Avoidable Repeat Rate for October 2019 for Newborn Blood Spot Screening - Manchester Laboratory

The avoidable repeat rate for samples received during October 2019 is displayed by Trust in Figure 1 and by current hospital (for in-patients) in Figure 2. The raw data is provided in Tables 2 and 3. The avoidable repeat rate is calculated by dividing the total number of avoidable repeats by the number of babies tested (i.e. first samples).

Please note that the 'Trust of the sample taker' data is incomplete as 49 samples (first samples and repeats) received in October had no Trust code (1%). Please write the Trust code for your maternity unit/ neonatal unit in the PCT field on the blood spot card to improve the accuracy of the figures. A list of trust codes is provided in Table 1. Alternatively maternity units could stamp cards with the code prior to issuing to midwives/neonatal units, depending on local arrangements. It would also be helpful if health visitors could write 'HV' in the PCT field, so that we can provide data specific to health visitors.

Table 1

Code	Trust Name
RXL	BLACKPOOL TEACHING HOSPITALS NHS FOUNDATION TRUST
RMC	BOLTON NHS FOUNDATION TRUST
RXR	EAST LANCASHIRE HOSPITALS NHS TRUST
RXN	LANCASHIRE TEACHING HOSPITALS NHS FOUNDATION TRUST
RW3/R0A	MANCHESTER UNIVERSITY NHS FOUNDATION TRUST – ST. MARY'S & RMCH
RM2/R0A	MANCHESTER UNIVERSITY NHS FOUNDATION TRUST - WYTHENSHAWE
RW6	PENNINE ACUTE HOSPITALS NHS TRUST
RVY	SOUTHPORT AND ORMSKIRK HOSPITAL NHS TRUST
RWJ	STOCKPORT NHS FOUNDATION TRUST
RMP	TAMESIDE HOSPITAL NHS FOUNDATION TRUST
RTX	UNIVERSITY HOSPITALS OF MORECAMBE BAY NHS FOUNDATION TRUST
RRF	WRIGHTINGTON, WIGAN AND LEIGH NHS FOUNDATION TRUST

Figure 1 - Avoidable repeats by Trust

Aisha Rahman & Beverly Hird   27/11/19 Version 2   CB-REP-REP-13
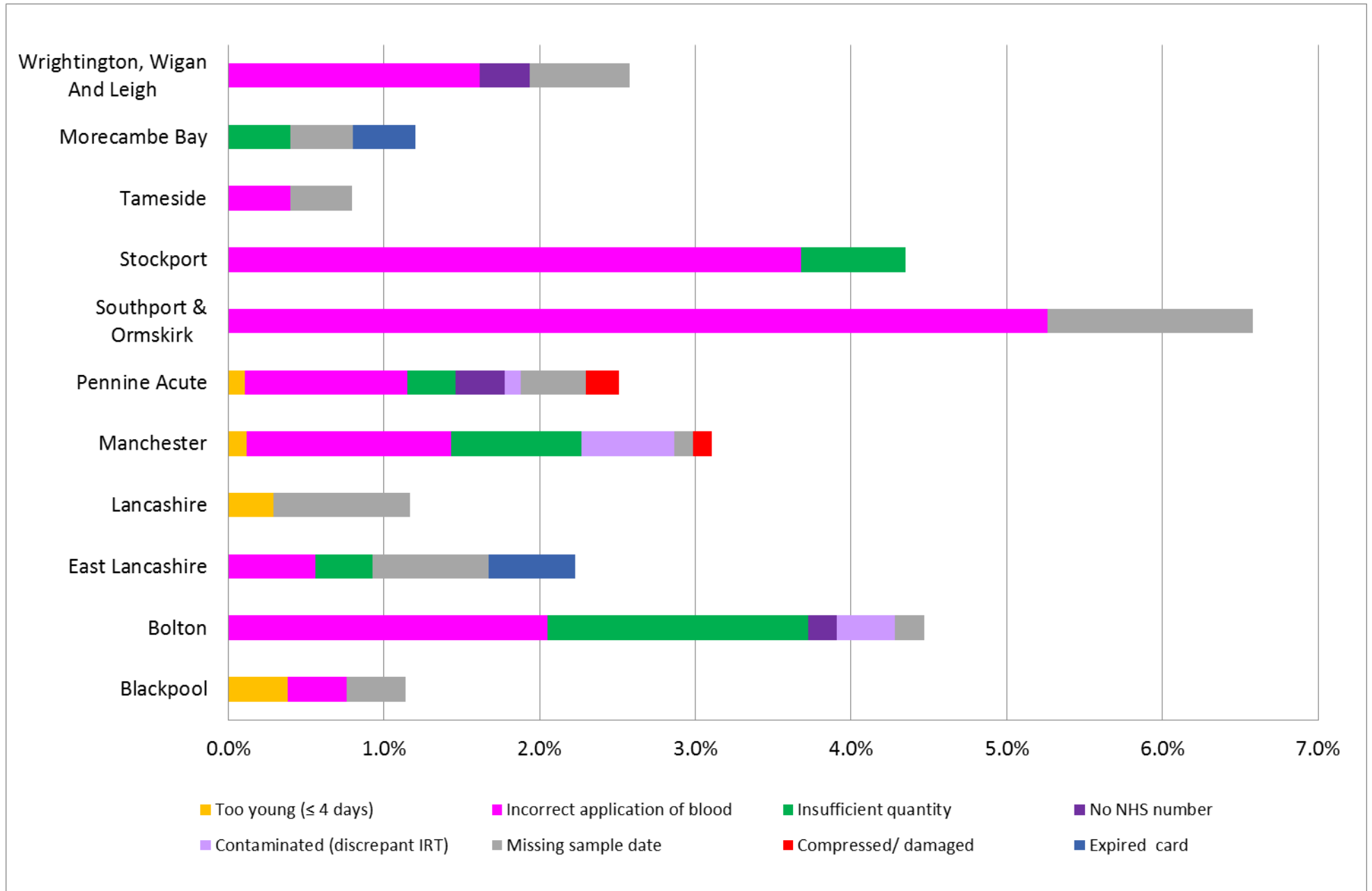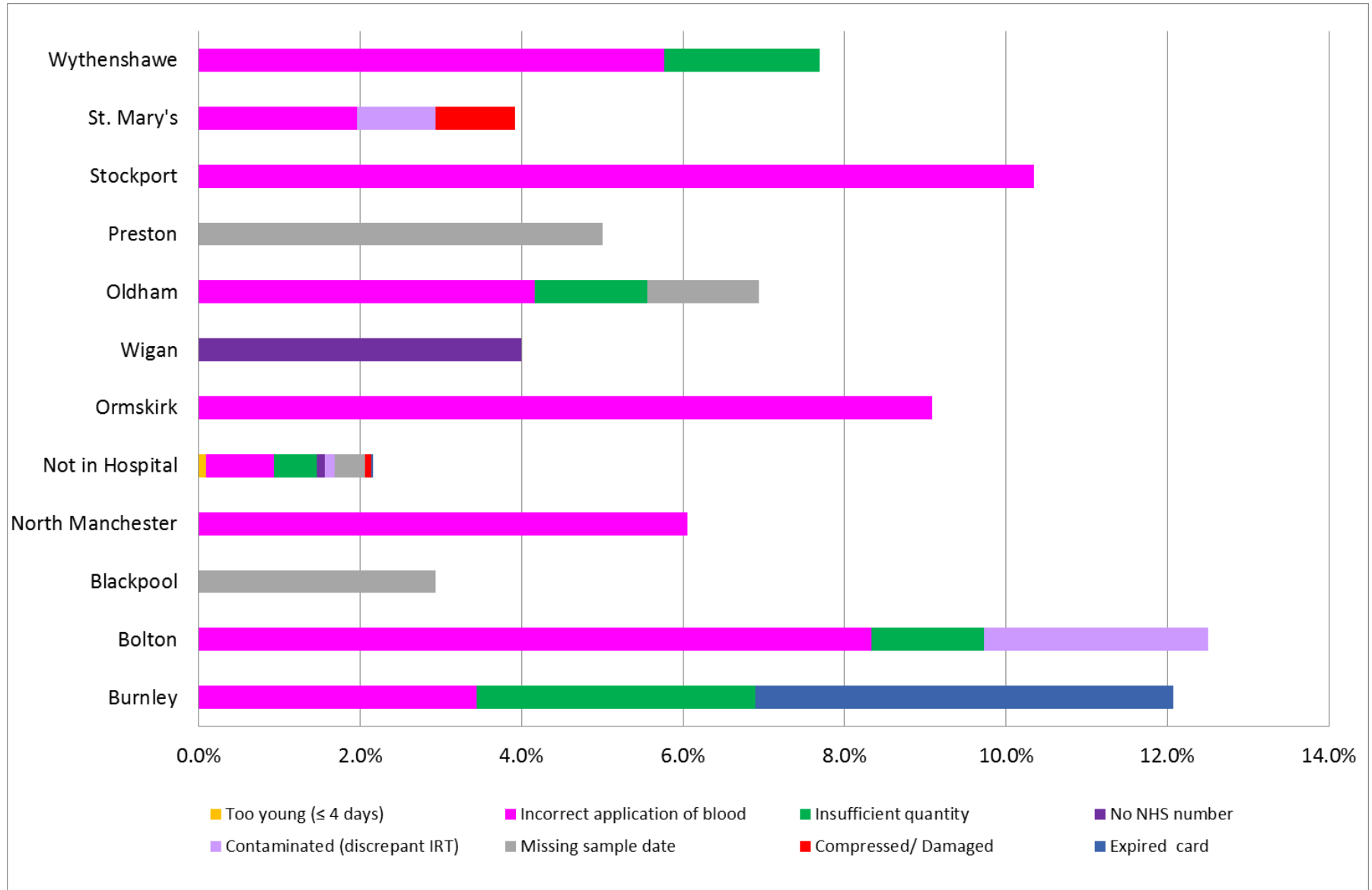
Figure 2 - Avoidable repeats by current hospital (in-patients)

Furness, Royal Blackburn, Lancaster, RMCH, and Tameside were excluded from the graph as they had no in-patient avoidable repeats.

Aisha Rahman & Beverly Hird   27/11/19 Version 2   CB-REP-REP-13

Table 2 – Avoidable repeats by Trust for October 2019

Trust	Number of first samples received/ babies tested	Too soon after transfusion (<72 hours)*	Too young (≤ 4 days)	Damaged in transit	Compressed/ damaged	Expired card	Incorrect application of blood	Insufficient quantity	>14 days in transit	No NHS number	Contaminated (discrepant IRT)	Missing sample date	DOB missing	Number of Avoidable Repeat Requests	Avoidable Repeat Requests Rate
Blackpool Teaching Hospitals NHS FT	263	0	1	0	0	0	1	0	0	0	0	1	0	3	1.1%
Bolton NHS FT	537	1	0	0	0	0	11	9	0	1	2	1	0	24	4.5%
East Lancashire Hospitals NHS Trust	538	0	0	0	0	3	3	2	0	0	0	4	0	12	2.2%
Lancashire Teaching Hospitals NHS FT	343	1	1	0	0	0	0	0	0	0	0	3	0	4	1.2%
Manchester University NHS FT	837	3	1	0	1	0	11	7	0	0	5	1	0	26	3.1%
Not Stated	45	0	0	0	1	0	0	0	0	0	0	1	0	2	4.4%
Health Visitor	34	0	0	0	0	0	0	3	0	0	0	0	0	3	8.8%
Pennine Acute Hospitals NHS Trust	957	1	1	0	2	0	10	3	0	3	1	4	0	24	2.5%
Southport & Ormskirk Hospital NHS Trust	76	1	0	0	0	0	4	0	0	0	0	1	0	5	6.6%
Stockport NHS FT	299	0	0	0	0	0	11	2	0	0	0	0	0	13	4.3%
Tameside And Glossop Integrated Care NHS FT	252	0	0	0	0	0	1	0	0	0	0	1	0	2	0.8%
University Hospitals of Morecambe Bay NHS FT	250	0	0	0	0	1	0	1	0	0	0	1	0	3	1.2%
Wrightington, Wigan and Leigh NHS FT	310	0	0	0	0	0	5	0	0	1	0	2	0	8	2.6%
Grand Total	**4741**	**7**	**4**	**0**	**4**	**4**	**57**	**27**	**0**	**5**	**8**	**20**	**0**	**129**	**2.7%**

*Not included in calculation of avoidable repeats

Table 3 – Avoidable repeats by current hospital (in-patients) for October 2019

Current Hospital	Number of first samples received/ babies tested	Too soon after transfusion (<72 hours)*	Too young (≤ 4 days)	Damaged in transit	Compressed / Damaged	Expired card	Incorrect application of blood	Insufficient quantity	>14 days in transit	No NHS number	Contaminated (discrepant IRT)	Missing sample date	DOB Missing	Number of Avoidable Repeat Requests	Avoidable Repeat Requests Rate
Burnley General Hospital	58	0	0	0	0	3	2	2	0	0	0	0	0	7	12.1%
Royal Bolton Hospital	72	1	0	0	0	0	6	1	0	0	2	0	0	9	12.5%
Blackpool Victoria Hospital	34	0	0	0	0	0	0	0	0	0	0	1	0	1	2.9%
Furness General Hospital	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
North Manchester General Hospital	33	0	0	0	0	0	2	0	0	0	0	0	0	2	6.1%
Not in hospital	4166	0	4	0	3	1	35	22	0	4	5	16	0	90	2.2%
Ormskirk & District General	11	1	0	0	0	0	1	0	0	0	0	0	0	1	9.1%
Royal Albert Edward Infirmary	25	0	0	0	0	0	0	0	0	1	0	0	0	1	4.0%
Royal Blackburn Hospital	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Royal Lancaster Infirmary	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Royal Manchester Childrens Hospital	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Royal Oldham Hospital	72	1	0	0	0	0	3	1	0	0	0	1	0	5	6.9%
Royal Preston Hospital	40	1	0	0	0	0	0	0	0	0	0	2	0	2	5.0%
Stepping Hill Hospital	29	0	0	0	0	0	3	0	0	0	0	0	0	3	10.3%
St Mary's Hospital, Manchester	102	2	0	0	1	0	2	0	0	0	1	0	0	4	3.9%
Tameside General Hospital	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Wythenshawe Hospital	52	0	0	0	0	0	3	1	0	0	0	0	0	4	7.7%
Grand Total	**4741**	**7**	**4**	**0**	**4**	**4**	**57**	**27**	**0**	**5**	**8**	**20**	**0**	**129**	**2.7%**

*Not included in calculation of avoidable repeats

Tips to help avoid rejection of samples:

- Collect sample on day 5 (date of birth is day 0)
- Check the expiry date on the card
- Wash the baby's heel with water to reduce the risk of a contaminated IRT result
- Ensure that blood spots are the size of the guide circles on the card
- Allow the blood to drop onto the card rather than touching the filter paper to the baby's heel
- Some brands of lancet device are more effective than others
- Extra blood spots, in addition to the 4 indicated by the guide circles, can be collected elsewhere on the card
- Repeat the test at the same visit if the spots are too small or have not soaked through to the back of the card
- Make sure there is a valid NHS number on the card

Conclusion

The avoidable repeat rate for October was 2.7% which is higher than last month's rate (September was 2.4%). Insufficient and multi-spotted samples remain the most common reason for sample rejection. There has been a noticeable increase in multi-spotted samples and samples with missing dates since last month. Four maternity units met Standard 6: Blackpool, Lancashire Teaching, Morecambe Bay and Tameside. Only Tameside met the achievable threshold of ≤1%.

Aisha Rahman & Beverly Hird   27/11/19 Version 2