used within NHS Wales.

MHRA guidelines state that biological medicines, including biosimilar medicines, must be prescribed by brand name to prevent automatic substitution taking place without clinician and patient involvement, and to support ongoing pharmacovigilance of the individual products.

The data reported in this section focuses primarily on the biological medicines with the potential to bring the greatest additional value to NHS Wales; i.e. adalimumab and ranibizumab.

In the cases of infliximab, etanercept, rituximab and trastuzumab only data for the latest quarter is reported. This is because the proportional use of the best value biologic options for each has increased to the point that continued reporting of year-on-year percentage changes has become less valuable and potentially misleading.

Please note: Where relevant, data for the primary care usage of the biological medicines have been included within the overall figures.

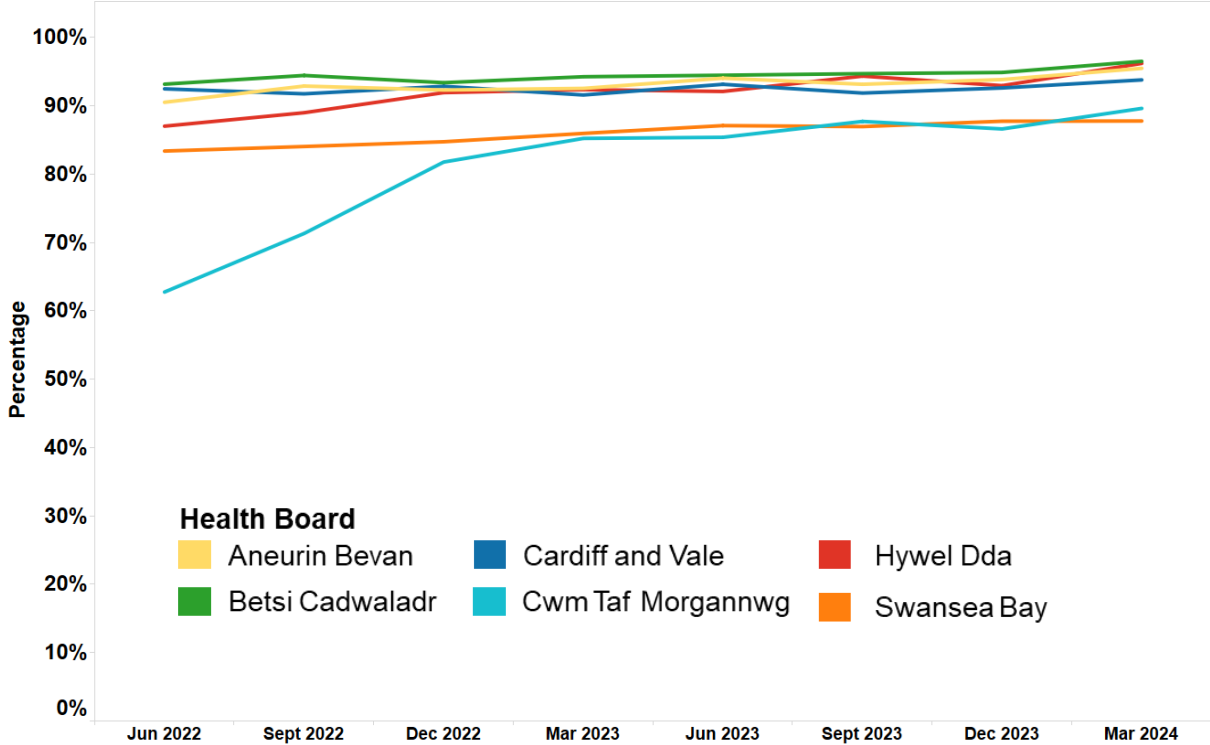
2.2.1.1 Adalimumab

- Across Wales, adalimumab biosimilar prescribing increased by 3.13%, for the quarter ending March 2024 compared with the equivalent quarter of the previous year. This is in line with the aim of this indicator.
- For the quarter ending March 2024, adalimumab biosimilar prescribing ranged from 87.8% to 96.5% across the health boards.
- The health board with the highest percentage was Betsi Cadwaladr UHB whilst the lowest percentage was seen in Swansea Bay UHB.
- Adalimumab biosimilar prescribing increased, compared with the equivalent quarter of the previous year, in all of the health boards.
- Cwm Taf Morgannwg UHB demonstrated the largest percentage increase and Swansea Bay UHB demonstrated the smallest percentage increase, compared with the equivalent quarter of the previous year.

Table 15. Adalimumab biosimilar as a percentage of reference and biosimilar prescribed

	2022-2023 Qtr 4	2023-2024 Qtr 4	% Change
Cwm Taf Morgannwg	85.2%	89.6%	5.15%
Hywel Dda	92.4%	96.2%	4.15%
Aneurin Bevan	92.6%	95.5%	3.17%
Cardiff And Vale	91.6%	93.8%	2.41%
Betsi Cadwaladr	94.3%	96.5%	2.39%
Swansea Bay	86.0%	87.8%	2.11%
Wales	90.4%	93.2%	3.13%

Figure 22. Trend in adalimumab biosimilar (Amgevita®, Hulio®, Hyrimoz®, Imraldi®) prescribing as a percentage of total adalimumab prescribed



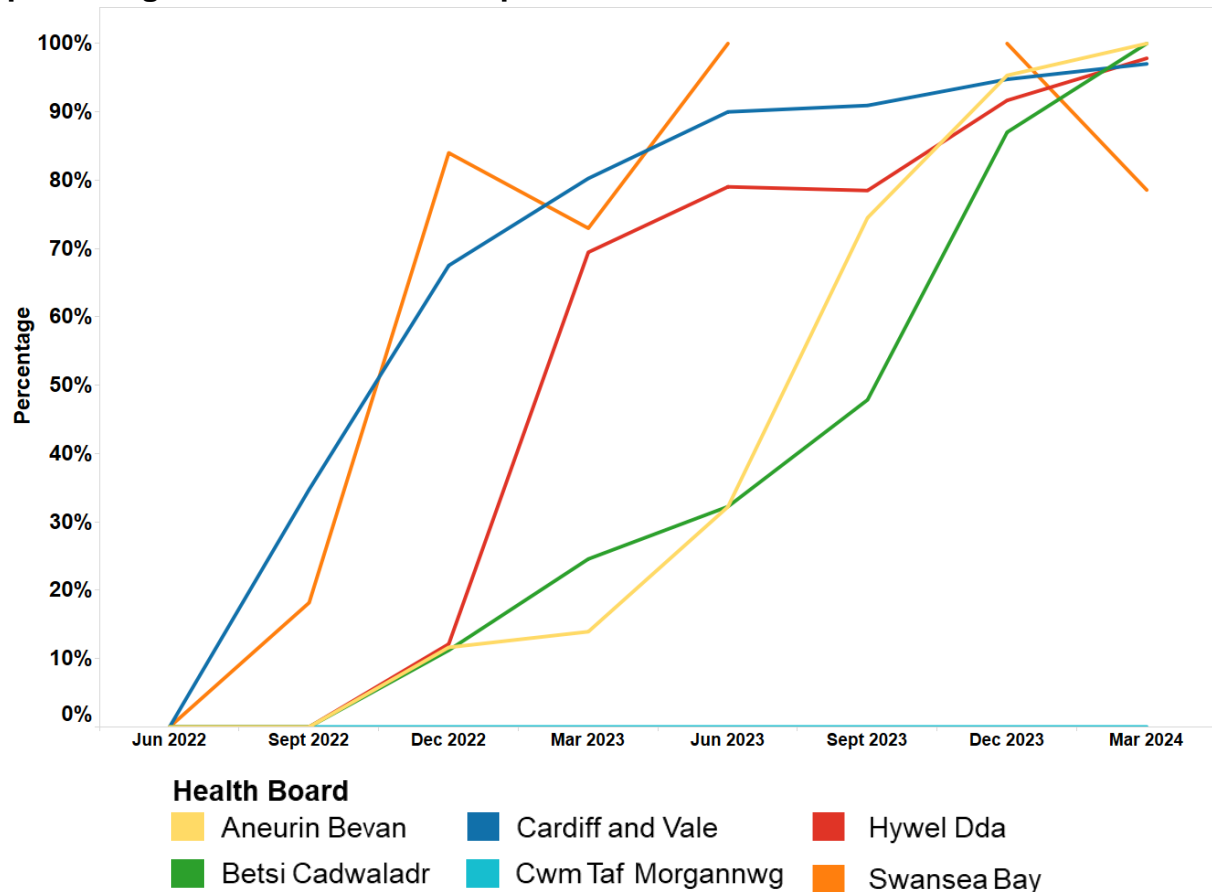
### 2.2.1.2 Ranibizumab

- Prior to the quarter ending September 2022, there was no ranibizumab biosimilar usage.
- For the quarter ending March 2024, ranibizumab biosimilar prescribing ranged from 0.0% to 100% across the health boards.
- The health boards with the highest percentage of ranibizumab biosimilar usage were Aneurin Bevan UHB and Betsi Cadwaladr UHB.
- Cwm Taf Morgannwg UHB demonstrated no usage of ranibizumab biosimilar.

**Table 16. Ranibizumab biosimilar as a percentage of reference and biosimilar prescribed**

	2022-2023 Qtr 4	2023-2024 Qtr 4	% Change
Aneurin Bevan	13.9%	100%	617%
Betsi Cadwaladr	24.6%	100%	307%
Cardiff And Vale	80.3%	97.0%	20.9%
Cwm Taf Morgannwg	0.00	0.00%	0.00%
Hywel Dda	69.5%	97.8%	40.9%
Swansea Bay	73.0%	78.6%	7.67%
<b>Grand Total</b>	<b>40.5%</b>	<b>98.9%</b>	<b>144%</b>

**Figure 23. Trend in ranibizumab biosimilar (Ongavia®) prescribing as a percentage of total ranibizumab prescribed**



### 2.2.1.3 Infliximab, etanercept, rituximab and trastuzumab

- In the cases of infliximab, etanercept, rituximab and trastuzumab, the proportional use of the best value biologic options for each has increased to the point that continued reporting of year-on-year percentage changes has become less valuable and potentially misleading. The data displayed here summarises the latest quarter's performance only.
- For more in-depth analysis and the option of carrying out year-on-year comparisons, all current and historical data can be analysed as part of the 'Biosimilars efficiencies' dashboard on the Server for Prescribing Information Reporting and Analysis (SPIRA): [spira.uk/info](http://spira.uk/info).

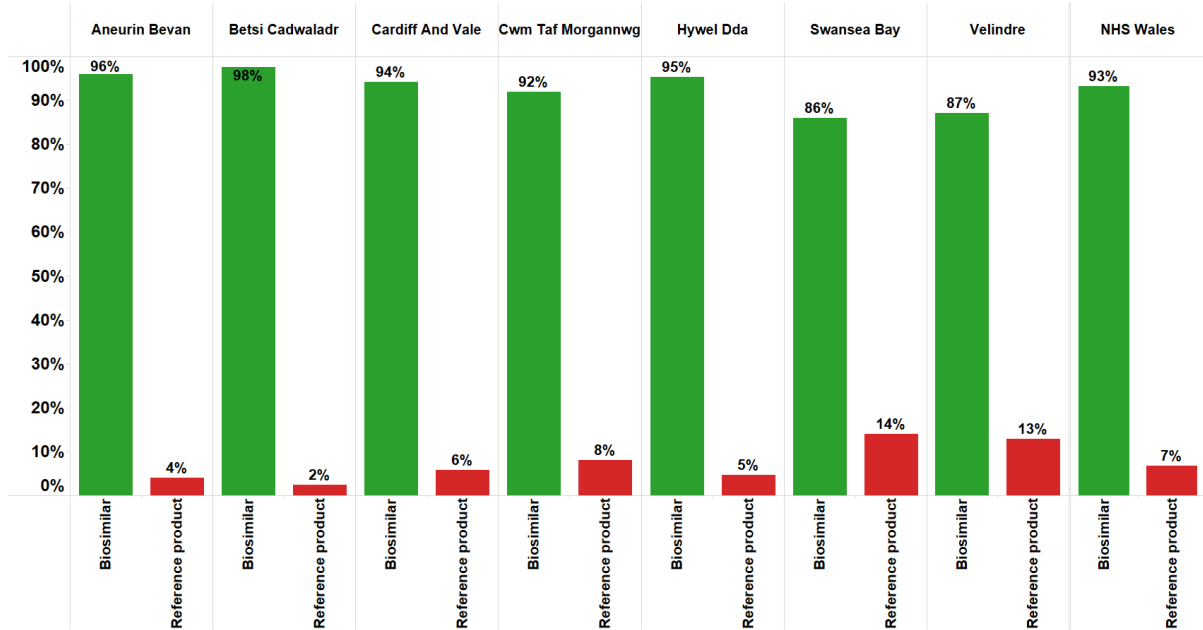
**Table 17. Infliximab, etanercept, rituximab and trastuzumab biosimilar as a percentage of reference and biosimilar prescribed**

	2023-2024 Qtr 4			
	Infliximab	Etanercept	Rituximab	Trastuzumab
Aneurin Bevan	98.7%	92.5%	99.8%	N/A
Betsi Cadwaladr	99.9%	96.5%	100%	100%
Cardiff And Vale	98.9%	90.2%	98.9%	N/A
Cwm Taf Morgannwg	99.1%	92.4%	98.6%	100%
Hywel Dda	99.4%	90.6%	98.9%	100%
Swansea Bay	95.7%	78.1%	99.6%	100%
Velindre	N/A	N/A	85.3%	100%
<b>Wales</b>	<b>98.4%</b>	<b>88.8%</b>	<b>94.4%</b>	<b>100%</b>

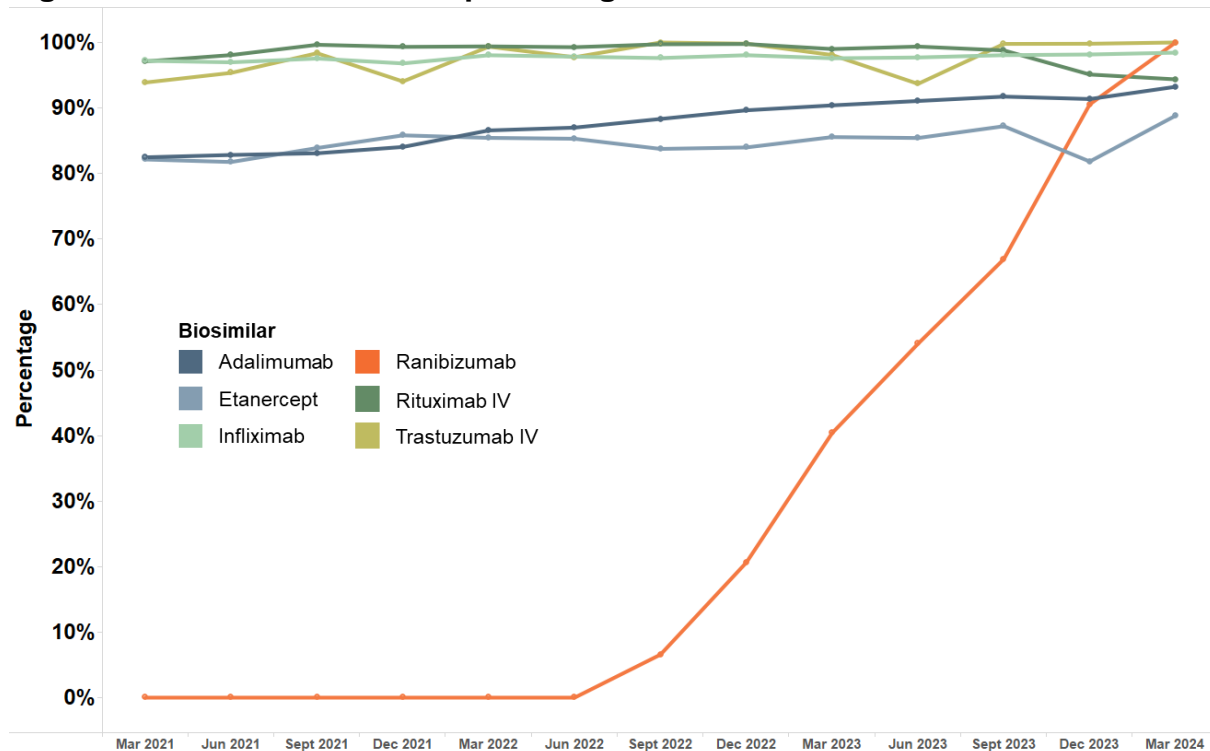
### 2.2.1.4 Total biosimilar usage

Within Wales there was an increase in the use of the reported biosimilar medicines (specifically adalimumab, etanercept, infliximab, ranibizumab, rituximab and trastuzumab) combined as a percentage of reported ‘reference’ biological medicines plus biosimilars combined, from 87% to 93% for the quarter ending March 2024 compared with the equivalent quarter of the previous year.

**Figure 24. Biological reference and biosimilar as a proportion of total reference plus biosimilar prescribed – Quarter ending March 2024**



**Figure 25. Trend in biosimilar percentage in Wales**



### 2.2.2 Low value for prescribing

**Purpose:** To drive a reduction in the prescribing of items considered as not suitable for routine prescribing in Wales.

**Unit of measure:** Low value for prescribing UDG spend per 1,000 patients.

**Aim:** To reduce prescribing of items considered as not suitable for prescribing in Wales.

The aim of the *Low Value for Prescribing in NHS Wales* initiative is to minimise the prescribing of items that offer a limited clinical benefit to patients and where more cost-effective treatments may be available.

Five items/item groups were identified for the purposes of the first phase of this initiative:

- co-proxamol
- lidocaine plasters
- tadalafil once-daily preparations
- liothyronine
- doxazosin modified release tablets.

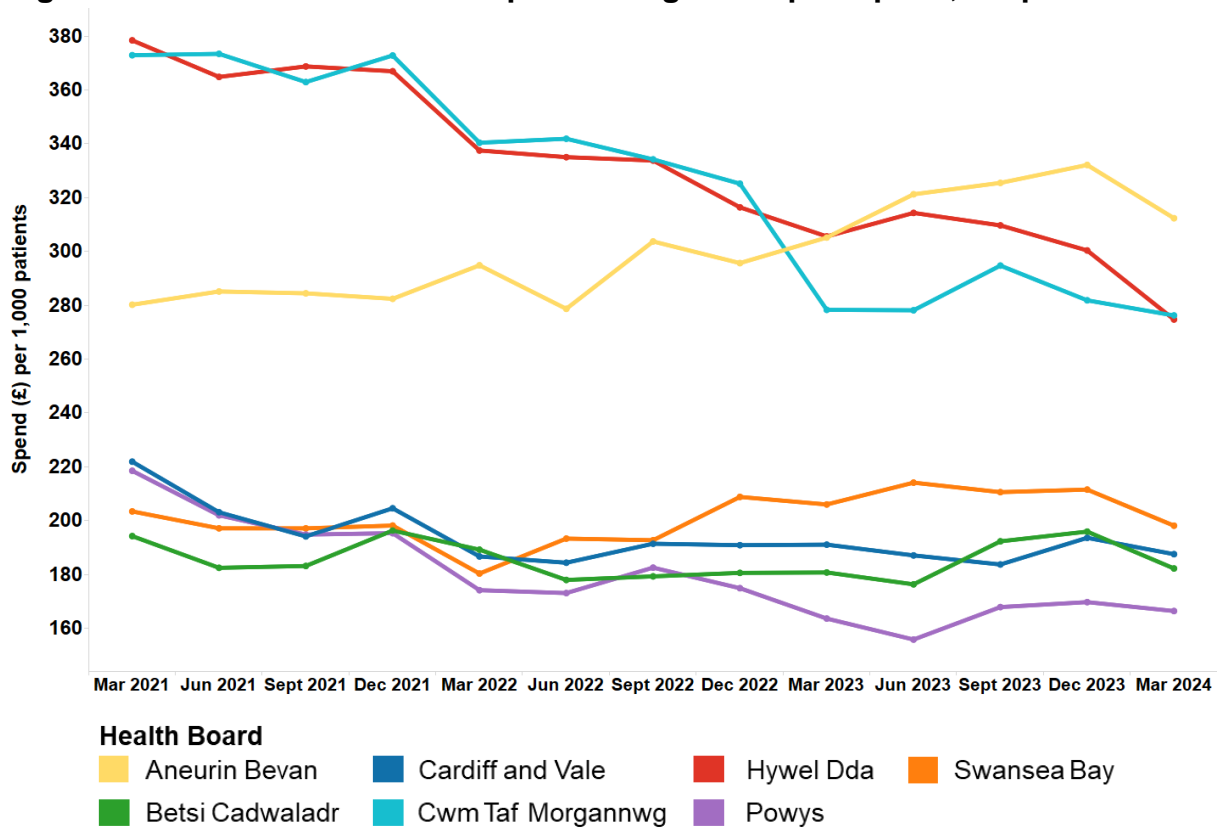
An additional four items/item groups were included in the second phase:

- omega-3 fatty acid compounds
  - oxycodone and naloxone combination product
  - paracetamol and tramadol combination product
  - perindopril arginine.
- Across Wales, low value for prescribing UDG spend per 1,000 patients decreased by 1.59% for the quarter ending March 2024, compared with the equivalent quarter of the previous year. This is in line with the aim of the indicator.
  - For the quarter ending March 2024, UDG spend per 1,000 patients ranged from £166 to £312 across the health boards.
  - The health board with the lowest UDG spend per 1,000 patients was Powys Teaching HB, whilst the highest spend was seen in Aneurin Bevan UHB.
  - The health board with the greatest percentage decrease was Hywel Dda UHB.
  - Aneurin Bevan UHB demonstrated the largest percentage increase.

Table 18. Low value for prescribing UDG spend (£) per 1,000 patients

	2022–2023 Qtr 4	2023–2024 Qtr 4	% Change
Hywel Dda	306	275	-10.1%
Swansea Bay	206	198	-3.83%
Cardiff And Vale	191	188	-1.85%
Cwm Taf Morgannwg	278	276	-0.75%
Betsi Cadwaladr	181	182	0.82%
Powys	164	166	1.71%
Aneurin Bevan	305	312	2.35%
Wales	238	234	-1.59%

Figure 26. Trend in low value for prescribing UDG spend per 1,000 patients



### Caution with interpreting NPI monitoring data

Calculations for the percentage difference reported are based on raw data, and values may therefore vary slightly from those calculated from the data tables or graphs, where figures have been rounded up or down.

Data for the Prescribing Safety Indicators have been provided by Audit+, the GP software tool delivered and supported by Digital Health and Care Wales (DHCW).

The Medusa data warehouse is reliant on data input by individual hospital pharmacy departments. If the data on a medicine are inputted under an alternative name to the usual generic or brand name, it may not be identified at extraction.

Medusa records the issue of medicines within the secondary care setting in Wales. Where supplies are issued to named patients, it can be assumed that the difference between number of medicines issued and number administered to patients is not significant. However, when the supplies are issued to wards or clinics, these items are often held as stock and therefore may be administered to patients at a considerably later point in time. However, within this report they are only considered for analysis within the time period they were issued.

The report includes medicines supplied by homecare and recorded through the hospital system; medicines supplied through other homecare providers are not included in this report. Therefore, some medicines use data may currently be incomplete. This issue is being worked on within NHS Wales as a priority.

Medicines supplied through hospitals in England or on FP10HP (issued by hospital clinicians in NHS England) to patients' resident in Wales, which do not get issued via Medusa or recorded through CASPA, are not included in this report.

Combining data obtained from two different software systems provides challenges, particularly as CASPA and Medusa report data via different measurement criteria. Hence, in order to amalgamate data, total cost of medicine usage is reported for all indicators and, where relevant, other measures such as total quantity, items and number are also reported.

## 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 Organization, is a unit of measurement whereby each medicine is assigned a value within its recognised dosage range. The value is the assumed average maintenance dose per day for a medicine when used for its main indication in adults. A medicine can have different DDIs depending on the route of administration.

**QAIF** – Quality assurance and improvement framework. QAIF was introduced as part of the General Medical Services (GMS) contract reform in 2019, it replaced the Quality and Outcome Framework (QOF), which was originally introduced as part of the new GMS contract in 2004.

**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 within the primary care section 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. In relation to the secondary care data presented within this report please see information above.

**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.

**UDG** – A user defined group is a specific basket of items developed to monitor a particular NPI.

Appendix 1. AWMSG National Prescribing Indicators 2022–2025

Table 1 Priority area NPIs for 2022–2025

National Prescribing Indicator	Applicable to:	Unit of measure	Target for 2023–2024	Data source
<b>Priority areas</b>				
<b>Analgesics</b>	Primary care	Opioid burden user defined group (UDG) ADQs per 1,000 patients High strength opioids (UDG) ADQs per 1,000 patients.	Maintain performance levels within the lower quartile, or show a reduction towards the quartile below.	NWSSP
		Tramadol DDDs per 1,000 patients	Maintain performance levels within the lower quartile, or show a reduction towards the quartile below.	NWSSP
		Gabapentin and pregabalin DDDs per 1,000 patients	Maintain performance levels within the lower quartile, or show a reduction towards the quartile below.	NWSSP
<b>Anticoagulants in atrial fibrillation</b>	Primary care	The number of patients with AF and a CHA <sub>2</sub> DS <sub>2</sub> -VASc score of 2 or more who are currently prescribed an anticoagulant, as a percentage of all patients with AF.	To increase the number of patients with AF and a CHA <sub>2</sub> DS <sub>2</sub> -VASc score of 2 or more prescribed an anticoagulant.	DHCW
		The number of patients diagnosed with AF who are prescribed an anticoagulant and have received an anticoagulant review within the last 12 months, as a percentage of all patients diagnosed with AF who are prescribed an anticoagulant.	To increase the number of patients who are prescribed an anticoagulant and have received an anticoagulant review within the last 12 months.	
		The number of patients diagnosed with AF who are prescribed antiplatelet monotherapy, as a percentage of all patients diagnosed with AF.	To reduce the number of patients with AF prescribed antiplatelet monotherapy.	

<b>National Prescribing Indicator</b>	<b>Applicable to:</b>	<b>Unit of measure</b>	<b>Target for 2023–2024</b>	<b>Data source</b>
<b>Antimicrobial stewardship</b>	Primary care	Total antibacterial items per 1,000 STAR-PUs	Health board target: a quarterly reduction of 10% against a baseline of April 2019–March 2020. GP Practice target: Maintain performance levels within the lower quartile, or show a reduction towards the quartile below.	NWSSP
		Number of 4C antimicrobial (co-amoxiclav, cephalosporins, fluoroquinolones and clindamycin) items per 1,000 patients	GP Practice target: Maintain performance levels within the lower quartile, or show a reduction towards the quartile below.	NWSSP
<b>Decarbonisation of inhalers</b>	Primary care	The number of dry powder inhalers (DPI) and soft mist inhalers (SMI) as a percentage of all inhalers prescribed.	Maintain performance levels within the upper quartile, or show an increase towards the quartile above.	NWSSP
<b>Supporting Domain: Safety</b>				
<b>Prescribing Safety Indicators</b>	Primary care	Number of patients identified	No target set	DHCW
<b>Hypnotics and anxiolytics</b>	Primary care	Hypnotic and anxiolytic UDG ADQs per 1,000 STAR-PUs	Maintain performance levels within the lower quartile, or show a reduction towards the quartile below	NWSSP

National Prescribing Indicator	Applicable to:	Unit of measure	Target for 2023–2024	Data source
Yellow Cards	Primary care	Number of Yellow Cards submitted	One Yellow Card per 2,000 GP practice population	MHRA
	Health board		One Yellow Card per 2,000 health board population  10% or greater increase from baseline (2021–2022) for Yellow Cards submitted by secondary care  25% or greater increase from baseline (2021–2022) for Yellow Cards submitted by members of the public	
	Community pharmacy		No target set. Reported as the number of Yellow Cards submitted by health board	
<b>Supporting Domain: Efficiency</b>				
Best value biological medicines	Primary + secondary care	Quantity of best value biological medicines prescribed as a percentage of total 'biosimilar' plus 'reference' product.	Increase the appropriate use of cost-efficient biological medicines, including biosimilar medicines	NWSSP DHCW
Low value for prescribing	Primary care	Low value for prescribing UDG spend per 1,000 patients	Maintain performance levels within the lower quartile or show a reduction towards the quartile below	NWSSP

**Appendix 2. Primary care NPI prescribing by GP cluster**

**Figure 1. Opioid burden prescribing – Quarter ending March 2024 versus quarter ending March 2023**

Data not reported due to an issue with certain DDD values.

**Figure 2. High strength opioid prescribing – Quarter ending March 2024 versus quarter ending March 2023**

Data not reported due to an issue with certain DDD values.

Figure 3. Tramadol prescribing – Quarter ending March 2024 versus quarter ending March 2023

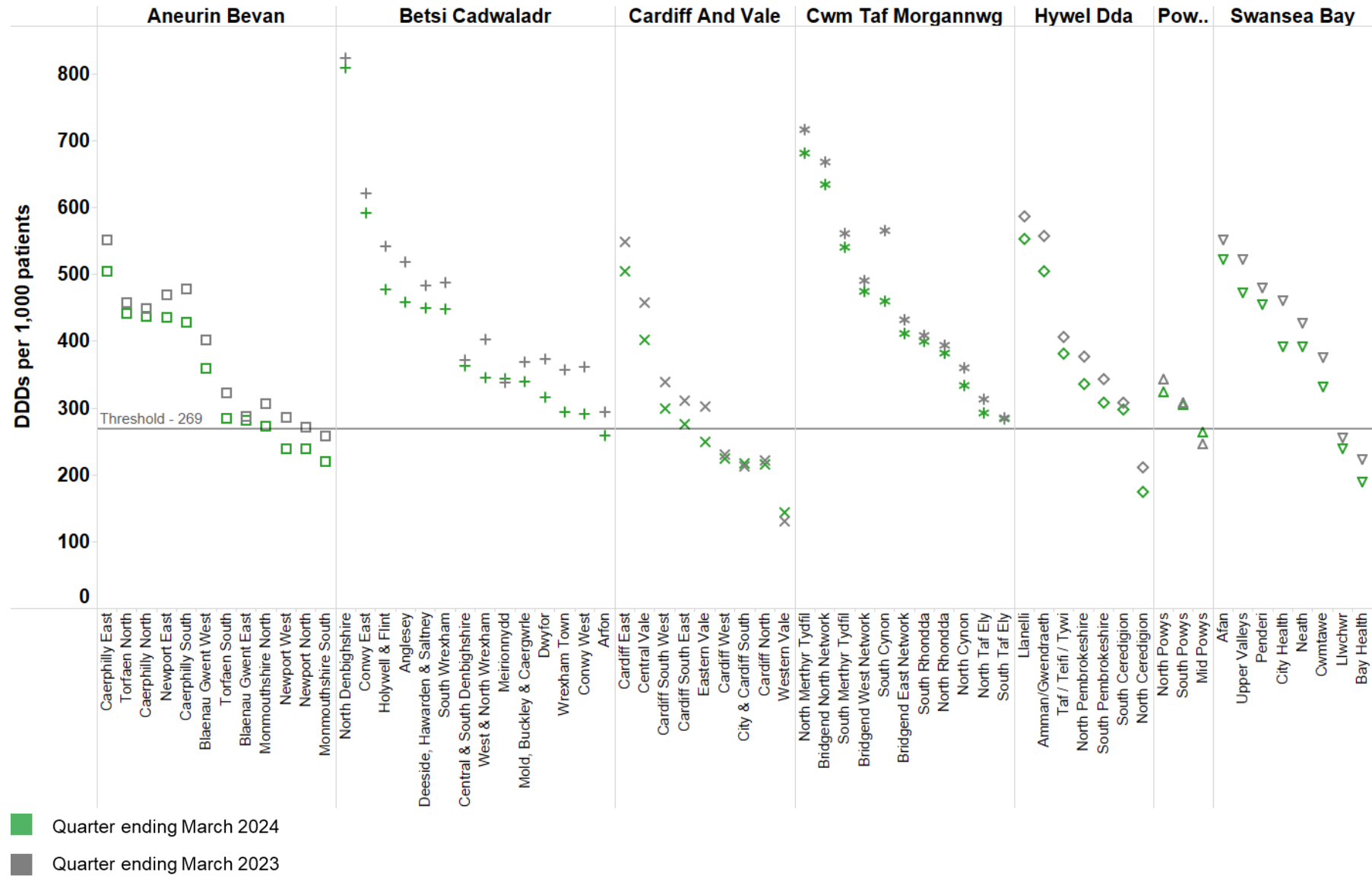


Figure 4. Gabapentin and pregabalin prescribing – Quarter ending March 2024 versus quarter ending March 2023

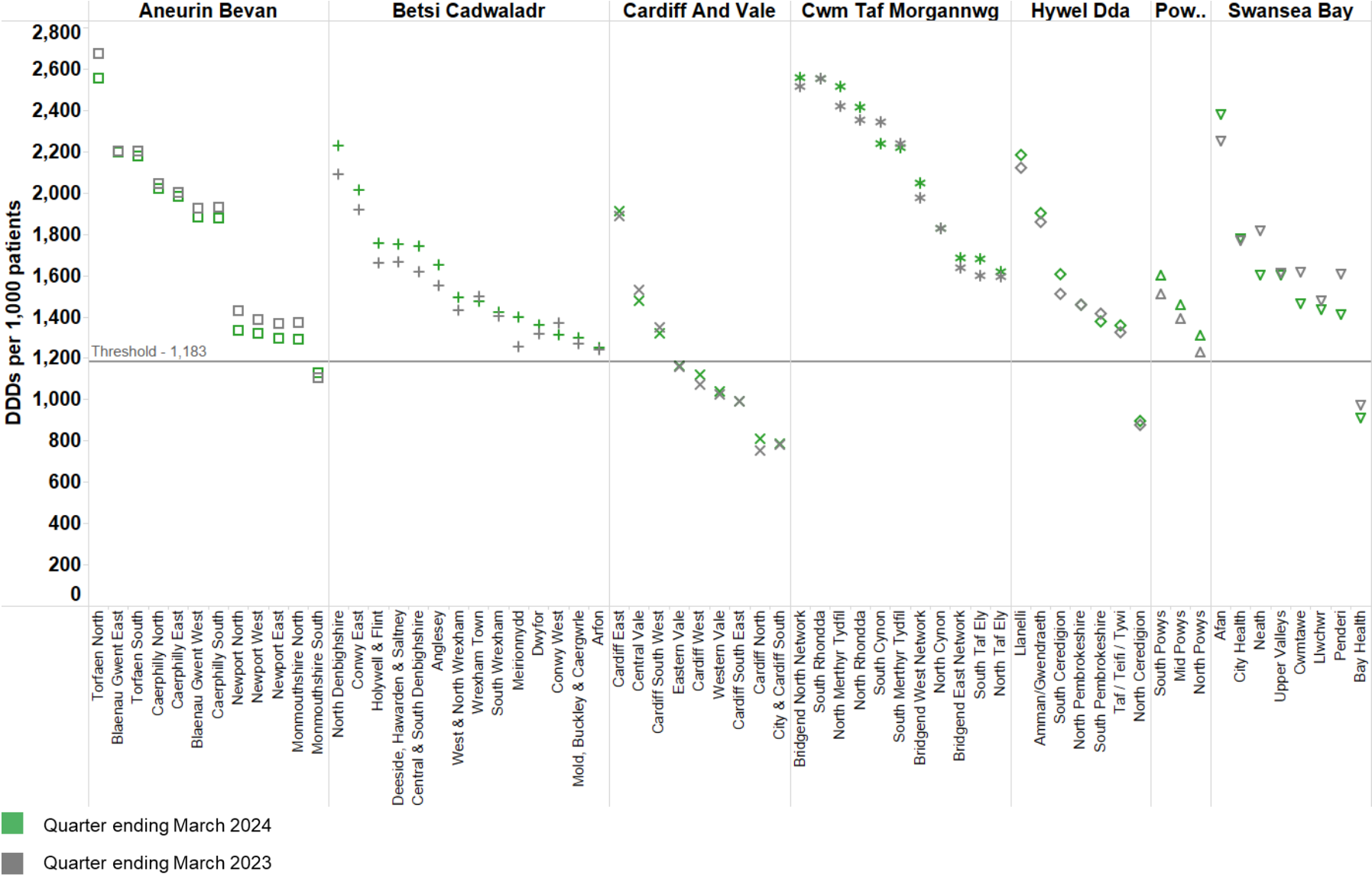
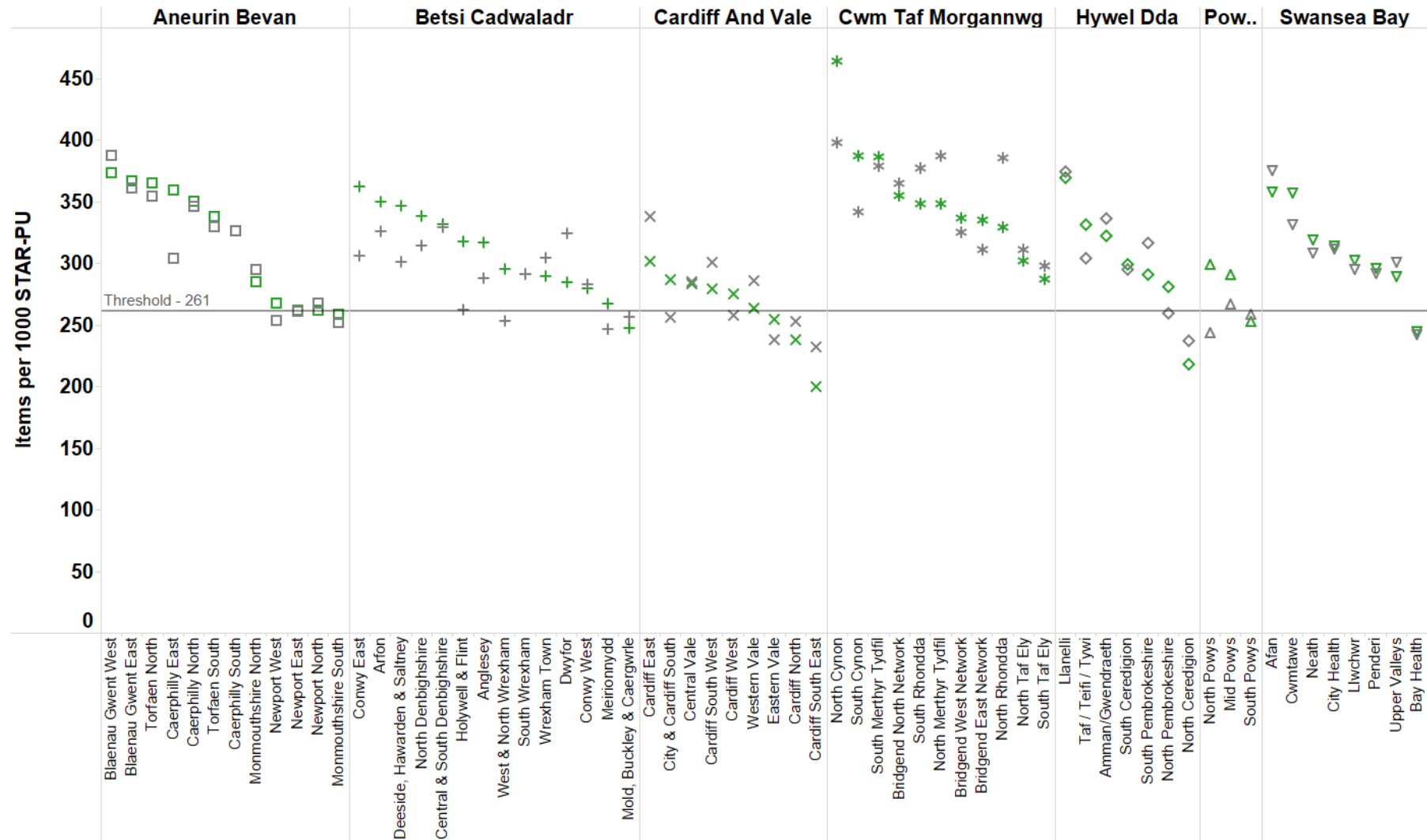


Figure 5. Antimicrobial prescribing – Quarter ending March 2024 versus quarter ending March 2020



■ Quarter ending March 2024  
■ Quarter ending March 2020

Figure 6. 4C prescribing – Quarter ending March 2024 versus quarter ending March 2023

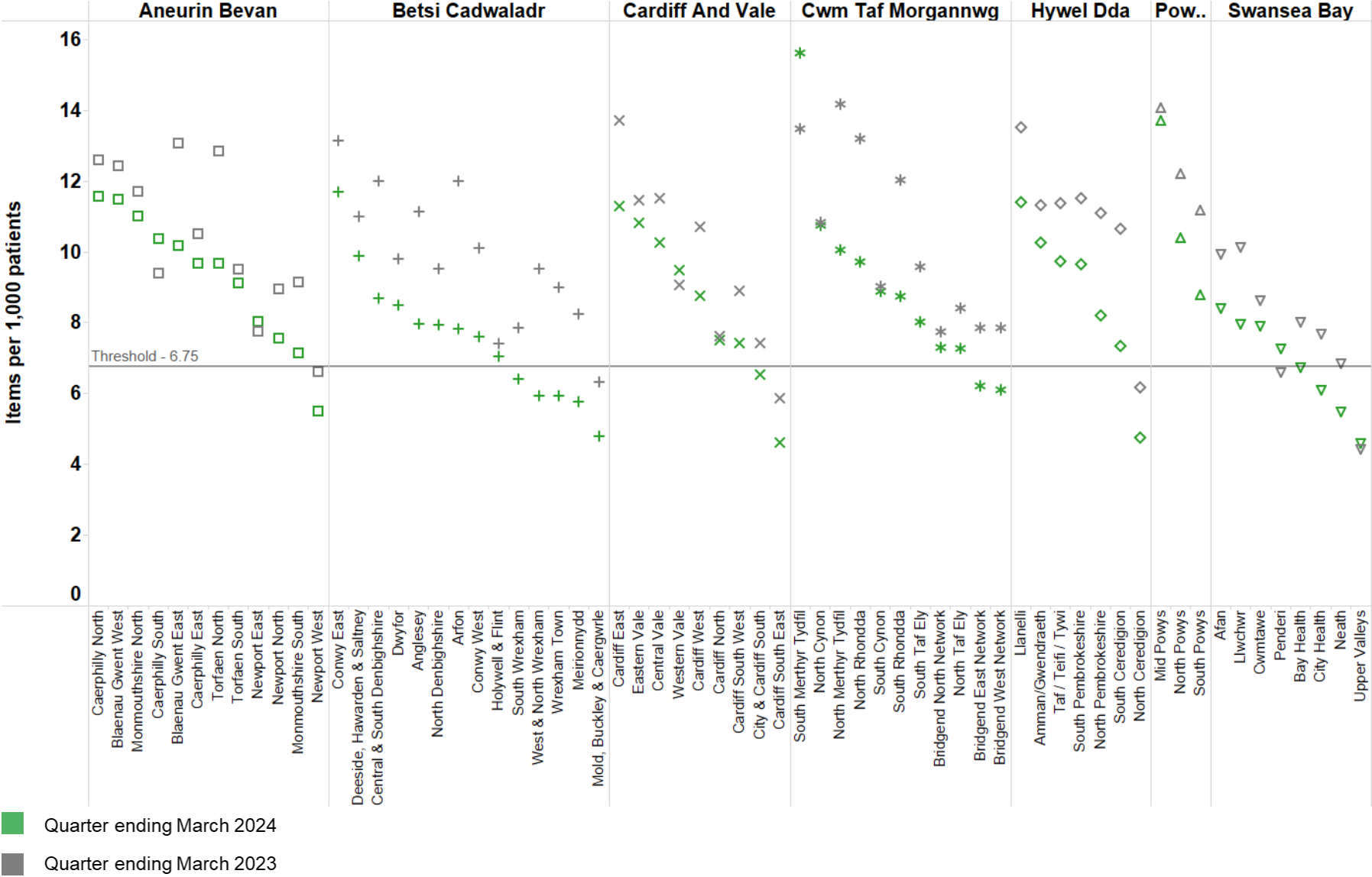


Figure 7. Decarbonisation of inhalers – Quarter ending March 2024 versus quarter ending March 2023

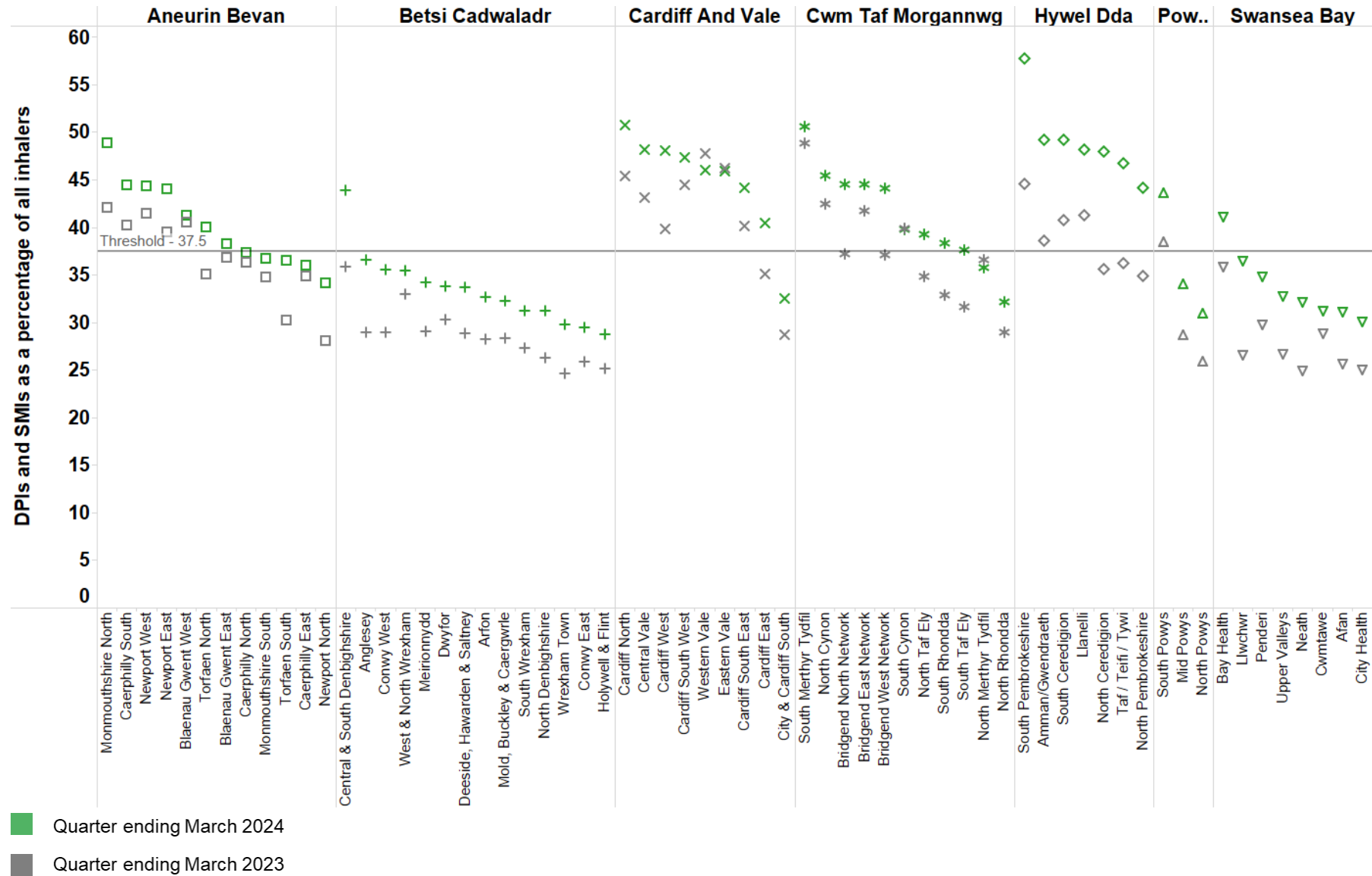


Figure 8. Hypnotic and anxiolytic prescribing – Quarter ending March 2024 versus quarter ending March 2023

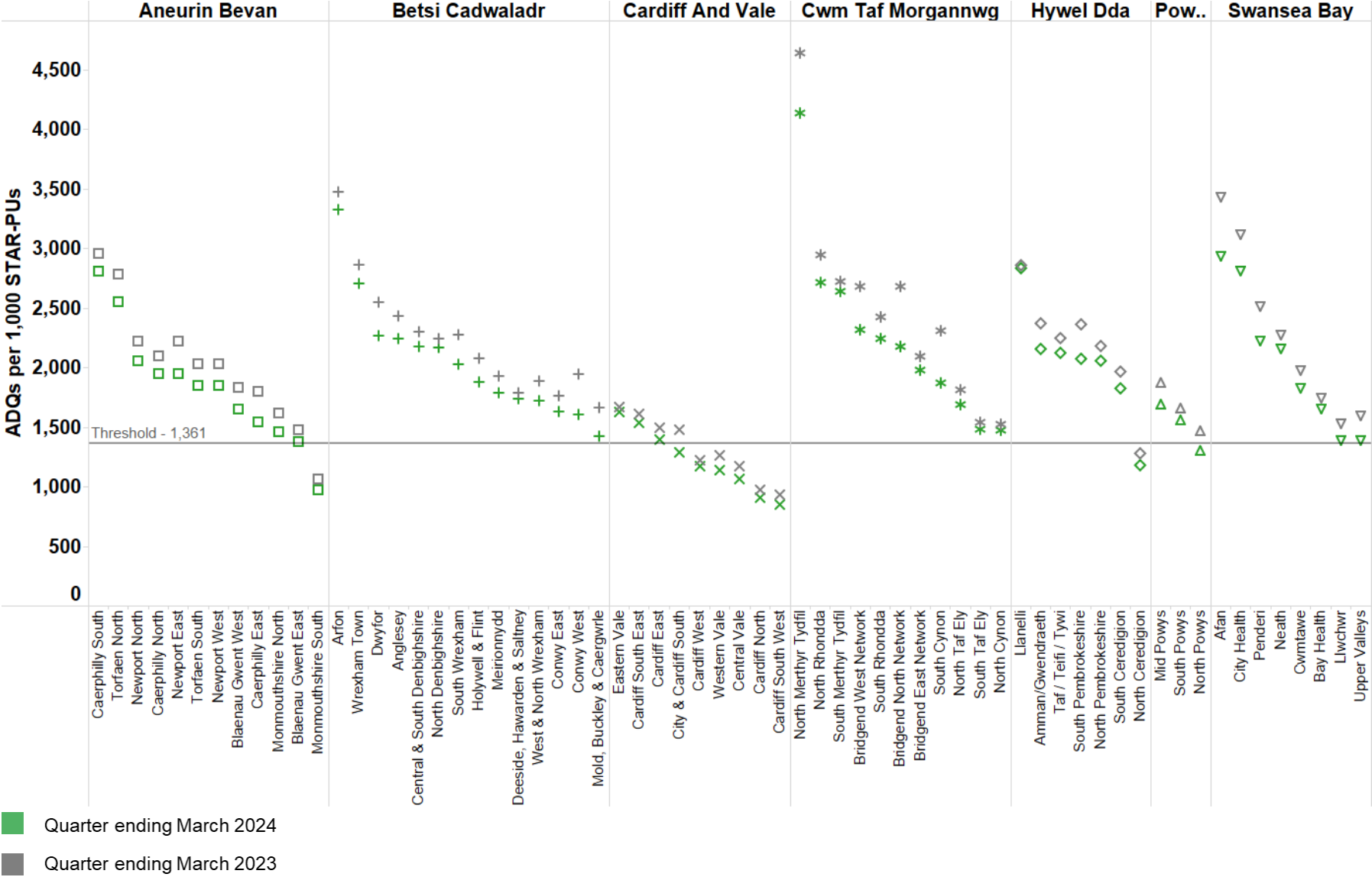


Figure 9. Low value for prescribing UDG spend (£) per 1,000 patients – March 2024 versus quarter ending March 2023

