

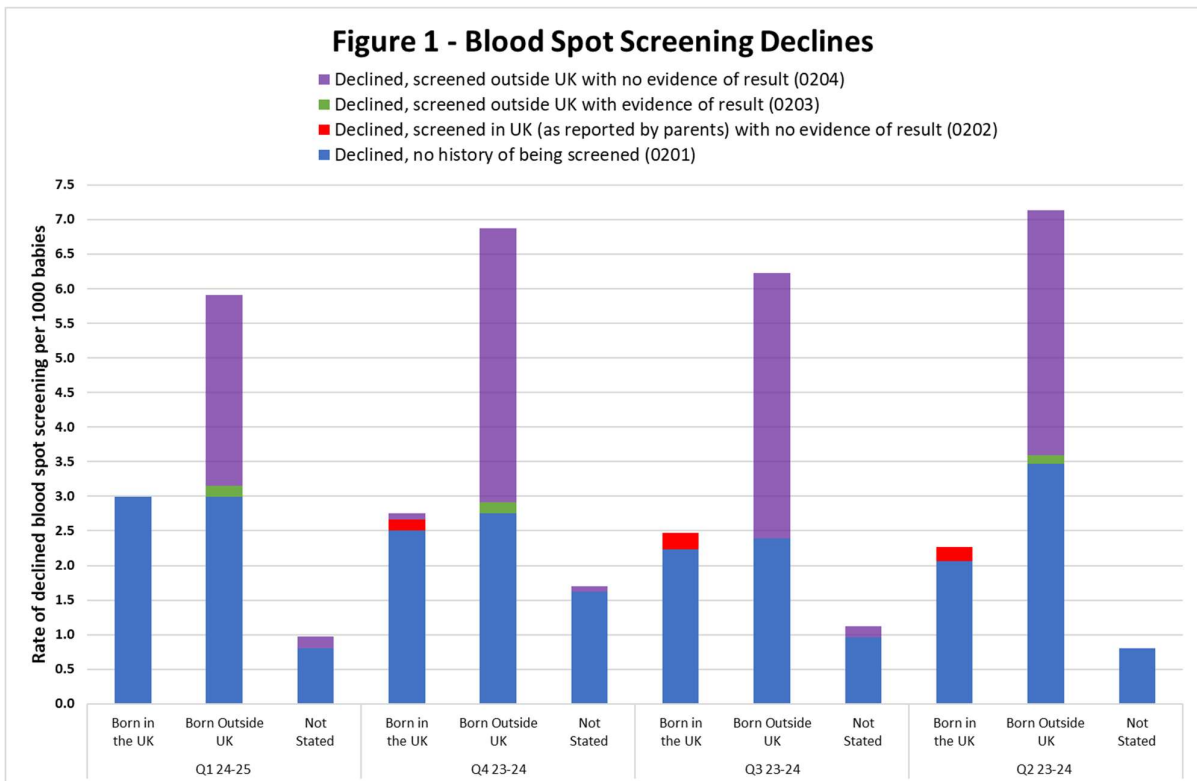
Manchester Newborn Screening Laboratory Quarterly Blood Spot Screening Report: Quarter 1 2024-25

Manchester Newborn Screening Laboratory, which serves babies born in Greater Manchester, Lancashire and South Cumbria, received 13317 blood spot samples between 1st April 2024 and 30th June 2024. This report describes performance against the NHS Newborn Blood Spot Screening Programme Standards. Full details of the standards including definitions and exclusions can be found at <https://www.gov.uk/government/publications/standards-for-nhs-newborn-blood-spot-screening>. The appendix of this document contains the data for standards 3-7 in table form.

The data for the laboratory reportable standards is presented by maternity unit/NHS trust of the sample taker. For accurate figures, please ensure the trust code is written/stamped on the blood spot card.

Declines

In Quarter 1 the laboratory received 122 notifications of declined blood spot screening. Figure 1 shows the trends in declined screens over the past year, by place of birth (born in UK or born outside of UK). The laboratory should be notified of all declines, including those for babies screened elsewhere, rather than directly notifying Child Health.



Key to colour coding

Met achievable threshold
Met acceptable threshold
Within 10% of acceptable threshold
More than 10% below acceptable threshold

Standard 3 – The proportion of blood spot cards received by the laboratory with the baby’s NHS number on a barcoded label

Acceptable: ≥ 90.0% of blood spot cards are received by the laboratory with the baby’s NHS number on a barcoded label.

Achievable: ≥ 95.0% of blood spot cards are received by the laboratory with the baby’s NHS number on a barcoded label.

Figure 2 displays performance against standard 3.

Overall, 84% of samples received in quarter 1 of 2024/25 had a barcoded NHS number label, which is higher than the previous quarter (81.7%). Of the 11 maternity units, 4 met the acceptable standard with 3 of these meeting the achievable threshold.

Standard 4 - The proportion of first blood spot samples taken on day 5

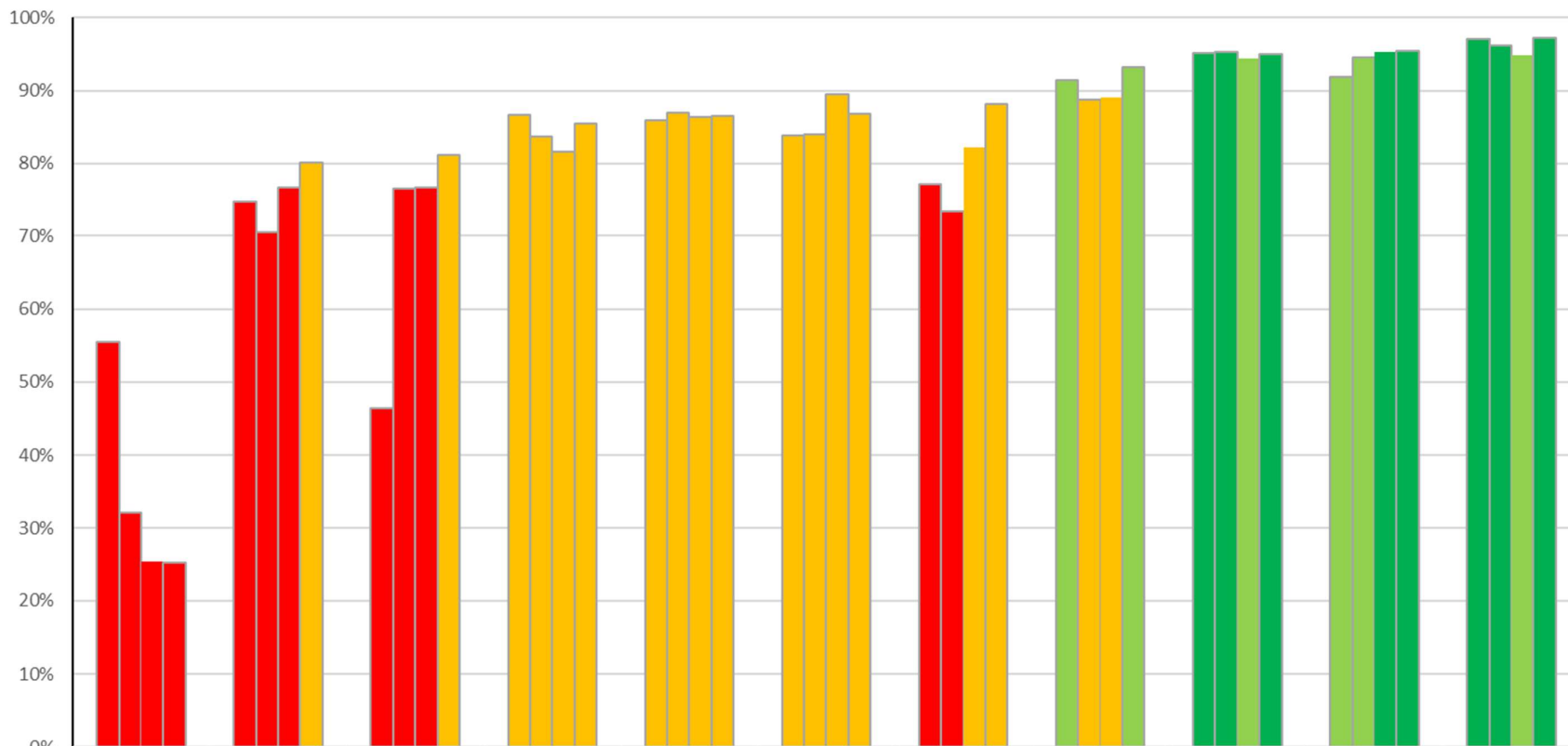
Acceptable: ≥ 90.0% of first blood spot samples are taken on day 5.

Achievable: ≥ 95.0% of first blood spot samples are taken on day 5.

Figure 3 displays performance against standard 4. Overall, 92% of samples received in quarter 1 of 2024/25 were collected on day 5, which is higher than the previous quarter (91.1%). 10 out of the 11 maternity units met standard 4, and 3 of these met the achievable threshold.

Figure 2: Standard 3 - The proportion of blood spot cards received by the laboratory with the baby's NHS number on a barcoded label

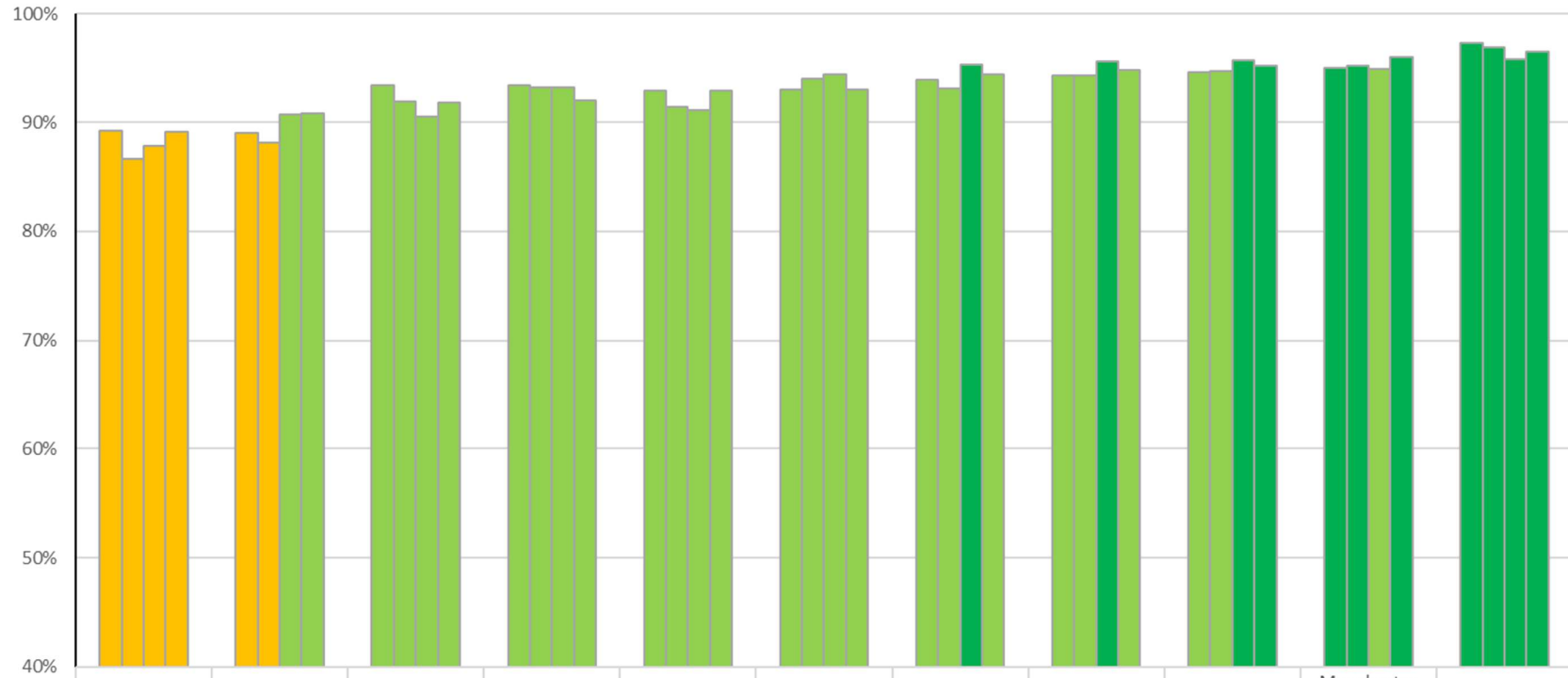
Most recent quarter on right-hand side



	W, Wigan & Leigh	Oldham (NCA)	Southport & Ormskirk	Stockport	East Lancashire	Tameside & Glossop	Bolton	Lancashire Teaching	Manchester	Morecambe Bay	Blackpool
Q2 23-24	55.5%	74.7%	46.4%	86.7%	85.9%	83.8%	77.1%	91.4%	95.1%	91.9%	97.1%
Q3 23-24	32.2%	70.5%	76.5%	83.6%	87.0%	84.0%	73.4%	88.8%	95.2%	94.5%	96.2%
Q4 23-24	25.4%	76.7%	76.8%	81.6%	86.4%	89.4%	82.2%	89.1%	94.4%	95.2%	94.8%
Q1 24-25	25.3%	80.1%	81.2%	85.5%	86.5%	86.8%	88.2%	93.3%	95.0%	95.5%	97.3%

Figure 3: Standard 4 - The proportion of first blood spot samples taken on day 5

Most recent quarter on right-hand side



Standard 5 - The proportion of blood spot samples received less than or equal to 3 working days of sample collection

Acceptable: $\geq 95.0\%$ of all samples received less than or equal to 3 working days of sample collection.

Achievable: $\geq 99.0\%$ of all samples received less than or equal to 3 working days of sample collection.

Figure 4 displays performance against standard 5.

Overall, 97.2% of samples were received within 3 working days. 8 Trusts met the standard, with 3 of these reaching the achievable threshold. Performance was similar to the previous quarter (97.4% samples received within 3 working days).

Standard 6 - The proportion of first blood spot samples that require repeating due to an avoidable failure in the sampling process

Acceptable: Avoidable repeat rate is $\leq 2.0\%$

Achievable: Avoidable repeat rate is $\leq 1.0\%$

The avoidable repeat rate for quarter 1 was 3.4%, which is slightly higher compared to quarter 4 (3.3%). The main reason for an avoidable repeat was insufficient blood, followed by incorrect application of blood. The performance for each trust is displayed in figure 5. One Trust met the standard, reaching the achievable threshold. Figure 6 compares the avoidable repeat rate for samples collected from in-patients with samples collected from babies at home/in the community. The rate was 2.8% for babies at home (2.7% in quarter 4) and 8.7% for samples collected from in-patients (8.1% in quarter 4).

Figure 4: Standard 5 - The proportion of blood spot samples received less than or equal to 3 working days of sample collection

Most recent quarter on right-hand side

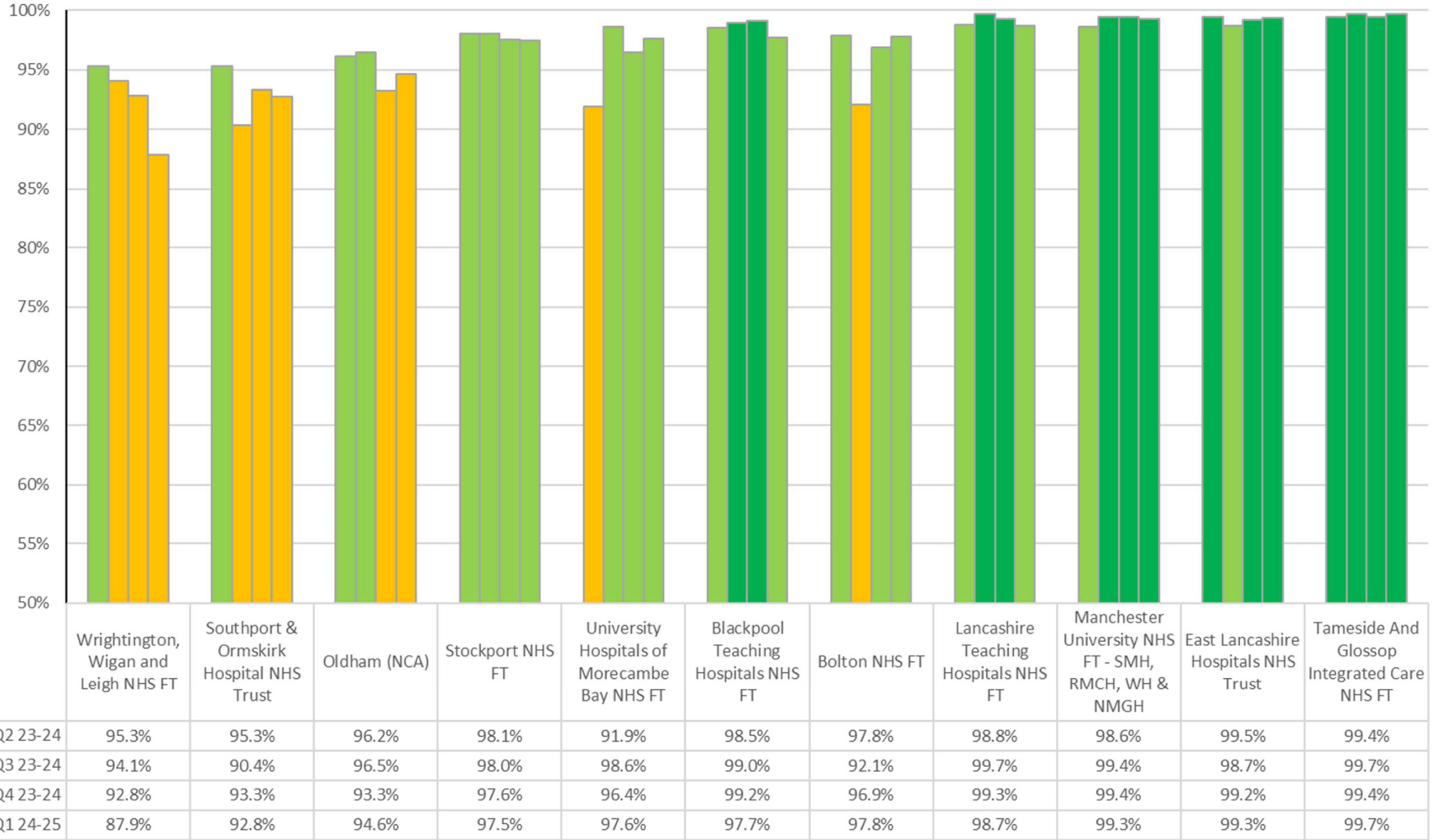


Figure 5: Standard 6 - The proportion of first blood spot samples that require repeating due to an avoidable failure in the sampling process by Trust

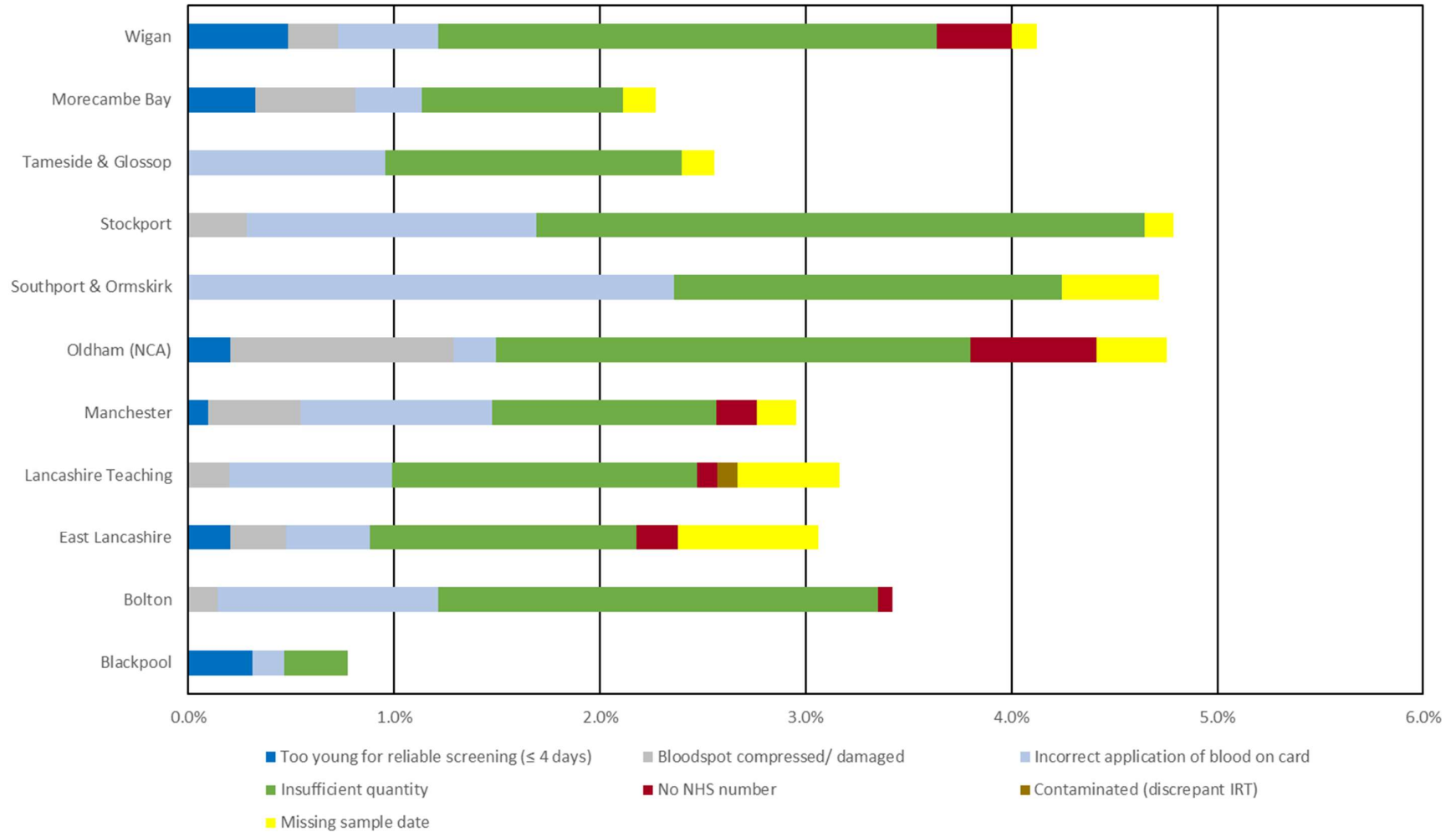
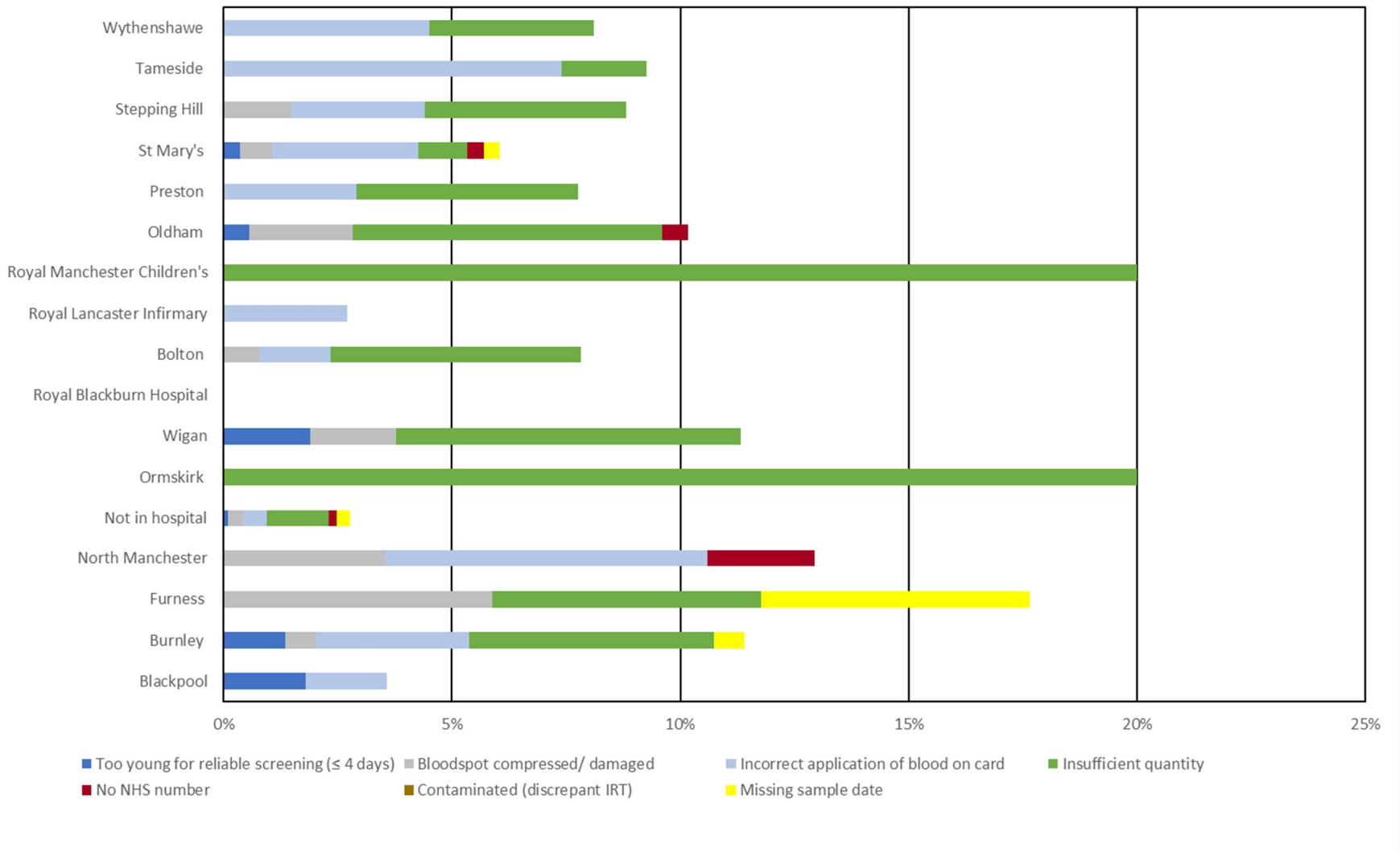


Figure 6: Standard 6 - Avoidable repeats for in-patients vs community



Q1 24-25 Table 1 - Summary of Performance				
Trust	Standard 3	Standard 4	Standard 5	Standard 6
Blackpool Teaching Hospitals NHS FT	97.3%	94.4%	97.7%	0.8%
Bolton NHS FT	88.2%	91.8%	97.8%	3.4%
East Lancashire Hospitals NHS Trust	86.5%	89.1%	99.3%	3.1%
Lancashire Teaching Hospitals NHS FT	93.3%	92.0%	98.7%	3.2%
Manchester University NHS FT - SMH, RMCH, WH & NMGH	95.0%	96.0%	99.3%	3.0%
Oldham (NCA)	80.1%	90.8%	94.6%	4.8%
Southport & Ormskirk Hospital NHS Trust	81.2%	92.9%	92.8%	4.7%
Stockport NHS FT	85.5%	95.2%	97.5%	4.8%
Tameside And Glossop Integrated Care NHS FT	86.8%	93.0%	99.7%	2.6%
University Hospitals of Morecambe Bay NHS FT	95.5%	96.4%	97.6%	2.3%
Wrightington, Wigan and Leigh NHS FT	25.3%	94.8%	87.9%	4.1%

Standard 7a - The proportion of second blood spots for raised IRT taken on day 21 to day 24

Acceptable: ≥ 80% of second blood spot samples taken on day 21 to day 24

Achievable: ≥ 90% of second blood spot samples taken on day 21 to day 24

During quarter 1 there were 4 repeats for raised IRT (CF inconclusive). Of these, 100% were collected on day 21-24. CF inconclusive repeats are performed by Screening Link Health Visitors. The data is presented by Maternity Unit in table 2.

Quarter 1 204-25 - Standard 7a			
Maternity Unit	Age at collection of CF repeat	Total	% collected day 21-24
	21		
Bolton NHS FT	1	1	100%
East Lancashire Hospitals NHS Trust	2	2	100%
Tameside And Glossop Integrated Care NHS FT	1	1	100%
Total	4	4	100%

Standard 7b - The proportion of second blood spot samples for borderline TSH taken between 7 and 10 calendar days after the initial borderline sample

Acceptable: ≥ 80.0% of repeat blood spot samples taken as defined

Achievable: ≥ 90.0% of repeat blood spot samples taken as defined

During quarter 1 there were 26 repeats for borderline TSH (CHT). Of these, 65% were collected 7-10 days after the original sample. Table 3 displays the information by Trust.

Quarter 1 204-25 - Standard 7b										
Trust	Number of days between original sample and collection of repeat sample								Total	% collected 7-10 days after original sample
	5	7	8	9	10	11	13	14		
Bolton NHS FT			1						1	100%
East Lancashire Hospitals NHS Trust	1				1	1			3	33%
Lancashire Teaching Hospitals NHS FT				1		1			2	50%
Manchester University NHS FT - SMH, RMCH, WH & NMGH		3	0	2	0	0	0	1	6	83%
Oldham (NCA)			3		1	1	1		6	67%
Stockport NHS FT		1						1	2	50%
Tameside And Glossop Integrated Care NHS FT				1					1	100%
University Hospitals of Morecambe Bay NHS FT			1			1			2	50%
Wrightington, Wigan and Leigh NHS FT			1		1			1	3	67%
Grand Total	1	4	6	4	3	4	1	3	26	65%

Standard 7c - The proportion of CHT pre-term repeats collected on day 28 or at discharge

Acceptable: ≥ 75.0% of repeat blood spot samples taken as defined

Achievable: ≥ 85.0% of repeat blood spot samples taken as defined

During quarter 1, 147 CHT pre-term repeats were received. Performance by trust is displayed in table 4. 80% were collected on day 28 or at discharge, 16% were collected after day 28.

Quarter 1 204-25 - Standard 7c					
Trust	Number of Pre-term CHT			Total	% Prem repeats
	EARLY	ON-TIME	LATE		
Blackpool Teaching Hospitals NHS FT		10	1	11	91%
Bolton NHS FT	1	13	5	19	68%
East Lancashire Hospitals NHS Trust	1	9	3	13	69%
Lancashire Teaching Hospitals NHS FT		13	2	15	87%
Manchester University NHS FT - SMH, RMCH, WH & NMGH	3	37	5	45	82%
Oldham (NCA)		13	3	16	81%
Stockport NHS FT		7	1	8	88%
Tameside And Glossop Integrated Care NHS FT	1	6		7	86%
University Hospitals of Morecambe Bay NHS FT		2	2	4	50%
Wrightington, Wigan and Leigh NHS FT		7	1	8	88%
Not Stated		1		1	100%
Grand Total	6	118	23	147	80%

Standard 9 - Timely processing of CHT and IMD (excluding HCU) screen positive samples

Acceptable: 100% of babies with a positive screening result (excluding HCU) have a clinical referral initiated within 3 working days of sample receipt

There were 8 screen positive samples for CHT and 5 for IMD in quarter 1. All were referred within 3 working days of sample receipt.

Standard 11 - Timely entry into clinical care

Data for standard 11 is displayed in table 5.

Table 5: Standard 11						
Condition	Criteria	Thresholds	Number of babies seen by specialist services by condition specific standard	Number of babies referred	Percentage seen by specialist services by condition specific standard	Comments
IMDs (excluding HCU)	Attend first clinical appointment by 14 days of age	Acceptable: 100%	4	4	100%	4 x MCAD, 1 x MCAD RIP before clinical review
CHT (suspected on first sample)	Attend first clinical appointment by 14 days of age	Acceptable: 100%	3	3	100%	
CHT (suspected on repeat following borderline TSH)	Attend first clinical appointment by 21 days of age	Acceptable: 100%	4	4	100%	1 additional baby screened positive after borderline result on their day 28 sample
CF (2 CFTR mutations detected)	Attend first clinical appointment by 28 days of age	Acceptable: ≥ 95.0% Achievable: 100%	2	3	67%	1 baby seen at day 33 due to insufficient sample making it difficult to obtain DNA result.
HCU	Attend first clinical appointment by 28 days of age	Acceptable: ≥ 95.0% Achievable: 100%	0	0	0%	
CF (1 or no CFTR mutation detected)	Attend first clinical appointment by 35 days of age	Attend first clinical appointment by 35 days of age	2	2	100%	
SCD	Attend first clinical appointment by 90 days of age	Attend first clinical appointment by 90 days of age	3	5	60%	2 babies did not attend their clinic appointment. 2 additional babies are still awaiting appointments but have not yet reached 90 days of age

Incidents

Details of incidents which have been referred to QA, either detected by the laboratory or occurred at MFT

Incident Number	Incident Date	Incident Severity	Incident Harm	Summary of incident	Further details	MFT or external	Lab/ Ward/ Maternity Unit	Local Area Team	QA informed
2512868	19/06/24	2 - minor	1 - no harm	Blood spot labelling error: another baby's bar-coded demographic sticker and reported against wrong baby.	Sample labelled with wrong sticker. Results reported	MFT	Wythenshawe Community Midwives	Greater Manchester	Yes

Appendix

Quarter 1 2024-25: Standard 3							
Trust	Number of all samples (including repeats)	Number of blood spot cards including baby's NHS number	Number of blood spot cards including ISB label barcoded baby's NHS number	Unreadable Barcodes	Percentage of all blood spot cards including babies' NHS number	Percentage of all blood spot cards including ISB bar-coded babies' NHS number	Percentage of all Unreadable Barcodes
Blackpool Teaching Hospitals NHS FT	664	664	646	7	100.0%	97.3%	1.1%
Bolton NHS FT	1622	1621	1431	73	99.9%	88.2%	4.5%
East Lancashire Hospitals NHS Trust	1595	1592	1380	21	99.8%	86.5%	1.3%
Health Visitor	233	231	6	0	99.1%	2.6%	0.0%
Lancashire Teaching Hospitals NHS FT	1056	1055	985	20	99.9%	93.3%	1.9%
Manchester University NHS FT - SMH & RMCH & WH & NMGH	3369	3363	3199	56	99.8%	95.0%	1.7%
Not Stated	10	10	8	0	100.0%	80.0%	0.0%
Oldham (NCA)	1631	1621	1307	18	99.4%	80.1%	1.1%
Southport & Ormskirk Hospital NHS Trust	223	223	181	8	100.0%	81.2%	3.6%
Stockport NHS FT	752	752	643	16	100.0%	85.5%	2.1%
Tameside And Glossop Integrated Care NHS FT	652	652	566	31	100.0%	86.8%	4.8%
University Hospitals of Morecambe Bay NHS FT	638	638	609	3	100.0%	95.5%	0.5%
Wrightington, Wigan and Leigh NHS FT	872	869	221	525	99.7%	25.3%	60.2%
Grand Total	13317	13291	11182	778	99.8%	84.0%	5.8%

Quarter 1 2024-25: Standard 4												
Trust	Number of first samples taken on or before day 4	5	6	7	8	9+	4 or earlier	5	6	7	8	9 or later
Blackpool Teaching Hospitals NHS FT	1	609	26	4	0	5	0.2%	94.4%	4.0%	0.6%	0.0%	0.8%
Bolton NHS FT	0	1294	82	13	6	15	0.0%	91.8%	5.8%	0.9%	0.4%	1.1%
East Lancashire Hospitals NHS Trust	3	1305	117	13	7	20	0.2%	89.1%	8.0%	0.9%	0.5%	1.4%
Health Visitor	0	3	0	0	0	163	0.0%	1.8%	0.0%	0.0%	0.0%	98.2%
Lancashire Teaching Hospitals NHS FT	0	926	62	8	4	7	0.0%	92.0%	6.2%	0.8%	0.4%	0.7%
Manchester University NHS FT - SMH, RMCH, WH & NMC	4	2996	76	19	6	20	0.1%	96.0%	2.4%	0.6%	0.2%	0.6%
Not Stated	0	2	0	0	0	2	0.0%	50.0%	0.0%	0.0%	0.0%	50.0%
Oldham (NCA)	2	1335	90	12	5	26	0.1%	90.8%	6.1%	0.8%	0.3%	1.8%
Southport & Ormskirk Hospital NHS Trust	0	196	11	1	2	1	0.0%	92.9%	5.2%	0.5%	0.9%	0.5%
Stockport NHS FT	0	675	28	0	1	5	0.0%	95.2%	3.9%	0.0%	0.1%	0.7%
Tameside And Glossop Integrated Care NHS FT	0	581	34	4	0	6	0.0%	93.0%	5.4%	0.6%	0.0%	1.0%
University Hospitals of Morecambe Bay NHS FT	2	594	14	0	4	2	0.3%	96.4%	2.3%	0.0%	0.6%	0.3%
Wrightington, Wigan and Leigh NHS FT	3	778	27	5	0	8	0.4%	94.8%	3.3%	0.6%	0.0%	1.0%
Grand Total	15	11294	567	79	35	280	0.1%	92.0%	4.6%	0.6%	0.3%	2.3%

Quarter 1 2024-25: Standard 5							
Trust	Number of samples received in 3 or fewer working days of sample being taken	Number of samples received in 4 or fewer working days of sample being taken	Number of samples received in 5 or more working days of sample being taken	Total number of samples received	Percentage of samples received by laboratories in 3 or fewer working days of sample being taken	Percentage of samples received by laboratories in 4 or fewer working days of sample being taken	Percentage of samples received by laboratories on or after 5 working days of sample being taken
Blackpool Teaching Hospitals NHS FT	646	660	1	661	97.7%	99.8%	0.15%
Bolton NHS FT	1482	1506	9	1515	97.8%	99.4%	0.59%
East Lancashire Hospitals NHS Trust	1521	1527	4	1531	99.3%	99.7%	0.26%
Health Visitor	164	173	7	180	91.1%	96.1%	3.89%
Lancashire Teaching Hospitals NHS FT	1032	1043	3	1046	98.7%	99.7%	0.29%
Manchester University NHS FT - SMH, RMCH, WH & NMGH	3258	3276	5	3281	99.3%	99.8%	0.15%
Not Stated	3	4	4	8	37.5%	50.0%	50.00%
Oldham (NCA)	1512	1588	10	1598	94.6%	99.4%	0.63%
Southport & Ormskirk Hospital NHS Trust	205	218	3	221	92.8%	98.6%	1.36%
Stockport NHS FT	729	744	4	748	97.5%	99.5%	0.53%
Tameside And Glossop Integrated Care NHS FT	649	651	0	651	99.7%	100.0%	0.00%
University Hospitals of Morecambe Bay NHS FT	622	635	2	637	97.6%	99.7%	0.31%
Wrightington, Wigan and Leigh NHS FT	763	842	26	868	87.9%	97.0%	3.00%
Grand Total	12586	12867	78	12945	97.2%	99.4%	0.60%

Quarter 1 2024-25: Standard 6 by Trust														
Status code and description of avoidable repeat	Blackpool Teaching Hospitals NHS FT	Bolton NHS FT	East Lancashire Hospitals NHS Trust	Health Visitor	Lancashire Teaching Hospitals NHS FT	Manchester University NHS FT - SMH & RMCH & WH & NMGH	Not Stated	Oldham (NCA)	Southport & Ormskirk Hospital NHS Trust	Stockport NHS FT	Tameside And Glosop Integrated Care NHS FT	University Hospitals of Morecambe Bay NHS FT	Wrightington, Wigan and Leigh NHS FT	Grand Total
0301: too young for reliable screening (≤ 4 days)	2	0	3	0	0	3	0	3	0	0	0	2	4	17
0302: too soon after transfusion (<72 hours)	1	9	10	0	2	0	0	2	0	0	0	0	0	24
0303: insufficient sample	2	30	19	5	15	34	0	34	4	21	9	6	20	199
0304: unsuitable sample (blood quality): incorrect blood application	1	15	6	6	8	29	0	3	5	10	6	2	4	95
0305: unsuitable sample (blood quality): compressed/damaged	0	2	4	4	2	14	0	16	0	2	0	3	2	49
0306: Unsuitable sample: day 0 and day 5 on same card	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0307: unsuitable sample for CF: possible faecal contamination	0	0	0	0	1	0	0	0	0	0	0	0	0	1
0308: unsuitable sample: NHS number missing/not accurately recorded	0	1	3	0	1	6	0	9	0	0	0	0	3	23
0309: unsuitable sample: date of sample missing/not accurately recorded	0	0	10	3	5	6	0	5	1	1	1	1	1	34
0310: unsuitable sample: date of birth not accurately matched	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0311: unsuitable sample: expired card used	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0312: unsuitable sample: >14 days in transit, too old for analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0313: unsuitable sample: damaged in transit	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Avoidable Repeat Requests	5	48	45	18	32	92	0	70	10	34	16	14	34	418
Number of first samples received/ babies tested	646	1402	1471	139	1012	3116	0	1473	212	710	626	616	825	12248
Avoidable Repeat Requests Rate	0.8%	3.4%	3.1%	12.9%	3.2%	3.0%	0.0%	4.8%	4.7%	4.8%	2.6%	2.3%	4.1%	3.4%

Transfusion Repeats are not included in the Avoidable Repeat calculation

Quarter 1 2024-25: Standard 6 by Current Hospital																		
Status code and description of avoidable repeat	Blackpool Victoria Hospital	Burnley General Hospital	Furness General Hospital	North Manchester General Hospital	Not in hospital	Ormskirk & District General	Royal Albert Edward Infirmary	Royal Blackburn Hospital	Royal Bolton Hospital	Royal Lancaster Infirmary	Royal Manchester Childrens Hospital	Royal Oldham Hospital	Royal Preston Hospital	St Mary's Hospital	Stepping Hill Hospital	Tameside General Hospital	Wythenshawe Hospital	Grand Total
0301: too young for reliable screening (≤4 days)	1	2	0	0	11	0	1	0	0	0	0	1	0	1	0	0	0	17
0302: too soon after transfusion (<72 hours)	1	10	0	0	0	0	0	0	9	0	0	2	2	0	0	0	0	24
0303: insufficient sample	0	8	1	0	147	3	4	0	7	0	1	12	5	3	3	1	4	199
0304: unsuitable sample (blood quality): incorrect blood application	1	5	0	6	57	0	0	0	2	1	0	0	3	9	2	4	5	95
0305: unsuitable sample (blood quality): compressed/damaged	0	1	1	3	35	0	1	0	1	0	0	4	0	2	1	0	0	49
0306: Unsuitable sample: day 0 and day 5 on same card	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0307: unsuitable sample for CF: possible faecal contamination	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
0308: unsuitable sample: NHS number missing/not accurately recorded	0	0	0	2	19	0	0	0	0	0	0	1	0	1	0	0	0	23
0309: unsuitable sample: date of sample missing/not accurately recorded	0	1	1	0	31	0	0	0	0	0	0	0	0	1	0	0	0	34
0310: unsuitable sample: date of birth not accurately matched	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0311: unsuitable sample: expired card used	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0312: unsuitable sample: >14 days in transit, too old for analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0313: unsuitable sample: damaged in transit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Avoidable Repeat Requests	2	17	3	11	301	3	6	0	10	1	1	18	8	17	6	5	9	418
Number of first samples received/ babies tested	56	149	17	85	10908	15	53	1	128	37	5	177	103	281	68	54	111	12248
Avoidable Repeat Requests Rate	3.6%	11.4%	17.6%	12.9%	2.8%	20.0%	11.3%	0.0%	7.8%	2.7%	20.0%	10.2%	7.8%	6.0%	8.8%	9.3%	8.1%	3.4%

Transfusion Repeats are not included in the Avoidable Repeat calculation