

**YCC West Midlands**

**ANNUAL REPORT  
2014/15**

# ANNUAL REPORT OF YELLOW CARD CENTRE WEST MIDLANDS TO THE MEDICINES AND HEALTHCARE PRODUCTS REGULATORY AGENCY

2014/15

## 1. STAFF

Professor R E Ferner – Director  
Professor J J Coleman – Honorary Consultant Physician  
Mr C Anton – Administrative Co-ordinator  
Ms K Khangura – ADR Pharmacist  
Dr A R Cox – Honorary Pharmacovigilance Pharmacist  
Ms M Robinson – Clerical Officer

## 2. SUMMARY

Our priorities for the year remain focused on teaching and providing information and we have continued our programmes for all grades of staff from nurses to consultants. We employed Ms Karamjit Khangura as an ADR pharmacist in October 2014 and she has worked hard to create a network of champions throughout the Region in both secondary and primary care. We now have champions—doctors, pharmacists and nurses—in place in the majority of the region’s acute Trusts and in a few CCGs, and we are continuing to expand the network.

We held a study afternoon to mark the 50<sup>th</sup> Anniversary of the Yellow Card Scheme in February 2015 which was well attended and featured keynote lecturers, case presentations, and patient perspectives. Feedback was enthusiastic. We have planned our first Champions’ Day in the autumn to allow the champions to meet, learn, and network.

The number of reports from the region rose by 13%, as did the percentage of serious reports. Non-health professionals (carers, parents, and patients) are now our largest reporting group. The recent trend of increasing number of reports from general practitioners has continued.

## 3. YELLOW CARD DATA

*Number of reports*

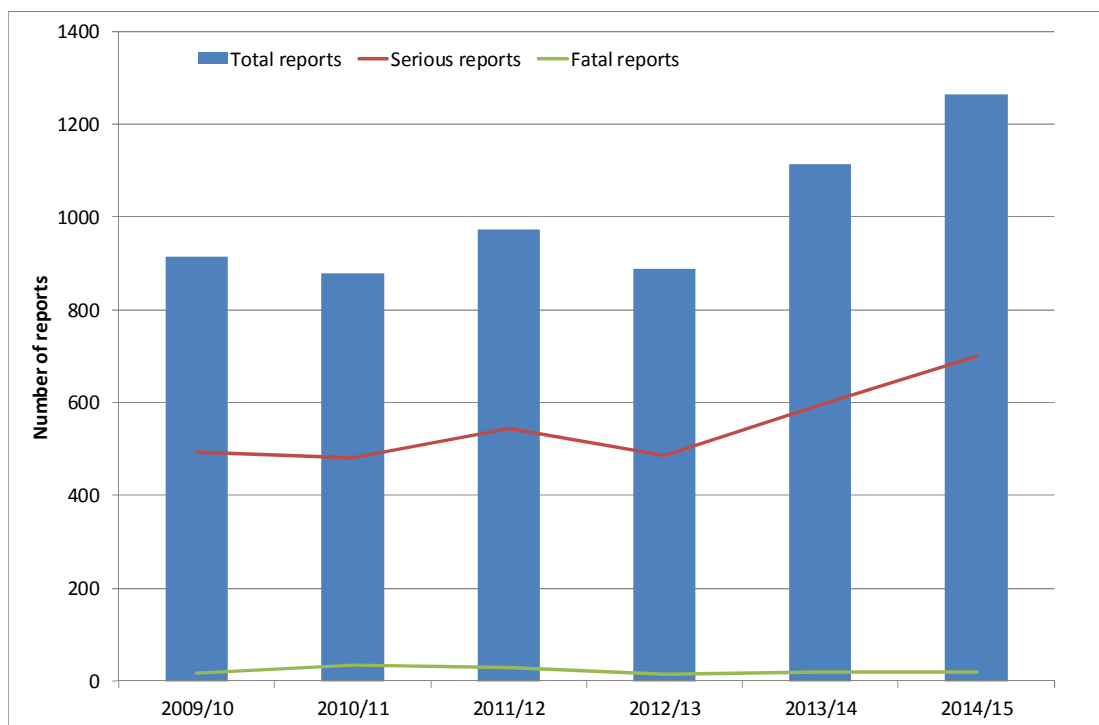
Year	Number of reports	As a percentage of national reports
2014/15	1263	6.5%
2013/14	1114	6.4%
2012/13	889	6.2%
2011/12	974	7.4%
2010/11	879	7.2%

*Serious reports*

Year	Number of serious reports	As percentage of total reports
2014/15	699	55%
2013/14	596	54%
2012/13	485	55%
2011/12	544	56%
2010/11	481	55%

*Fatal reports*

Year	Number of fatal reports	As percentage of total reports
2014/15	20	1.6%
2013/14	19	1.7%
2012/13	16	1.8%
2011/12	29	3%
2010/11	34	3.9%
2009/10	18	2%



### Age banding

Age range	Percentage of reports 2014/15	Percentage of reports 2013/14	Percentage of reports 2012/13	Percentage of reports 2011/12	Percentage of reports 2010/11
<18	13%	12%	8%	9%	13%
18-24	6%	4%	6%	6%	6%
25-34	9%	8%	9%	9%	9%
35-44	9%	11%	11%	10%	13%
45-54	12%	14%	12%	16%	11%
55-64	12%	14%	14%	13%	14%
65-74	18%	16%	20%	17%	13%
75-84	11%	13%	11%	10%	13%
>85	4%	2%	5%	3%	3%
unknown	5%	4%	5%	6%	6%
<b>Total</b>	<b>1263</b>	<b>1114</b>	<b>889</b>	<b>974</b>	<b>879</b>

### Source of report

Reporter qualification	2014/15	2013/14	2012/13	2011/12	2010/11
Carer	11	9	6	7	5
Community Pharmacist	47	90	61	44	24
Coroner	2	1	1		
Dentist	5	8	1	3	3
GP	279	248	236	229	190
Healthcare Assistant	1	3		2	
Hospital Doctor	176	155	144	191	184
Hospital Health Professional	36	31	48	63	51
Hospital Nurse	128	85	60	68	66
Hospital Pharmacist	121	92	98	68	36
Nurse	115	131	91	102	105
Other Health Professional	47	39	26	45	64
Parent	22	24	11	10	8
Patient	254	135	77	84	90
Pharmacist		16	8	28	12
Physician	7	11	8	12	39
Radiographer	7	11	10	21	

### Report type

Report type	2014/15
eYC	768
Paper	275
GP systems	117
TPP	61
MiDB	37

We have created a number of additional graphs to examine some local trends in reporting.

Figure 1: All Patient Reports (combined patient, carer, and parent reports)

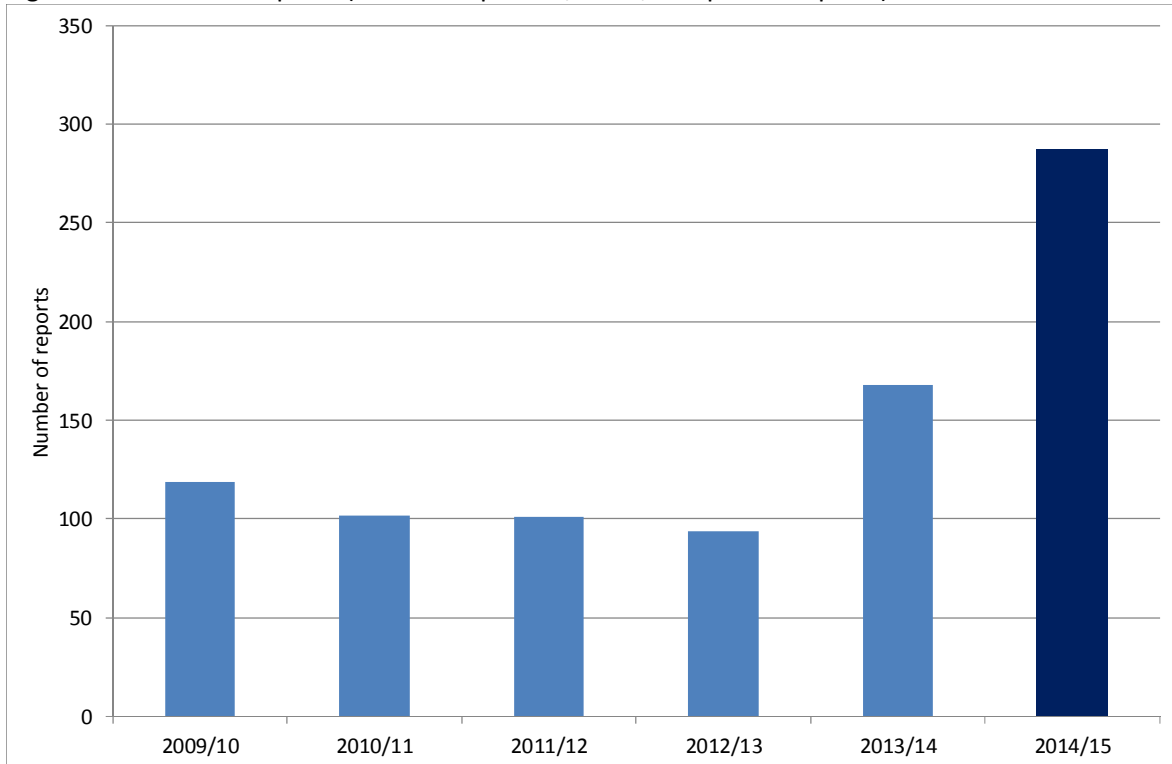


Figure 2: All hospital Reports (Combination of hospital doctor, hospital nurse, hospital pharmacist & hospital other healthcare professional)

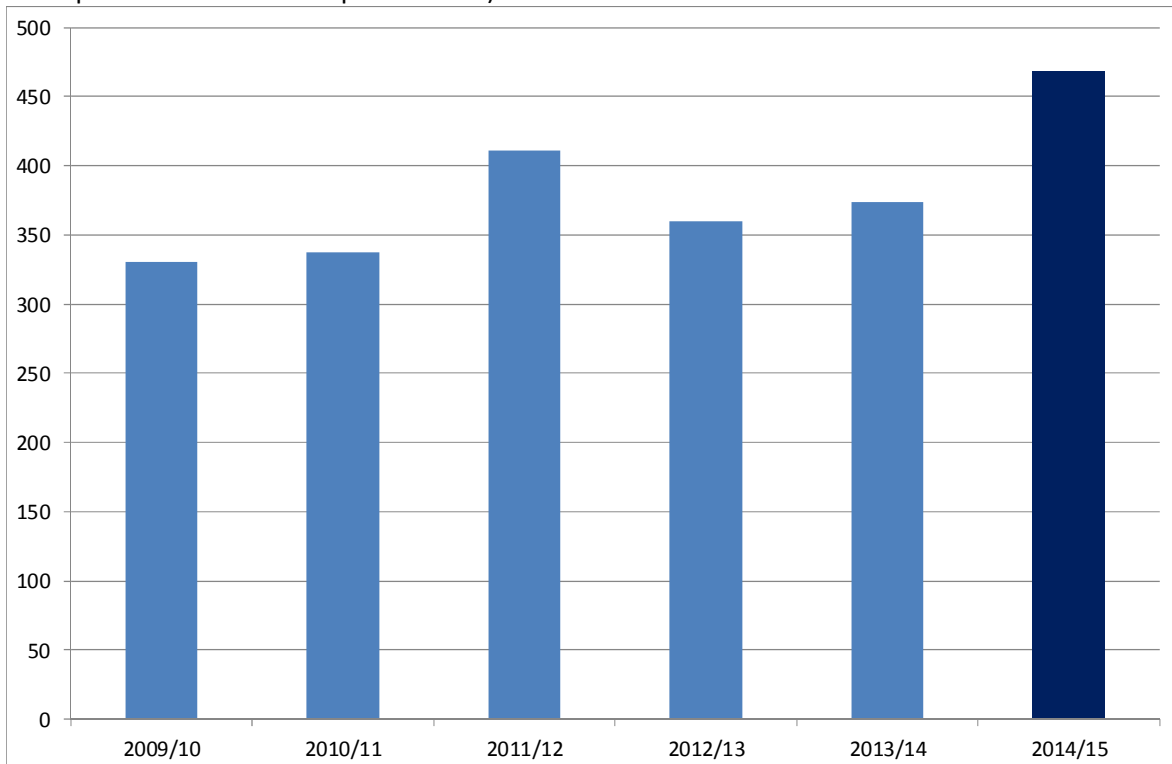


Figure 3: All Pharmacist Reports (Combination of pharmacist, community pharmacist, & hospital pharmacist).

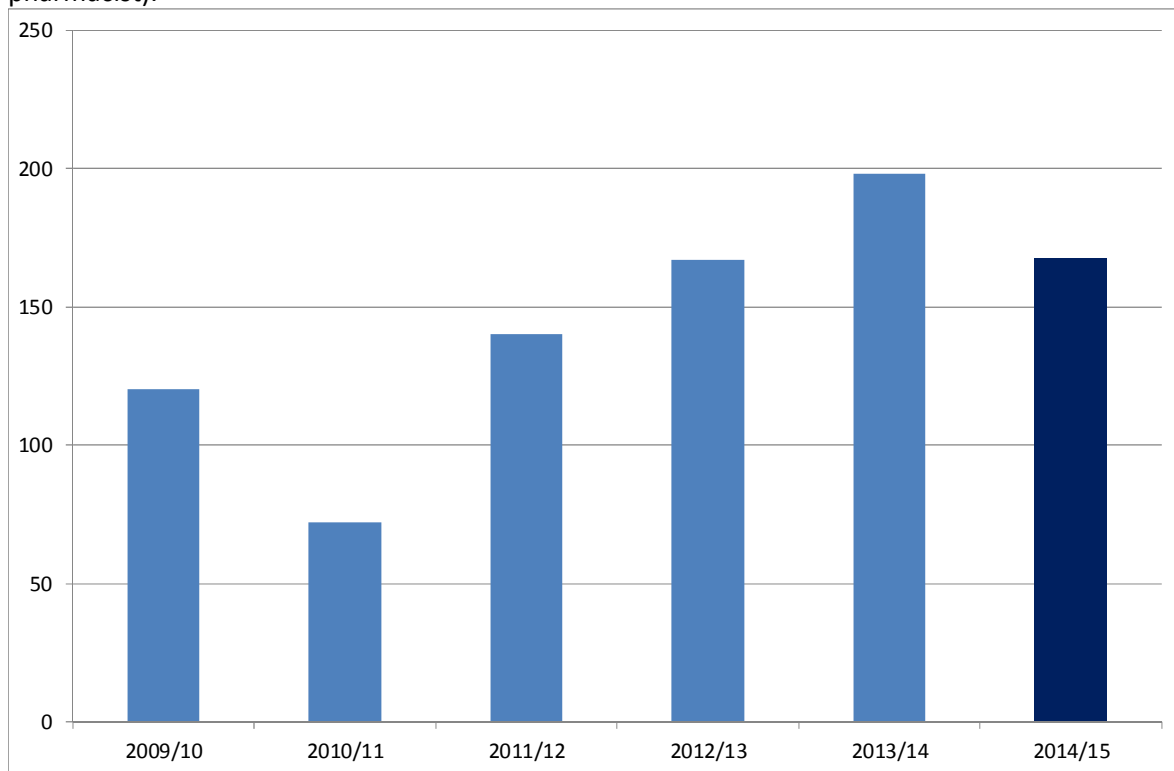


Figure 4: Hospital Doctor Reports

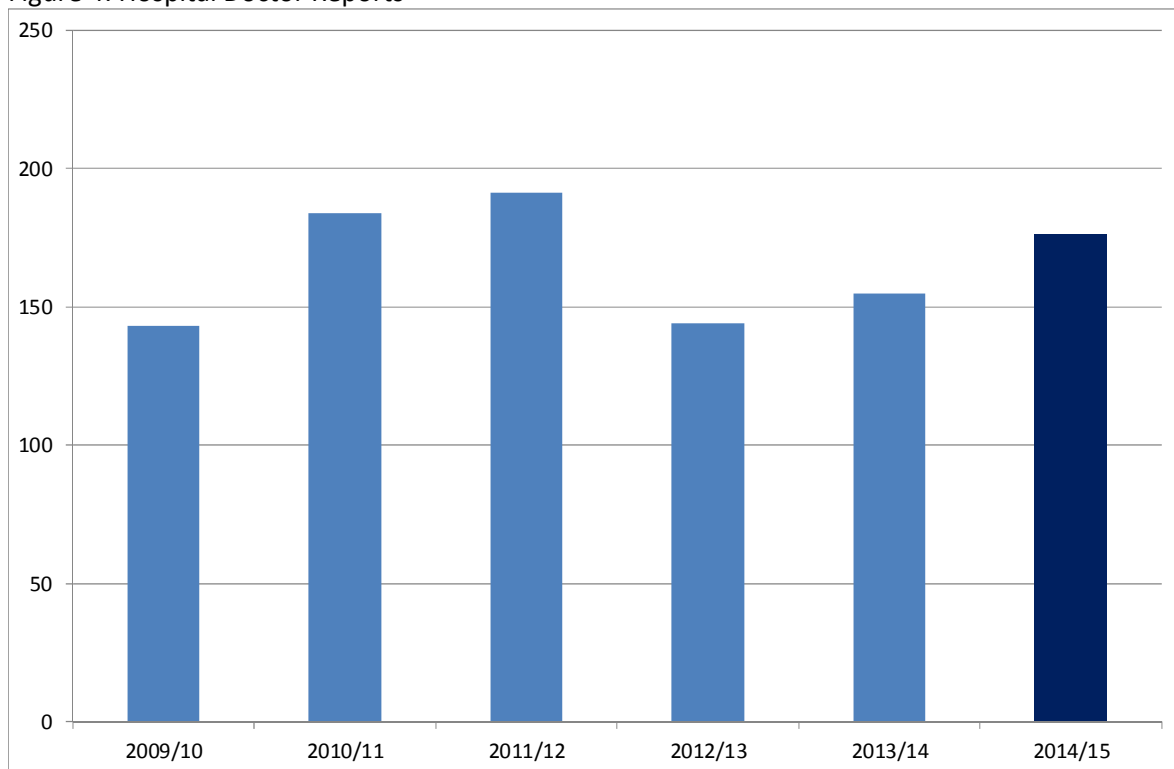


Figure 5: All Healthcare Professional Reports

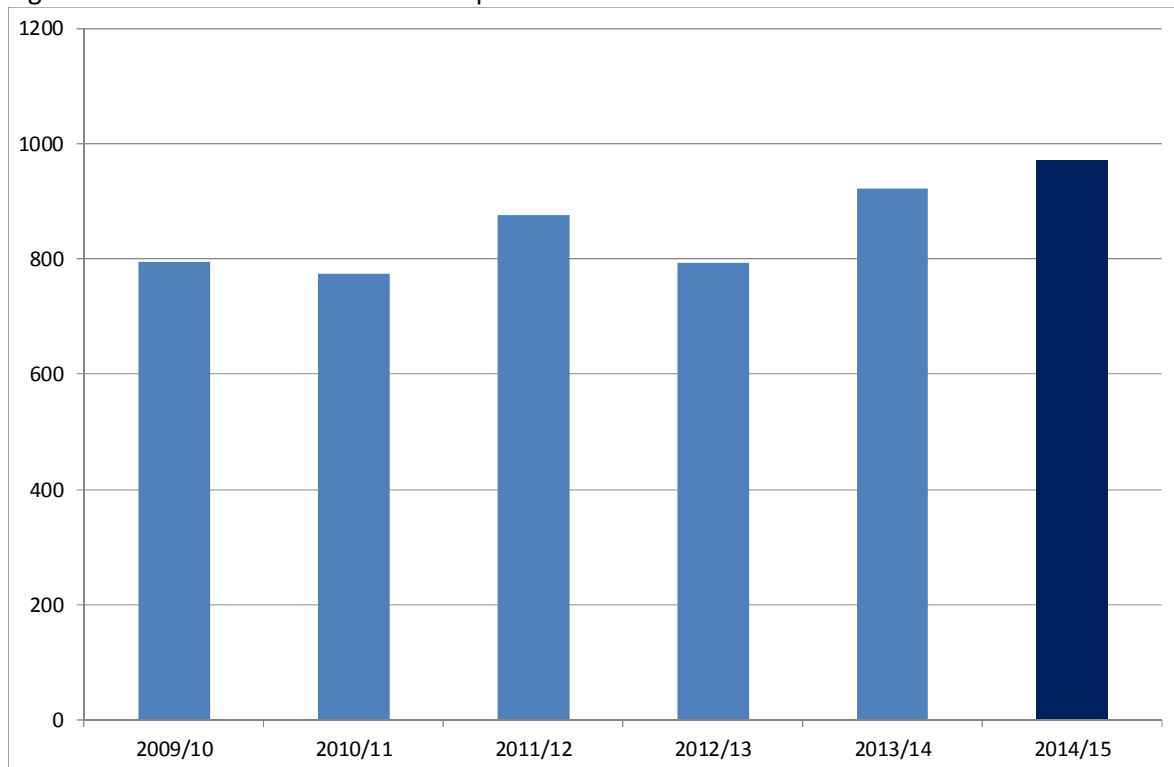


Figure 6: All Nurse Reports (Nurse, and Hospital Nurse)

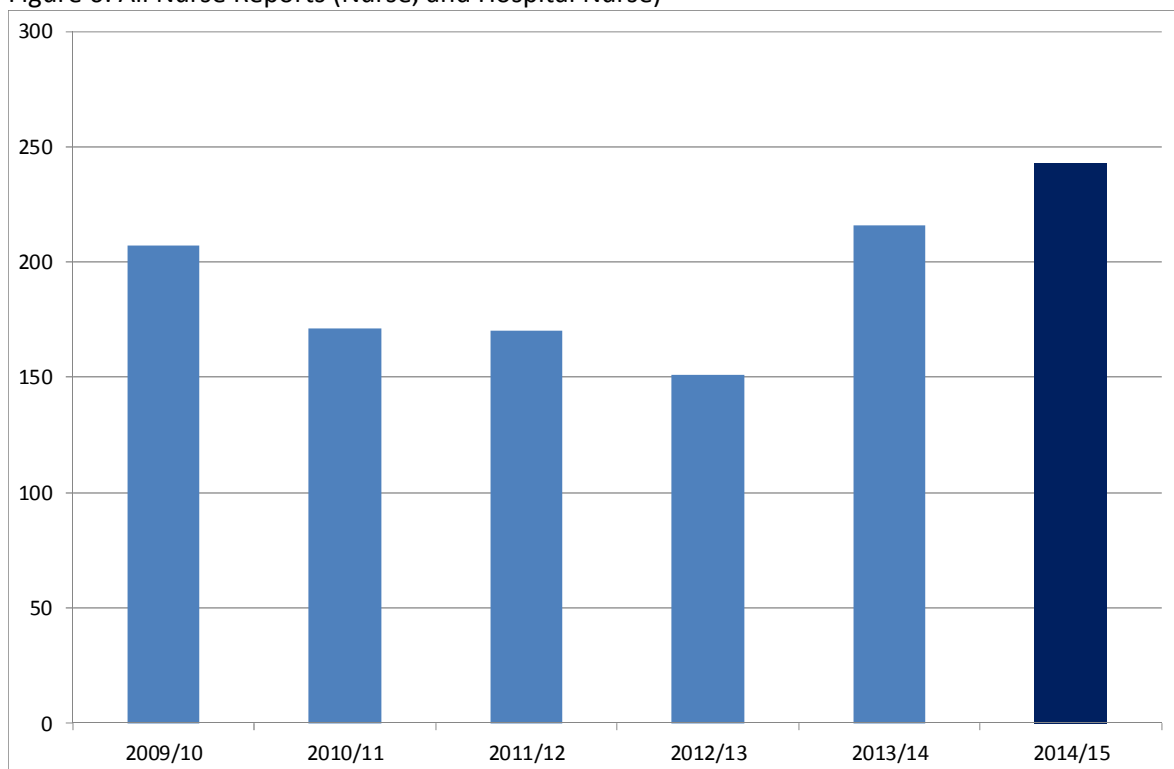
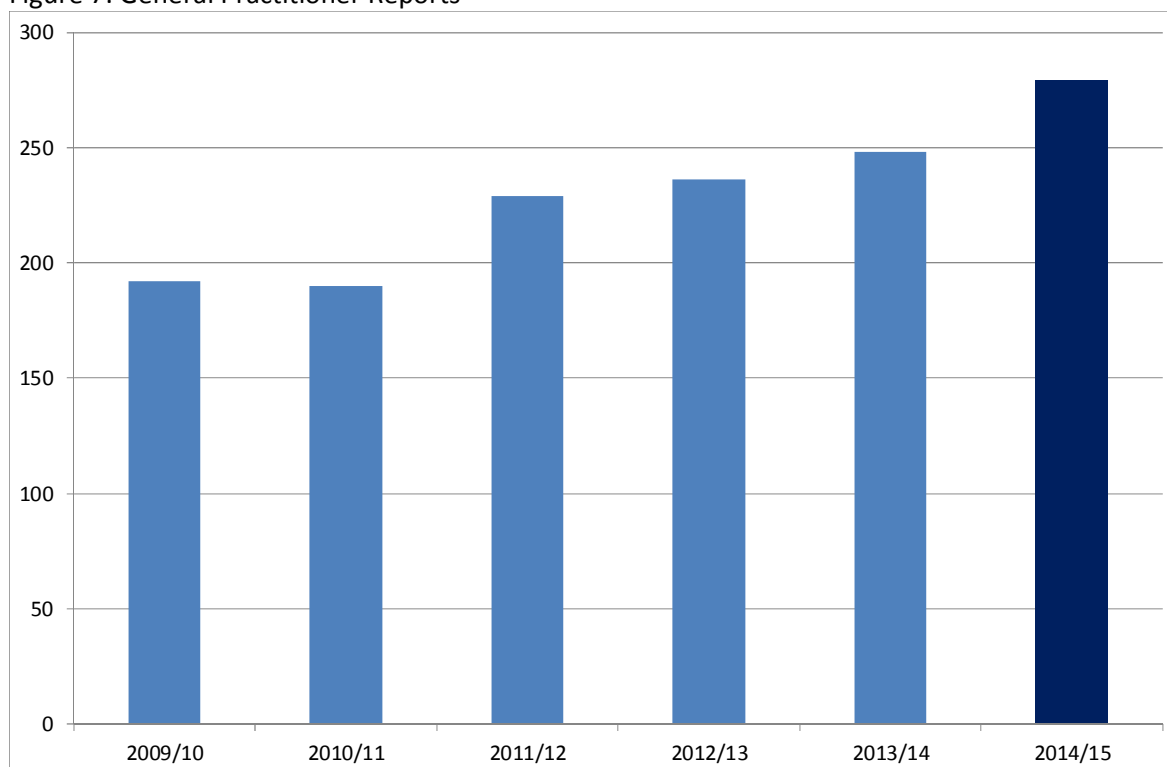


Figure 7: General Practitioner Reports



*Top 10 drugs*

The top 10 drugs listed as suspect drug are shown below

Drug	Total
influenza virus vaccine	67
rivaroxaban ▼	46
varicella zoster virus vaccine	25
simvastatin	23
etonogestrel	21
atorvastatin	19
dapagliflozin ▼	19
retigabine ▼	17
rotavirus	16
etanercept	16

**4. PROMOTIONAL ACTIVITIES**

We have promoted the scheme with various talks and lectures during the year. Details of them are listed below.

**Meetings**

- Birmingham and Solihull Mental Health FT, Medication Safety Officer (MSO)
- Birmingham Cross City CCG, prescribing support pharmacist
- Dudley Group of Hospitals, senior pharmacist
- Birmingham Children’s Hospital, senior pharmacist
- Worcester Hospital, ADR Champion
- University Hospital Birmingham, MSO



- Heart of England FT, medicines information pharmacy team
- SWBH CCG, commissioning manager
- South Staffordshire & Shropshire Healthcare NHS Foundation Trust, MSO
- Solihull CCG, MSO
- Coventry and Rugby CCG, Head of medicines management, chair of APC
- West Midlands Academic Health Sciences Network Drug Safety Advisory Group x 6

## ADR Champions

Champions have been recruited at Birmingham and Solihull Mental Health trust, Birmingham Children's Hospital Trust, Birmingham Women's Hospital FT, Burton FT, Dudley Group of Hospitals FT (2), Heart of England FT, Royal Orthopaedic Hospital FT, Royal Wolverhampton Trust (3), Shrewsbury and Telford Trust, South Staffordshire and Shropshire Healthcare FT (2), South Warwickshire Acute Trust, University Hospital Coventry and Warwickshire, University Hospital of North Staffordshire Trust (3), Walsall Hospital Trust (3), Worcester Acute Trust (2), Wye Valley Trust (3)

A training meeting for the champions is being planned for the autumn.

## Teaching

Meeting	Time	Number of participants	Number of sessions
Birmingham Children's Hospital, pharmacist and technicians	1 hour	15	1
Russell's Hall Hospital, grand round medication errors	1 hour	30	1
Birmingham and Solihull Mental Health FT pharmacists	45 minutes	13	1
Walsall Manor Medicines Safety Group pharmacists and risk managers	30 minutes	4	1
Heart of England FT, FY2s	45 minutes	35	1
Birmingham Women's Hospital, pharmacists and technicians	1 hour	6	1
Birmingham Cross City CCG, pharmacists	30 minutes	20	1
Russell's Hall Hospital, pharmacists, technicians and 1 consultant	1 hour	16	1
Birmingham University lecture on Polypharmacy, 3 <sup>rd</sup> year medical students	30 minutes	9	1
Sandwell Hospital pharmacists	30 minutes	7	1
City Hospital pharmacists and pre-reg pharmacists	30 minutes	5	1
Birmingham University pharmacy students	30 minutes	5	1
Aston University pharmacy students	30 minutes	3	1
Aston University independent prescribers course	1 hour	22	1
Hereford County Hospital, pharmacists and technicians	45 minutes	20	1
Prescribing Masterclass Oxford	3 hours	20	1

## Lectures given

- Anton C. Regulatory action; Medical inaction? Drug Safety. Conference: 14th ISO P Annual Meeting
- Ferner RE. Dowling Club Travelling Lectures, Medical University of Kazan, Tartarstan (Russian Federation), June 2014: "Adverse drug reactions and the skin."
- Ferner RE. SIR Institute for Pharmacy Practice and Policy, de KNMP en de afdeling klinische farmacie en het Scientific Institute of Quality in Healthcare van het Radboud UMC, Nijmegen, June 2014: "A perspective on patient safety."
- Ferner RE. Experimental Therapeutics Annual Dinner Oxford, October 2014: "Fatal pharmacology".
- Ferner RE. South Asian Chapter of the American College of Clinical Pharmacologists, Mumbai, April 2014: "How Drug & Therapeutics Committees make decisions".
- Ferner RE. European Association of Poisons Centres and Clinical Toxicologists, Brussels, May 2014: "The future toxicology of food and drink".
- Ferner RE. British Geriatric Society Autumn Brighton, October 2014: "Medication errors in the elderly".
- Ferner RE. Dowling Club meeting Birmingham, October 2014: "Mayhem, malpractice, and murder".
- Ferner RE. Intensive Care Society London, December 2014: "Drug Interactions on the intensive care unit".

## 6. PUBLICATIONS AND CONFERENCES

Publications for 2014/15 include:

Ferner RE, Aronson JK. Cato Guldberg & Peter Waage, the history of the Law of Mass Action, and its relevance to clinical pharmacology. *British Journal of Clinical Pharmacology* 2015. doi: 10.1111/bcp.12721. [Epub ahead of print]

Anton C, Cox AR, Ferner RE. Regulatory action; Medical inaction? Drug Safety. Conference: 14th ISO P Annual Meeting "New Ideas in Ancient Cultures: Advancing Pharmacovigilance in Asia" Tianjin China. *Drug Safety* 2014; 37(10): 842-3.

Aronson JK, Ferner RE. The Law of Mass Action and the pharmacological concentration-effect curve: resolving the paradox of apparently non-dose-related adverse drug reactions. *British Journal of Clinical Pharmacology* 2015. doi: 10.1111/bcp.12706. [Epub ahead of print]

Aronson JK, Ferner RE. A licence to cure: When there is sufficient evidence of quality, efficacy, and safety, the cheapest product should be prescribable. *BMJ*. 2015; 350: h1723.

Barber J, McKeever TM, McDowell SE, Clayton JA, Ferner RE, Gordon RD, Stowasser M, O'Shaughnessy KM, Hall IP, Glover M. A systematic review and meta-analysis of thiazide-induced hyponatraemia: Time to reconsider electrolyte monitoring regimens after thiazide initiation? *British Journal of Clinical Pharmacology* 2015; 79(4): 566-77.

Bradberry SM, Wilkinson JM, Ferner RE. Systemic toxicity related to metal hip prostheses. *Clinical Toxicology* 2014; 52(8): 837-47.

Coleman JJ, Hodson J, Thomas SK, Brooks HL, Ferner RE. Temporal and other factors that influence the time doctors take to prescribe using an electronic prescribing system. *Journal of the American Medical Informatics Association* 2015; 22: 206 12

Ferner RE. Toxic murder 2000-2014. Conference: 35th International Congress of the European Association of Poisons Centres and Clinical Toxicologists, EAPCCT 2015 St Julian's Malta. *Clinical Toxicology* 2015; 53(4):234

Ferner RE. Adverse drug reactions in dermatology. *Clinical and Experimental Dermatology* 2015; 40(2): 105-9; quiz 109-10.

Ferner RE, Mackenzie AA, Aronson JK. The adverse effects of nitrous oxide. *Adverse Drug Reaction Bulletin*. 2014; 285: 1099-1102.

Khangura K, Begum M. Omitted medicines in hospital: assessing the scale of the problem and the potential for patient harm. *International Journal of Pharmacy Practice* 2015; Suppl 1: 40.

Omer HM, Hodson J, Thomas SK, Coleman JJ. Multiple drug intolerance syndrome: a large-scale retrospective study. *Drug Safety* 2014; 37(12): 1037-45.

McIlroy G, Thomas SK, Coleman JJ. Second-generation antipsychotic drug use in hospital inpatients with dementia: the impact of a safety warning on rates of prescribing. *Journal of Public Health (Oxford)* 2015; 37(2): 346-52.

Pankhurst T, Mani D, Ray D, Jham S, Borrowes R, Coleman JJ, Rosser D, Ball S. Acute kidney injury following unselected emergency admission: role of the inflammatory response, medication and co-morbidity. *Nephron Clinical Practice* 2014; 126(1): 81-9.

## **7. RESEARCH**

Our current research activity is concerned with adverse drug reactions, including classification, monitoring, and the patient experience of adverse drug reactions and the Yellow Card scheme.