



National Perinatal Mortality Review Tool

Learning from Standardised Reviews When Babies Die

National Perinatal Mortality Review Tool

Fifth Annual Report



December 2023



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The development of the national PMRT is a result of a collaborative effort by a substantial number of individuals. We also owe a debt of gratitude to the many users of the PMRT who have contacted us with comments and suggestions as to how we might improve the contents and operations of the PMRT.

Glossary

CDOP	Child Death Overview Panel (England)
Cool/cold cot	A cot which is kept cool/cold to preserve the baby's body after death
CTG	Cardiotocograph
NCMD	National Child Mortality Database
MBRRACE-UK	The collaboration established to deliver the MNI-CORP
MNI-CORP	Maternal, Newborn and Infant Clinical Outcome Review Programme
PMRT	Perinatal Mortality Review Tool
Sands	Stillbirth and neonatal death charity

Use of the terms women and mothers

We use the terms 'women' and 'mothers' throughout this report to refer to those who are pregnant and give birth. We acknowledge that not all people who are pregnant or give birth identify as women, and it is important that evidence-based care for maternity, perinatal and postnatal health is inclusive.

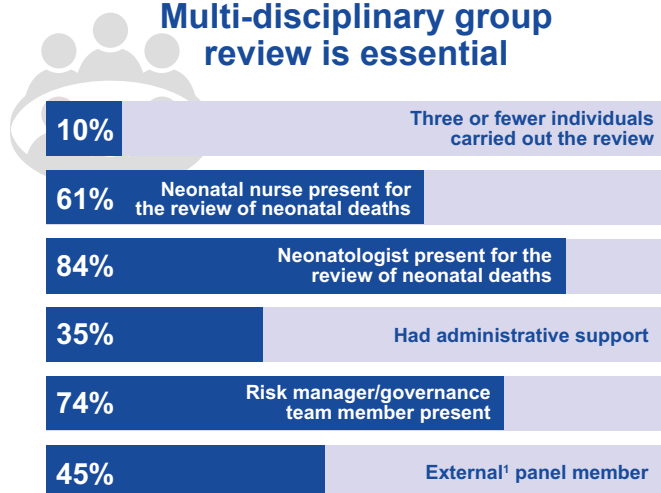
Learning from Standardised Reviews When Babies Die – 2023 Annual Report



Key Messages – December 2023

Since the launch of the national Perinatal Mortality Tool (PMRT) in early 2018, over 23,000 reviews have been started. This fifth annual report presents the findings for reviews completed from March 2022 to February 2023 coinciding with the third year of the global health emergency due to the COVID-19 virus. Here are the key messages from the 4,111 reviews completed during this period.

Multi-disciplinary group review is essential



Issue with care and areas for improvement identified at review

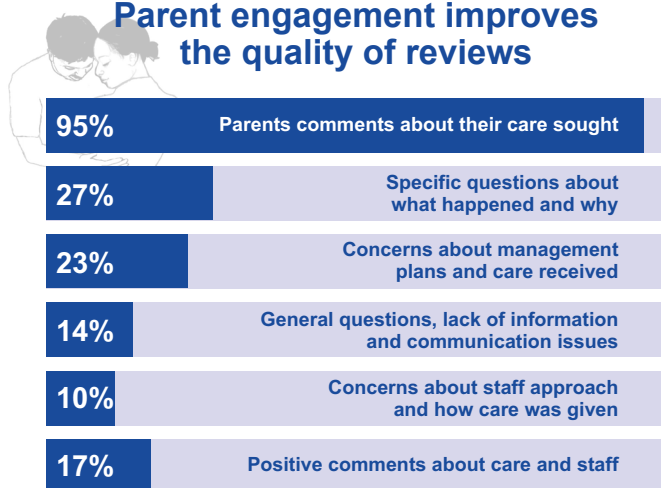


Over 19 out of 20 reviews identified areas for improvement



4 out of 20 reviews identified at least one issue with care that may have made a difference to the outcome for the baby

Parent engagement improves the quality of reviews



Comments, questions and concerns raised by parents

Why did they send me home when my blood pressure was high?

Midwife advised "it was normal for the baby's movements to slow down as the baby has less room".

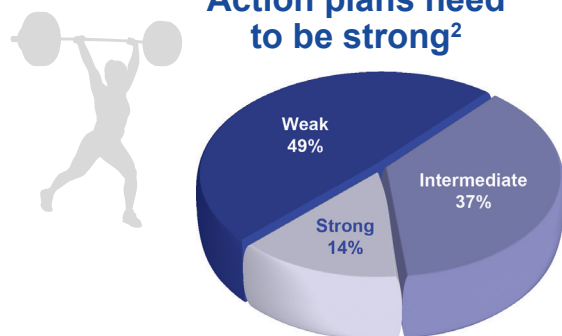
Once we got the worst news of our life we saw Professor [name] again and I can't explain how much that meant to us. He came along to explain why he felt this had happened and say how sorry he was. This is something that I will always remember.

If the baby had been born when I first came in with reduced movements and I had been induced, would the outcome have been different?

Was my weight to blame? I was advised to stop running by my GP due to a couple of early bleeds, so put on some weight and stopped the main form of regular exercise I took.

I have no concerns with my care. In particular I had good diabetic care.

Action plans need to be strong²



Examples of the strength² of actions planned

<p>Weak</p> <p>“ Feedback and re-education to the medical staff member involved and all medical staff ”</p> <p>A reminder for individual action without any controls</p>	<p>Intermediate</p> <p>“ A standard operating procedure (SOP) is being developed to support Intensive Care Unit (ICU) staff with caring for pregnant patients ”</p> <p>A new support for the system is in place but this still requires individuals to act without controls</p>	<p>Strong</p> <p>“ New IT system includes bereavement care module which requests a Kleihauer test automatically as part of routine postnatal investigations ”</p> <p>A system level design to eliminate human error</p>
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1. A relevant professional external to the trust/health board to provide a 'fresh eyes' independent perspective of care.

2. Strong actions are system changes which remove the reliance on individuals to choose the correct action. They use standardised and permanent physical or digital designs to eliminate human error and are sometimes referred to as 'forcing actions'.

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Executive Summary

All the reviews reported in this, the fifth national PMRT annual report, were carried out during the third year of the global health emergency due to COVID-19. Clinical services continued to be challenged as a consequence of the impact of COVID-19 on pregnant women, staff sickness and shortages, and the start of industrial action by NHS staff. Despite this there have been continued improvements in the use of the PMRT to carry out reviews of care when babies die.

Review of care when a baby dies should be a routine part of maternity and neonatal care in order to provide answers for bereaved parents and families about what happened and why their baby died. Importantly, wider learning also comes from both individual and summarised review findings which should be used to improve care and prevent future adverse safety events and baby deaths.

Since the launch of the PMRT in 2018, an increasing proportion of eligible babies' deaths have been reviewed using the PMRT such that the care of the vast majority of babies who die is now assessed using the tool. Importantly, local PMRT reviews are the only review of care that will be carried out for the majority of babies who die in the UK. For example, in England only 8% of babies who die who are eligible for a PMRT review will be investigated by the Maternity and Newborn Safety Investigation Special Health Authority (MNSI) (formerly HSIB), and whilst Child Death Overview Panels (CDOPs) review all neonatal deaths they include as part of their discussions the report from the local PMRT review carried out at the trust.

Supporting parents and families through bereavement and the review process is essential; meaningful engagement with parents and families in the process has the potential to improve the quality of reviews from which parents will also benefit directly. In order to engage with reviews, parents need a straightforward verbal explanation, in a language they can understand, of the purpose and process of review and the part they can play. Verbal explanations need to be supported by 'plain language' parent-facing written information. Materials developed by the PMRT collaboration to support parent engagement are available for use.

It is essential that the review process is resourced adequately to ensure that high quality and timely reviews are carried out. Resourcing involves including review activities in job plans for consultants and prioritising the time of other staff.

Improvements in the multi-disciplinary nature of reviews are evident in this report with, notably, a continuing decline in the number of reviews involving only three or fewer staff members. Having a member of the review team who is external to the trust or health board provides a 'fresh eyes' perspective, independent view of care. It is gratifying that, despite the challenges of making arrangements to involve an external health professional, the steady increase over time of the proportion of reviews with an external present has continued and 45% of reviews now benefit from this additional scrutiny. Of concern, however, is the fact that in the vast majority of instances trusts and health boards do not appear to provide appropriate administrative support to reduce the burden of routine administrative tasks for clinical staff carrying out reviews.

There has been a general shift in the holistic grading of care suggesting that the discipline of robust self-critical examination is being embraced more widely, with the need for improvements in care identified more frequently. The quality of the action plans developed following the identification of issues with care has also shown an improvement. The plans developed following the reviews in this report indicate a greater focus on 'strong' and 'intermediate', system level changes with actions designed to reduce the capacity for human error rather than 'weaker' actions aimed at individuals.

The issues with care identified in this report are largely focused around the same areas as in previous reports including: screening for fetal growth restriction; management of reduced fetal movements; assessment of maternal risk status; staffing issues during labour and birth; thermal and respiratory management once the baby has been born; and issues with the quality of documentation. These national findings, alongside the local summary reports which trusts and health boards can generate from the PMRT, provide the basis for prioritisation of local service improvement activities.

To fully realise the benefits of local reviews and consequent service improvements requires appropriate resourcing of the PMRT process and the consequent actions needed to improve care. It is clearly better that resources are spent on robust review processes meaningfully involving parents at this 'grass roots' level, and on service quality improvement activities, rather than having to resort to later, expensive external enquiries after the fact.

Recommendations

1. Evaluate the approach to parent engagement, ensure staff are trained and use the available PMRT Parent Engagement materials, particularly in trusts and health boards where fewer parents are engaged with the review process.
Action: Trusts and health boards, staff caring for bereaved parents, service commissioners
2. Provide adequate resourcing of PMRT review teams, including administrative support.
Action: Trusts and health boards, service commissioners
3. Provide adequate resourcing to ensure the involvement of independent external professionals in review teams.
Action: Service commissioners
4. Use the local PMRT summary reports and this national report as the basis to prioritise resources for key aspects of care and quality improvement activities identified as requiring action.
Action: Trusts and Health Boards, Service Commissioners, regional/network support systems, Governments
5. Improve service quality improvement activities implemented as a consequence of reviews by developing 'strong' actions targeted at system level changes and audit their implementation and impact.
Action: PMRT review teams, governance teams in Trusts and Health Boards, Service Commissioners

1. Background

The fundamental aim of the PMRT is to support objective, robust and standardised local reviews of care when babies die. This is to provide answers for bereaved parents and their families about whether the care that they and their baby received was appropriately safe and personalised or whether different care may have changed the outcome. The second, but nonetheless important, aim is to ensure local and national learning results from review findings to improve care, reduce safety-related adverse events, and prevent future baby deaths.

The PMRT is designed to support the review of baby deaths, from 22 weeks' gestation onwards, including late miscarriages, stillbirths, and neonatal deaths. For about 90% of parents, the PMRT review process is likely to be the only hospital review of their baby's death that will take place.

This fifth annual report builds on previous reports and presents an analysis of reviews completed from March 2022 to February 2023. The main focus of this year's report is yet again 'quality' in terms of parent engagement, the review process, and subsequent actions plans. Accompanying data tables, the technical report, and an infographic are available separately.

www.npeu.ox.ac.uk/pmrt/reports

2. Findings

Since it was launched in 2018, all trusts and health boards across England, Wales, Scotland and Northern Ireland have adopted the PMRT and by the 25th September 2023 a total of 23,396 reviews had been started and/or completed using the tool.

During 2022 a review of care was started for 97% of all babies who died in the perinatal period comprising 97% of stillborn babies and those who died in the late second trimester (late miscarriages), and 95% of babies who died in the neonatal period (first four weeks after birth) (Figure 1). Whilst overall only 82% of these reviews were completed and the report printed, the proportion of deaths where a review has been started and completed has increased since the launch of the tool notably for neonatal deaths (Figure 2). See Tables 1.1 to 1.4 in the separate Data Tables report.

The rest of this report presents the findings relating to the 4,111 reviews started in the period March 2022 to February 2023 that were completed; findings from reviews started but not completed are not included. See Table 1.5.

Figure 1: Proportion of deaths where a review was started by country and type of death, 2022

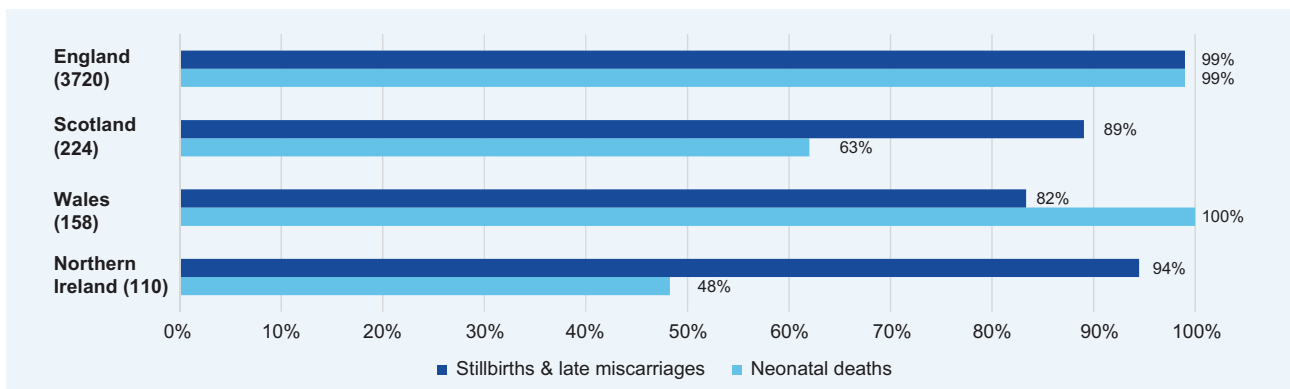
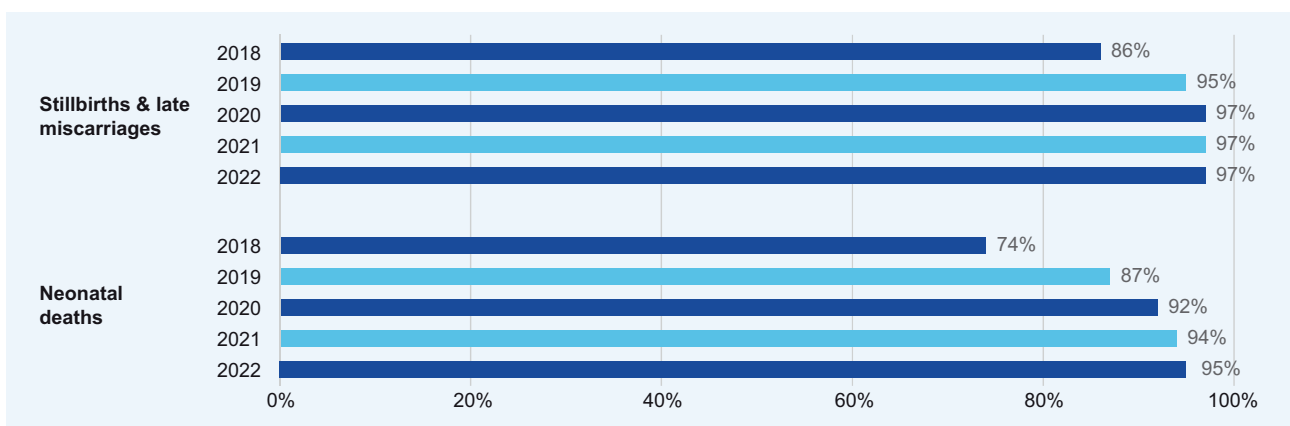


Figure 2: Proportion of deaths where a review was started by year and type of death, 2018 to 2022



2.1 Parent engagement

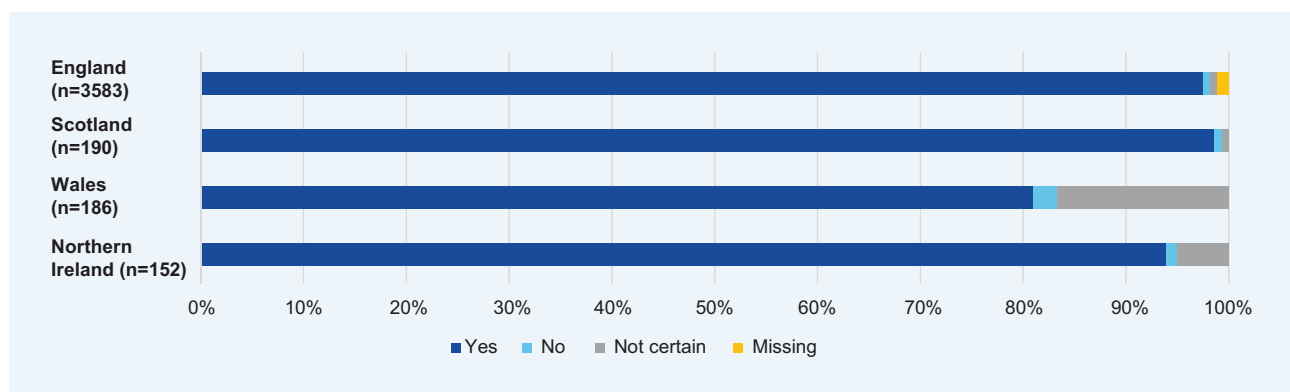
Engaging parents in PMRT reviews means ensuring parents are made aware that a review of their care and that of their baby will take place, and that they are given the opportunity to voice any questions or concerns, and their perspective of the care they received.

In their immediate grief, and often shock, parents may not feel able to express any questions or concerns and will need to be given time and often more than one opportunity to do so. Some parents may never feel able to engage with the review process. See Appendix A for information about the materials developed by the PMRT to support parent engagement.

If parents do have questions or concerns regarding their care it is important to seek these prior to the completion of the review so that during the review any questions and concerns they have can be addressed. This will ensure that when the review findings are fed back to parents their questions and concerns are answered.

It is not possible to fully assess the quality of parent engagement from the largely quantitative information collected in PMRT reviews. Here we present three indicators that provide some insights. See Table 2.1.

Figure 3: Proportion of parents who were told a review would take place, Mar 2022 to Feb 2023



2.1.1. Were parents told that a review would take place?

Overall 96% of UK parents were told that a review of their care would take place. This varied from 97% in England, 98% in Scotland, 81% in Wales and 94% in Northern Ireland (Figure 3) representing an overall increase from the previous report.

2.1.2. Were parents' perspectives of their care sought?

Of the parents who were told that a review would take place, their perspectives of the care they received was reported as having been sought from 95%. This ranged from 96% in England, 95% in Scotland, 83% in Wales to 80% in Northern Ireland.

2.1.3. Did parents feel able to express their views?

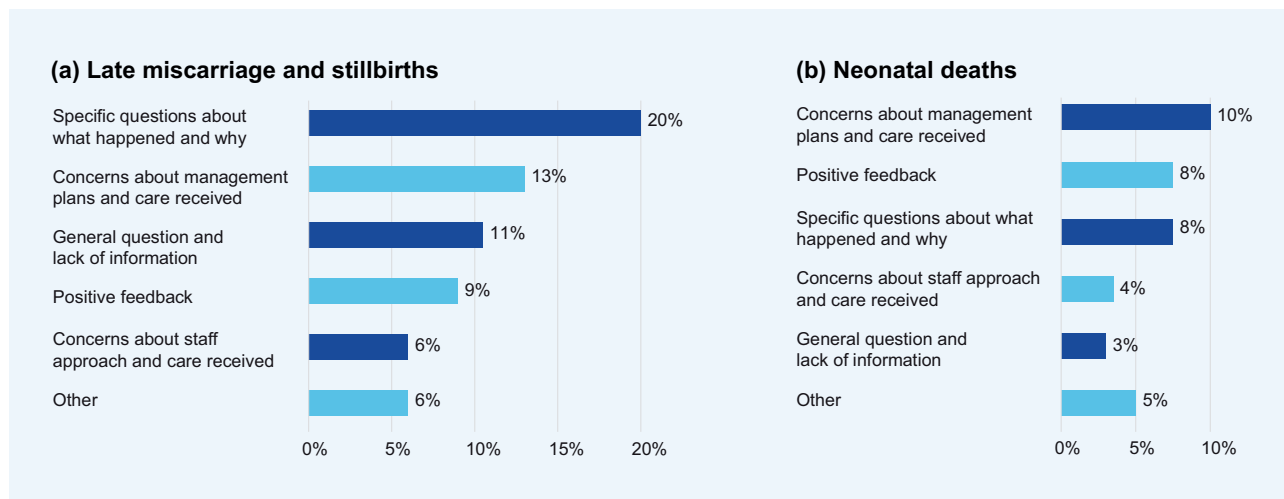
Overall, for just over half of reviews (53%), there was at least one comment, question or concern expressed by parents recorded. These included some positive comments about their care generally or particular staff members.

From the information recorded in the PMRT it was unclear what proportion of parents had been approached where they specifically indicated they had no comments or questions about their care. Nor was it possible to fully distinguish this group from the group of parents who had been approached but no questions, concerns or comments had been received back from the parents by the time of the review.

2.1.4. Parental comments and concerns expressed

A total of 2,174 reviews (53%) included comments, questions or concerns from parents; some provided multiple comments. A random sample of 200 of these were analysed (Figures 4a, 4b) and illustrative parental quotes are given in Figure 5. Nearly a fifth of the parents' comments (17%) were positive feedback about their care. See Table 2.2.

Figure 4: Comments, questions and concerns about their care expressed by parents by type of death, Mar 2022 to Feb 2023



The majority of questions from parents were specific to what had happened and why their baby had died (27%) together with concerns about the management plans and the care they had received (23%). Lack of compassion from staff (7%) alongside loss of control in terms of not being listened to and feeling they were being ignored (3%) accounted for 10% of comments. Notably, expressions of feelings that they were not being listened to were reported less frequently than in the previous report.

Some parents asked very general questions about their care and had issues with communication questioning why they were not given particular information which would have been relevant to their care (14%). A range of other comments and questions (11% in total) related to procedural and administrative issues, and expressions of grief. Of note in 3% of comments and questions there were expressions of maternal/pater-

nal self-blame and guilt, for example, asking if the baby's death was caused by something they either did or didn't do.

Whilst representing population based data the information from the PMRT about parents' questions and concerns, comes via the trusts and health boards and not directly from parents. For information about how the review process is seen directly from a parent perspective, Sands has recently carried out a survey of their members' experience of the review into their baby's death. It has also heard from marginalised groups in a recent focus group research project the 'Listening Project' (Appendix D).

Figure 5: What parents said about their care, reviews completed Mar 2022 to Feb 2023



The process of engaging parents with reviews is sensitive and relational to operationalise. As an example of how this process has been organised in one trust Figure 6 summarises the process developed in South Tyneside and Sunderland NHS Foundation Trust. The process flowchart is available to download from the PMRT website at:

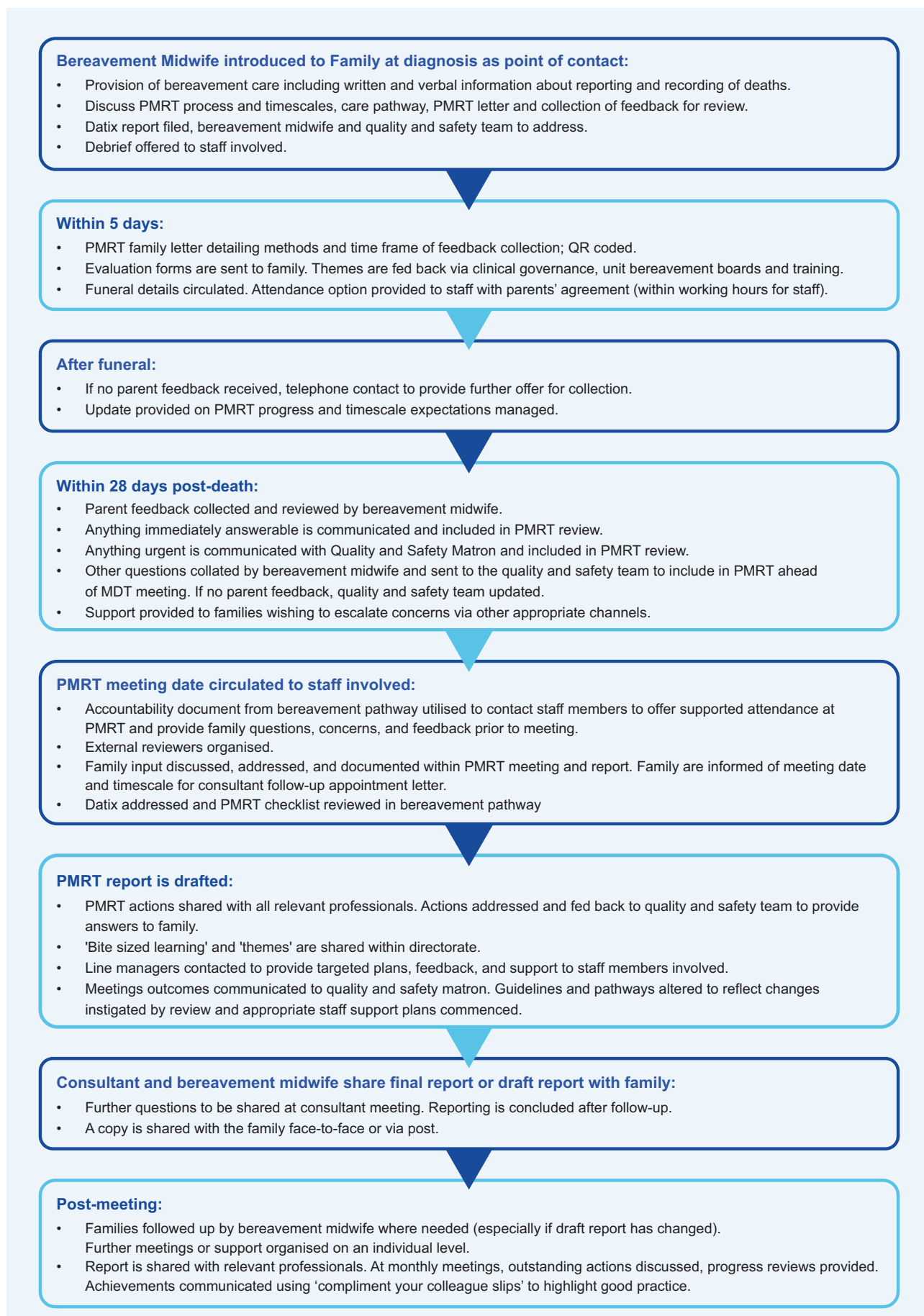
www.npeu.ox.ac.uk/pmrt/reports

Sands provide training to support staff in delivering meaningful parent engagement (Appendix D).

Key findings from a recent trust and health board staff survey of the use of PMRT engagement materials are also available on the PMRT website:

www.npeu.ox.ac.uk/pmrt/reports

Figure 6: Organisation of the PMRT process in South Tyneside and Sunderland NHS Foundation Trust
(with thanks to Charlotte Mutton, Specialist Bereavement Lead Midwife, who provided this flowchart)



2.2 The review team

It is essential that the teams of professionals undertaking PMRT supported reviews reflect the multi-disciplinary teams who provide maternity and neonatal care. Single individuals, or even two or three members of staff, are unlikely to be able to appropriately and objectively assess all aspects of the care provided; a high quality review is a multi-disciplinary activity. Ideally reviews should involve an external panel member who is there to ensure the review is as objective as possible.

There has been a steady improvement in the composition of the review teams which are now more multi-disciplinary than in previous years. This is reflected in the median number of staff present for reviews which has increased from five in 2018-19 to eight in 2022-23. See Table 1.6.

In 2022-23 10% of reviews were conducted by three or fewer individuals compared with 15% in 2021-22. Over half (58%) of all reviews were carried out by a team consisting of eight or more professionals and this proportion at 68% was higher for reviews of neonatal deaths; this represents an increase from 52% and 60% respectively in 2021-22. See Table 1.7.

Improvement in the multi-disciplinary nature of review teams is further illustrated by more PMRT reviews of neonatal deaths having neonatologists or paediatricians present. This has increased from 59% of reviews having a neonatologist or paediatrician present in 2018-19 to 84% in 2022-23 (Figure 7).

Having a member of the PMRT review team who is external to the Trust/Health Board and able to provide a 'fresh eyes' independent perspective is strongly

recommended.¹ Whilst not yet at ideal levels the proportion of reviews benefiting from the presence of an external member has increased to 1 in 2 from 1 in 3 in the previous year. See Appendix B for details about the role of an external review team member.

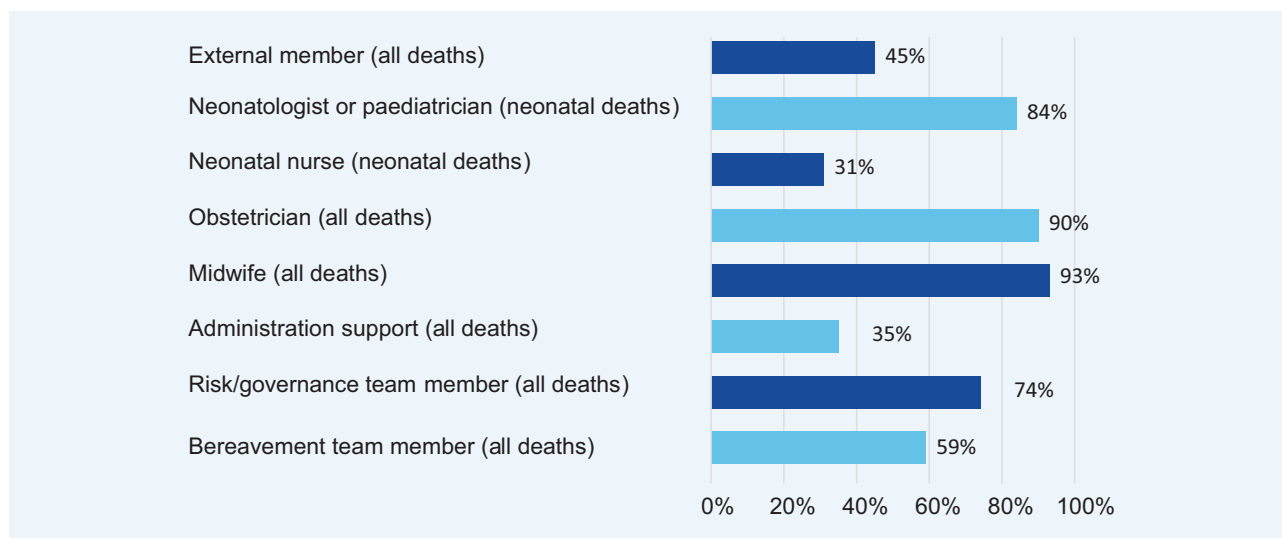
Conducting high quality reviews requires all the relevant information to be available for the review team at the review meeting. Having administrative support ensures this happens and enables timely reviews to be carried out in the most efficient and effective way. The proportion of reviews undertaken with administrative support increased from 30% in the previous report to 35%; this means, however, that 65% of reviews appear to lack this support.

The presence of members of the risk and governance team is important to ensure that learning from reviews is translated into actions which are implemented and subsequently audited. These team members were present for three-quarters of reviews and this has not increased over time.

The presence of bereavement team members has increased to just less than 60% from 50% previously. See Appendix B for details about the importance of the role of bereavement team members.

As well as illustrating parent engagement, the flow-chart example from South Tyneside and Sunderland (Figure 6) also illustrates how the trust engages their staff in the review process and how quality improvement activities are followed through from review findings to actions and audit.

Figure 7: Proportion of reviews with specific professionals present for the review, Mar 2022 to Feb 2023



¹ Kirkup B. The Report of the Morecambe Bay Investigation. London: The Stationery Office. 2015 The Report of the Morecambe Bay Investigation (publishing.service.gov.uk) (accessed 5th July 2022)

2.3 Issues with care identified

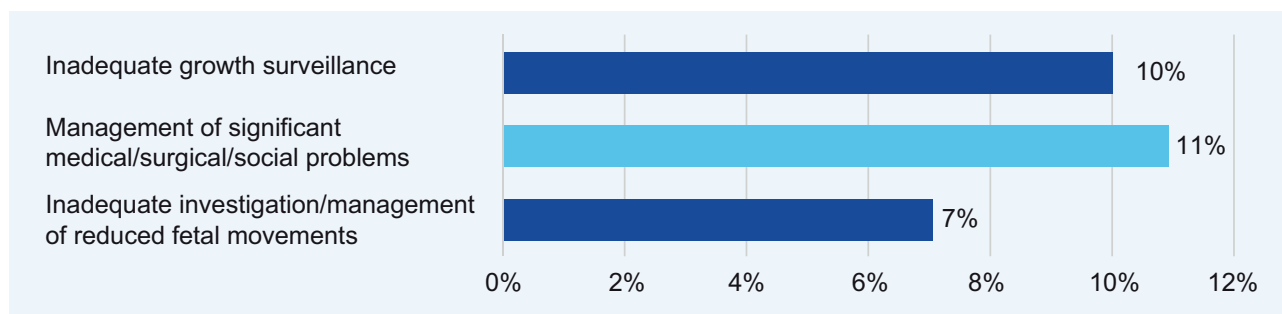
Overall, in the course of 95% of reviews at least one issue with care was identified (19 out of 20). In 20% (4 out of 20) reviews identified at least one issue with care that may have made a difference to the outcome for the baby. See Table 3.1.

Overall 6,369 issues with **pre-conception and antenatal care** were identified of which 1,749 were relevant to the outcome. Of these issues the most common which were relevant largely reflect findings from all earlier reports. The three most common issues identified of relevance to the death of the baby were: inadequate growth surveillance (10% of all reviews); delay in diagnosis or inappropriate management of medical, surgical or social problems

(11%); and inadequate investigation and management of reduced fetal movements (7%) (Figure 8). There was an increase in the frequency with which these issues were identified compared with the previous year but no real change in the proportion with relevance to the outcome. See Table 3.2.

Having increased slightly to 27% compared with 24% in the previous report, late booking or not having booked at all was the most commonly identified issue at this stage of care, although the proportion of pregnancy outcomes for which this issue was relevant was unchanged at 10%. It is unclear from the information available why late booking or not having booked at all was so common although it may have been a consequence of access to services or a perceived inability to access services as a result of service changes due to the pandemic.

Figure 8: Proportion of all reviews with issues during pre-conception and antenatal care identified as relevant to the outcome



Overall 2,740 issues with **labour and birth** were identified of which 792 were deemed relevant to the outcome. See Table 3.3. The five most common issues relevant to the outcome remained the same as the previous year and with the same frequency: fetal monitoring in labour (3%); inappropriate setting/location of birth (3%); staffing issues (including insufficiently senior staff involved in care and lack of one-to-one care in established labour) (2%), inappropriate assessment of maternal risk status at the start of and during the course of care in labour (2%); and maternal monitoring (including infrequent observations and lack of a partogram) (2%) (Figure 9).

Overall there were 2,282 issues with **care of the newborn baby** encompassing the initial resuscitation and stabilisation, transfer to the neonatal unit (including further onward transfer to an external unit) and during on-going neonatal care. Of these 468 were identified as relevant to the outcome. See Table 3.4. As with earlier stages of care, these issues also reflect the issues identified in previous reports. Problems with documentation were again highlighted with

30% of reviews identifying issues with documentation during resuscitation and stabilisation and 20% during care on the neonatal unit. Whilst the majority of issues were not identified as relevant to the outcome, problems with documentation are of considerable clinical concern. Incomplete documentation means it is difficult to assess the care provided as part of the PMRT review and hence the quality of this aspect of the review itself is in question.

Thermal management at any stage of care continues to remain the most common issue of concern identified as having relevance to the outcome for the baby affecting 7% of babies who died in the neonatal period. Again respiratory management was the second most common issue identified affecting 4% (Figure 10).

Figure 9: Proportion of all reviews with issues during labour and birth identified as relevant to the outcome, Mar 2022 to Feb 2023

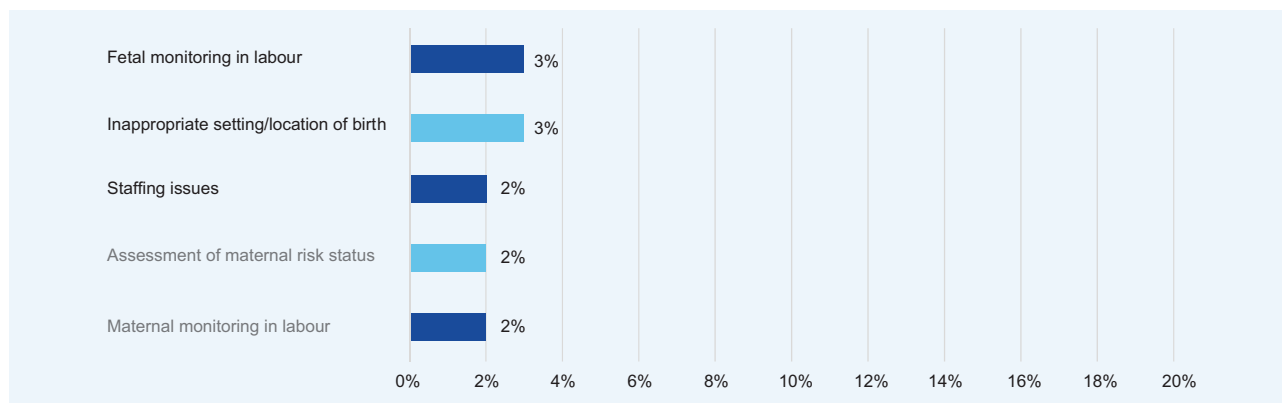
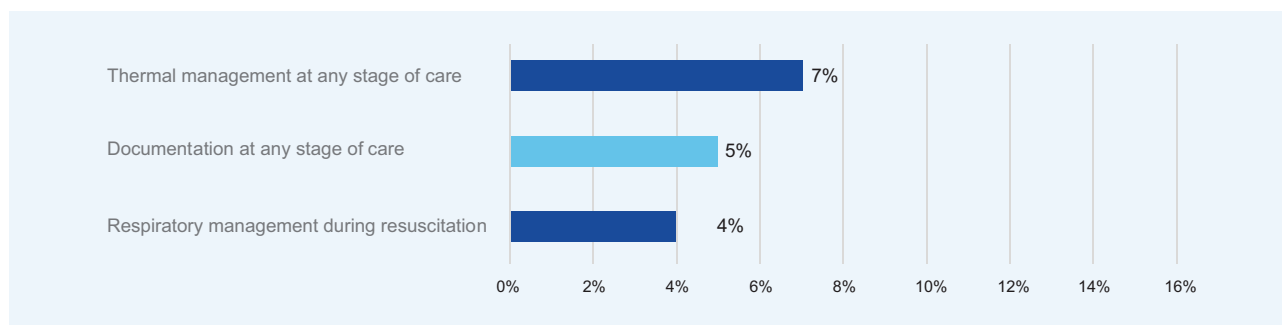


Figure 10: Proportion of all reviews with issues during resuscitation, stabilisation, transfer and neonatal care identified as relevant to the outcome, Mar 2022 to Feb 2023



2.4 Issues with investigations and bereavement care

The single most common issue with postnatal investigations remains that of the need for the baby to be transferred to another hospital for post-mortem when this investigation is requested (26%). See Table 3.6. A further issue once again affecting 7% of reviews is that the placental histology was not carried out by a perinatal/paediatric pathologist which, as has been identified in the MBRRACE-UK confidential enquiries,² is likely to have affected the quality and value of this examination. Additionally, in 7% of reviews specific postnatal investigations were indicated but were not offered.

In terms of bereavement care, the absence of a policy, support and practical help to enable parents to take their baby home was identified in nearly a quarter of all reviews. See Table 3.7. Whilst only a small proportion of parents will wish to take their baby home, they have the right to make an informed choice about this important aspect of their care after the death of their baby, and will need help and support to decide what to do.

An inadequate location and quality of the bereavement suite, including being affected by pandemic modifications, was identified in 9% of reviews. Added to this bereavement care in general was adversely affected by service modifications due to the pandemic for a further 3%.

2 Draper ES, Gallimore ID, Kurinczuk JJ, Kenyon S (Eds.) on behalf of MBRRACE-UK. MBRRACE-UK 2019 Perinatal Confidential Enquiry: Stillbirths and neonatal deaths in twin pregnancies. The Infant Mortality and Morbidity Studies, Department of Health Sciences, University of Leicester: Leicester, 2021. www.npeu.ox.ac.uk/assets/downloads/mbrance-uk/reports/perinatal-report-2020-twins/MBRRACE-UK_Twin_Pregnancies_Confidential_Enquiry.pdf (accessed 26th October 2023).

The quality of bereavement care was difficult to assess in many instances due to inadequate documentation available to the PMRT review team. This may be as a result of the bereavement care notes being held in a different location to general maternity/neonatal notes. Importantly if these notes are never combined it will always be difficult to assess the care, but with this information missing it will also be difficult to provide good quality holistic care to the mother and her partner for any future pregnancies.

The National Bereavement Care Pathway (NBCP) identifies nine standards for good bereavement care (Figure 11). These provide the basis for establishing high quality bereavement care services and can then be used to audit the service. More information is available on the NBCP website

<https://nbcpathway.org.uk/>

Figure 11: National Bereavement Care Pathway – standards for good bereavement care



2.5 Grading of care

Towards the end of each review the review team is required to provide an overall grading of care for each stage of the care pathway, including bereavement care. This provides a holistic grading summary indicative of the extent to which improvements in care, had they been implemented, may have affected the outcome (Figure 12). See Tables 4.1 to 4.6.

Over time there has been a steady decrease in the proportion of reviews of pregnancy and labour care for late miscarriages and stillbirths where the care has been graded as A (no issues with care identified) with 41% at this grade in 2022-23 compared with 50% in the previous annual report and 62% in the first annual report. This change is largely accounted

for by a commensurate increase in reviews with care graded as B (issues with care that would have made no difference to the outcome for this baby).

There has been a similar but smaller change in the distribution of grade A for the whole pathway of care for babies who died in the neonatal period with 32% now being grade A, compared with 46% in 2018-19. There has been a slight increase in the proportion with care graded as B (47% vs 43% in the previous year) whereas there has been a doubling in the proportion graded C&D (issues with care that may or were likely to have made a difference to the outcome) from 9% in 2018-19 to 18% in 2022-23.

A similar pattern of change has been seen in the grading of bereavement care for all babies with a decrease over time where the care is graded A. The commensurate increase in other grades has largely been in grade B (issues with care that would have made no difference to the outcome) rather than C&D.

There has been a steady increase over time in the proportion of reviews where a member external to the trust/health board is present (now 45% of all reviews). This has been associated with a small but persistent change in the distribution of the grading of care with a slightly greater proportion of reviews graded as C&D and fewer A or B when an external reviewer is present (Figure 13) compared with reviews overall.

Figure 12: Grading of care by stage of care, Mar 2022 to Feb 2023

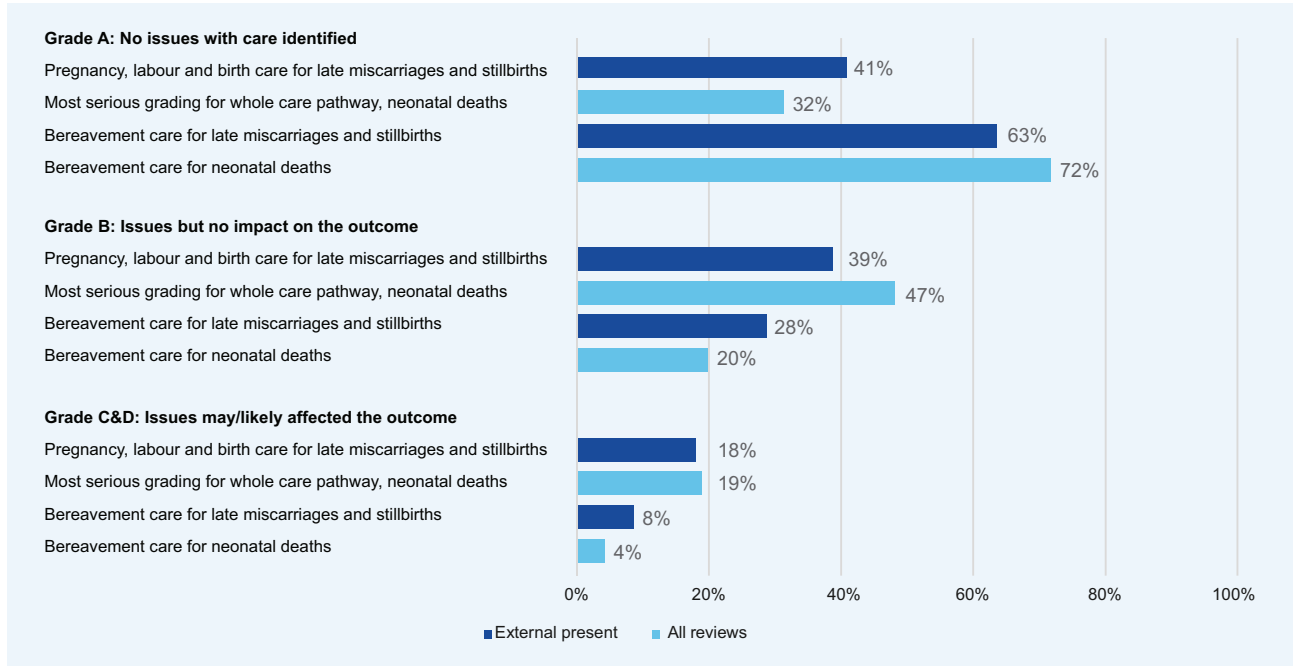
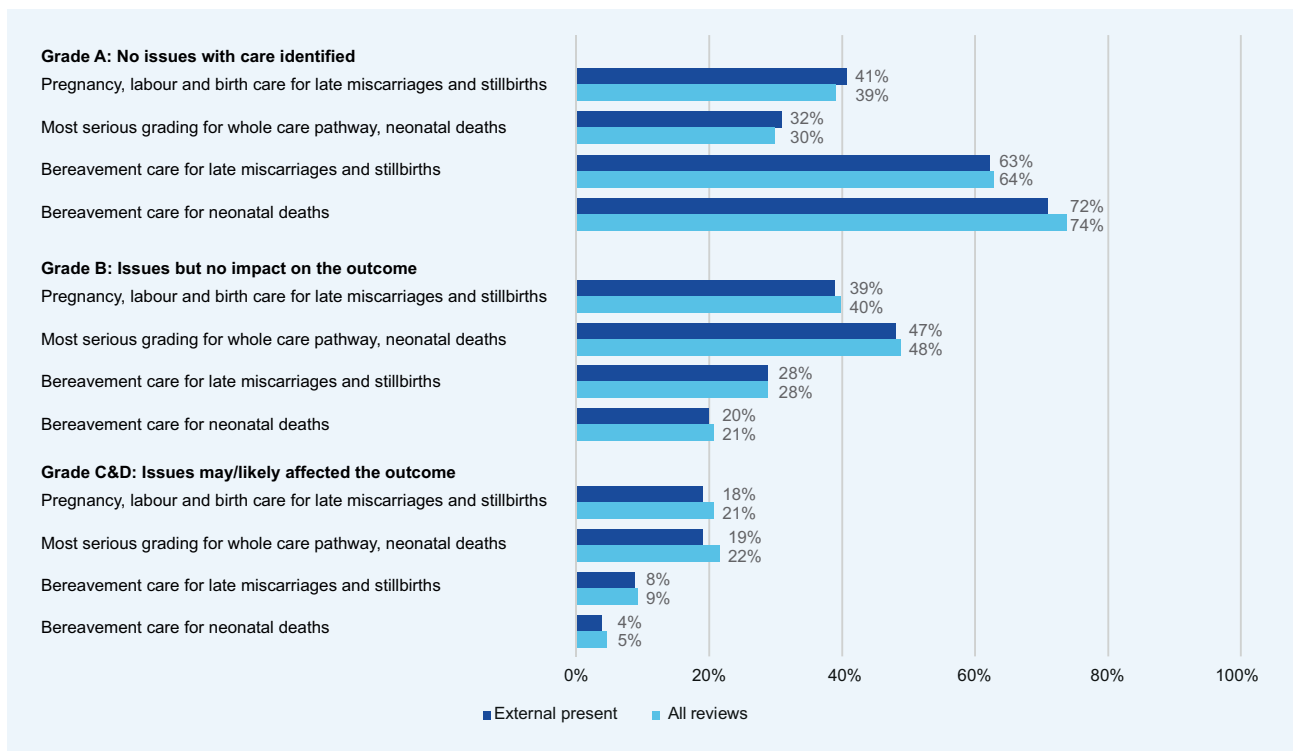


Figure 13: Grading by stage of care and the presence of an external member of the review team, Mar 2022 to Feb 2023



2.6 Action plans

At the end of each review, when any issues with care have been identified, each issue is examined in turn to enable the review team to agree if the issue was likely to have been relevant or not to the outcome for the mother and baby. A decision is also made, regardless of the relevance for the particular mother and baby, whether the issue requires action to improve future care.

For example, assessment for the need and provision of aspirin may have been indicated and not carried out, however, the baby died from an unrelated cause. So whilst this omission in care was not relevant to the particular baby's death, the reasons for the omission needs to be investigated and systems put in place to ensure that all eligible women are assessed.

A total of 8,879 separate actions were planned over the course of the 4,111 reviews conducted. This represents an average of just over two actions per review although not all reviews resulted in an action plan and some had more than two actions identified.

2.6.1. The strength of actions

In previous reports we have highlighted the need for action plans to be “strong”, where strong actions are system level changes which remove the reliance on individuals to choose the correct action.³ These are actions that use standardisation and permanent physical or digital designs to eliminate human error and are sometimes referred to as ‘forcing actions’ (see Appendix C for further information). Action strength is illustrated in Figure 14.

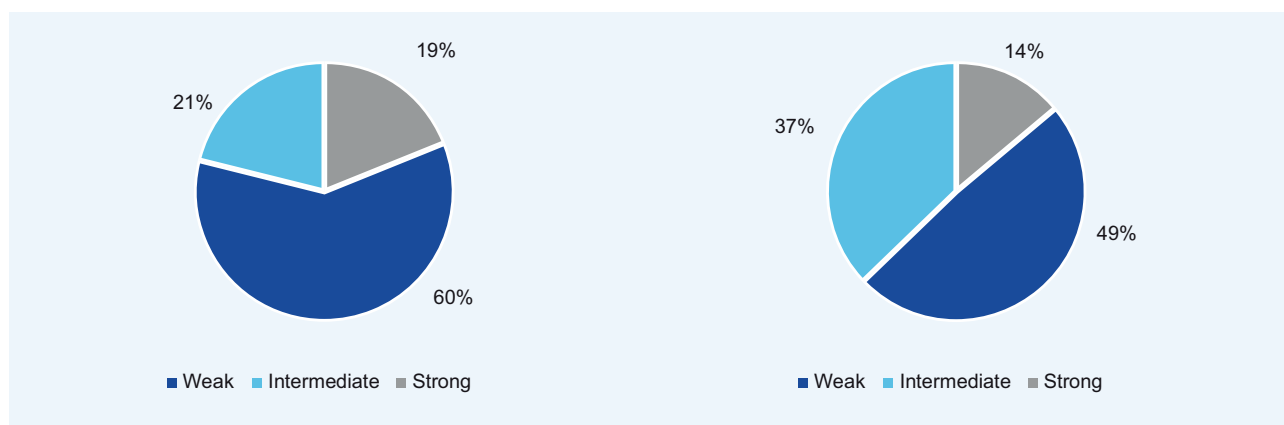
A random sample of 100 action plans was coded by strength. Comparing Figures 15 and 16 illustrates that the proportion of strong and intermediate actions combined has increased and now represent 50% of all actions compared with 40% in the previous year.

Figure 14: The strength of actions associated with illustrative issues

Issues	Actions
Although indicated this mother was not offered a Kleihauer test	<p>Strong action</p> <p>New IT system includes a bereavement care module which requests a Kleihauer test automatically as part of routine postnatal investigations</p>
The mother was sedated on ICU at the time of birth and therefore it was not known she was in labour	<p>Intermediate action</p> <p>A standard operating procedure (SOP) is being developed to support Intensive Care Unit (ICU) staff with caring for pregnant patients</p>
National and local guidelines should be followed for small for gestational age babies	<p>Weak action</p> <p>Feed-back and re-education to medical staff member involved and all medical staff</p>

3 US Department of Veterans Affairs. Root Cause Analysis Tools. VA National Center for Patient Safety. REV.02.26.2015. (Pgs26-29) RCA Step by Step Guide REV 07.01.2016 (va.gov)

Figure 15: Strength of actions Mar 2021 to Feb 2022 Figure 16: Strength of actions Mar 2022 to Feb 2023



2.7 Using PMRT evidence to improve care

Following the completion of the review for a specific mother and baby, the review is closed and a final report of the review is produced. This can be used for discussion of the review findings with the parents and the basis for writing the ‘plain language’ follow-up letter to parents.

The PMRT system also has the capacity to produce summary reports of the findings of all reviews carried out over a period of time, with the period of time defined by the person generating the summary report from the PMRT system.

Many teams in trust and health boards use this summary report as a basis of quarterly mortality reporting to their Executive Board which for trusts in England can form part of the compliance with Safety Action 1 for the national Maternity Incentive Scheme.⁴

Recurring issues identified as requiring action but for which there is no immediate solution are identified in these reports. This can be used as a means of highlighting any resource implications to improve care and outcomes.

2.8 PMRT developments

The main development of the MBRRACE-UK/PMRT platform, which has been underway recently, is the integration of the MBRRACE-UK/PMRT notification of neonatal deaths with Child Death Overview Panels (CDOPs) and the National Child Mortality Database (NCMD) in England. Following notification of a neonatal death to the MBRRACE-UK/PMRT system, the notification will be immediately transferred to the relevant CDOP (based on baby/mother

place of residence at the time of the death) and then on to the NCMD. Once the review is complete and closed, this too can then be submitted from within the PMRT system directly to the relevant CDOP and the appropriate information is directly downloaded into the NCMD. The integration of the systems will reduce duplication of data entry and review effort and enable the information to be used for multiple purposes.

Phase 1 roll out of the system launched with a small number of trusts and CDOPs is still underway. Once this phase is completed we will invite all trusts and CDOPs to a series of meetings to launch the integrated system across England. Opportunities for integration with similar systems in the devolved nations will then be explored.

We have also been working on the integration with the Single Notification Portal (SNP) being developed by NHS England. This will enable a single notification of a perinatal or maternal death to be sent to relevant national organisations including MBRRACE-UK/PMRT, NHS Resolution Early Notifications, and the Maternity and Newborn Safety Investigation Special Health Authority (MNSI) formerly known as HSIB and now located at the Care Quality Commission (CQC). The SNP is planned for launch in 2024.

Finally, we are developing an online training programme for staff in Units to support all aspects of the use of the PMRT to carry out reviews. The sessions will include enhancing parent engagement, running the panels and using the information from the reviews to support parent feedback. These sessions are planned to start early in 2024. In the meantime the baby charity Sands run free online training to support the delivery of meaningful parent engagement (see Appendix D for details).

⁴ NHS Resolution Maternity Incentive Scheme: <https://resolution.nhs.uk/services/claims-management/clinical-schemes/clinical-negligence-scheme-for-trusts/maternity-incentive-scheme> (accessed 26th October 2023)

3. Conclusions and recommendations

An increasing proportion of baby deaths have been reviewed using the PMRT since its launch in 2018. During 2022 a review of care using the PMRT was started for 97% of baby deaths. For 83% the review was completed and the report was printed out, which is an improvement from 77% in 2021. This is a notable achievement given this was the third year of disruption of health services due to the global health emergency caused by the COVID-19 virus. Clinical services continued to be significantly challenged by the impact of the pandemic on pregnant women, staff sickness and shortages, and the start of the recent industrial action by health service staff.

Whilst it is reassuring to know that the vast majority of baby deaths are now reviewed using the PMRT, the next consideration is the quality of the reviews carried out. One of the most important aspect of this is the quality of parent engagement in the review process, so that if parents have any questions, concerns or comments about their care they are able to express them so they can be addressed in the review process. To be able to do this parents need to be given help to understand what a review is and what the process means through a straightforward verbal explanation, in a language they can understand, supported by 'plain language' parent-facing written information. 'Parent Engagement' materials were developed by the PMRT collaboration, involving parents, and are available on the PMRT website.⁴ Free, online training in delivering meaningful parent engagement has also been available for health care professionals from Sands, the baby death charity, since early 2021 (Appendix D). Sands have also developed guidance for parents to support them in raising concerns and to help them understand the various review processes, including the PMRT review that may occur when a baby dies (Appendix D).

Good engagement with parents and families will improve the quality of their review from which they will benefit directly. Future adverse safety events and deaths will be prevented following the implementation of relevant actions identified in high quality reviews. To further support the conduct of PMRT reviews, from early 2024, we will be running online training for staff to supplement the written guidance on the PMRT website. This will include a session about how to enhance and improve parent engagement. The example from the Sunderland and South Tyneside Trust illustrates how they have operationalised the process of parent engagement to ensure that parents are fully supported and given multiple opportunities to ask questions and raise any concerns they have about their care.

For over half of reviews, parent questions, concerns or comments were noted and 17% of these included positive comments from parents about their care. Nevertheless, communication issues, and feeling unsupported and not listened to continue to be reported by parents. The analysis of the information concerning parents' questions and comments was approached differently this year and we have not reported the proportion where 'no comment' was noted in the tool. This is because we are increasingly concerned that it is not clear when 'no comment' is reported whether this is because parents genuinely do not have any questions or comments and said that this was the case, or whether these were parents from whom no comments were received. For the latter we are also concerned about the variation between trusts and health boards in the quality of their approach to parents to seek any questions and comments. We plan to address this within the tool to include a checkbox list to distinguish between these different types of answers which are currently noted in the tool as 'no comment'.

The ability to conduct a thorough, robust and systematic review of all stages of the pregnancy and neonatal care journey requires health professionals who are involved in all stages of the delivery of care. Conducting a high quality review is a multi-disciplinary activity which ideally also involves someone external to the organisation who can provide the 'fresh eyes' of an independent professional. There has been a steady improvement in the number of health care professionals involved in review teams and notably the greater majority of reviews of neonatal deaths now involve a neonatologist or paediatrician and about half involve a neonatal nurse. Overall 45% of reviews also now involve a health care professional external to the trust/health board which also represents a steady increase from previous years. This is despite the complexity of making these arrangements particularly during the challenges to the delivery of direct clinical service provision posed by the pandemic. Ideally all reviews should benefit from the presence of an external professional, but without additional resources this is unlikely to be achieved. In the meantime, trusts and health boards may wish to focus on particularly complex or potentially contentious deaths to use this resource to maximum effect.

A third of all reviews now have administrative support which is an improvement but is certainly less than ideal since such support can help ensure reviews are timely and have all the relevant information available at the meeting, the latter being a task that will otherwise fall to a clinical member of the team. The presence of members of the risk management and governance teams is also essential to ensure that learning from reviews is translated into actionable plans which are implemented and subsequently audited. These team members were present for three-quarters of reviews and this is unchanged from the

last report. Similarly the proportion of reviews with a member of the bereavement team present, at 60%, is an improvement from 50% in the previous report but still not optimal given the potential impact that poor bereavement care can have on a family's psychosocial wellbeing. It also appears that when the bereavement team are involved, in some organisations they are expected to manage the PMRT process. This is not advised since the role of the bereavement team member(s) is to advocate on behalf of the parents presenting their questions, concerns and comments, and not to take responsibility for the PMRT review process (Appendix B).

The issues with care identified in this report are largely focused around the same areas as in previous reports including screening for fetal growth restriction and management of reduce fetal movements; assessment of maternal risk status and staffing issues during labour and birth; thermal and respiratory management once the baby has been born; and the quality of documentation. These issues should therefore remain a focus of quality improvement activities, two of which in England, for example, will include the full implementation of the Saving Babies Lives Care Bundle version 3.⁵

The single most common issue with investigations carried out after the baby has died is that when a post-mortem was requested babies had to be transferred to another hospital for this examination. The need for transfer relates to access to specialist perinatal pathology services which are largely centralised due to the small number of pathologists now available with these skills. Transfer may be distressing for parents and, whilst this should not necessarily be the case, in some places anecdotal reports suggest that it lengthens their wait for the review findings.

The inadequate location and quality of the bereavement suite together with bereavement care being adversely affected by service changes due to the pandemic continue to be highlighted for about 1 in 10 parents. Some parents may wish to take their baby home, others may not, but everyone has a right to an informed choice and may need help to decide what to do. In the absence of support and practical help the ability to take their baby home was not available for 18% of parents; this was a smaller proportion than in the previous report (24%) but there is still room for improvement. Importantly the ability of PMRT review teams to review the quality of bereavement care was adversely affected by not being able to access bereavement care notes which appear to be located separately from the general maternity notes in many places.

Overall 95% (19 out of 20) of reviews had at least one issue with care identified and for 4 out of 20 reviews this was judged to have adversely impacted the outcome for the baby. In this report we present the overall holistic grading of care by the review panel at different stages along the care pathway. Over time there has been a general decline in the proportion of reviews where the care has been graded as A, having 'no issues with care identified' with a commensurate increase in the proportion with grades C ('issues which may have made a difference to the outcome') and D ('issues which were likely to have made a difference to the outcome') other than for bereavement care where the commensurate increase has been in the proportion graded B ('issues that would have made no difference to the outcome'). In the presence of generally decreasing perinatal mortality rates this seems likely to be a result of review teams taking a more self-critical approach to the care their organisations provided and seeking to improve future care, rather than poorer care in general being provided; this is a positive development.

Previously the presence of an external professional was associated with a change in the distribution of grades with a greater proportion of B, C, and D grades. This trend has continued, although the differences were quite small, and may be part of a general trend to being more self-critical and improving the learning from the reviews being conducted.

The final important step in any review is to identify which issues need action to improve future care. It is heartening to now see an increase in the proportion of actions which are 'strong' or 'intermediate' in strength and resulting in system level changes which do not rely solely on the actions of individuals for implementation. Acknowledging that not all actions to deal with issues can be strong or even of intermediate strength, with half of all actions now being of this strength, the direction of travel is encouraging.

It is evident that there is no one single issue with care, relevant to the outcome for the baby that, if changed would have a substantial impact on the perinatal mortality rate in any organisation. This underlines the fact that multiple, incremental and sustained improvements across all aspects of care are required to make a substantial difference to the perinatal mortality rate of individual trusts and health boards, and nationally.

The national findings from PMRT reviews reported here identify where efforts are needed to continue to improve care. In addition individual trusts and health boards should use their own summary PMRT report findings alongside these national findings to prioritise where they need to focus their quality improvement efforts. We have highlighted an example from one trust who have mapped out and operationalised a

5 NHS England. Saving Babies' Lives Version Three. A care bundle for reducing perinatal mortality. www.england.nhs.uk/publication/saving-babies-lives-version-three/ (Accessed 6th November 2023)

process to enhance parent and staff engagement with reviews. Engagement of both parties are required to ensure that high quality reviews are conducted and the findings lead to service quality improvement changes.

This report presents data from 2022, the year in which the Ockenden maternity review in Nottingham was established; it is uncertain when the review findings will be published. In contrast robust local reviews

have the capacity to identify learning immediately, enabling timely changes in practice. However, to fully realise the benefits of local reviews and consequent service improvements requires appropriate resourcing to conduct high quality reviews and to implement the service changes needed. It would clearly be better for resources to be available at the 'grass roots' level for robust, self-critical reviews to achieve this, rather than being spent on costly external enquiries or reviews conducted after the fact.

Recommendations

1. Evaluate the approach to parent engagement, ensure staff are trained and use the available PMRT Parent Engagement materials, particularly in trusts and health boards where fewer parents are engaged with the review process (see Appendices A and D).
Action: Trusts and health boards, staff caring for bereaved parents, service commissioners
2. Provide adequate resourcing of PMRT review teams, including administrative support (see Appendices B and E).
Action: Trusts and health boards, service commissioners
3. Provide adequate resources to ensure the involvement of independent external professionals in review teams (see Appendices B and E).
Action: Service commissioners
4. Use the local PMRT summary reports and this national report as the basis to prioritise resources for key aspects of care and quality improvement activities identified as requiring action.
Action: Trusts and Health Boards, Service Commissioners, regional/network support systems, Governments
5. Improve service quality improvement activities implemented as a consequence of reviews by developing 'strong' actions targeted at system level changes and audit their implementation and impact (see Appendix C).
Action: PMRT review teams, governance teams in Trusts and Health Boards, Service Commissioners

4. Appendices

Appendix A - Parent engagement materials

A working group, which included parents, developed a set of resources to support parent engagement with reviews.


These are available to download from the PMRT website:

www.npeu.ox.ac.uk/pmrt/parent-engagement-materials

Appendix B - Recommended composition of review teams and roles


An external member should be a relevant health professional who is external to the trust and health board. Their role is participate in the review panel to provide a 'fresh eyes', independent and robust view of the care provided. This may involve challenging the usual care provided by the trust/health board where the death is being reviewed.

The role of the bereavement team member(s) is to advocate on behalf of the parents by presenting their questions, concerns and comments; they should not be required to take responsibility for the PMRT review process.



PMRT Review Group

<p><u>Core Group*</u></p> <p>Roles within group:</p> <ul style="list-style-type: none">• Chair and Vice-Chair• Scribe/IT/Admin support• PMRT Champion <p>Minimum of 2 of each of the following:</p> <ul style="list-style-type: none">• Obstetrician• Midwife• Neonatologist and Neonatal Nurse<ul style="list-style-type: none">- All cases where resuscitation was commenced- All neonatal deaths• Risk manager/governance team member (1 acceptable) e.g. service manager• Bereavement team (1 acceptable)• External panel member (1 acceptable) <p>* Group members can fulfil multiple roles**</p> <p style="text-align: center;">All opinions and views are equal, facilitate a breadth of discussion</p>	<p><u>Additional Members</u></p> <p>Named and invited to attend or contribute where applicable:</p> <ul style="list-style-type: none">• Pathologist – when a PM was performed• GP/Community Healthcare• Anaesthetist• Sonographer/Radiographer• Safeguarding team• Service manager• Any other relevant healthcare team members pertinent to case
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Appendix C - Action plan strength

The US Veterans Affairs root cause analysis tools defines the strength of an action by describing how well the action would eliminate human error.¹

Strong actions are system level changes which remove the reliance on individuals to choose the correct action. They use standardisation and permanent physical or digital designs to eliminate human error and are sometime referred to as 'forcing' actions.

An example of a strong action is the development of a process for ensuring the systematic assessment of all women for the need for aspirin for pre-eclampsia prophylaxis and including this as a mandatory item in the electronic patient record.

Intermediate actions are those actions that put systems in place, but those systems still require individuals to make choices about the correct actions to take without any controls in place.

An example of an intermediate action is a major review which led to a new staffing model and a newly appointed Lead for Triage and Induction.

Weak actions involve reminders to individuals for action and training which require individuals to using the training to make choices about the correct actions to take and do not put any controls in place. They are often single activities without repetition which take no account of the fact that new staff are appointed. They can also involve debrief discussions with an individual involved in a patient safety incident. This will have no effect on the clinical behaviour of other members of staff.

An example of a weak action is the distribution of a communication to maternity staff regarding the necessity for intrapartum antibiotics in preterm labour and the importance of this.

1. US Department of Veterans Affairs. Root Cause Analysis Tools. VA National Center for Patient Safety. REV.02.26.2015. (Pgs26-29) RCA Step by Step Guide REV 07.01.2016 (va.gov)

Appendix D - Sands parent resources

Free online training in delivering meaningful parent engagement is available for health care professionals from Sands:

<https://training.sands.org.uk/courses-and-booking/open-access/>

Sands survey of members' experiences of reviews and the 'Listening Project' of marginalised groups are available at:

<https://www.sands.org.uk/sands-parent-surveys-and-reports>

Sands guidance for parents – 'How to raise concerns, give feedback or make a complaint' is available at:

https://www.sands.org.uk/sites/default/files/Complaints_Raising_Concerns_Feedback_Aug_2023.pdf?_gl=1*_olTi7b*_ga*NjM3NjA1MDIwLjE2OTc1Mzg5Nzc.*_ga_RXE8QR4HHG*MTY5OTAwOTExOC4zLjE uMTY5OTAwOTQ5OC41NS4wLjA

Sands information for parents – 'Understanding why your baby died' is available at:

<https://www.sands.org.uk/understanding-why-your-baby-died>

Appendix E - Indicative level of review team resourcing

Example for 10 deaths per month

Person time required per week:

- 2PA*'s consultant obstetrician
- 12 hours midwife time
- 1PA* consultant neonatologist
- 5 hours neonatal nurse time
- 2 days of clerical support

*PA – programmed activity which is the metric used to describe consultant time



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