Participation in United Kingdom (UK) Haemovigilance

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Reporting in 2018

Participation in UK haemovigilance remains very high, and in the calendar year 2018 there were only three registered National Health Service (NHS) Trusts/Health Boards that did not submit any new reports to either SHOT or the Medicines and Healthcare products Regulatory Agency (MHRA). Of the three nonreporting NHS organisations, one was a medium level user of blood components (based on the 2017 SHOT participation benchmarking component user levels, see Table 2.1), one was a very low user, and one was an indirect user who may have made reports via another reporting organisation.

Although in general participation is high, there are widely differing levels of reporting between organisations. Analysis was carried out to look at the number of reports made by each NHS Trust or Health Board, and independent reporting organisations based on their usage levels (again, using the 2017 SHOT participation benchmarking usage criteria below).

Table 2.1:	Usage level	Total components per annum
SHOT participation	Very low	<1,000
benchmarking usage levels	Low	1,001–7,000
	Medium	7,001–12,000
	High	12,001–20,000
	Very high	>20,001

This analysis shows that there is a wide spread of reporting levels across the different size organisations. Surprisingly there was one very high usage, and two high usage organisations that made five or fewer reports during 2018. Whilst there is no 'right' or 'wrong' number of reports, organisations with this level of blood use would be expected to have a higher level of reporting than this.



Figure 2.1: Number of 2018 reports by reporting organisation and component usage level Since 2012, SHOT has produced participation benchmarking data at NHS Trust/Health Board level, and for any independent, non-NHS reporting organisations that have reported during the preceding two years. These data are available on the SHOT website (https://www.shotuk.org/reporting/shot-participation-benchmarking/), and reporters are encouraged to review these data when they are published each year.

Variable rates of incidents reported from Trusts/Health Boards could be due to multiple factors, for example, staffing issues, variable resource allocation, organisational cultures, and robustness of transfusion practices.

Learning point

 Reporters should benchmark their participation levels against similar sized organisations and try to identify any underlying reasons for wide variations

Figure 2.2 demonstrates that the majority of serious adverse blood reactions and events (SABRE) reporters are actively engaged in UK haemovigilance reporting (by either submitting new reports, or closing off older reports), with the majority of active reporters reporting in the first month of 2019. The few that have never reported or have not reported in the last year are either facilities, care homes, private hospitals and a very small NHS organisation with fewer than 200 units issued per year.

The number of reports received on the SHOT database has increased slightly from 2017, but the increase is largely due to one particular report of a refrigerator failure that led to 106 patients being administered anti-D immunoglobulin which was out of controlled temperature storage. Without the single incident involving multiple cases, the reporting numbers this year would have decreased from last year. The analysis in Figure 2.1 that shows some large organisations with low reporting levels, could indicate that there is under-reporting of some incidents. In spite of this, reporting levels per 10,000 total components have continued to increase year-on-year, from 10.9 reports per 10,000 components issued in 2010, to 17.3 in 2018 (Figure 2.3). This is an increase of 58.7% over the nine-year period, however during this time, component issue levels have also decreased by approximately 20%.









SHOT reporting by UK country

In total, 4037 reports were submitted to SHOT in 2018 and the breakdown by country, including total component issues, is shown in Figure 2.4.

Reporting organisations in England have reported a lower percentage of total cases than last year (79.9% in 2018 compared to 83.5% in 2017), while the overall percentages have increased for Scotland and Northern Ireland. Reporting from Wales remains very similar to 2017 at 4.9% of total reports (Bolton-Maggs et al. 2018). The reasons for this may need to be explored further, they could be due to increased awareness and improved reporting.

Full tables containing the breakdown of data from 2018 and previous years can be found in the supplementary information on the SHOT website www.shotuk.org.

FFP **MB-FFP Red cells** Platelets SD-FFP Cryo Totals NHS Blood and 1,422,742 252.951 90,500 6.336 41,386 1,980,377 166,462 Transplant Northern Ireland Blood 41,352 8,229 3,505 1,110 299 955 55,450 Transfusion Service Scottish National **Blood Transfusion** 3,580 425 189,894 142,670 23,881 16,203 3.135 Service 8,460 108,794 Welsh Blood Service 85,570 10,343 4,000 421 Totals 1,692,334 295,404 194,630 99,190 7,060 45,897 2,334,515

FFP=fresh frozen plasma; SD=solvent detergent-sterilised; MB=methylene blue-treated; Cryo=cryoprecipitate

SD-FFP data supplied by Octapharma

Paediatric/neonatal MB-FFP are expressed as single units; Cryoprecipitate numbers are expressed as pools and single donations as issued; all other components are adult equivalent doses

Table 2.2: Total issues of blood components from the Blood Services of the UK in the calendar year 2018



Cases included in the 2018 Annual SHOT Report n=3326

The total number of reports analysed and included in the 2018 Annual SHOT Report is 3326. This is an increase of 96 from the 3230 reports analysed in the 2017 Annual SHOT Report (published 2018). This number does not include 39 reports of anti-D immunisation as these are part of a separate study.

The number of reports excluding 'near miss' and 'right blood right patient' is 1659, a small reduction from 1671 in 2017.



RBRP=right blood right patient; CS=cell salvage; UCT=unclassifiable complications of transfusion

Analysis of errors by location

The trends of error reports by different locations reported in the last two Annual SHOT Reports have been updated again for 2018. The trends for all four areas analysed have continued in the same direction, with emergency departments now contributing to more than 10% of all error reports to SHOT in 2018. Theatres also show a slight increase year on year as a percentage of total error reports, while the general wards and adult critical care units show a downward trend.

Figure 2.6: Trend of error reports from different departments



Reference

Bolton-Maggs PHB (Ed), Poles D et al. (2018) on behalf of the Serious Hazards of Transfusion (SHOT) Steering Group. The 2017 Annual SHOT Report. https://www.shotuk.org/shot-reports/ [accessed 30 May 2019].