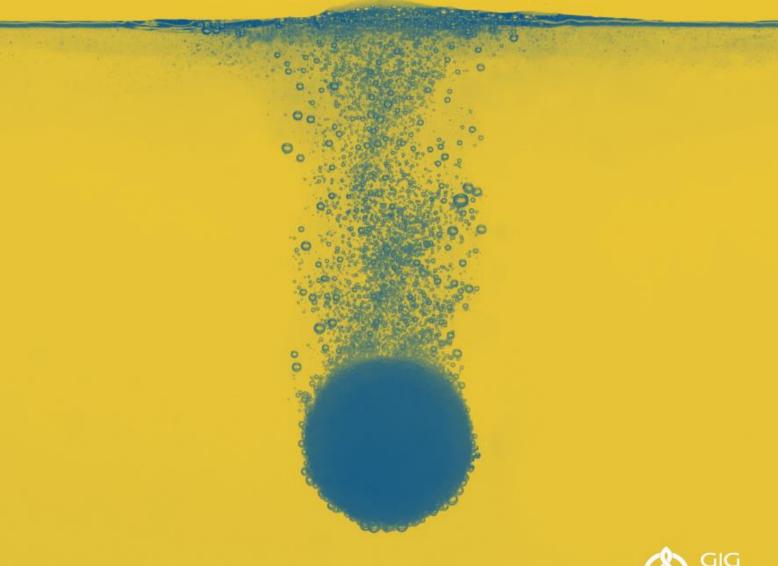


# Annual Report 2018-2019









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# YELLOW CARD CENTRE WALES ANNUAL REPORT TO MHRA

Date: 2018-19

1. TEAM

**Executive Team** 

Dr A M Thomas Medical Director, YCC Wales

Mrs A Adams Principal Pharmacist, Welsh Medicines Information Centre

Mrs J Walker/ Specialist Information Pharmacist – Pharmacovigilance and Patient

Miss S Latif Safety

**Advisory board** 

Dr R Bracchi Medical Advisor, AWTTC

Dr J Coulson Deputy Clinical Director, AWTTC and Senior Lecturer in Clinical

Pharmacology

Mr A Evans Chief Pharmaceutical Officer, Welsh Government
Dr L Gray Consultant in Acute Medicine, Cardiff and Vale UHB

Mr J Hayes Director, Welsh Medicines Resource Centre Dr L Hughes Senior Lecturer in Pharmacy, Cardiff University

Dr L James All Wales Consultant Pharmacist, Acute Care & Medication Safety
Mrs N Mahon Immunisation Co-ordinator, Child Health, Cardiff and Vale UHB

Dr R Ratcliffe General Practitioner, Wales Deanery Prof P A Routledge (Chair) Clinical Director, AWTTC

Mrs K Samuels Head of Patient Access to Medicines, AWTTC
Dr M Singh Consultant in Acute Medicine, Aneurin Bevan UHB

Dr J Thompson Senior Lecturer in Clinical Pharmacology, Cardiff University

Mrs F J Woods All Wales Medicines Information Pharmacist

#### 2. EXECUTIVE SUMMARY

Throughout 2018-19 Yellow Card Centre Wales (YCC Wales) continued to promote the reporting of suspected adverse drug reactions (ADRs) via the Yellow Card Scheme to healthcare professionals and members of the public. It was, overall, a successful year for the centre.

During 2018-19 the reconfigured management structure of YCC Wales (the executive team and advisory board) worked effectively. The executive team being responsible for the day to day operations of the centre and the newly introduced advisory board, which includes multi-disciplinary professionals and colleagues from Cardiff University and Welsh Government, providing support and direction to our objectives.

The number of Yellow Card reports submitted from Wales increased from 3036 in 2017-18 to 3192 in 2018-19, an increase of 5%. The highest percentage increase was seen within Hywel Dda University Health Board, where the number of Yellow Card reports that were submitted increased by 81% when compared with 2017-18. YCC Wales has worked with the Yellow Card Champion based within the Health Board to support initiatives that may have led to an increase in reporting rates.

General Practitioners (GPs) remained the highest reporting group during 2018-19, contributing 47.8% (1527) of the total number of reports for the year. This was an increase of 7% on the previous year. The continued increase in the number of Yellow Card reports submitted from GPs in Wales may be related to the continuation of Yellow Card reporting rates as a National Prescribing





(reporting) Indicator in primary care and the integration of Yellow Card reporting into the clinical system support which is used in many practices.

YCC Wales continued to support local Yellow Card Champions throughout the year. The fifth successful YCC Wales Yellow Card Champion training day was held in March 2019. This year, the training day was organised in collaboration with the All Wales Consultant Pharmacist in Acute Care and Medication Safety. The Welsh Medication Safety Officers (MSOs) were also invited to attend. This allowed for a varied and inclusive programme across pharmacovigilance and patient safety

During 2018-19 YCC Wales celebrated the first anniversary of the introduction of the YCC Wales mascot 'Yellow Card Charlie'. Charlie was used throughout promotional events in 2018-19, including the ADR Awareness Week, held in collaboration with the MHRA in November 2018.

YCC Wales also released the Supporter Pledge in its electronic format during November 2018, which was shared at all promotional events. Since its release there have been 81 pledges by healthcare professionals and 62 pledges by members of the public.

# 3. YELLOW CARD DATA

#### a. Total numbers

A total of 3192 reports of suspected adverse drug reactions originated from the YCC Wales region in 2018/19. This represents an increase of 5% when compared with 2017/18 (3036). Table 1 and Figure 1 show the upward trend in total number of Yellow Card (YC) reports from Wales over the last 5 years.

| Year    | Number of reports | Percentage change on previous year |
|---------|-------------------|------------------------------------|
| 2018/19 | 3192              | +5                                 |
| 2017/18 | 3036              | +30                                |
| 2016/17 | 2330              | +28                                |
| 2015/16 | 1817              | +25                                |
| 2014/15 | 1460              | +24                                |

Table 1: Number of Yellow Card reports submitted from Wales over the last 5 years



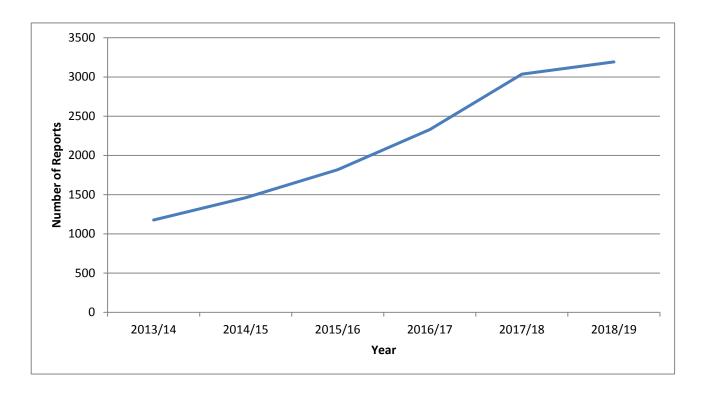


Figure 1: Number of Yellow Card reports submitted from Wales over the last 5 years

Figure 2 shows the seven Health Boards in Wales and Figure 3 the number of reports from each Health Board over the past five years.

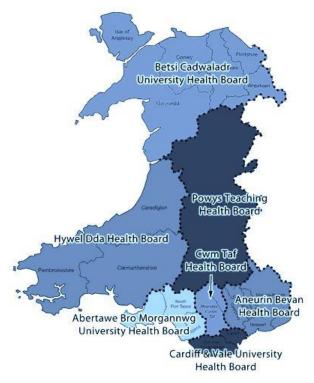


Figure 2: Map showing Health Boards in Wales



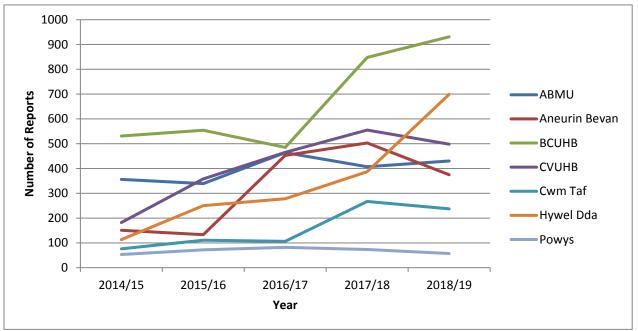
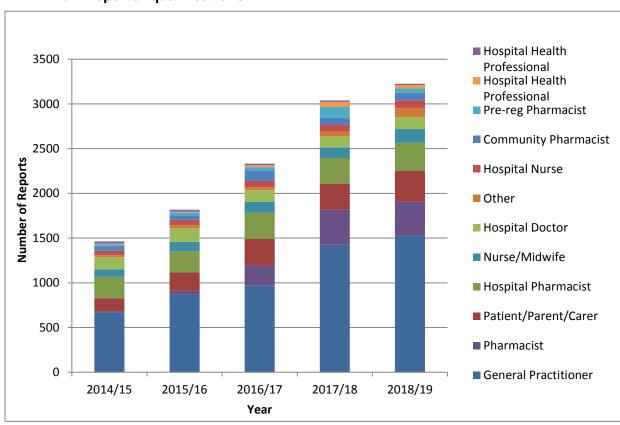


Figure 3: Number of Yellow Card reports submitted from each Health Board in Wales over the last five

ABMU = Abertawe Bro Morgannwg University Health Board; BCUHB = Betsi Cadwaladr University Health Board; CVUHB = Cardiff and Vale University Health Board

# b. Reporter qualifications



4. Figure 4: Number of Yellow Card reports submitted from Wales over the last 5 years by reporter qualification

\*Other reporter qualifications = paramedic, optometrist, dentist, coroner, radiographer, chiropodist, medical student



| Reporter                     | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 |
|------------------------------|---------|---------|---------|---------|---------|
| General Practitioner         | 665     | 870     | 972     | 1425    | 1527    |
| Pharmacist                   | 15      | 39      | 217     | 392     | 378     |
| Patient/Parent/Carer         | 147     | 208     | 300     | 292     | 346     |
| Hospital Pharmacist          | 241     | 237     | 295     | 286     | 315     |
| Nurse/Midwife                | 83      | 103     | 122     | 120     | 154     |
| Hospital Doctor              | 137     | 155     | 129     | 124     | 134     |
| Hospital Nurse               | 50      | 61      | 71      | 78      | 87      |
| Other Health Professional    | 5       | 20      | 22      | 35      | 84      |
| Community Pharmacist         | 49      | 49      | 114     | 75      | 81      |
| Pre-registration pharmacist  | 23      | 31      | 38      | 123     | 51      |
| Pharmacy assistant           | 6       | 10      | 23      | 56      | 38      |
| Hospital Health Professional | 25      | 22      | 19      | 17      | 13      |
| Dentist                      | 4       | 3       | 1       | 4       | 6       |
| Radiographer                 | 5       | 4       | 5       | 3       | 5       |
| Medical student              | 3       | 0       | 3       | 1       | 2       |
| Coroner                      | 1       | 0       | 0       | 0       | 2       |
| Optometrist                  | 0       | 1       | 1       | 3       | 1       |
| Paramedic                    | 0       | 2       | 0       | 0       | 1       |
| Physician                    | 2       | 2       | 1       | 6       | 0       |

Table 2: Number of Yellow Card reports submitted from Wales over the last 5 years by reporter qualification

# a. Serious reports

| Year    | Number of serious reports | Percentage of total reports | Percentage change on previous year |
|---------|---------------------------|-----------------------------|------------------------------------|
| 2018/19 | 1176                      | 37                          | -5                                 |
| 2017/18 | 1267                      | 42                          | 0                                  |
| 2016/17 | 987                       | 42                          | -8                                 |
| 2015/16 | 908                       | 50                          | -4                                 |
| 2014/15 | 789                       | 54                          | +28                                |

Table 3: Number of serious reactions reported from Wales over the last five years

## b. Fatal reports

| Year    | Number of fatal reports | Percentage of total reports | Percentage change on previous year |
|---------|-------------------------|-----------------------------|------------------------------------|
| 2018/19 | 37                      | 1.2                         | +0.4                               |
| 2017/18 | 25                      | 0.8                         | -0.7                               |
| 2016/17 | 34                      | 1.5                         | +0.3                               |
| 2015/16 | 22                      | 1.2                         | -0.4                               |
| 2014/15 | 23                      | 1.6                         | +0.2                               |

Table 4: Number of fatal reports submitted from Wales over the last five years

It is important to note that suspected ADRs are associations only and there is not necessarily a causal link between any of the medicines reported on a particular Yellow Card and the fatal outcome.

# c. Age breakdown



| Age band      | 2016/17 | 2017/18 | 2018/19 |
|---------------|---------|---------|---------|
| Unknown       | 73      | 73      | 74      |
| Under 2       | 52      | 40      | 52      |
| 2 - 6 years   | 65      | 41      | 71      |
| 7 - 12 years  | 22      | 24      | 45      |
| 13 - 17 years | 51      | 46      | 50      |
| 18 - 24 years | 100     | 110     | 137     |
| 25 -34 years  | 159     | 186     | 221     |
| 35 - 44 years | 191     | 224     | 251     |
| 45 - 54 years | 287     | 346     | 376     |
| 55 - 64 years | 362     | 452     | 453     |
| 65 - 74 years | 466     | 716     | 682     |
| 75-84 years   | 334     | 533     | 550     |
| 85+ years     | 168     | 245     | 230     |
| Total         | 2330    | 3036    | 3192    |

Table 5: Number of Yellow Card reports submitted from Wales over the last three years by patient age

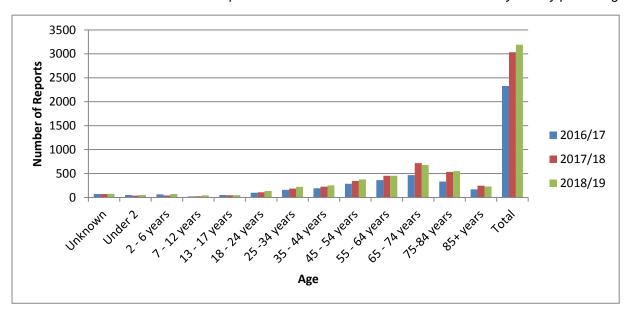


Figure 5: Number of Yellow Card reports submitted from Wales over the last three years by patient age

d. Top 10 suspected medicines - comparison of last two years.

| Drug name                        | Number of<br>reports<br>(2017/18) | Number of reports (2018/19) |
|----------------------------------|-----------------------------------|-----------------------------|
| Rivaroxaban▼                     | 180                               | 154                         |
| Apixaban                         | 142                               | 140                         |
| Ramipril                         | 66                                | 89                          |
| Influenza Virus* (▼ some brands) | 60                                | 84                          |
| Amlodipine                       | 77                                | 81                          |
| Sertraline                       | 66                                | 78                          |
| Atorvastatin                     | 59                                | 63                          |
| Nitrofurantoin                   | 44                                | 51                          |
| Doxycycline                      | 33                                | 50                          |
| Empagliflozin                    | 46                                | 47                          |





Table 6: Comparison of the number of Yellow Card reports submitted over the last two years for the top 10 suspected medicines in Wales

\*multiple brands

▼ medicine subject to additional monitoring

# e. Sources of reports - detailed breakdown

| Reporter                            | 201    | 6/17       | 2017/18 |            | 2018/19 |            |
|-------------------------------------|--------|------------|---------|------------|---------|------------|
| Reporter                            | Number | % of total | Number  | % of total | Number  | % of total |
| Carer                               | 18     | 0.8        | 10      | 0.3        | 14      | 0.4        |
| Parent                              | 43     | 1.8        | 42      | 1.4        | 56      | 1.7        |
| Patient                             | 239    | 10.2       | 240     | 7.9        | 276     | 8.6        |
| Community<br>Pharmacist<br>Hospital | 114    | 4.9        | 75      | 2.5        | 81      | 2.5        |
| Pharmacist                          | 295    | 12.6       | 286     | 9.4        | 315     | 9.9        |
| Pharmacist                          | 217    | 9.3        | 392     | 12.9       | 378     | 11.8       |
| Pharmacy<br>Assistant               | 23     | 1.0        | 56      | 1.8        | 38      | 1.2        |
| Pre-reg pharmacist                  | 38     | 1.6        | 123     | 4.0        | 51      | 1.6        |
| Hospital Nurse                      | 71     | 3.0        | 78      | 2.6        | 87      | 2.7        |
| Nurse                               | 116    | 5.0        | 115     | 3.8        | 150     | 4.7        |
| GP                                  | 972    | 41.7       | 1425    | 46.8       | 1527    | 47.8       |
| Hospital Doctor                     | 129    | 5.5        | 124     | 4.1        | 134     | 4.2        |
| Physician                           | 1      | 0.04       | 6       | 0.2        | 0       | 0.0        |
| Coroner                             | 0      | 0          | 0       | 0.0        | 2       | 0.1        |
| Dentist                             | 1      | 0.04       | 4       | 0.1        | 6       | 0.2        |
| Midwife                             | 6      | 0.3        | 5       | 0.2        | 4       | 0.1        |
| Optometrist                         | 1      | 0.04       | 3       | 0.1        | 1       | 0.03       |
| Radiographer                        | 5      | 0.2        | 3       | 0.1        | 5       | 0.2        |
| Hospital Healthcare<br>Professional | 19     | 0.8        | 17      | 0.6        | 13      | 0.4        |
| Healthcare<br>Assistant             | 3      | 0.1        | 3       | 0.1        | 2       | 0.1        |
| Other Healthcare<br>Professional    | 19     | 0.8        | 32      | 1.1        | 84      | 2.6        |
| Medical Student                     | 3      | 0.1        | 1       | 0.03       | 2       | 0.1        |
| Unknown                             | 0      | 0          | 0       | 0.0        | 0       | 0.0        |
| Total                               | 2333   | 100        | 3040    | 100        | 3226    | 100        |

Table 7: Number of Yellow Card reports submitted from Wales over the last three years by reporter type





As can be seen in Table 7 a total of 3226 reports were analysed. This figure differs from the 3192 reports stated in section 3a above (Table 1 and Figure 1). The reasons for this are:

- Merger of duplicate reports by the Medicines & Healthcare products Regulatory Agency (MHRA)
- Removal of invalid reports following further investigation by the MHRA.

# f. Type of Reports

| Report Type | Number of reports (2018/19) | Percentage of total reports |  |  |
|-------------|-----------------------------|-----------------------------|--|--|
| EYC         | 1946                        | 60.3                        |  |  |
| GP systems  | 896                         | 27.8                        |  |  |
| Paper       | 343                         | 10.6                        |  |  |
| MiDatabank  | 25                          | 0.8                         |  |  |
| Арр         | 17                          | 0.5                         |  |  |

Table 8: Number of reports submitted during 2018-19 from Wales by submission route

## 4. DISCUSSION OF YELLOW CARD DATA

An increase of 5% was seen in the total number of Yellow Card reports submitted from Wales during 2018-19 (3192) when compared with the previous year (3036).

Three of the seven Health Boards in Wales had an increase in the number of Yellow Card reports submitted. The highest percentage increase was seen within Hywel Dda University Health Board, where the number of Yellow Card reports that were submitted increased by 81% when compared with 2017-18. YCC Wales has worked with the Yellow Card Champion based within the Health Board to support initiatives that may have led to an increase in reporting rates.

The highest number of reports came from General Practitioners (GPs), who contributed 47.8% (1527) of the total number of reports received for the year. This was an increase of 7% on the previous year. The increase in the number of reports from GPs is most likely to be related to the continuation of Yellow Card reporting rates as a National Prescribing (reporting) Indicator in primary care and the integration of Yellow Card reporting into the clinical system support which is used in some practices.

An increase was seen in the number of reports submitted by patients, parents and carers. This is encouraging and may be attributed to the introduction of the new National Prescribing Indicator for each local Health Board that encourages reporting by members of the public. YCC Wales have also taken part in events aimed at members of the public, including attendance at the Newport 50+ information day, the National Eisteddfod of Wales, and organisation of coffee mornings with residents of sheltered accommodation, in collaboration with local councils. Finally, the use of the YCC Wales patient pledge and promotion of Yellow Card reporting by the Patient and Public Interest Group (PAPIG) members to their patient groups could also have contributed to the increase in reporting by members of the public.

There was also a 30% increase in reporting by nurses, and an increase in reporting by hospital doctors, hospital pharmacists, dentists, coroners and radiographers.

The percentage of serious suspected ADR reports submitted within Wales decreased by 7% when compared with 2017-18. The percentage of serious reports from GPs decreased compared to 2017/18. The proportion of fatal reports remained comparatively static.





As in the previous year the highest number of reports concerned patients in the group aged 65-74 years. There has been an increase in the number of reports across all age groups except in the 65-74 years and 85+ years age groups.

The most frequently reported suspected medicine was rivaroxaban with 154 reports. 2 of the top 10 suspected medicines were on the list of medicines subject to additional monitoring (identified using an inverted black triangle ▼). In 2017-18, omeprazole was 1 of the 10 most frequently reported suspected medicines; this is not the case in 2018-19. Nitrofurantoin and doxycycline are 2 of the10 most frequently reported suspected medicines in 2018-19; this was not the case in 2017-18.

The majority (60.3%) of reports were submitted as electronic Yellow Cards. Only 0.5% were submitted via the app. YCC Wales will continue to advertise the availability of the App more widely.

#### 5. PROMOTIONAL ACTIVITIES

#### a. Training delivered to healthcare professionals and their respective groups

| Audience type                   | Session type         | Duration<br>(hours) | Number of sessions | Total<br>audience<br>numbers | Total<br>hours<br>training |
|---------------------------------|----------------------|---------------------|--------------------|------------------------------|----------------------------|
| Healthcare<br>Professionals     | Meeting              | 1                   | 2 (JW)             | 20                           | 2                          |
| Healthcare<br>Professionals     | Information<br>Stand | 6                   | 1 (JW)             | 150                          | 6                          |
| Mammographers                   | Lecture              | 1                   | 1 (JW)             | 10                           | 1                          |
| Healthcare<br>Professionals     | Information<br>Stand | 7                   | 2 (JW/SL)          | 100                          | 14                         |
| Healthcare<br>Professionals     | Lecture              | 1.5                 | 1 (LG/AA/JW/AT)    | 125                          | 1.5                        |
| Pharmacists                     | Lecture              | 0.5                 | 4 (JW/SL/AG)       | 50                           | 2                          |
| Pre-registration<br>Pharmacists | Lecture              | 0.5                 | 1 (JW/SL)          | 5                            | 0.5                        |
| Dental professionals            | Lecture              | 0.5                 | 1 (SL)             | 100                          | 0.5                        |

Table 9: Training activities delivered to healthcare professionals during 2018-19

#### b. Training delivered to patients and their respective groups

| Audience type                      | Session type         | Duration (hours) | Number of sessions | Total<br>audience<br>numbers | Total<br>hours<br>training |
|------------------------------------|----------------------|------------------|--------------------|------------------------------|----------------------------|
| Patient and Public Interest Group  | Lecture              | 1                | 2 (AT)             | 40                           | 2                          |
| HealthWise Wales                   | Meeting              | 1                | 2 (RB/JW/AT/AA)    | 5                            | 2                          |
| Members of the Public and Patients | Information<br>Stand | 4                | 3 (JW/SA/LJ)       | 150                          | 12                         |
| Members of the Public and Patients | Information<br>Stand | 5                | 1 (JW/HE/LH)       | 200                          | 5                          |
| Members of the Public and Patients | Information<br>Stand | 7                | 2 (JW/SL)          | 100                          | 14                         |





| Patient and Public<br>Interest Group | Lecture              | 1 | 1 (SL/AT) | 20 | 1 |
|--------------------------------------|----------------------|---|-----------|----|---|
| Members of the Public and Patients   | Information<br>Stand | 1 | 2 (SL/AG) | 20 | 2 |

Table 10: Training activities delivered to patients and their respective groups during 2018-19

#### c. Training delivered to undergraduates

| Audience type                    | Session type | Duration (hours) | Number of sessions | Total<br>audience<br>numbers | Total<br>hours<br>training |
|----------------------------------|--------------|------------------|--------------------|------------------------------|----------------------------|
| Medical Student                  | Discussion   | 1                | 1 (JW)             | 1                            | 1                          |
| Pharmacy Students                | Tutorial     | 0.5              | 1 (JW)             | 2                            | 0.5                        |
| Dental Students                  | Tutorial     | 1                | 1 (AT)             | 60                           | 1                          |
| Medical and Pharmacy<br>Students | Workshop     | 2                | 12 (AT/JT/JC/LG)   | 400                          | 24                         |

Table 11: Training activities delivered to undergraduates during 2018-19

In November 2018, YCC Wales held a breakout session at the RPS Wales Medicines Safety Conference entitled 'to be or not to be...safe'. The session explored how pharmacovigilance, safety culture and human factors influence patient safety. YCC Wales also held a stand at the conference.

In January 2019, YCC Wales were asked to review the ADR e-learning packages aimed at Pharmacy staff, produced by Health Education and Improvement Wales (HEIW).

In February 2019, YCC Wales in collaboration with HEIW, presented on common ADRs seen in Dentistry. The presentation generated many discussion points, specifically around serious ADRs such as osteonecrosis of the jaw. YCC Wales aims to continue being involved in teaching dental professionals on ADR reporting, to increase dental reporting.

YCC Wales has continued to support Cardiff University undergraduate students undertaking projects relating to ADR reporting. During 2018-19 a medical student undertook a project looking at Yellow Card reporting in the paediatrics team.

# d. Materials developed for YCS promotion

All training materials were updated and redistributed during 2018-19. YCC Wales continues to use promotional materials including pens, post-it notes and lanyards at conference events and training sessions. Posters and stickers incorporating YCC Wales' new mascot (Yellow Card Charlie) were also developed and used during promotional activities. Welsh versions of all YCC Wales materials were also developed and used at all conference events and training sessions. Finally, YCC Wales developed display screen material that was used in both hospitals and GP practices.

YCC Wales developed a resource pack for all its champions. The resource pack is given to each new champion when they commence their role.

YCC Wales, in collaboration with the MHRA, developed a Welsh version of the MHRA's patient information leaflet. The Welsh leaflets were used at conference events and training session throughout Wales during 2018/19.





YCC Wales developed a Yellow Card Scheme CPD package for General Practitioners (GPs). The CPD package covers the history of the Yellow Card Scheme, along with why, what, and how to report adverse reactions to the Yellow Card Scheme.

#### 6. PUBLICATIONS

#### **Full Articles**

Cole CP & Routledge P. An evaluation of rational prescribing in hospital outpatient practice in Sierra Leone and assessment of affordability of a prescription as an outcome. Pan Afr Med J. 2018 Nov 13;31:174. doi: 10.11604/pamj.2018.31.174.16729. eCollection 2018.

Gray LA & Routledge PA. Adverse Drug Reactions, still masquerading after all these years? Adverse Drug Reactions Bulletin 2019; 314: 1215-18

# Regional, national and international lectures

Medication without Harm: the WHO Global initiative to reduce the level of severe, avoidable harm by 50% over the next five years at Reducing Medication errors in Hospitals: National Summit, De Vere West One Conference Centre, London, Apr 18th 2018

Pharmacovigilance for Herbal and Traditional Medicines; Challenges and opportunities at HMAC Induction programme, MHRA, London, Jun 27th 2018

Pharmacovigilance and YCC Wales: Past, Present and Future at the MHRA UK Cross-Partnership meeting, Princess of Wales Hospital, Bridgend, Jul 18th 2018

Medication without Harm: who is responsible? at Paediatric Medication Error Prevention (PMEP) Group, Morriston Hospital, Swansea, Sept 19th 2018

Drug Regulation, the first three hurdles to BSc in Medical Pharmacology, Cardiff University, Cardiff, Oct 8th 2018

Pharmacogenetics and Precision Medicine to BSc in Medical Pharmacology, Cardiff University, Cardiff, Oct 15th 2018

Post-marketing surveillance to BSc in Medical Pharmacology, Cardiff University, Cardiff, Oct 22nd 2018

Medication without Harm Update at Monitoring & Reducing Medication Errors & Harm in Hospitals National Summit 2018, The Studio Conference Centre Manchester, Dec 6th 2018

Poisons and Medicines: do your Genes matter? at University of the third Age (U3A), Theatre Brycheiniog, Brecon, Thursday 24th Jan 2019

Towards safer prescribing of medicines; learning from experience at Safer Medicines- a workshop for Doctors. Friday 8th March 2019, Ffaenol Fawr Hotel, Bodelwyddan, Mar 8th 2019

#### 7. YCC WEBSITE

#### a. Website updates

The YCC Wales website is incorporated into the All Wales Therapeutics and Toxicology Centre (AWTTC) website.





The site includes:

- Information about the YCC Wales team including contact details
- Information for patients
- Advice for healthcare professionals on reporting ADRs
- Links to external educational resources, YCC Wales publications and annual reports.
- Information on our Champion Scheme.

Information contained on the website is regularly reviewed and updated.

#### b. Number of website hits

This function has not yet been activated but will hopefully be for future years.

# 8. RESEARCH AND ONGOING INITIATIVES

#### 8.1 Yellow Card Champion Scheme

In November 2012 the All Wales Chief Pharmacists Committee agreed to the implementation of the Yellow Card Hospital Champion Scheme. Whilst the scheme was initially aimed at recruiting hospital pharmacists and pharmacy technicians as Champions it has now been expanded to primary care pharmacists. Champions working across all sectors are invited to attend our training days.

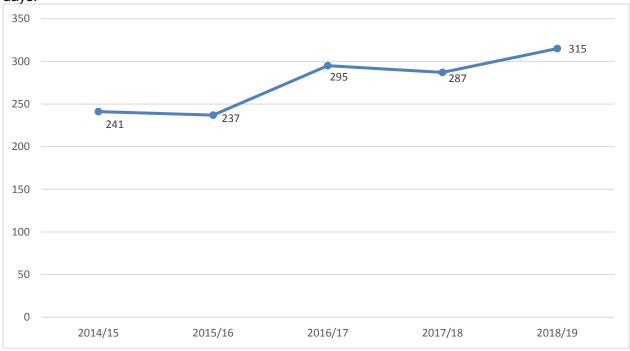


Figure 6: Number of Yellow Card reports submitted by Hospital Pharmacists in Wales over the last five years





Figure 6 shows the number of Yellow Card reports submitted by hospital pharmacists during 2018-19 has increased when compared to the previous year. The aim for the next year will be to further increase the number of reports by hospital pharmacists.

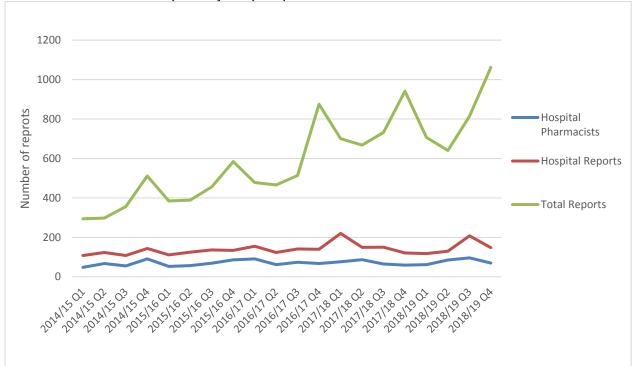


Figure 7: Number of Yellow Card reports submitted by Hospital Pharmacists, Hospital Reporters and all reporters in Wales over the last five years

Figure 7 illustrates that the number of reports from secondary care has not increased to the same extent as from primary care sources over the past four years. The Yellow Card Champions have continued to provide education to healthcare professionals working within primary and secondary care. YCC Wales has also continued to recruit and train new Yellow Card Champions.

A Wales wide e-prescribing system, which is in early stages of development, will allow for direct ADR submission to the Yellow Card Scheme. Similar to current GP systems, the ADR information will be pre-populated to assist users and encourage reporting.

YCC Wales held its fifth; training day on March 12th 2019. This year, the training day was organised in collaboration with the All Wales Consultant Pharmacist in Acute Care and Medication Safety. The invitation was also extended to the Welsh Medication Safety Officers (MSOs), several of which attended. The day began with a patient story involving sepsis. The programme of the day included sessions on patients' allergy status, antimicrobial stewardship, motivational interviewing, and medicines safety and common errors. There was also an update from the MHRA. YCC Wales received excellent feedback regarding the content, organisation and presentation standard of the day. The training day will continue to run annually with the next day scheduled for March 2020.

In July 2017, YCC Wales launched its "Champions Forum". This is an electronic forum where Yellow Card Champions can share good practice and offer support to one another. It is also a means for YCC Wales to distribute materials and information about upcoming initiatives. During 2018-19, YCC Wales continued promoting the use of the Forum amongst its Yellow Card Champions.

In October 2018, YCC Wales produced questionnaires for HealthWise Wales, a scheme which asks members of the public their views on health and wellbeing topics. This was done to explore





the publics' awareness and knowledge of the Yellow Card Scheme. Members of HealthWise Wales were asked to complete a questionnaire about the Yellow Card reporting Scheme. YCC Wales are awaiting the results of this initiative and are aiming to use the results to organise activities to improve public awareness and knowledge of the scheme.

In collaboration with the MHRA and the other four Yellow Card Centres, YCC Wales started a project aimed at targeting ADR reporting by Children and Young People. The aim of the project is to educate young people on ADRs and the importance of reporting them.

Over the last year, several of the team members (as part of a multidisciplinary team) have been supporting Swansea University to develop an electronic tool (PADRe) designed to capture ADR's and other parameters in nursing homes. The tool development is being led by Professor Sue Jordan and is in the final stages of development.

# 8.2 National Prescribing Indicator

In 2018/19, Yellow Card reporting continued as a National Prescribing Indicator (NPI) in Wales. NPIs are developed annually to promote national prescribing, balancing both quality and efficacy.

The following targets were maintained during 2018/19:

- A. Target for GP practices GP practices to submit one Yellow Card per 2,000 practice population.
- B. Target for each Health Board submit in excess of one Yellow Card per 2,000 Health Board population.

In 2017-18 YCC Wales worked together with the All Wales Prescribing Advisory Group (AWPAG) on a proposal to include Yellow Card reporting from secondary care healthcare professionals and members of the public as National Prescribing (reporting) Indicators (NPIs). The following NPI targets were introduced in 2018/19:

- Health Boards- demonstrate a 20%, or greater, increase from baseline\*, for Yellow Cards submitted by secondary care.
- Health Boards- demonstrate a 50%, or greater, increase from baseline\*, for Yellow Cards submitted by members of the public
- Yellow Cards submitted in community pharmacy- no target value set

\*Baseline: number of Yellow Cards submitted in 2017/18.





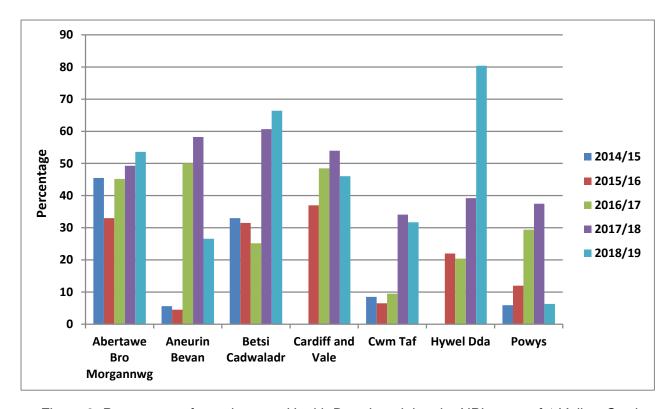


Figure 8: Percentage of practices per Health Board attaining the NPI target of 1 Yellow Card submitted per 2,000 patients, over the last five years

Figure 8 shows the percentage of GP practices achieving Target A. For the fourth year running all Health Boards in Wales have practices achieving the target. The largest change was within Hywel Dda UHB where the percentage of practices attaining the NPI target increased from 39% in 2017-18 to 80% in 2018-19.



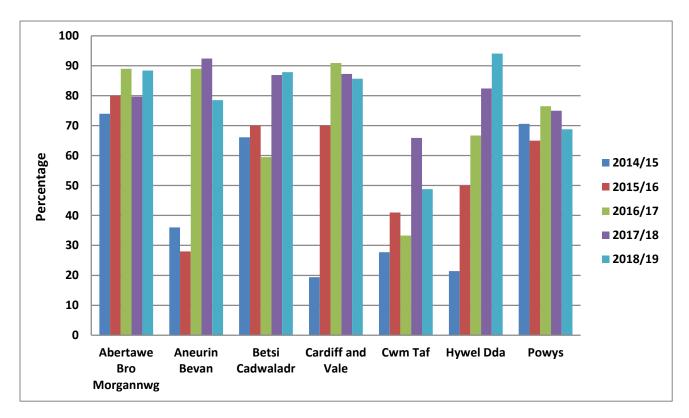


Figure 9: Percentage of GP practices in each Health Board submitting a Yellow Card over the last 5 years

Figure 9 shows the percentage of GP practices who have submitted at least one Yellow Card. Practice level data is cascaded to individual Health Boards on a quarterly basis and can be used to target those practices who have not submitted a Yellow Card and offer additional training and support. YCC Wales continues to work with local Yellow Card Champions to offer this support throughout Wales.

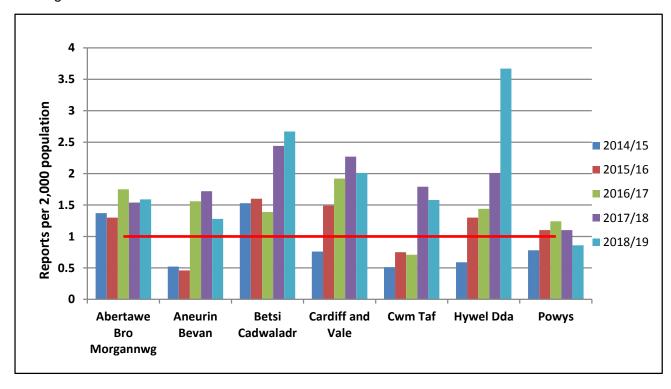






Figure 10: Number of Yellow Card reports per 2,000 patient population submitted per Health Board over the last 5 years

Figure 10 shows the performance of each Health Board against Target B: Target for each Health Board – submit in excess of one Yellow Card per 2,000 Health Board population. An increase was seen in reporting rates in three of the seven Health Boards in Wales.

The NPIs within primary care have been positively associated with increased numbers of Yellow Card reports submitted from this healthcare sector in Wales.

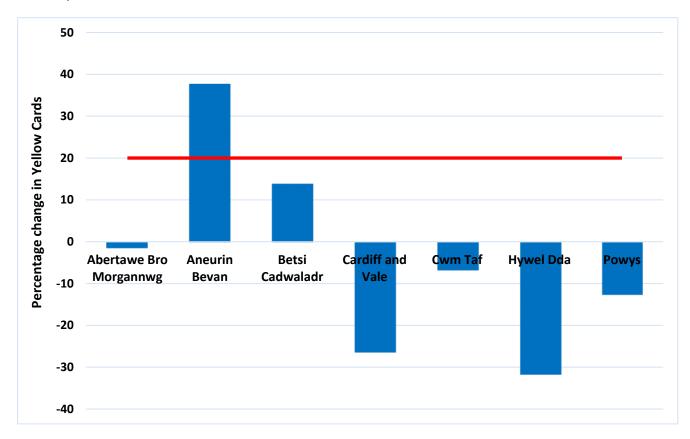


Figure 11: Performance of each Health Board against the NPI Secondary Care Target (demonstrate a 20%, or greater, increase from baseline, for Yellow Cards submitted by secondary care)

Figure 11 shows the performance of each Health Board against the new secondary care target. One of the seven Health Boards achieved the target to increase reporting by 20% in secondary care. YCC Wales are working with colleagues in all the Health Boards on how this can be improved. This NPI target will be maintained for 2019/20.





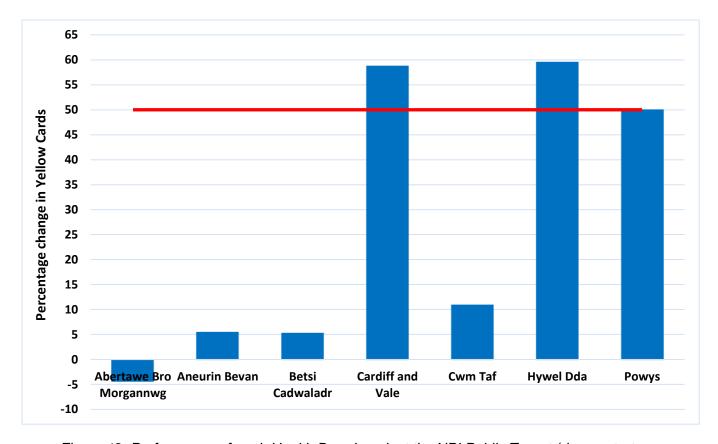


Figure 12: Performance of each Health Board against the NPI Public Target (demonstrate a 50%, or greater, increase from baseline, for Yellow Cards submitted by members of the public)

Figure 12 shows the performance of each Health Board against the new members of the public target. Three of the seven Health Boards achieved the target to increase reporting by 50% by members of the public. YCC Wales are planning events aimed at members of the public in all the Health Boards to encourage reporting in all the Health Boards by members of the public. This NPI target will be maintained for 2019/20.



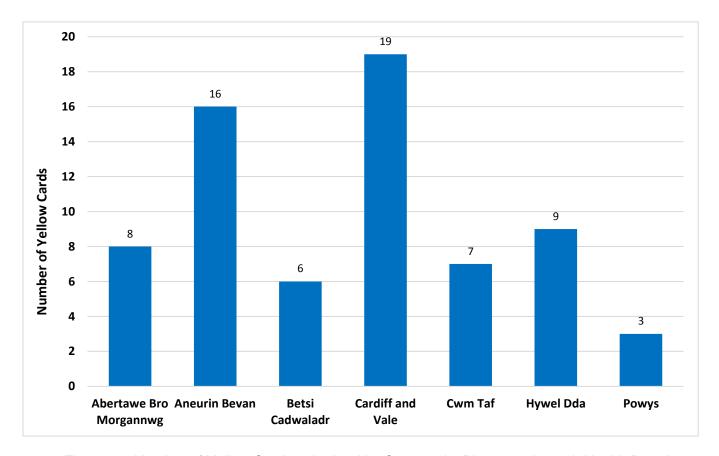


Figure 13: Number of Yellow Cards submitted by Community Pharmacy in each Health Board

Figure 13 shows the performance of each Health Board against the Community Pharmacy NPI. As this NPI is new and has no target set, the 2018/19 results will be compared to the following years and used to target areas of low reporting. This NPI will be maintained for 2019/20, with no target set.

#### 8.3 Social Media

YCC Wales launched its Twitter account in August 2016. Posts are regularly published to encourage Yellow Card reporting amongst healthcare professionals and members of the public. In order to increase awareness of the Yellow Card Scheme and encourage Yellow Card reporting amongst members of the public and healthcare professionals, YCC Wales produced a number of social media campaigns.

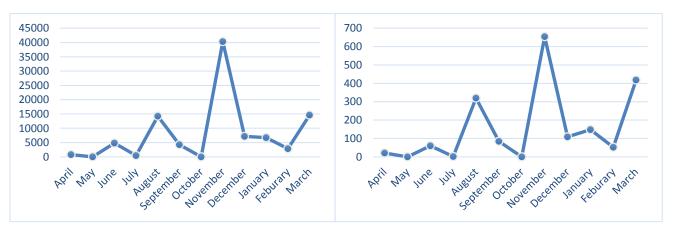






Figure 14: Number of monthly Twitter Impressions during 2018/19

Figure 15: Number of monthly Twitter Engagements during 2018/19

Figures 14 and 15 illustrate the peak numbers of Twitter impressions and post engagements achieved between November-December 2018 and February-March 2019. These coincided with the 3<sup>rd</sup> European Union-wide adverse drug reaction (ADR) awareness week held in November 2018, the RPS Wales Medicines Safety Conference in November 2018 and the YCC Wales Training Day held in March 2019. During these periods YCC Wales was very active on Twitter. To date YCC Wales has 235 followers. It is hoped that this number will increase further over the next year.

In June 2017 YCC Wales expanded its social media presence by launching a YCC Wales Facebook page in an effort to spread the word wider about the Yellow Card scheme and the importance of reporting ADRs. The current page following is 79. YCC Wales are hopeful that the following will increase over the next financial year.

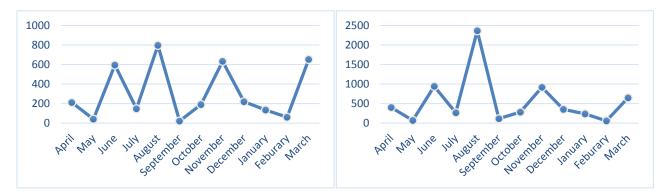


Figure 16: Monthly Facebook reach during 2018/19

Figure 17: Number of monthly Facebook Engagements during 2018/19

As can be seen in figures 16 and 17 peaks of reach and engagements once again corresponded with social media campaigns and the YCC Wales training day.

# 8.4 Yellow Card Supporter Pledge

During 2017-18 YCC Wales, with input from the MHRA, developed a Yellow Card Supporter Pledge. The pledge was developed to provide information about the Yellow Card Scheme and invite members of the public and healthcare professionals to make a pledge to making medicines safer. A paper version of the pledge continued to be used in 2018/19. YCC Wales released the Supporter Pledge in its electronic format during November 2018, which was shared at all promotional events. Since its release there have been 81 pledges by healthcare professionals and 62 pledges by members of the public.

#### 9. CONCLUSIONS

The year 2018/19 has seen a further rise in the number of Yellow Card reports submitted from Wales. The continuation and expansion of the Yellow Card Champion Scheme and maintenance of the National Prescribing (reporting) Indicator once again was associated with an increase in reporting rates.





Our strategy for 2019-20 will be to:

- Increase awareness of the Yellow Card Scheme and reporting rates amongst members
  of the public through patient centred initiatives e.g. Your Medicines, Your Health
- Continue to raise awareness of the new National Prescribing (reporting) Indicator coming amongst secondary care organisations and provide appropriate support.
- Target low reporting Groups and Health Boards
- Undertake a project with the Welsh Ambulance Service
- Undertake a project with Children involving medicines safety





#### 10. **ACKNOWLEDGEMENTS**

YCC Wales acknowledges the contribution made by the following individuals during 2018-19 in helping us to promote and develop our current initiatives:

# **Yellow Card Hospital Pharmacist Champions**

Rosemary Allgeier, Public Health Wales Katherine Beach, CAV Dianne Burnett, Hywel Dda Huw Carson, ABUHB Sue Chong, CAV Samantha Clitheroe, BCUHB Sarah Crawford, ABUHB Julian Denrico, BCUHB Rebecca Dent, Velindre Lisa Evans, ABMU Andrea Griffiths, CAV Ciara Griffiths, Hywel Dda Suzanne Hemmings, ABUHB Katherine Howard, Cwm Taf Gareth Hunt, Velindre Emma Jones, Powys Rhian Jenkins, Hywel Dda Cerys Lockett, CAV Glesni Owen, BCUHB Bethan Roberts, BCUHB Nia Sainsbury, ABMU Llinos Strange, Hywel Dda Lowri Thomas, CAV Sean Thomas, Hywel Dda Anna Watts, CAV Ceri Wilkes, BCUHB

#### **Practice Pharmacist Champions**

Lloyd Hambridge, ABUHB Carl Peacock, ABUHB James Wermig, ABUHB

#### **Primary Care Pharmacist Champions**

Lucy Higgins, ABUHB Rhian Welham, Hywel Dda

## Welsh Analytical Prescribing Support Unit (WAPSU)

Anne Coles Chrissie Collier Kath Haines Claire Thomas

# **Cardiff University**

Dr Louise Hughes

#### **Welsh Medicines Information Centre**

Hannah Evans



\*\*YellowCard
Making medicines safer

Sara Arthur







For further information visit:

www.awttc.org/yccwales
or e-mail:
YCCWales@wales.nhs.uk