

Yellow Card Centre North West

ANNUAL REPORT

TO THE MEDICINES AND HEALTHCARE PRODUCTS REGULATORY AGENCY

2020/21

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YELLOW CARD CENTRE NORTH WEST ANNUAL REPORT TO THE MEDICINES AND HEALTHCARE PRODUCTS REGULATORY AGENCY

2020/21

1. STAFF

Professor Sir Munir Pirmohamed – Director (until December 2020) Dr Lauren Walker – Director (from January 2021) Christine Randall – Senior Medicines Information Pharmacist David Moloney – Medicines Information Technician Helen Edmondson – Medicines Information Technician Marian Madden – Administrative Assistant

2. EXECUTIVE SUMMARY

In 2020/21 a total of 4,044 Yellow Cards (YCs) were submitted by health professionals, patients and carers from the Yellow Card Centre North West (YCCNW). This is a 16.8% decrease on 2019/20 almost certainly as a consequence of the pandemic. However, reporting has increased by 8.2% when compared to five years ago.

Patient/carer reporting rose by 9% in 2020/21, accounting for 19% of reporting. Although overall reporting by healthcare professionals decreased this year, there was increased reporting by; pharmacy technicians/assistants 471 reports (up 19%) and pre-registration pharmacists 136 reports (up 12%). Although hospital pharmacists reported more YCs than any other group, 1,619 reports (40% of the total), their reporting was down by 25%. Reporting also fell significantly by GPs 199 reports (down by 42%) with all other groups seeing a slight decline in reporting this year.

Serious adverse drug reactions (ADRs) accounted for 61% of all reports (63 reports [2.5% of serious reports] had a fatal outcome).

The top reported suspect drug was influenza vaccine with 135 reports. Eight of the 2019/20 top ten suspect drugs also appeared in the 2019/20 top ten; apixaban, influenza vaccine, rivaroxaban, aspirin, sertraline, omeprazole, warfarin and adalimumab. New to the 2020/21 top ten are clopidogrel and edoxaban.

Reporting of ADRs via YCs embedded in electronic healthcare systems account for 23% of all our reports. Current systems in use in the North West are MiDatabank (pharmacy medicines information system) which contributed 646 reports (30% of hospital pharmacy reports), SystmOne (GP patient management system that is also used in prisons, custody centres and some hospices) which contributed 168 reports, down from 312 reports last year, 106 EMIS(GP patient management system), up by over 300%, and 3 Vision (GP patient management system). 68% of North West GP reports were made using SystmOne, EMIS or Vision with 22% of those made by GPs working in the prison service.

The North West-wide network of Yellow Card Champions was set up in 2015 to share good practice, explore ideas and initiatives and lend support. The Champions group did not meet in 2020/21 due to the pandemic but members continue to increase to receive local data and communications. Currently there are 90 Champions representing 31 trusts/organisations.

YCCNW continues support local reporters, health professionals, students and patients. In 2020/21 only one training session was provided face to face but 11 sessions were provided virtually and 3 sessions were prerecorded for upload to educational institutions. Over 300 individuals engaged.

In 2019/20YCCNW continued to support reporting to the Yellow Card Scheme:

- locally by providing quarterly feedback to NHS Trusts on their reporting.

- nationally by co-ordinating feedback of MiDatabank ADR reporting on behalf of the MHRA and UKMi via emails

- nationally by contributing review of medication safety alerts, communications and publications for the monthly MSO WebEx event facilitated by NHS England.
- Supporting the North West MRC Fellowship Scheme in Clinical Pharmacology by providing 'Current issues in Pharmacovigilance' sessions
- Supporting new Champions with one to one support and training slides
- Participating in and supporting the MHRA initiative to improve information on ADRs and the Yellow Card Scheme to children and young people.
- by updating the CPPE ADR e-learning programme assessment.
- by updating ADR information in the CPPE /NHS Medicines Safety App.
- on social media via our Twitter account @yellowcardnw.

Note that reports of suspected ADRs to COVID-19 vaccines are not included in the body of our annual report. This is due to the large volume of Yellow Card reports received and analysed by the Medicines and Healthcare products Regulatory Agency in relation to the COVID-19 vaccines meaning this data is handled and reported separately by the agency. As a result, YCC North West has limited access to information required for analysis. An abbreviated summary is included as an Annex , see Section 10 – Annexe 1 - COVID-19 VACCINE REPORTING DECEMBER 2020 to MARCH 2021, on page 16.

3. YELLOW CARD DATA

ADR reports received

Overall 4,044 reports of suspected ADRs were made by healthcare professionals and patients/carers from the YCCNW region in 2020/21. Table 1 highlights the total number of reports originating from the YCCNW region for the past five years and Figure 1 is a graphical representation of this data. Figure 2 shows the split by reporter type for Yellow Card reports originating in the YCCNW region in 2020/21 and Figure 3 compares the number of reports for each reporter type received in 2020/21 with those received in previous years.

Table 1. The total number of reports and percentage change over the last five years from the YCCNW region.

Year	Number of reports	Percentage change on previous year
2020/21	4,044	-16.8%
2019/20	4,859	+17.1%
2018/19	4,148	+5.4%
2017/18	3,936	+5.3%
2016/17	3,738	+5.1%

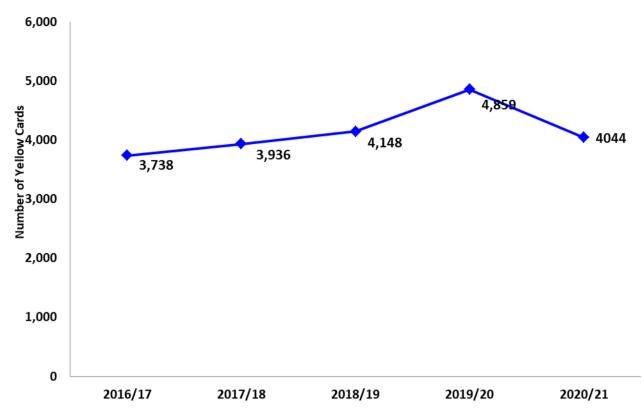
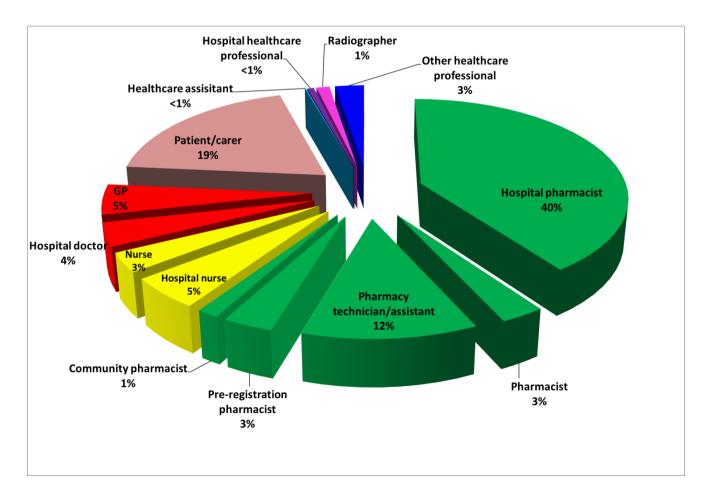


Figure 1. Line graph summarising the total number of reports originating from the YCCNW region for the past five years.

Figure 2. Percentage of Yellow Card reports that originated from the YCCNW region for each reporter group in 2020/21.



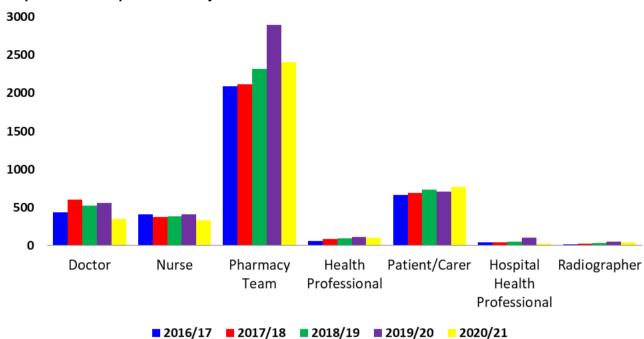


Figure 3. Number of Yellow Card reports received from each reporter group in 2020/21 compared with the previous four years.

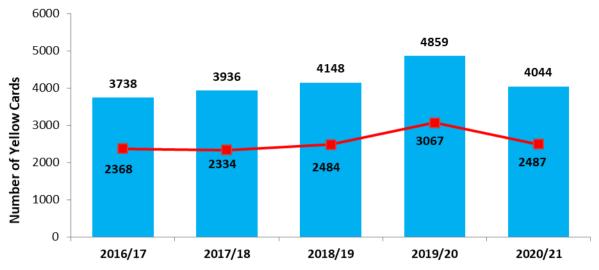
• Serious reactions

Total number of reports classified as serious that originated from the YCCNW region in 2020/21 and comparative data for previous years are shown in Table 2 and displayed graphically in Figure 4. A fatal outcome was reported on 63 Yellow Cards in 2020/21.

Table 2

Year	Number of serious reports	Percentage of total reports	Percentage change on previous year
2020/21	2,487	61%	-18.9%
2019/20	3,067	63%	23.5%
2018/19	2,484	60%	6.4%
2017/18	2,334	59%	-1.4%
2016/17	2,368	63%	+6%





• Fatal reports

Total number of fatalities that were reported from within the YCCNW region in 2020/21 and comparative data from previous years are shown in Table 3.

Table 3

Year	Number of fatal reports	Percentage change on previous year
2020/21	63	+12.5
2019/20	56	+3.7
2018/19	54	-12.9%
2017/18	62	+67%
2016/17	37	-13.9%

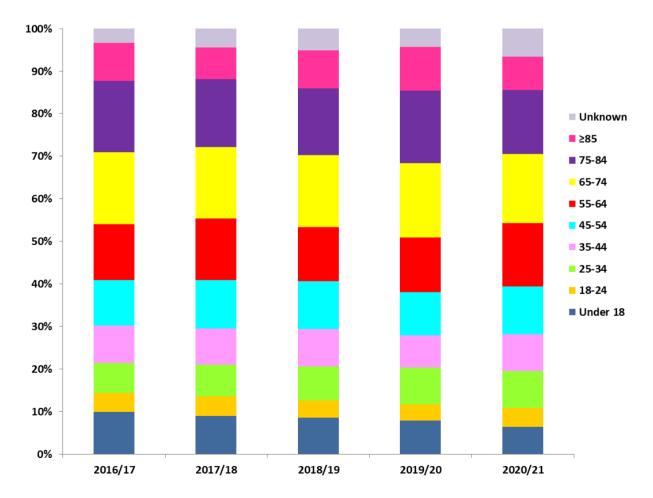
Age breakdown

Table 4 shows the number of Yellow Cards originating from within the YCCNW region stratified by patient age at time of reaction, 2016/17 to 2020/21. Figure 5 is a graphical representation of this data.

Age band (years)	2016/17	2017/18	2018/19	2019/20	2020/21
Under 2	91	95	98	102	65
2-6	101	77	89	88	47
7-12	67	68	71	79	50
13-17	111	110	97	112	95
18-24	166	183	165	183	184
25-34	262	293	334	424	350
35-44	332	338	367	367	349
45-54	397	445	464	492	451
55-64	493	569	525	625	605
65-74	631	661	704	849	653
75-84	625	627	653	827	608
≥85	338	296	371	502	318
Unknown	124	174	210	209	269
Total	3,738	3,936	4,148	4,859	4,044

Table 4

Figure 5. Percentage of Yellow Card reports that originated from the YCCNW region, stratified by age group from 2016/17 through to 2020/21.



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Top ten drugs

Table 5 lists the top ten reported suspect drugs originating from within the YCCNW region for 2020/21. Overall there were 4,810 suspect drugs reported on 4,044 Yellow Cards (some Yellow Card reports had more than one suspect drug). The top ten suspect drugs accounted for 18% of total suspect drugs reported on a Yellow Card. Table 6 contains the top ten reported suspect drugs originating from within the YCCNW region for 2019/20; these drugs accounted for 18% of total suspect drugs reported on a Yellow Card in 2019/20.

Table 5. The top ten reported suspect drugs for Yellow Cards that originated from the YCCNW region in 2020/21.

Drug name	Number of times reported as a suspect drug (2020/21)
Influenza virus (some [▼])	149
Apixaban	127
Adalimumab (some [▼])	102
Sertraline	94
Omeprazole	73
Edoxaban [▼]	72
Rivaroxaban [▼]	68
Warfarin	64
Aspirin	60
Clopidogrel	57
Total	852

Table 6. The top ten reported suspect drugs for Yellow Cards that originated from the YCCNW region in 2019/20.

Drug name	Number of times reported as a suspect drug (2019/20)
Apixaban	206
Influenza virus (some [▼])	105
Rivaroxaban [▼]	102
Phenoxymethylpenicillin	101
Adalimumab (some [▼])	98
Aspirin	94
Sertraline	94
Warfarin	82
Omeprazole	76
Ibuprofen	68
Total	1026

• Source of reports

Table 7 Number of Yellow Cards originating from within the YCCNW region stratified by reporter type from 2018/19 to 2020/21.

	2018/19 to 2 2018		2019/20		2020/21	
Reporter	Number	% of total	Number	% of total	Number	% of total
Carer	35	0.8%	36	0.7%	37	0.9%
Parent	96	2.3%	127	2.6%	63	1.5%
Patient	603	14.5%	543	11.2%	670	16.6%
Community Pharmacist	151	3.6%	140	2.9%	59	1.4%
Hospital Pharmacist	1,636	39.4%	2,147	44.2%	1,619	40%
Pharmacist	111	2.7%	95	2.0%	120	2.97%
Pharmacy Technician/assistant	346	8.4%	399	8.2%	471	11.6%
Pre-reg pharmacist	78	1.9%	122	2.5%	136	3.3%
Hospital Nurse	191	4.6%	234	4.8%	205	5%
Nurse	193	4.7%	172	3.5%	128	3.1%
GP	306	7.4%	342	7.0%	189	4.7%
Hospital Doctor	216	5.2%	217	4.5%	153	3.8%
Physician	3	0.07%	5	0.10%	10	0.25%
Coroner	1	0.02%	1	0.02%	0	0.0%
Dentist	2	0.05%	9	0.2%	15	0.37%
Midwife	5	0.1%	8	0.2%	4	0.1%
Optometrist	1	0.02%	3	0.1%	3	0.07%
Paramedic	1	0.02%	3	0.1%	5	0.12%
Radiographer	37	0.9%	51	1.0%	47	1.16%
Hospital Healthcare Professional	49	1.2%	88	1.8%	24	0.59%
Healthcare Assistant	1	0.002%	9	0.2%	5	0.12%
Other Healthcare Professional	82	2%	107	2.2%	75	1.85%
Medical Student	6	1%	2	0.04%	3	0.07%
Other	0	0%	0	0%	3	0.07%
Total	4,148	100%	4,859	100%	4,044	100.0%

Green – increasing figures

<mark>Red</mark> Black

decreasing figures
no changes

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Type of report

Table 8 shows the method used to report an ADR to the Yellow Card Scheme in 2020/21.

	Number of reports	Percentage of total reports
Electronic Yellow Card	2920	72%
MiDatabank (Pharmacy medicines information)	646	16%
SystmOne (Patient management system)	168	4%
APP	135	3.3%
EMIS (Patient management system)	106	2.6%
Paper	64	1.6%
Vision (Patient management system)	3	<0.1%
APPCOV (COVID report App)	2	<0.1%

Table 8. Number of Yellow Card reports from each reporting method originating from the YCCNW region in 2020/21.

4. INTERPRETATION OF REPORTING FIGURES

Yellow Card reports originating from the YCCNW region declined this year, down 16.8% in 2020/21 compared with 2019/20, although maintaining an increase of 8.2% over the last five years. Given the increased workload and changing priorities experienced by healthcare professionals within the NHS since the COVID-19 pandemic began in March 2020 this drop is not unexpected. However, patient/carer reporting rose by 9% accounting for 19% of total reporting.

There were 2,559 reports from acute trusts, 63% of all reports. 423 (11%) reports came from primary care, 110 (3%) from community/mental health trusts, 44 (1%) from prisons/custody centres, 84 (2%) from private organisations and 51 (1%)classed as other.

Within the acute sector pharmacy teams continue to lead reporting within their trusts. Hospital pharmacists continued to report more YCs than any other healthcare professional group making 1,619 reports and accounting for 40% of the total; 39% of these were made via MiDatabank and 54% electronically through the Yellow Card web portal. Pharmacy technicians/assistants made 415 reports (up by 7%) and pre-registration pharmacists 133 reports (up by 19%). This high level of reporting reflects the commitment and enthusiasm of the pharmacy teams who engage with the North West Champions network. This commitment could not be achieved without the support and encouragement provided by Chief Pharmacists and their senior teams.

Reporting fell within the following reporter categories; GPs 199 reports (down 42%), hospital doctors 153 reports (down 29%), hospital nurses 205 reports (down 12%) and radiographers 47 reports (down 8%) and community pharmacists 59 reports (down 58%).

Reporting via electronic healthcare systems with embedded YCs continues to increase and they now contribute 23% of all YCCNW reports (923 YC reports), contributions from each are:

- 646, MiDatabank (pharmacy medicines information system),
- 168 SystmOne (GP patient management system). Also used in prisons, custody suites, minor injuries units and hospices.
- 106 EMIS (GP patient management system). EMIS is the most prevalent GP management system in the North West and reporting via this interface is increasing following introduction of an embedded Yellow Card in February 2020.
- 3 Vision (GP patient management system).
- 70% of North West GP reports were made using SystmOne, EMIS or Vision with 26% of those made by GPs working in the prison service.

Reporting via the APP has greatly increased, 135 reports in 2020/21, up by 114 (643% increase) compared to 2019/20. 65 (48%) of APP reports were made by patients/parents and 57 (42%) came from secondary care.

The top reported suspect drug for 2020/21 was influenza vaccine with 135 reports. For the first time in four years apixaban was not the top reported suspect drug dropping down to 2nd place, four of these reports were fatalities. Eight of the top ten suspect drugs also appeared in the 2019/20 top ten; apixaban, influenza vaccine, rivaroxaban, aspirin, sertraline, omeprazole, warfarin and adalimumab. New to the 2020/21 top ten are clopidogrel (57 reports) and edoxaban (72 reports).

Serious adverse drug reactions (ADRs) accounted for 61% of all reports (63 reports [2.5% of serious reports] had a fatal outcome). Black triangle drugs in the top ten include biosimilar adalimumab, the oral anticoagulant rivaroxaban and some of the influenza vaccines.

257 reports related to children under the age of 18 years, 27% of these reports related to vaccines and 11% related to antimicrobials.

Observations and associations in 2020/21:

- 127 reports listed apixaban as the suspect drug, 78% of these reports were made by hospital the pharmacy teams. The apixaban reports included 50 of suspected haemorrhage/bleeding reactions and 8 suspected to be associated with a thromboembolic event.
- 34 (46%) of 74 community pharmacy team reports were to vaccines, including 31 for influenza vaccines. Probably a reflection of the increasing role of community pharmacists in delivering vaccinations.
- Of 193 reports made by GPs 44 (23%) were to antimicrobials. GPs also made 29 reports associated with antidepressant or antipsychotic agents.
- Radiographers made 47 reports of which 2 described anaphylactic/anaphylactoid reactions and 15 describe gastrointestinal symptoms.
- Seven cases of serious skin reactions were reported; 3 of erythema multiforme (fexofenadine, venlafaxine, Anadin Extra), 2 of toxic epidermal necrolysis (hydroxychloroquine, furosemide), and 2 of Steven's Johnson Syndrome (co-trimoxazole, lamotrigine).
- 23 reports were for ECG QT interval prolongation suspected to be associated with medication, these included; 2 citalopram, 2 sertraline, 1 amitriptyline, 1 escitalopram, 1 venlafaxine, 1 fluconazole and 1 trazodone.
- 73 reports were for acute kidney injury these included: 6 ACEI/ARBs, 4 loop diuretics, 3 digoxin, 3 atorvastatin, 3 aspirin.
- Of 766 patient/carer reports 81 (11%) listed the flu vaccine as the suspect drug .
- 79% of pharmacy technician reports in acute trusts came from three trusts (39% from St Helens and Knowsley, 21% from Wirral and 19% from Wrightington, Wigan and Leigh.

5. PROMOTIONAL ACTIVITIES

• Training delivered

Training carried out during 2020/21 was almost exclusively undertaken remotely and is detailed in Tables 9 and 10. Table 9 contains data relating to training of healthcare professionals, table 10 contains data relating to training undergraduates. No presentations were given to patients.

Audience type	Session type	Duration (hours)	Number of sessions	Total audience numbers	Total hours training
Dentists	Lecture	2 hours	1	150 (virtual)	2
Dentists – foundation trainees	Lecture	0.5 hours	6	90 (virtual)	3
MRC fellows	Lecture	0.75 hours	2	20 (virtual)	1.5
Non-medical prescribers	Lecture	0.75 hour	2	60 (virtual)	1.5
Pre-registration pharmacists	Lecture	1 hour	1	25 (in person)	1
	Totals		12	345	9

Table 9. Training provided to healthcare professionals in 2020/21

Table 10. Training provided to undergraduates in 2018/19

Audience type	Session type	Duration	Number of sessions	Total audience numbers	Total hours training
Dental undergraduates	Lecture	0.5 hours	1	Online - uploaded	0.5
Medical students	Lecture	1.0	2	Online - uploaded	2
Totals			3	-	2.5

Meetings attended None

• Lectures delivered (invited)

Czech Hospital Pharmacy Conference, January 2021 – Pharmacovigilance activities and the COVID-19 vaccine – Christine Randall

In collaboration with YCC West Midlands, YCC Wales, YCC Scotland and the MHRA a series of short presentation via WebEx to support the WHO/MHRA led Medicines Safety Week ($2^{nd} - 6^{th}$ November 2020).

Materials developed/maintained to promote YCS

SPS Website COVID-19 vaccine support - <u>Reporting suspected COVID-19 vaccine side</u> <u>effects, and potential product defects or counterfeit products</u>

CPPE e-learning programme ADRs - review and updating of assessment questions.

Christine Randall contributes to updating the NHS Medicines Safety App. The app is a quick way for healthcare professionals to test their knowledge on high risk areas for medicines safety incidents. It provides a quiz with a series of ten multiple choice questions chosen randomly from a bank of questions for each topic or mixed up in a 'lucky dip'.

Training materials used to deliver educational sessions on ADRs and the Yellow Card scheme continue to be updated, with PowerPoint presentations tailored to the audience and medium.

6. **PUBLICATIONS (2020/21)**

- SJS/TEN 2019: From science to translation. Chang WC, Abe R, Anderson P, Anderson W, Ardern-Jones MR, Beachkofsky TM, Bellón T, Biala AK, Bouchard C, Cavalleri GL, Chapman N, Chodosh J, Choi HK, Cibotti RR, Divito SJ, Dewar K, Dehaeck U, Etminan M, Forbes D, Fuchs E, Goldman JL, Holmes JH 4th, Hope EA, Hung SI, Hsieh CL, Iovieno A, Jagdeo J, Kim MK, Koelle DM, Lacouture ME, Le Pallec S, Lehloenya RJ, Lim R, Lowe A, McCawley J, McCawley J, Micheletti RG, Mockenhaupt M, Niemeyer K, Norcross MA, Oboh D, Olteanu C, Pasieka HB, Peter J, Pirmohamed M, Rieder M, Saeed HN, Shear NH, Shieh C, Straus S, Sukasem C, Sung C, Trubiano JA, Tsou SY, Ueta M, Volpi S, Wan C, Wang H, Wang ZQ, Weintraub J, Whale C, Wheatley LM, Whyte-Croasdaile S, Williams KB, Wright G, Yeung SN, Zhou L, Chung WH, Phillips EJ, Carleton BC. *J Dermatol Sci.* 2020 Apr;98(1):2-122.
- 2. A Review of the Important Role of CYP2D6 in Pharmacogenomics. Taylor C, Crosby I, Yip V, Maguire P, Pirmohamed M, Turner RM. *Genes (Basel)*. 2020 Oct 30;11(11):1295
- **3.** Dimethyl fumarate induced lymphopenia in multiple sclerosis: A review of the literature. Dello Russo C, Scott KA, **Pirmohamed M.** *Pharmacol Ther.* 2021 Mar;219:107710.
- **4.** Pharmacogenomics for Primary Care: An Overview. Rollinson V, Turner R, **Pirmohamed M.** *Genes* (*Basel*). 2020 Nov 12;11(11):1337.
- **5.** Warfarin dosing algorithms: A systematic review. Asiimwe IG, Zhang EJ, Osanlou R, Jorgensen AL, **Pirmohamed M.** *Br J Clin Pharmacol.* 2021 Apr;87(4):1717-1729.
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- 9. Pharmacogenomics in the UK National Health Service: opportunities and challenges. Turner RM, Newman WG, Bramon E, McNamee CJ, Wong WL, Misbah S, Hill S, Caulfield M, Pirmohamed M. *Pharmacogenomics*. 2020 Nov;21(17):1237-1246.
- **10.** Alcohol-related brain injury: An unrecognized problem in acute medicine. Thompson A, Richardson P, **Pirmohamed M**, Owens L. *Alcohol.* 2020 Nov;88:49-53.
- **11.** Pharmacogenomics of anticancer drugs: Personalising the choice and dose to manage drug response. Carr DF, Turner RM, **Pirmohamed M.** *Br J Clin Pharmacol.* 2021 Feb;87(2):237-255.
- 12. Pharmacogenomic associations of adverse drug reactions in asthma: systematic review and research prioritisation. King C, McKenna A, Farzan N, Vijverberg SJ, van der Schee MP, Maitland-van der Zee AH, Arianto L, Bisgaard H, BØnnelykke K, Berce V, PotoČnik U, Repnik K, Carleton B, Daley D, Chew FT, Chiang WC, Sio YY, Cloutier MM, Den Dekker HT, Duijts L, de Jongste JC, Dijk FN, Flores C, Hernandez-Pacheco N, Mukhopadhyay S, Basu K, Tantisira KG, Verhamme KM, Celedón JC, Forno E, Canino G, Francis B, Pirmohamed M, Sinha I, Hawcutt DB. *Pharmacogenomics J.* 2020 Oct;20(5):621-628.
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- 20. Beta-lactam-induced immediate hypersensitivity reactions: A genome-wide association study of a deeply phenotyped cohort. Nicoletti P, Carr DF, Barrett S, McEvoy L, Friedmann PS, Shear NH, Nelson MR, Chiriac AM, Blanca-López N, Cornejo-García JA, Gaeta F, Nakonechna A, Torres MJ, Caruso C, Valluzzi RL, Floratos A, Shen Y, Pavlos RK, Phillips EJ, Demoly P, Romano A, Blanca M, Pirmohamed M. J Allergy Clin Immunol. 2021 May;147(5):1830-1837.
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7. YCC WEBSITE

Website updates

The YCC North West website development was delayed in 2020/21 due to COVID-19 priorities but is now currently under construction on a new platform.

Number of website hits

We are unable to obtain this information, however this should become available once the hosting issues are resolved.

Twitter presence

In October 2018 we created a twitter account, @yellowcardnw, as of April 2021 we have just over 200 followers with moderate impressions on average of 8.1k, but engagement rate has been overall quite low. It is currently used to raise local and national awareness around safety in health and medicines, reporting ADRs as well as promoting our learning days and champions meetings. This year it has been difficult to penetrate our messages and we have tweeted less optimally than expected.

8. RESEARCH AND ONGOING INITIATIVES

YCCNW Champions network

The North West-wide network of Yellow Card Champions, set up in 2015, shares good practice, explores ideas and initiatives and lends support. The Champions meet twice a year and the group continues to expend, however all scheduled meetings were cancelled in 2020/21. Secondary care and community or mental health trusts who have active members of the network (22 of 26 acute plus 6 of 8 community /mental health) contributed 2,513 reports in 2020/21 (62% of all reports, 98% of secondary care reports and 84% of community/mental health trusts). All of the top ten reporting secondary care trusts actively participated in the Champions network in 2020/21.

9. CONCLUSION

In 2020/21 4,044 Yellow Cards were submitted by health professionals, patients and carers from the YCCNW region. This is a 16.8% decrease compared to 2019/20, the reduction is expected to be related to the changing work priorities of healthcare staff during the COVID-19 pandemic. Hospital pharmacists continued to be the highest reporting group (1,619 reports (40% of the total). This continuing high level of hospital pharmacy reporting correlates well with active participation in the North West-wide Champion network. The highest percentage increase in reporting in 2020/21 came from Pharmacy technicians/assistants (19% increase) and pre-registration pharmacist (12% increase).

10. ANNEX 1 - COVID-19 VACCINE REPORTING DECEMBER 2020 to MARCH 2021

Table 11 Summary of COVID-19 vaccine reporting December 2020 to March 2021

Vaccine Brand	Number of reports
Astrazeneca	12,030
PfizerBioNTech	4,428
Unspecified	20
Reporter	
Patient/carer/recipient	12,383
Doctor	987
Nurse	942
Pharmacist	557
Healthcare professional	1,012
Healthcare assistant	349
Dentist	144
Radiographer	44
Paramedic	31
Optometrist	15
Chiropodist	14
Sex	
Female	12,059
Male	3,794
Unknown	625
Age	
0 -18	244
19-30	2,257
31-40	2,712
41-50	2,578
51-60	3,421
61-70	2,405
71-80	1,205
81-90	306
>90	65
Unknown	1,285