



National Perinatal Mortality Review Tool

Learning from Standardised Reviews When Babies Die

National Perinatal Mortality Review Tool

Fifth Annual Report - Tables of Findings



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1. Conducting Reviews

Table 1.1: Number of reviews and the percentage of deaths where a review has been carried out using the PMRT by year, England 2018 to 2022 (as at 29th September 2023)

	Type of death		
	Stillbirths & late miscarriages n (%)	Neonatal deaths n (%)	Total n (%)
2018			
Review at least started	2,256 (85%)	1,094 (80%)	3,350 (83%)
Review published*	2,069 (78%)	889 (65%)	2,958 (74%)
2019			
Review at least started	2,458 (98%)	1,330 (99%)	788 (99%)
Review published*	2,293 (92%)	1,128 (90%)	3,421 (91%)
2020			
Review at least started	2,277 (91%)	1,273 (96%)	3,550 (98%)
Review published*	2,163 (95%)	1,086 (82%)	3,249 (90%)
2021			
Review at least started**	2,459 (99%)	1,391 (99%)	3,850 (99%)
Review published**	2,185 (88%)	1,024 (73%)	3,209 (83%)
2022			
Review at least started**	2,240 (99%)	1,445 (99%)	3,685 (99%)
Review published**	2,017 (89%)	1,190 (82%)	3,207 (86%)

*Published means that the review is complete, has been closed and the final report has been produced

**Percentages based on the notifications of eligible deaths to the MBRRACE-UK system as at 29th Sept 2023; some deaths in 2022 may not have been notified and some of the reviews will still be in progress at this stage of reporting

Table 1.2: Number of reviews and the percentage of deaths where a review has been carried out using the PMRT by year, Scotland 2018 to 2022 (as at 29th September 2023)

	Type of death		
	Stillbirths & late miscarriages n (%)	Neonatal deaths n (%)	Total n (%)
2018			
Review at least started	93 (45%)	35 (38%)	128 (43%)
Review published*	59 (29%)	27 (29%)	86 (29%)
2019			
Review at least started	160 (82%)	65 (75%)	225 (80%)
Review published*	127 (65%)	53 (61%)	225 (80%)
2020			
Review at least started	162 (81%)	51 (56%)	213 (73%)
Review published*	150 (75%)	44 (48%)	194 (67%)
2021			
Review at least started**	163 (88%)	76 (62%)	239 (78%)
Review published**	148 (80%)	49 (40%)	197 (64%)
2022			
Review at least started**	162 (89%)	62 (63%)	224 (80%)
Review published**	116 (64%)	44 (44%)	160 (57%)

*Published means that the review is complete, has been closed and the final report has been produced

**Percentages based on the notifications of eligible deaths to the MBRRACE-UK system as at 29th Sept 2023; some deaths in 2022 may not have been notified and some of the reviews will still be in progress at this stage of reporting

Table 1.3: Number of reviews and the percentage of deaths where a review has been carried out using the PMRT by year, Wales 2018 to 2022 (as at 29th September 2023)

	Type of death		
	Stillbirths & late miscarriages n (%)	Neonatal deaths n (%)	Total n (%)
2018			
Review at least started	92 (72%)	47 (78%)	139 (74%)
Review published*	75 (59%)	24 (40%)	99 (53%)
2019			
Review at least started	93 (73%)	73 (99%)	166 (82%)
Review published*	67 (52%)	43 (58%)	110 (54%)
2020			
Review at least started	97 (89%)	65 (100%)	162 (87%)
Review published*	89 (82%)	30 (51%)	119 (71%)
2021			
Review at least started**	97 (80%)	55 (100%)	152 (87%)
Review published**	58 (48%)	6 (11%)	64 (37%)
2022			
Review at least started**	99 (82%)	59 (100%)	158 (88%)
Review published**	84 (69%)	13 (22%)	97 (54%)

*Published means that the review is complete, has been closed and the final report has been produced

**Percentages based on the notifications of eligible deaths to the MBRRACE-UK system as at 29th Sept 2023; some deaths in 2022 may not have been notified and some of the reviews will still be in progress at this stage of reporting

Table 1.4: Number of reviews and the percentage of deaths where a review has been carried out using the PMRT by year, Northern Ireland 2020 to 2022 (as at 29th September 2023)

	Type of death		
	Stillbirths & late miscarriages n (%)	Neonatal deaths n (%)	Total n (%)
2020†			
Review at least started	73 (84%)	23 (35%)	96 (63%)
Review published*	43 (49%)	11 (17%)	54 (35%)
2021			
Review at least started**	81 (77%)	20 (30%)	101 (59%)
Review published**	23 (22%)	3 (4%)	26 (15%)
2022			
Review at least started**	80 (94%)	30 (48%)	110 (74%)
Review published**	76 (89%)	19 (30%)	95 (64%)

†Trusts in Northern Ireland adopted the PMRT for the conduct of reviews during autumn 2019. As a consequence the reviews carried out in Northern Ireland in 2019 and 2020 were during the implementation phase of the use of the PMRT and few reviews were completed or published in 2019. This table therefore only includes information about reviews carried out from January 2020

*Published means that the review is complete, has been closed and the final report has been produced

**Percentages based on the notifications of eligible deaths to the MBRRACE-UK system as at 29th Sept 2023; some deaths in 2022 may not have been notified and some of the reviews will still be in progress at this stage of reporting

Table 1.5: Characteristics of completed reviews by country and type of death for the five time periods of review from Jan 2018 to Feb 2023

	Reviews Jan 2018 to Feb 2019		Reviews Mar 2019 to Feb 2020		Reviews Mar 2020 to Feb 2021		Reviews Mar 2021 to Feb 2022		Reviews Mar 2022 to Feb 2023	
	Number of reviews N = 1,500	Percentage of reviews	Number of reviews N = 3,693	Percentage of reviews	Number of reviews N = 3,981	Percentage of reviews	Number of reviews N = 4,199	Percentage of reviews	Number of reviews N = 4,111	Percentage of reviews
Country:										
England	1,416	94%	3,642	94%	3,621	91%	3,746	89%	3,583	87%
Wales	23	2%	81	2%	146	4%	171	4%	186	5%
Scotland	61	4%	150	4%	176	4%	235	6%	190	5%
Northern Ireland*	--	--	--	--	38	1%	47	1%	152	4%
Type of death:										
Late miscarriages	143	10%	449	12%	385	10%	416	10%	383	9%
Stillbirths	1,011	67%	2,158	58%	2,215	56%	2,394	57%	2,248	55%
Neonatal deaths	346	23%	1,086	29%	1,381	35%	1,389	33%	1,480	36%

*Northern Ireland adopted the tool in autumn 2019

Table 1.6: Number and percentage of staff recorded as present at the review session with the largest number of participants by type of death, comparing the five time periods of review from Jan 2018 to Feb 2023

	Reviews Jan 2018 to Feb 2019			Reviews Mar 2019 to Feb 2020			Reviews Mar 2020 to Feb 2021			Reviews Mar 2021 to Feb 2022			Reviews Mar 2022 to Feb 2023		
	Late miscarriages & stillbirths (N = 2,607 n (%))	Neonatal deaths (N = 346) n (%)	Neonatal deaths & stillbirths (N = 2,607 n (%))	Late miscarriages & stillbirths (N = 2,607 n (%))	Neonatal deaths (N = 1,086) n (%)	Neonatal deaths & stillbirths (N = 2,600 n (%))	Late miscarriages & stillbirths (N = 2,810 n (%))	Neonatal deaths (N = 1,389) n (%)	Neonatal deaths & stillbirths (N = 2,631 n (%))	Late miscarriages & stillbirths (N = 1,480 n (%))	Neonatal deaths (N = 1,480 n (%))	Late miscarriages & stillbirths (N = 2,631 n (%))	Neonatal deaths (N = 1,480 n (%))		
1	94 (8%)	23 (7%)	224 (9%)	89 (8%)	160 (6%)	110 (8%)	164 (6%)	96 (7%)	86 (3%)	80 (5%)					
2-3	316 (27%)	87 (25%)	605 (23%)	188 (17%)	405 (16%)	161 (11%)	250 (9%)	101 (8%)	167 (6%)	84 (6%)					
4-7	447 (41%)	129 (37%)	1,031 (40%)	434 (40%)	1,089 (42%)	448 (32%)	976 (35%)	326 (23%)	915 (35%)	268 (18%)					
8+	265 (23%)	107 (31%)	601 (22%)	323 (30%)	874 (34%)	627 (45%)	1,358 (48%)	832 (60%)	1,382 (53%)	1,005 (68%)					
None recorded	2		147 (6%)	52 (5%)	72 (3%)	35 (3%)	62 (2%)	34 (2%)	81 (3%)	43 (3%)					
Median	5	6	4	5	6	7	7	9	8	10					

Table 1.7: Number and percentage of reviews involving each type of professional, comparing the five time periods from Jan 2018 to Feb 2023

Professional role	Number of reviews in any review session (% of reviews) Reviews Jan 2018 to Feb 2019		Number of reviews in any review session (% of reviews) Reviews Mar 2019 to Feb 2020		Number of reviews in any review session (% of reviews) Reviews Mar 2020 to Feb 2021		Number of reviews in any review session (% of reviews) Reviews Mar 2021 to Feb 2022		Number of reviews in any review session (% of reviews) Reviews Mar 2022 to Feb 2023	
	Late miscarriages & stillbirths (N = 1,154) n (%)	Neonatal deaths (N = 346) n (%)	Late miscarriages & stillbirths (N = 2,607) n (%)	Neonatal deaths (N = 1,086) n (%)	Late miscarriages & stillbirths (N = 2,600) n (%)	Neonatal deaths (N = 1,381) n (%)	Late miscarriages & stillbirths (N = 2,810) n (%)	Neonatal deaths (N = 1,389) n (%)	Late miscarriages & stillbirths (N = 2,631) n (%)	Neonatal deaths (N = 1,480) n (%)
External panel member	105 (9%)	29 (8%)	496 (19%)	206 (19%)	539 (21%)	304 (22%)	938 (33%)	478 (34%)	1,180 (45%)	667 (45%)
Midwife	972 (84%)	267 (77%)	2,174 (83%)	826 (76%)	2,295 (88%)	1,128 (82%)	2,658 (95%)	1,198 (86%)	2,474 (94%)	1,347 (91%)
Neonatologist/ paediatrician	140 (12%)	204 (59%)	468 (18%)	766 (71%)	592 (23%)	1,112 (81%)	795 (28%)	1,148 (83%)	733 (28%)	1,247 (84%)
Obstetrician	893 (77%)	253 (73%)	2,050 (79%)	778 (72%)	2,269 (87%)	1,024 (74%)	2,540 (90%)	1,153 (83%)	2,435 (93%)	1,261 (85%)
Bereavement team member	495 (43%)	145 (42%)	1,444 (55%)	526 (48%)	1,353 (52%)	703 (51%)	1,602 (57%)	828 (60%)	1,548 (59%)	879 (59%)
Risk manager/ governance team member	749 (65%)	206 (60%)	2,452 (94%)	918 (85%)	1,889 (73%)	920 (67%)	2,060 (73%)	1,003 (72%)	1,940 (74%)	1,121 (76%)
PMRT/maternity safety champion*	125 (11%)	24 (7%)	454 (18%)	139 (14%)	410 (18%)	269 (21%)	581 (24%)	300 (23%)	549 (25%)*	318 (24%)*
Neonatal nurse	56 (5%)	83 (24%)	226 (9%)	779 (71%)	209 (8%)	632 (46%)	376 (13%)	740 (53%)	361 (14%)	905 (61%)
Service manager/ member of management team	288 (25%)	65 (19%)	1,130 (43%)	366 (34%)	967 (37%)	404 (29%)	1,214 (43%)	505 (36%)	1,141 (43%)	578 (39%)
Administrative support staff	122 (11%)	48 (14%)	448 (17%)	230 (21%)	545 (21%)	320 (23%)	760 (27%)	502 (36%)	847 (32%)	592 (40%)
Pathologist	26 (2%)	4 (1%)	120 (5%)	16 (1%)	152 (6%)	47 (3%)	228 (8%)	94 (7%)	185 (7%)	94 (6%)
Anaesthetist	39 (3%)	4 (1%)	52 (2%)	19 (2%)	49 (2%)	33 (3%)	89 (3%)	57 (4%)	110 (4%)	71 (5%)
Other	223 (19%)	67 (19%)	764 (29%)	558 (51%)	623 (24%)	466 (34%)	803 (29%)	564 (41%)	904 (34%)	694 (47%)
Unknown (in addition to other)	938 (81%)	297 (86%)	406 (16%)	252 (23%)	357 (14%)	305 (22%)	555 (20%)	415 (30%)	590 (22%)	474 (32%)

*Maternity safety champions are only relevant in England and thus the proportions are calculated on the basis of the 3,583 reviews completed in England

2. Parents' perspectives of their care and that of their baby

Table 2.1: Number and percentage of reviews indicating parents' perspectives of care were sought and comments recorded comparing the five time periods from Jan 2018 to Feb 2023

	Reviews Jan 2018 to Feb 2019		Reviews Mar 2019 to Feb 2020		Reviews Mar 2020 to Feb 2021		Reviews Mar 2021 to Feb 2022		Reviews Mar 2022 to Feb 2023											
	Reviews where parents' perspectives were indicated as having been sought	Reviews with parents' comments recorded**	Reviews where parents' perspectives were indicated as having been sought	Reviews with parents' comments recorded**	Reviews where parents' perspectives were indicated as having been sought	Reviews with parents' comments recorded**	Reviews where parents' perspectives were indicated as having been sought	Reviews with parents' comments recorded**	Reviews where parents' perspectives were indicated as having been sought	Reviews with parents' comments recorded**										
	N	%	N	%	N	%	N	%	N	%										
Country:																				
England	1,070	76%	1,037	73%	2,916	84%	2,899	84%	3,277	90%	3,244	90%	3,620	97%	3,109	83%	3,450	96%	1,917	54%
Wales	19	82%	18	78%	70	86%	70	86%	98	67%	98	67%	140	82%	120	70%	154	83%	83	45%
Scotland	35	57%	34	56%	130	87%	130	87%	160	91%	160	91%	201	86%	163	69%	180	95%	95	50%
Northern Ireland*	--	--	--	--	--	--	--	--	34	89%	34	89%	44	94%	38	81%	122	80%	79	52%
Overall	1,124	75%	1,089	73%	3,116	84%	3,099	84%	3,569	90%	3,536	89%	4,005	95%	3,430	82%	3,906	95%	2,174	53%
Type of death:																				
Late miscarriages	100	70%	98	69%	365	81%	365	81%	344	89%	344	89%	398	96%	332	81%	365	95%	199	52%
Stillbirths	781	77%	755	75%	1,879	87%	1,875	87%	2,041	92%	2,039	92%	2,309	96%	1,922	80%	2,173	97%	1,217	54%
Neonatal deaths	243	70%	236	68%	872	80%	859	79%	1,184	86%	1,153	83%	1,298	93%	1,176	85%	1,368	92%	758	51%

* Trusts in Northern Ireland adopted the PMRT for the conduct of reviews during autumn 2019. As a consequence the reviews carried out in Northern Ireland in 2019 and 2020 were during the implementation phase of the use of the PMRT and few reviews were completed or published in 2019. This table therefore only includes information about reviews carried out from March 2020.

** A small number of the comments were not actually parental comments

‡ This is the percentage of reviews where parents' views were sought, not the percentage of the total reviews carried out

Table 2.2: Themes from a sample of those parents who had questions, comments or expressed concerns about their care by type of death Mar 2022 to Feb 2023

Questions and concerns – main themes	Sub-themes	Number of responses Late miscarriages and stillbirths N=128 (sample) n (%)	Number of responses Neonatal deaths N=72 (sample) n (%)	Number of responses All deaths N=200 (sample) n (%)
Staff approach and care received	Lack of compassion	8 (4%)	6 (3%)	14 (7%)
	Loss of control – not listened to/felt ignored	4 (2%)	1 (1%)	5 (3%)
Questions, confusion or complaints	General 'why' or 'how' questions	14 (7%)	3 (2%)	17 (9%)
	Specific 'why' or 'how' questions	39 (20%)	15 (8%)	54 (27%)
	Lack of information	7 (4%)	3 (2%)	10 (5%)
	Concerns about management plans and care received	26 (13%)	19 (10%)	45 (23%)
Maternal/parental self-blame and guilt	Self-blame or guilt	3 (2%)	3 (2%)	6 (3%)
Positive feedback	Positive comments about care generally	6 (3%)	9 (5%)	15 (8%)
	Specific positive comments about staff	12 (6%)	6 (3%)	18 (9%)
	Procedural comments	3 (2%)	5 (3%)	8 (4%)
Other	Administrative feedback	4 (2%)	1 (1%)	5 (3%)
	Grief	2 (1%)	1 (1%)	3 (2%)

3. Issues with care identified in the reviews

Table 3.1: Number and proportion of reviews with issues with care identified and the average number of issues identified per death reviewed, for the five time periods from Jan 2018 to Feb 2023

	Reviews Jan 2018 to Feb 2019	Reviews Mar 2019 to Feb 2020	Reviews Mar 2020 to Feb 2021	Reviews Mar 2021 to Feb 2022	Reviews Mar 2022 to Feb 2023
Country:					
England	1,334 (94%)	3,238 (89%)	3,456 (95%)	3,624 (97%)	3,376 (94%)
Wales	23 (100%)	68 (84%)	144 (99%)	171 (100%)	181 (97%)
Scotland	59 (97%)	131 (87%)	160 (91%)	230 (98%)	188 (99%)
Northern Ireland*	--	--	37 (97%)	46 (98%)	151 (99%)
Overall	1,416 (94%)	3,437 (93%)	3,797 (95%)	4,071 (97%)	3,896 (95%)
Type of death:					
Late miscarriages	127 (89%)	399 (88%)	360 (94%)	386 (93%)	351 (91%)
Stillbirths	940 (93%)	1,980 (92%)	2,465 (96%)	2,346 (98%)	2,141 (95%)
Neonatal deaths	341 (99%)	1,058 (97%)	1,332 (97%)	1,339 (96%)	1,404 (95%)

* Northern Ireland adopted the tool in autumn 2019

Table 3.2: The nine most common issues with care identified relevant to the outcome in reviews of pre-conception and antenatal care, for the five time periods from Jan 2018 to Feb 2023

Issue group	Reviews Jan 2018 to Feb 2019		Reviews Mar 2019 to Feb 2020		Reviews Mar 2020 to Feb 2021		Reviews Mar 2021 to Feb 2022		Reviews Mar 2022 to Feb 2023	
	Number and percentage of reviews with each issue N=1,500 n (%)	Number of issues relevant to the outcome N=883 n (%)*	Number and percentage of reviews with each issue N=3,693 n (%)	Number of issues relevant to the outcome N=1,371 n (%)*	Number and percentage of reviews with each issue N=3,981 n (%)	Number of issues relevant to the outcome N=1,650 n (%)*	Number and percentage of reviews with each issue N=4,199 n (%)	Number of issues relevant to the outcome N=1,789 n (%)*	Number and percentage of reviews with each issue N=4,111 n (%)	Number of issues relevant to the outcome N=1,749 n (%)*
Inadequate growth surveillance	384 (26%)	269 (30%)	712 (19%)	448 (24%)	748 (19%)	371 (23%)	1,029 (25%)	428 (24%)	966 (23%)	398 (23%)
Late booking/unbooked pregnancy	220 (15%)	65 (7%)	568 (15%)	201 (11%)	588 (15%)	139 (8%)	1,000 (24%)	160 (9%)	1,095 (27%)	174 (10%)
Smoking assessment and management of exposure to tobacco smoke	604 (40%)	113 (13%)	1,226 (33%)	196 (11%)	973 (24%)	129 (8%)	834 (20%)	62 (3%)	1,057 (26%)	91 (5%)
Delay in diagnosis or inappropriate management of significant medical/surgical/social problems during pregnancy ³	155 (10%)	106 (12%)	363 (10%)	343 (18%)	408 (10%)	334 (20%)	759 (18%)	440 (25%)	822 (20%)	462 (26%)
Inadequate investigation or management of reduced fetal movements ²	230 (15%)	142 (16%)	456 (12%)	273 (15%)	462 (12%)	314 (19%)	702 (17%)	322 (18%)	560 (14%)	280 (16%)
Lack of appropriate referral for social issues ¹ or screening for domestic abuse at booking	196 (13%)	11 (1%)	808 (22%)	51 (3%)	636 (16%)	39 (2%)	407 (10%)	30 (2%)	379 (9%)	23 (1%)
Assessment and management of aspirin requirement	339 (23%)	66 (7%)	628 (17%)	128 (7%)	467 (12%)	101 (6%)	332 (8%)	70 (4%)	275 (7%)	72 (4%)
Screening for, or management of, gestational diabetes mellitus (GDM)	164 (11%)	17 (2%)	246 (7%)	38 (2%)	235 (6%)	30 (2%)	269 (6%)	43 (2%)	268 (7%)	31 (2%)
Antenatal risk assessment and management	**	**	**	**	**	**	**	**	**	**

*This percentage is the proportion of all relevant issues identified including issues affecting a small proportion of reviews which are not listed in the table.

**Not reported in these years

- Includes:** housing, benefits, social support, teenager, other vulnerabilities
- Includes:** no risk assessment; investigations indicated not carried out; poor quality, or incorrectly interpreted CTGs; lack of appropriate written information for mother
- Includes:** inappropriate management according to guidelines

Table 3.3: The eight most common issues with care identified during intrapartum care, for the five time periods from Jan 2018 to Feb 2023

Issue group	Reviews Jan 2018 to Feb 2019		Reviews Mar 2019 to Feb 2020		Reviews Mar 2020 to Feb 2021		Reviews Mar 2021 to Feb 2022		Reviews Mar 2022 to Feb 2023	
	Number and percentage of reviews with each issue N=1,500 n (%)	Number of issues relevant to the outcome N=346 n (%)*	Number and percentage of reviews with each issue N=3,693 n (%)	Number of issues relevant to the outcome N=869 n (%)*	Number and percentage of reviews with each issue N=1,037 n (%)	Number of issues relevant to the outcome N=1,650 n (%)*	Number and percentage of reviews with each issue N=4,199 n (%)	Number of issues relevant to the outcome N=979 n (%)*	Number and percentage of reviews with each issue N=4,111 n (%)	Number of issues relevant to the outcome N=792 n (%)*
Issues with monitoring of the mother ¹	507 (34%)	52 (15%)	944 (26%)	114 (13%)	904 (23%)	115 (11%)	914 (22%)	92 (9%)	886 (22%)	84 (11%)
No assessment of mother's risk status or inadequate management at the start of her care in labour or during the course of her labour	118 (8%)	41 (12%)	198 (5%)	83 (10%)	221 (6%)	122 (12%)	281 (7%)	108 (11%)	266 (6%)	85 (11%)
Fetal monitoring issues ²	53 (4%)	67 (19%)	162 (4%)	180 (21%)	162 (4%)	177 (17%)	311 (7%)	185 (19%)	244 (6%)	121 (15%)
Issues with communication with mothers with poor/no English	77 (5%)	13 (4%)	244 (7%)	45 (5%)	193 (5%)	22 (2%)	283 (7%)	23 (2%)	260 (6%)	33 (4%)
Staffing issues ³	82 (5%)	40 (12%)	289 (5%)	132 (15%)	169 (4%)	136 (13%)	233 (6%)	121 (12%)	194 (5%)	88 (11%)
Inappropriate setting/location of birth	53 (4%)	24 (7%)	138 (4%)	50 (6%)	178 (5%)	84 (8%)	179 (4%)	97 (10%)	201 (5%)	104 (13%)
Issues in management of preterm and threatened preterm labour	27 (2%)	22 (6%)	73 (2%)	28 (3%)	93 (2%)	50 (5%)	166 (4%)	69 (7%)	198 (5%)	70 (9%)
Issues with birth mode(s) ⁴	42 (3%)	19 (5%)	101 (3%)	68 (8%)	108 (3%)	81 (8%)	120 (3%)	79 (8%)	130 (3%)	68 (9%)

1. **Includes:** infrequent observations and lack of partogram
2. **Includes:** incorrect method of fetal monitoring, interpretation or management, from prior to established labour to the latent phase of labour
3. **Includes:** insufficiently senior staff involved in care and lack of one-to-one care in established labour
4. **Includes:** inappropriate choice, timing and management

Table 3.4: The most common issues with care identified during neonatal care (excluding end of life care), for the four time periods from Jan 2018 to Feb 2022

Issue group	Reviews Jan 2018 to Feb 2019		Reviews Mar 2019 to Feb 2020		Reviews Mar 2020 to Feb 2021		Reviews Mar 2021 to Feb 2022		Reviews Mar 2022 to Feb 2023	
	Number and percentage of reviews with each issue N=346 n (%)	Number of issues relevant to outcome N=81 n (%)	Number and percentage of reviews with each issue N=1,086 n (%)	Number of issues relevant to outcome N=446 n (%)	Number and percentage of reviews with each issue N=1,381 n (%)	Number of issues relevant to outcome N=440 n (%)	Number and percentage of reviews with each issue N=1,389 n (%)	Number of issues relevant to outcome N=453 n (%)	Number and percentage of reviews with each issue N=1,480 n (%)	Number of issues relevant to outcome N=421 n (%)
Inadequate documentation:										
At all stages of care	185 (53%)	32 (40%)	791 (73%)	125 (28%)	721 (52%)	154 (35%)	1,132 (81%)	73 (16%)	882 (60%)	77 (18%)
Resuscitation & stabilisation	172 (50%)		525 (48%)		441 (32%)		609 (44%)		447 (30%)	51 (12%)
Transfer to neonatal unit	25 (7%)		107 (10%)		92 (7%)		91 (7%)		54 (4%)	8(2%)
Neonatal care	5 (10%)		134 (12%)		162 (12%)		353 (25%)		297 (20%)	15 (4%)
Transfer to an external neonatal	14 (4%)		25 (2%)		26 (2%)		79 (6%)		84 (6%)	<10
Thermal management issues:										
At all stages of care	61 (18%)	14 (17%)	272 (25%)	88 (20%)	345 (25%)	138 (31%)	376 (27%)	123 (27%)	367 (25%)	108 (26%)
Resuscitation	18 (5%)		24 (3%)		51 (4%)		48 (3%)		26 (2%)	<10
Neonatal care	14 (4%)		64 (5%)		64 (5%)		78 (6%)		91 (6%)	33 (8%)
Transfer to neonatal unit/other	50 (15%)		174 (16%)		230 (17%)		250 (18%)		250 (17%)	69 (16%)
Issues during resuscitation with:										
Respiratory management ¹	56 (16%)	<10	183 (17%)	55 (13%)	218 (16%)	71 (16%)	209 (15%)	66 (15%)	174 (12%)	57 (14%)
Delayed cord clamping							61 (4%)	6 (1%)	76 (5%)	16 (4%)
Resuscitation not in line with NLS							49 (4%)	21 (5%)	29 (2%)	14 (3%)
Issues during neonatal care with:										
Cardiovascular management ²	21 (6%)	<10	45 (4%)	43 (10%)	60 (4%)	10 (2%)	60 (4%)	6 (1%)	64 (4%)	16 (4%)
Respiratory management							69 (5%)	18 (4%)	86 (6%)	25 (6%)
Issues with communication with parents ³	13 (4%)	<10	43 (4%)	56 (3%)	52 (4%)	11 (3%)	108 (8%)	11 (2%)	85 (6%)	9 (2%)

1. **Includes:** issues around establishing ventilation, intubation, positive pressure respiratory support, oxygen saturation monitoring and administration of surfactant

2. **Includes:** line placement and radiological confirmation of line position

3. **Includes:** mothers/parents with poor/no English and at any stage of resuscitation, transfer and neonatal care

Table 3.5: The most common issues with care identified during end of life care, for the five time periods from Jan 2018 to Feb 2023

	Reviews Jan 2018 to Feb 2019	Reviews Mar 2019 to Feb 2020	Reviews Mar 2020 to Feb 2021	Reviews Mar 2021 to Feb 2022	Reviews Mar 2022 to Feb 2023
Issue group	Number of reviews with each issue N=346 n (%)	Number of reviews with each issue N=1,086 n (%)	Number of reviews with each issue N=1,381 n (%)	Number of reviews with each issue N=1,389 n (%)	Number of reviews with each issue N=548 n (%)
Post-mortem not discussed with parents prior to the baby's death	52 (15%)	151 (14%)	217 (16%)	237 (17%)	209 (38%)
Organ donation not discussed with parents despite no specific contraindications	82 (24%)	209 (19%)	225 (16%)	184 (13%)	167 (30%)
Inadequate documentation	57 (16%)	180 (17%)	114 (8%)	117 (8%)	153 (28%)

Table 3.6: The most common issues with care identified after the baby had died, for the five time periods from Jan 2018 to Feb 2023

	Reviews Jan 2018 to Feb 2019	Reviews Mar 2019 to Feb 2020	Reviews Mar 2020 to Feb 2021	Reviews Mar 2021 to Feb 2022	Reviews Mar 2022 to Feb 2023
Issue group	Number of reviews (N=1,500) n (%)	Number of reviews N=3,693 n (%)	Number of reviews N=3,981 n (%)	Number of reviews N=4,199 n (%)	Number of reviews N=4,111 n (%)
Baby had to be transferred elsewhere for a post-mortem	--*	546 (15%)	1,024 (26%)	1,081 (64%)**	1,057 (26%)
Placental histology was performed but not by a perinatal/paediatric pathologist	177 (12%)	351 (10%)	287 (7%)	275 (7%)	279 (7%)
The placenta was not sent for histological examination	38 (3%)	136 (4%)	132 (3%)	99 (2%)	87 (2%)
The parents were not offered a hospital post-mortem	16 (1%)	63 (2%)	77 (2%)	41 (1%)	44 (1%)
It is not possible to assess from the notes whether the parents were offered a hospital post-mortem	19 (1%)	39 (1%)	30 (1%)	46 (1%)	40 (1%)
The placenta was sent for histological examination but there is no result in the notes	27 (2%)	52 (1%)	40 (1%)	34 (1%)	41 (1%)
The parents consented to a full or limited post-mortem examination but this was not carried out	17 (1%)	7 (<1%)	4 (<1%)	9 (<1%)	2 (<1%)

*Not reported in 2018-19

Table 3.7: The most common issues with bereavement care* identified from Aug 2020 to Feb 2023

Issue group	Reviews Aug 2020 to Feb 2021	Reviews Mar 2021 to Feb 2022	Reviews Mar 2022 to Feb 2023		
	Number of reviews N=2,322* n (%)	Number of reviews N=4,199 n (%)	Number of reviews of late miscarriages and stillbirths N=2,631 n (%)	Number of reviews of neonatal deaths N=1,180 n (%)	Number of all reviews N=4,111 n (%)
Policy, support and practical help to take their baby home was not available	542 (24%)	917 (22%)	459 (17%)	289 (24%)	748 (18%)
Inadequate documentation regarding taking the baby home	413 (18%)	566 (13%)	312 (12%)	201 (17%)	513 (12%)
Inadequate documentation regarding access to a cold cot	237 (10%)	321 (8%)	77 (3%)	144 (12%)	221 (5%)
Inadequate documentation regarding transfer to mortuary care	187 (8%)	306 (7%)	111 (4%)	100 (8%)	211 (5%)
Location and quality of the bereavement suite inadequate including being affected by service modifications due to the pandemic**	207 (9%)	267 (6%)	243 (9%)	104 (9%)	347 (8%)
Inadequate documentation to tell if bereavement care respected cultural, religious and spiritual wishes of the parents	134 (6%)	228 (5%)	124 (5%)	107 (9%)	231 (6%)
Bereavement care adversely affected by service modifications due to the pandemic**	--	218 (5%)	82 (3%)	34 (3%)	116 (3%)
Inadequate documentation to tell if bereavement care provided included practical help and/or emotional support	95 (4%)	169 (4%)	76 (3%)	80 (7%)	156 (4%)
Inadequate documentation to assess the location and quality of the bereavement care		149 (4%)	50 (2%)	128 (11%)	178 (4%)
Poor quality of the bereavement care offered	64 (3%)	118 (3%)	51 (2%)	92 (8%)	143 (3%)
Inadequate documentation to tell if a named contact for questions after bereavement was identified	69 (3%)	83 (2%)	25 (1%)	29 (2%)	
Bereavement checklist was not included in the notes	51 (3%)	110 (3%)	60 (2%)	79 (7%)	139 (3%)
Parents were not offered the use of a cold cot	36	68 (2%)	11 (<1%)	54 (5%)	65 (2%)
Bereavement care did not provide practical health and/or emotional support			63 (2%)	36 (3%)	99 (2%)
Bereavement care not provided by trained staff			42 (2%)	16 (1%)	58 (1%)
A named contact was not identified for questions after discharge/inadequate documentation to tell if a named contact was identified			67 (3%)	42 (4%)	109 (3%)
Other***	135	314 (7%)	59 (2%)	95 (8%)	154 (4%)**

*Bereavement care questions were incorporated into the PMRT in August 2020

**Specific pandemic related questions were incorporated into the PMRT in August 2020

*** Includes six additional issues each affecting 50 or fewer reviews overall

Table 3.8: The eight most common issues with care identified as due to the impact of the Covid-19 pandemic*, Aug 2020 to Feb 2023

Issue group	Reviews Aug 2020 to Feb 2021	Reviews Mar 2021 to Feb 2020	Reviews Mar 2022 to Feb 2023
	Number and percentage of reviews N=2,322* n (%)	Number and percentage of reviews N=4,199 n (%)	Number and percentage of reviews N=4,111 n (%)
Services changes which affected smoking assessment and management of exposure to tobacco		2,440 (58%)	871 (21%)
The pandemic affected how women accessed maternity care	114 (5%)	141 (3%)	63 (2%)
Bereavement care adversely affected by service modifications due to the pandemic	90 (4%)	89 (2%)	52 (1%)
Questions about domestic abuse not asked due to remote delivery of booking care	63 (3%)	102 (2%)	126 (3%)
The opportunity to take their baby home after death was not available	44 (2%)	58 (1%)	7 (<1%)
Location and quality of the bereavement care adversely affected by the pandemic	34 (2%)	36 (1%)	11 (<1%)
Serial scans for high risk of fetal growth restriction not available due to changes to service provision	17 (1%)	29 (1%)	8 (<1%)
Standard and further postnatal investigations were indicated but not offered	15 (1%)	22 (1%)	8 (<1%)

*SARS-CoV-2 and COVID related questions were incorporated into the PMRT in August 2020

4. Grading of care

Table 4.1: Grading of care during pregnancy care, labour and birth for late miscarriages & stillbirths, for the five review time periods from Jan 2018 to Feb 2023

	Reviews Jan 2018 to Feb 2019	Reviews Mar 2019 to Feb 2020	Reviews Mar 2020 to Feb 2021	Reviews Mar 2021 to Feb 2022	Reviews Mar 2021 to Feb 2022 with external**	Reviews Mar 2022 to Feb 2023	Reviews Mar 2022 to Feb 2023 with external present **
	Number of reviews N = 1,154 n (%*)	Number of reviews N = 2,607 n (%*)	Number of reviews N = 2,600 n (%*)	Number of reviews N = 2,810 n (%*)	Number of reviews N = 938 n (%*)	Number of reviews N = 2,631 n (%*)	Number of reviews N = 1,180 n (%*)
A – No issues with care identified	710 (62%)	1,496 (57%)	1,434 (55%)	1,400 (50%)	435 (46%)	1,087 (41%)	461 (39%)
B - Care issues that would have made no difference to the outcome	291 (25%)	705 (27%)	721 (28%)	867 (31%)	322 (34%)	1,023 (39%)	467 (40%)
C - Care issues which may have made a difference to the outcome	114 (10%)	329 (13%)	357 (14%)	394 (14%)	135 (14%)	388 (14%)	187 (16%)
D - Care issues which were likely to have made a difference to the outcome	30 (3%)	72 (3%)	83 (3%)	124 (4%)	45 (5%)	115 (4%)	63 (5%)
Unrecorded	9 (1%)	5 (<1%)	5 (<1%)	25 (1%)	1 (<1%)	18 (<1%)	2 (<1%)

*Rounding errors may result in percentages totalling 99% or 101%

** These are reviews where an external member is present as part of the review team

Table 4.2: Grading of care during pregnancy, labour and birth for neonatal deaths, for the five review time periods from Jan 2018 to Feb 2023

	Reviews Jan 2018 to Feb 2019	Reviews Mar 2019 to Feb 2020	Reviews Mar 2020 to Feb 2021	Reviews Mar 2021 to Feb 2022	Reviews Mar 2021 to Feb 2022 with external**	Reviews Mar 2022 to Feb 2023	Reviews Mar 2022 to Feb 2023 with external**
A – No issues with care identified	Number of reviews N = 346 n (%)*	Number of reviews N = 1,086 n (%)*	Number of reviews N = 1,381 n (%)*	Number of reviews N = 1,389 n (%)*	Number of reviews N = 478 n (%)*	Number of reviews N = 1,480 n (%)*	Number of reviews N = 667 n (%)*
B - Care issues that would have made no difference to the outcome	214 (62%)	678 (62%)	751 (54%)	713 (51%)	237 (50%)	700 (47%)	303 (45%)
C - Care issues which may have made a difference to the outcome	102 (29%)	278 (26%)	406 (29%)	445 (32%)	162 (34%)	518 (35%)	241 (36%)
D - Care issues which were likely to have made a difference to the outcome	20 (6%)	84 (8%)	111 (8%)	148 (11%)	64 (13%)	159 (11%)	90 (13%)
Unrecorded	7 (1%)	18 (2%)	41 (3%)	37 (3%)	12 (3%)	46 (3%)	26 (4%)
	3 (1%)	28 (3%)	72 (5%)	46 (3%)	3 (1%)	57 (4%)	7 (1%)

*Rounding errors may result in percentages totalling 99% or 101%

**These are reviews where an external member is present as part of the review team

Table 4.3: Grading of care from birth to the death of the baby for neonatal deaths, for the five review time periods from Jan 2018 to Feb 2023

	Reviews Jan 2018 to Feb 2019	Reviews Mar 2019 to Feb 2020	Reviews Mar 2020 to Feb 2021	Reviews Mar 2021 to Feb 2022	Reviews Mar 2021 to Feb 2022 with external**	Reviews Mar 2022 to Feb 2023	Reviews Mar 2022 to Feb 2023 with external**
A – No issues with care identified	Number of reviews N = 346 n (%)*	Number of reviews N = 1,086 n (%)*	Number of reviews N = 1,381 n (%)*	Number of reviews N = 1,389 n (%)*	Number of reviews N = 478 n (%)*	Number of reviews N = 1,480 n (%)*	Number of reviews N = 667 n (%)*
B - Care issues that would have made no difference to the outcome	237 (68%)	679 (63%)	852 (62%)	791 (57%)	276 (58%)	827 (56%)	371 (56%)
C - Care issues which may have made a difference to the outcome	92 (27%)	342 (32%)	446 (32%)	452 (33%)	156 (33%)	511 (35%)	240 (36%)
D - Care issues which were likely to have made a difference to the outcome	11 (3%)	46 (4%)	68 (5%)	100 (7%)	41 (9%)	83 (6%)	41 (6%)
Unrecorded	1 (0%)	8 (1%)	10 (1%)	7 (<1%)	1 (<1%)	13 (1%)	9 (1%)
	5 (1%)	11 (1%)	5 (<1%)	39 (3%)	4 (1%)	46 (3%)	6 (1%)

*Rounding errors may result in percentages totalling 99% or 101%

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Table 4.4: Most serious level of grading of care during pregnancy, labour, birth and during the neonatal period for neonatal deaths, for the five review time periods from Jan 2018 to Feb 2023

	Reviews Jan 2018 to Feb 2019	Reviews Mar 2019 to Feb 2020	Reviews Mar 2020 to Feb 2021	Reviews Mar 2021 to Feb 2022	Reviews Mar 2021 to Feb 2022 with external**	Reviews Mar 2022 to Feb 2023	Reviews Mar 2022 to Feb 2023 with external**
	Number of reviews N = 346 n (%)	Number of reviews N = 1,086 n (%)	Number of reviews N = 1,381 n (%)	Number of reviews N = 1,389 n (%)	Number of reviews N = 478 n (%)	Number of reviews N = 1,480 n (%)	Number of reviews N = 667 n (%)
A – No issues with care identified	159 (46%)	507 (47%)	582 (42%)	501 (36%)	167 (35%)	477 (32%)	199 (30%)
B - Care issues that would have made no difference to the outcome	147 (42%)	439 (40%)	586 (42%)	600 (43%)	205 (43%)	696 (47%)	319 (48%)
C - Care issues which may have made a difference to the outcome	26 (7%)	111 (10%)	161 (12%)	213 (15%)	91 (19%)	214 (15%)	116 (17%)
D - Care issues which were likely to have made a difference to the outcome	8 (2%)	24 (2%)	50 (4%)	42 (3%)	13 (3%)	55 (4%)	32 (5%)
Unrecorded	6 (2%)	5 (<1%)	2 (<1%)	33 (2%)	2 (<1%)	38 (3%)	1 (<1%)

*Rounding errors may result in percentages totalling 99% or 101%

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Table 4.5: Grading of bereavement care following late miscarriage and stillbirth, for the four time periods from Jan 2018 to Feb 2023

	Reviews Jan 2018 to Feb 2019	Reviews Mar 2019 to Feb 2020	Reviews Mar 2020 to Feb 2021	Reviews Mar 2021 to Feb 2022	Reviews Mar 2021 to Feb 2022 with external**	Reviews Mar 2022 to Feb 2023	Reviews Mar 2022 to Feb 2023 with external**
	Number of reviews N = 1,154 n (%)	Number of reviews N = 2,607 n (%)	Number of reviews N = 2,600 n (%)	Number of reviews N = 2,810 n (%)	Number of reviews N = 938 n (%)	Number of reviews N = 2,631 n (%)	Number of reviews N = 1,180 n (%)
A – No issues with care identified	955 (83%)	2,175 (83%)	2,072 (80%)	2,075 (74%)	655 (70%)	1,662 (63%)	750 (64%)
B - Care issues that would have made no difference to the outcome	141 (12%)	336 (13%)	427 (16%)	550 (20%)	221 (24%)	747 (28%)	331 (28%)
C - Care issues which may have made a difference to the outcome	23 (2%)	70 (3%)	65 (3%)	126 (5%)	44 (5%)	158 (6%)	68 (6%)
D - Care issues which were likely to have made a difference to the outcome	8 (1%)	22 (1%)	34 (1%)	35 (1%)	17 (2%)	47 (2%)	30 (3%)
Unrecorded	27 (2%)	4 (<1%)	2 (<1%)	24 (<1%)	1 (<1%)	17 (<1%)	1 (<1%)

*Rounding errors may result in percentages totalling 99% or 101%

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Table 4.6: Grading of bereavement care following neonatal death, for the four time periods from Jan 2018 to Feb 2023

	Reviews Jan 2018 to Feb 2019	Reviews Mar 2019 to Feb 2020	Reviews Mar 2020 to Feb 2021	Reviews Mar 2021 to Feb 2022	Reviews Mar 2021 to Feb 2022 with external**	Reviews Mar 2022 to Feb 2023	Reviews Mar 2022 to Feb 2023 with external**
A – No issues with care identified	Number of reviews N = 346 n (%)*	Number of reviews N = 1,086 n (%)*	Number of reviews N = 1,381 n (%)*	Number of reviews N = 1,389 n (%)*	Number of reviews N = 478 n (%)*	Number of reviews N = 1,480 n (%)*	Number of reviews N = 667 n (%)*
B - Care issues that would have made no difference to the outcome	312 (90%)	933 (86%)	1,147 (83%)	1,086 (78%)	374 (78%)	1,071 (72%)	491 (74%)
C - Care issues which may have made a difference to the outcome	22 (6%)	94 (9%)	131 (9%)	219 (16%)	72 (15%)	296 (20%)	140 (21%)
D - Care issues which were likely to have made a difference to the outcome	5 (1%)	28 (3%)	30 (2%)	38 (3%)	26 (5%)	47 (3%)	25 (4%)
Unrecorded	0 (0%)	21 (2%)	59 (4%)	3 (<1%)	3 (1%)	15 (1%)	8 (1%)
	7 (2%)	10 (1%)	14 (1%)	43 (3%)	3 (1%)	51 (3%)	3 (<1%)

*Rounding errors may result in percentages totalling 99% or 101%

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