

Looking back to plan ahead: Reflections on over a decade of SHOT UK haemovigilance participation benchmarking data

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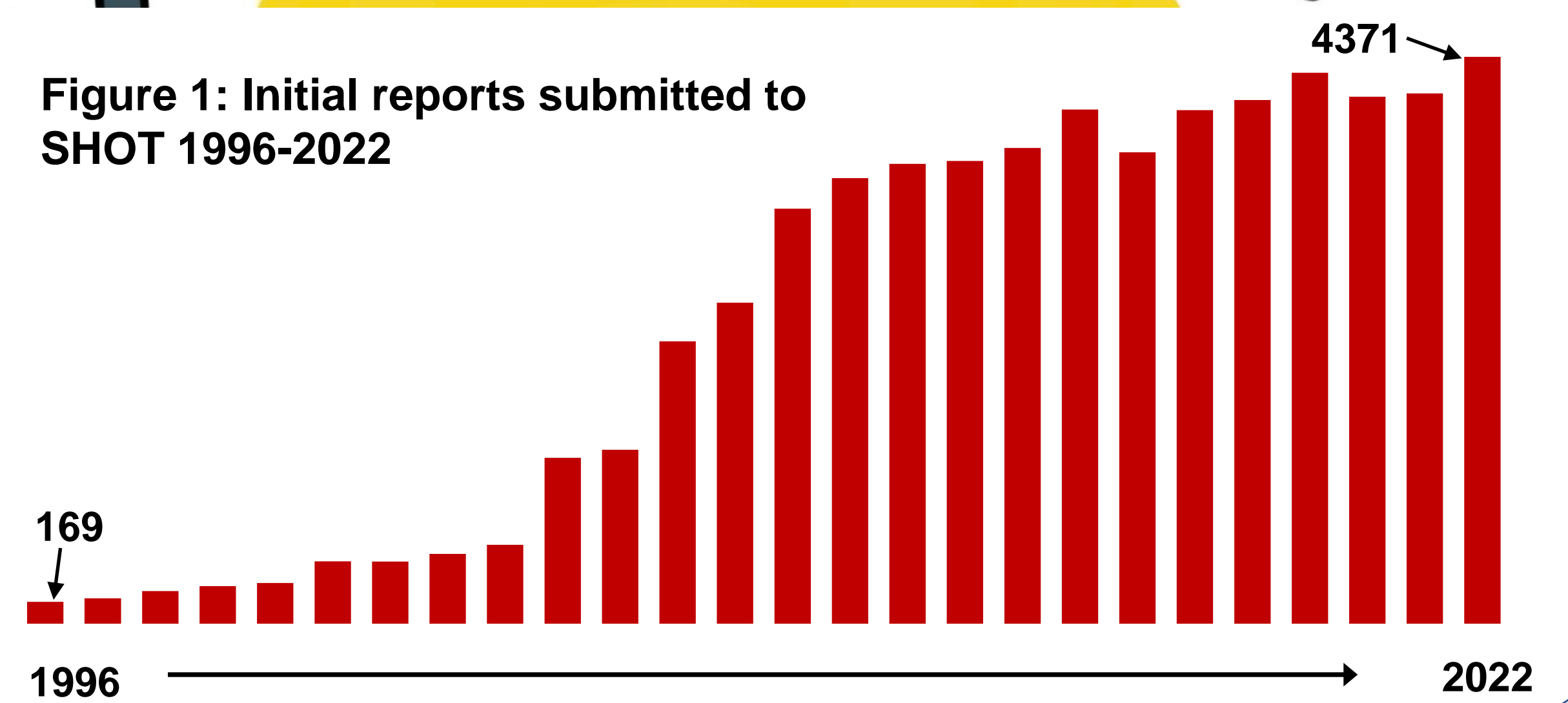
Serious Hazards of Transfusion, NHS Blood and Transplant, Manchester, UK

1. Introduction

- The quality of SHOT data can only be assured if there is full engagement throughout the transfusion community in supporting the haemovigilance process
- Since 1996 reporting has increased year-on-year from 169 initial reports submitted in 1996, to 4371 in 2022
- Variation in submission levels exist across different National Health Service (NHS) Trusts and Health Boards
- SHOT began publishing participation benchmarking data in 2011, with the aim of promoting awareness
- Reporters are encouraged to review their individual participation reports to understand the number of incidents submitted under each of the 4 main categories (i.e. serious adverse events (SAE), serious adverse reactions (SAR), near miss (NM) and anti-D immunoglobulin errors (ANTID)), and to benchmark their overall reporting levels against other similar sized organisations



Figure 1: Initial reports submitted to SHOT 1996-2022



2. Methodology

Organisations are allocated to a usage cluster based on total blood components issued annually. Usage clusters can change over time due to reduction in component usage, but since 2018 have been defined as:

Cluster	No. components
Very low	1-1,000
Low	1,001-6000
Medium	6,001-10,000
High	10,001-19,000
Very high	>19,001

Each reporting organisation receives an individual benchmarking report, with the following data for overall totals and the main four report types (SAE/SAR/NM/ANTID):

- Number of reports submitted
- Change in number of reports from previous year
- Average number of reports for the region/area and usage cluster
- Reports submitted per 1,000 blood components issued
- Average reports per 1,000 blood components issued for the region/area and usage cluster

Figure 2: Example of an individual organisations participation benchmarking report

Participation Benchmarking Data 2022									
Anytown Hospital NHS Foundation Trust									
Anywhere RTC									
Participation Code: P1003									
	Serious Adverse Reaction	Serious Adverse Event	Near Miss WBIT	Near Miss Other	Anti-D	Withdrawn Reports	Other Reports (Cell Salvage / T1)	Anti-D Immunisation Reports	Total Reports
2022 No. of Reports	2	1	0	0	0	0	1	0	4
Increase/Decrease from 2021	+1	-6	-1	-7	0	0	+1	0	-10
Area Average	2.88	6.44	3.64	1.20	1.60	2.80	0.20	0.12	18.96
High Usage Cluster Average	4.02	7.79	5.54	3.48	2.50	3.92	0.21	0.33	28.02
2022 Reports per 1000 components	0.18	0.09	0.00	0.00	N/A	0.00	0.09		0.55
Increase/Decrease from 2021	+0.10	-0.52	-0.09	-0.61	N/A	0.00	+0.09		-0.84
Area Average	0.25	0.84	0.47	0.18	0.12	0.32	0.08		2.43
High Usage Cluster Average	0.30	0.61	0.43	0.26	0.19	0.30	0.02		2.15

Data from 12 years of participation benchmarking analysis have been reviewed to identify trends in participation and areas for improvement.

3. Results

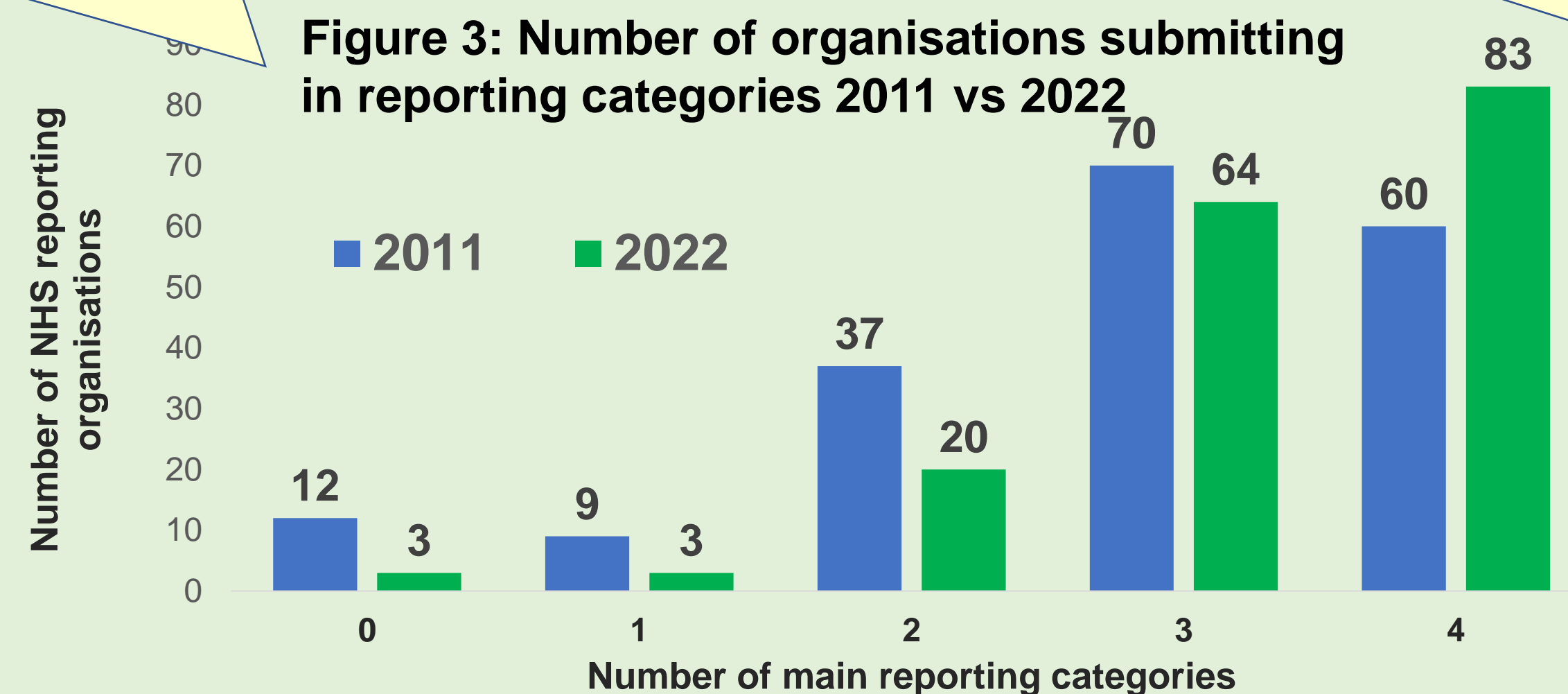
2011

- 21/188 (11.2%) organisations submitted reports in <2 of the 4 main categories
- Only 60/188 (31.9%) reported across all 4 categories
- Suggests some organisations were not fully participating

2022

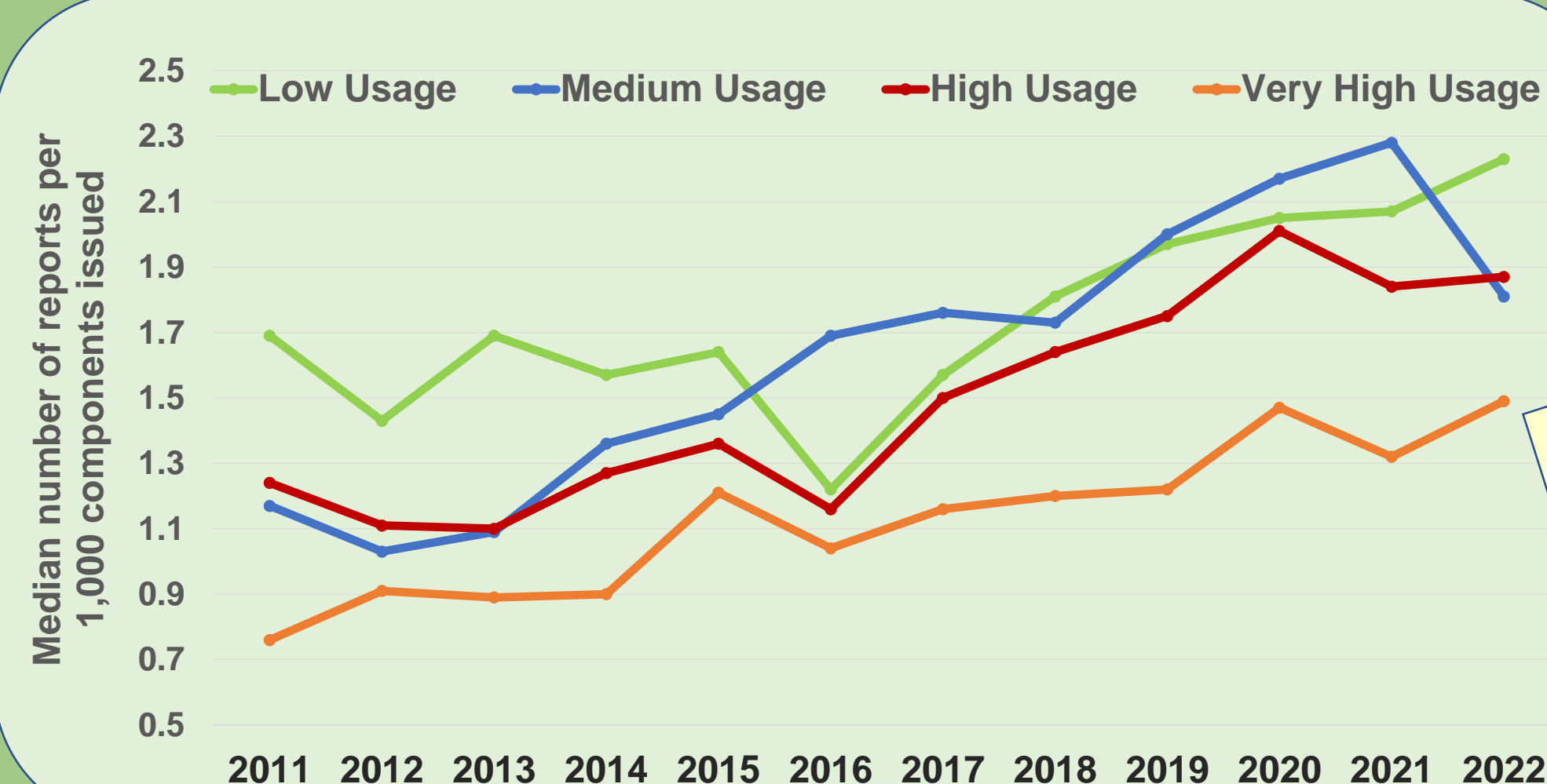
- Only 6/173 (3.5%) organisations submitted reports in <2 of the 4 main categories
- 83/173 (48.0%) reported in all 4 main categories
- Indicates a move towards more comprehensive participation

Figure 3: Number of organisations submitting in reporting categories 2011 vs 2022



- Low and medium usage level organisations submit more reports per 1,000 components than high or very high usage organisations
- Steady upward trend in the median number of reports submitted by all usage clusters

Figure 4: Median reports per 1,000 components issued - 2011 to 2022



- Largest percentage increase seen in very high usage organisations
- 96.1% increase in 2022 (median 1.49) compared to 2011 (median 0.76)

4. Conclusions

SHOT participation benchmarking data has helped to inform organisations, increase awareness of reporting levels, and reinforced the need to report across a broad range of reporting categories

Reporting levels have increased across all sized organisations, but there are consistently lower reporting levels from those organisations with the highest blood use

Haemovigilance participation data plays a crucial role in promoting patient safety, quality improvement, regulatory compliance and facilitates proactive risk-management