



# each baby COUNTS.

2020 final progress report



March 2021

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# Abbreviations

CTG	cardiotocography
DHSC	Department of Health and Social Care
HIE	hypoxic-ischaemic encephalopathy
HSIB	Healthcare Safety Investigation Branch
NICE	National Institute for Health and Care Excellence
NMPA	National Maternity and Perinatal Audit
NNU	neonatal unit
PMRT	Perinatal Mortality Review Tool
RCA	Root Cause Analysis
RCM	Royal College of Midwives
RCOG	Royal College of Obstetricians and Gynaecologists
TH	therapeutic hypothermia

# Acknowledgements

This report has been prepared by the Each Baby Counts project team:

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We are indebted to the many healthcare professionals and other organisations who were involved in the notification of Each Baby Counts babies and the provision of other information. Without the generous contribution of their time and expertise, it would not have been possible to produce this report. We would particularly like to thank all of the Each Baby Counts lead reporters and reviewers whose contribution has made it possible to carry out this surveillance and analysis.

We would also like to express our gratitude to the members of our Independent Advisory Group for supervision, strategic direction and governance of the activities of the programme and to the MBRRACE-UK team for providing data to check case ascertainment.

Chapter authorship is attributed as follows:

**Overall findings for 2018:** Benson Nwaobasi, Daniel Wolstenholme, Alan Cameron, Louise Robertson and Marian Knight, with the therapeutic hypothermia section by Kirstin Webster, NMPA Neonatal Clinical Fellow

**The learning and legacy of Each Baby Counts:** Fran Carroll, Daniel Wolstenholme, Alan Cameron and Marian Knight

# Foreword

Each Baby Counts launched in 2014 with a clear ambition to reduce stillbirths, neonatal deaths and brain injuries as a result of incidents occurring during term labour. This was an enormous undertaking in which I am both professionally and personally invested. Professionally, because I have been involved in this project since its first report, and personally, because I know that each serious incident has a profound and life-changing effect on so many people.

This will be our last progress report as the important work of investigation and reporting will be the responsibility of the Healthcare Safety Investigation Branch in England.\* In addition to ensuring that this work continues, the UK Government remains committed to its national ambition to halve the rates of stillbirths, neonatal and maternal deaths and intrapartum brain injuries by 2025.

The ethos of the Each Baby Counts programme will therefore remain a priority for the healthcare system. However, as a College we recognise that the recent investigations at individual trusts, and the publication of the interim Ockenden report, must be a watershed moment for maternity services. The entire health system must recommit itself to challenging safety issues head on.

Each Baby Counts very effectively opened a discussion on what had been a very difficult issue. But it is now imperative that the health system shifts its focus from counting to acting. We have unfortunately not seen the impact in the annual figures that we had hoped. And although more and more parents are now involved in investigations, ultimately we need to make sure that no family has to experience the pain of an outcome that, with the right care, might have been different.

This final report includes qualitative feedback from individuals across various organisations involved in improving maternity safety. This will, I hope, be useful in designing future programmes of work, and helpfully reflects my own feelings about how we move forward. From now, our progress should be judged by the practical actions we can take to implement the recommendations of this project, and that is what we intend to do. We are working to improve leadership and culture, to implement practical changes which will improve electronic fetal heart monitoring, and to ensure our workforce is well supplied with the appropriate expertise across all maternity units.

I would like to thank the Each Baby Counts team at the College for their dedication to this project over the years, as well as our investigators, and our co-principal investigators Zarko Alfirevic and Alan Cameron. A huge thanks also to the Each Baby Counts reviewers and the Independent Advisory Group for providing strategic direction and governance of the activities of the programme. This project could not have been successful without the

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\* In Scotland and Northern Ireland, existing adverse event reporting, PMRT and MBRRACE-UK will continue to be used. In Wales, existing reporting systems and MBRRACE-UK are applicable.

support and contribution from our lead reporters across NHS trusts and health boards as well as the healthcare professionals who have engaged openly with this process.

Most of all, I would like to thank the families who have supported this project. All of them have suffered immeasurably and, in the face of their suffering, have worked tirelessly to make services safer for other people.



Edward Morris MD FRCOG  
President, Royal College of Obstetricians  
and Gynaecologists



# Parent foreword

Back in 2013, the two of us were bereaved mothers not only trying to understand why our sons had died but also trying to investigate how many other babies across the country were injured or dying following term labour. No one could tell us and there was little focus or recognition of potentially avoidable harm. This led to us starting our Campaign for Safer Births,\* with the main aims being to highlight the issue and campaign for improvements.

In April 2014, we read an article in *The Guardian*† that quoted David Richmond, the then President of the RCOG. David was raising this issue of avoidable baby death and brain damage. We wrote to him immediately. He responded telling us the amazing news that the college had secured funding for a new project and he asked us to consider being involved as parent representatives. It was soon named Each Baby Counts (EBC) and we attended the first Advisory Group meeting in late 2014.



▲ Nearly three hundred babies a year are dying during or soon after their birth with a further 1,200 ending up with brain damage or other serious health problems. Photograph: Richard Gardner/Rex Features

Britain's leading obstetrician says it is legitimate to ask whether understaffing of maternity care and labour wards is contributing to Britain's stubbornly high rates of baby death and brain damage.

Dr David Richmond, president of the Royal College of Obstetricians and Gynaecologists, has voiced alarm that nearly 300 babies a year are dying during or soon after birth with a further 1,200 ending up with brain damage or other serious health problems.

Each Baby Counts published its inaugural report in June 2017 and, for the first time, the number of babies affected by potential brain injury or death in term labour was published. At last a voice was being given to these babies and families.

Many parents have been involved with the EBC project over the years. Some have bravely documented their story for the EBC website‡ and newsletters, whilst others have spoken at the annual report launches. We, along with the RCOG, would like to thank all parents who have been involved in, followed and supported the project.

\* [www.campaignforsaferbirths.co.uk](http://www.campaignforsaferbirths.co.uk).

† [www.theguardian.com/society/2014/apr/27/infant-mortality-rate](http://www.theguardian.com/society/2014/apr/27/infant-mortality-rate).

‡ [www.rcog.org.uk/en/guidelines-research-services/audit-quality-improvement/each-baby-counts/why-each-baby-counts-matters](http://www.rcog.org.uk/en/guidelines-research-services/audit-quality-improvement/each-baby-counts/why-each-baby-counts-matters).



So many powerful stories were shared, like that of the Dalhaug family who tragically lost one of their twin sons:

“The loss of Thor has devastated our lives, and we count ourselves amongst the lucky ones as we still have Harrison – we live for him. Every day, every birthday, every Christmas, every first has been a great joy tainted by deep sadness. We will carry the scars of Thor’s loss and the circumstances of his death for the rest of our lives.

Every mother, every father and every family who has to suffer, and live with the consequences of a preventable loss share one thing, a simple thing, a deep and powerful wish that things could have been different – through Each Baby Counts, you have the power to make things different!”

Much has been learnt in the years since 2014 and there is now, rightly, huge focus on maternity safety. It is fantastic that this focus and activity has resulted in a significant reduction in overall stillbirth\* and neonatal death rates.† Sadly, the EBC rates published today for 2018 remain static. However, we feel the focus on these cases has definitely been of value.

We now know many of the reasons for harm occurring and recommendations have been developed to overcome these; however, there are still many recommendations to be fully implemented by trusts and there are areas where national work and outputs are needed. We urge that adequate resource and funding is given to ensure that all recommendations are implemented and sustained.

An area of major concern for us is that, with the end of Each Baby Counts and uncertainty on the future of the HSIB maternity investigation programme, this group of baby deaths and injuries may become invisible again. Parents deserve to know why their baby died through thorough independent investigations. The numbers of these cases must be published for public record. Learning must be turned into local and national action.

**These babies must not be forgotten again.**

Nicky Lyon and Michelle Hemmington  
Bereaved parents  
Co-founders, Campaign for Safer Births  
Parent representatives, Each Baby Counts Advisory Group



\* Office for National Statistics. *Provisional births in England and Wales: 2020* [[www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/livebirths/articles/provisionalbirthsinenglandandwales/2020#stillbirths](https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/livebirths/articles/provisionalbirthsinenglandandwales/2020#stillbirths)].

† The reduction in neonatal death rate is for babies born at 24 weeks of gestation or longer.

# Executive summary

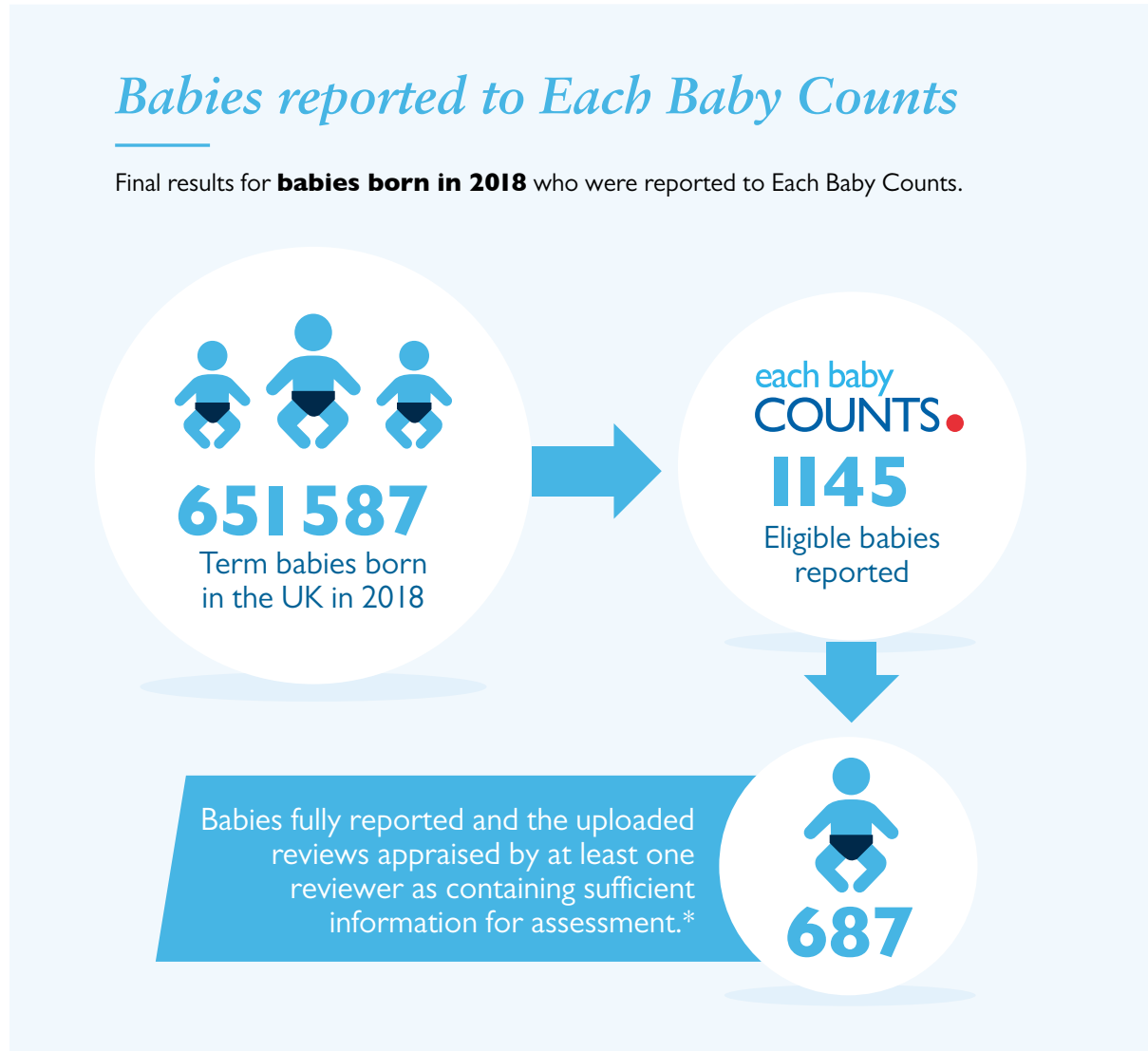
## Introduction

Each Baby Counts is a national quality improvement programme led by the Royal College of Obstetricians and Gynaecologists (RCOG) to reduce the number of babies who die or are left severely disabled as a result of incidents occurring during term labour. In individual maternity units, these events are rare and it is therefore difficult to see clear patterns or identify how best to avoid them. The Each Baby Counts programme brings together the results of local investigations across all four nations of the UK into stillbirths, neonatal deaths and brain injuries occurring during term labour to understand the bigger picture, share the lessons learned and prevent babies from dying or suffering brain injuries in the future.

This report presents key findings based on the analysis of data relating to the care given to mothers and babies throughout the UK in 2018. It also takes a retrospective look at the key learning points and the impact of Each Baby Counts over time since its inception.

## Key clinical findings

651 587 term babies were born in the UK in 2018:

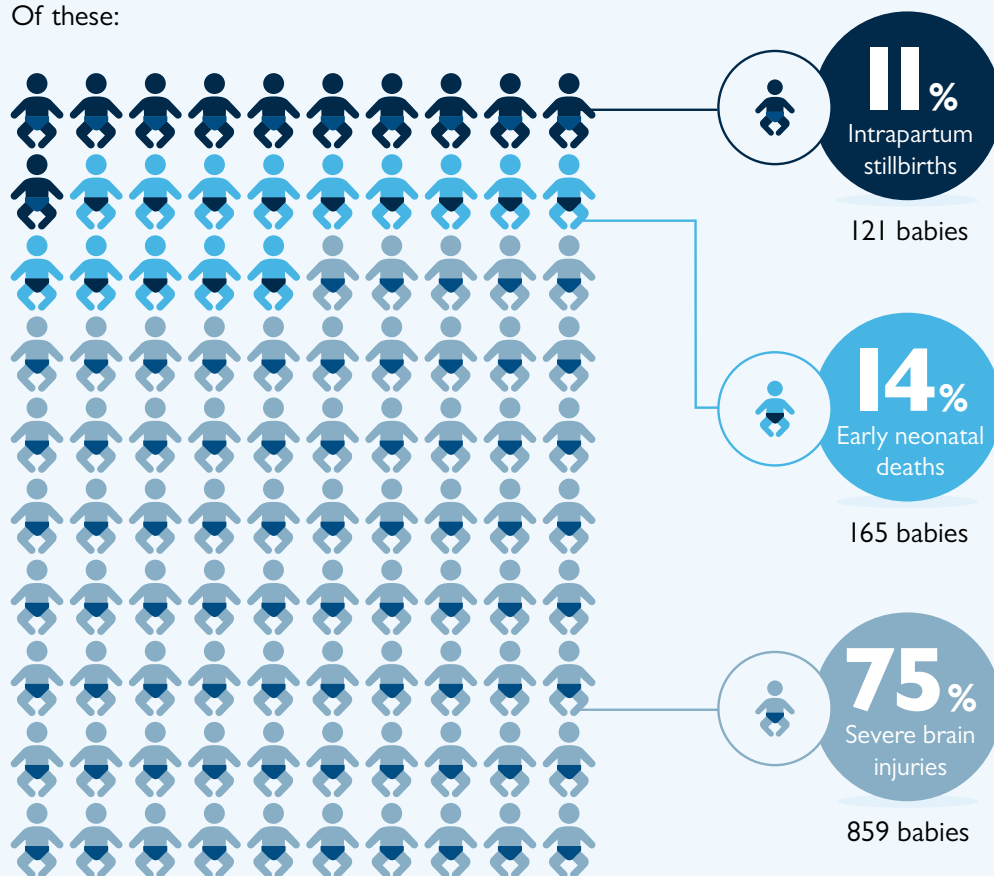


\* The final number of reports uploaded and reviewed was severely impacted by COVID-19, and thus reviews completed by only one reviewer were included for more representation. In previous years, this would have been at least two reviewers.

## How many babies?

The total number of babies that fulfilled the Each Baby Counts criteria in 2018 was **1145**.

Of these:

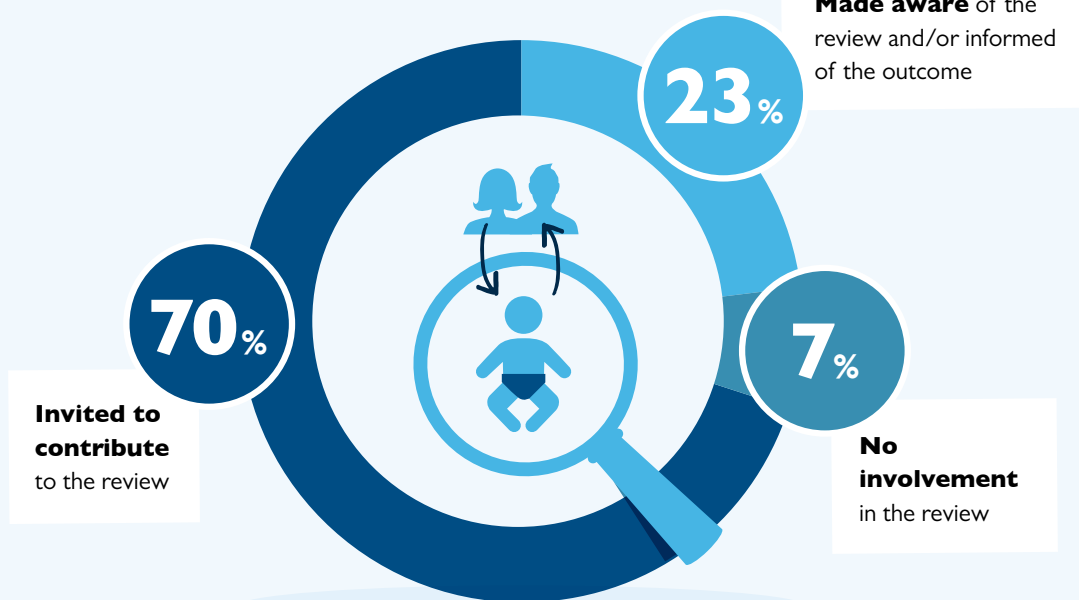


Note: These categories are mutually exclusive. Babies with a severe brain injury who died within the first 7 days of life are classified as early neonatal deaths.

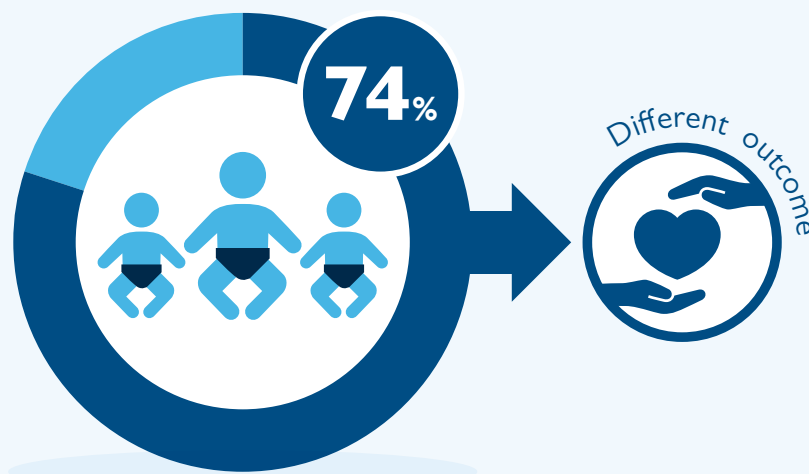
In total, 1145 babies born in 2018 who met the eligibility criteria for Each Baby Counts were reported. There were 121 intrapartum stillbirths, and a further 165 babies born alive following labour but who died within the first 7 days after birth. There were 859 babies who met the Each Baby Counts eligibility criteria for severe brain injury. The Each Baby Counts definition of severe brain injury is based on information available within the first 7 days after birth. However, it is not known how many of these babies will have a significant long-term disability as a result of the injuries sustained during birth.

## Parental involvement in reviews

Parental involvement in local reviews containing sufficient information.



One aspect that the Each Baby Counts reports consider is parental involvement during the local review process. The figures in this latest report show that parents were invited to contribute to the local review in 70% of cases, compared with 50% in 2017. The Each Baby Counts project has always highlighted the importance and need for parental involvement in local reviews, and while the 2018 figures are encouraging, they also show that 7% of parents were not involved in the review process, indicating the need for more to be done. Future work should address this to ensure that all parents are informed of the local review and have the opportunity to be involved if they wish.



## *Care impacts outcomes*

Proportion of babies for whom **different care** might have resulted in a different outcome.

The proportion of babies for whom different care might have resulted in a different outcome was 74%, based on our reviewers' assessments. This is in line with previous years' Each Baby Counts reports and comparable investigations.

## **The learning and legacy of Each Baby Counts**

In this report, the Each Baby Counts project team presents findings from qualitative work exploring stakeholders' reflections on the Each Baby Counts programme, with a focus on four main topics:

- 1 Drivers and aims of Each Baby Counts
- 2 Value and impact
- 3 Functional limitations
- 4 Closure of Each Baby Counts and practical recommendations for future work.

The key learning points are summarised below.

## Key learning points



### *Raising the profile*

The work of Each Baby Counts has raised the profile of maternity safety and the importance of the cohort of babies included in the programme.



### *Secondary uses of Each Baby Counts criteria*

The use of Each Baby Counts definitions by multiple agencies is testament to the wider impact and value of the programme.

## *Transformation of findings into action*

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Implementation of Each Baby Counts recommendations is key to improving maternity safety. Thus far, little demonstrable action has been taken in widely implementing recommendations to change practice.

## *International learning*

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Learning from Each Baby Counts is shared globally through the RCOG network of Members and Fellows working towards the shared goal of reducing morbidity and mortality.



# Methodology for the Each Baby Counts programme

Each Baby Counts is a UK-wide quality improvement programme led by the Royal College of Obstetricians and Gynaecologists (RCOG). Its ambition is to reduce the number of babies who die or are left severely disabled as a result of incidents occurring during term labour.

The Each Baby Counts project team, based at the RCOG, has compiled this report. The programme relies on 402 local lead reporters, who have responsibility for completing an online registration form for all eligible babies born in their unit, and 77 multidisciplinary reviewers, who complete an independent review of the local investigation reports submitted by lead reporters. A full list of Each Baby Counts reviewers and our methodology is available in previous reports and on the RCOG website: [www.rcog.org.uk/eachbabycounts](http://www.rcog.org.uk/eachbabycounts).

It cannot have escaped readers' notice that this has not been a typical year. While the cases referred to in this report happened in 2018, the reviewing process took place in 2020 and so have been subject to the disruption that COVID-19 has brought to working and home lives.

As with other similar projects, the project team was advised to pause requests for reviewing to frontline colleagues at the end of March 2020. There was a three-month hiatus of reviewers' activity, resulting in fewer cases being completely reviewed than in previous years. Even with the pragmatic decision that this report would include assessments where *one* reviewer had completed the assessment, in contrast to previous reports that included only assessments by *at least two* reviewers, there were still 281 babies that were not reviewed. This has obviously had a significant impact on the quantitative analysis. The Each Baby Counts team recognises that lessons from the care of these babies will not be able to contribute to future learning; however, the team was also clear that this report, the final report for the Each Baby Counts programme, needed to be published on time.

This report also includes a review of the programme by interviewing key stakeholders. The Each Baby Counts team hopes that the contribution of each and every baby whose story has been shared over the last 4 years will be recognised through the new insights and impact that have been gained through this ground-breaking project.

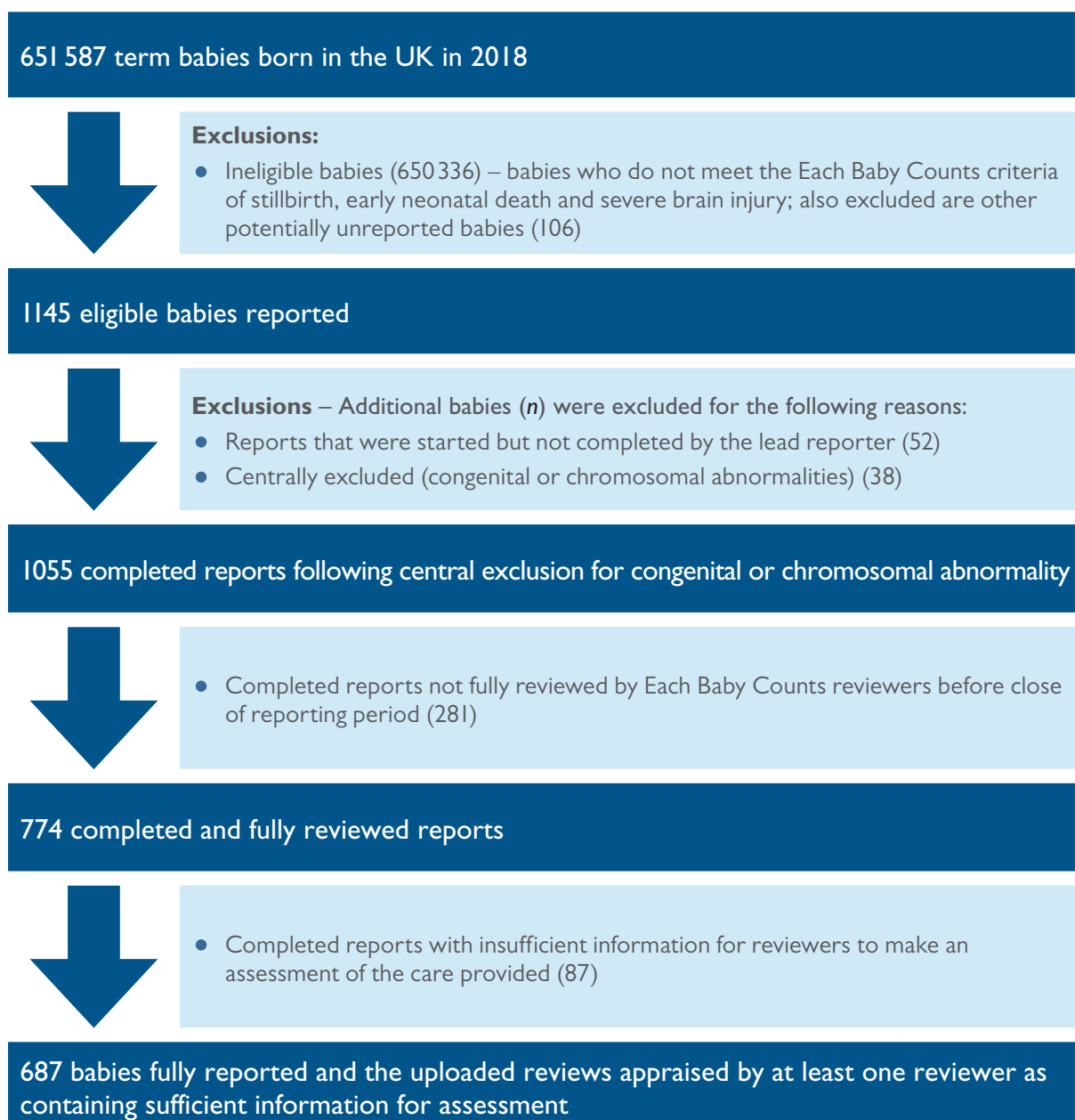
## Report structure

This report comprises two main sections:

- Overall findings for 2018 – a quantitative summary of the number of eligible babies, the quality of local reviews and the proportion of babies for whom Each Baby Counts reviewers felt that different care might have made a difference to the clinical outcome. Previous years' data have been included to allow some comparison over the lifetime of the project.
- The learning and legacy of Each Baby Counts – qualitative research interviews.

# Overall findings for 2018

The final results for the babies born in 2018 who have been reported to Each Baby Counts are presented in Figure 1.



**Figure 1** Final results for babies born in 2018 who were reported to the Each Baby Counts programme

As part of the quality assurance process, the number of potentially unreported babies who still met the Each Baby Counts criteria in 2018 was estimated through cross-checks with

other national datasets, specifically the MBRRACE-UK\* and the BadgerNet† databases. The relevant units were then asked to provide information on babies meeting the Each Baby Counts case definition, but further information was not received for 106 potentially eligible babies identified through these sources. This proportion (9%) is higher than those in previous reports, no doubt owing to the programme pause to alleviate the undue burden on frontline clinicians who would need to be involved in the cross-checking process.

The information for these babies was not checked or completed by the trust or health board's lead reporters before close of the reporting period. Historically, a large proportion of these notifications have been found to be duplicates, already reported, and babies with chromosomal congenital abnormalities, which would have subsequently gone on to be excluded. So the final impact on numbers tends to be minimal.

651 587 babies were born at term in the UK during 2018.<sup>1</sup> 121 babies died during labour and a further 165 babies were born alive but died within the first week after birth (early neonatal deaths). A total of 859 babies met the Each Baby Counts criteria for babies born with severe brain injury diagnosed within the first 7 days of life:

- diagnosed with grade III hypoxic-ischaemic encephalopathy (HIE), or
- therapeutically cooled (active cooling only), or
- had decreased central tone *and* was comatose *and* had seizures of any kind

It should be noted that the Each Baby Counts definition of severe brain injury is based on the information that is available within the first 7 days after birth. At this point, the long-term implications are unknown. It is yet to be determined how many babies will go on to have long-term disability.

The proportion of babies born in 2018 who met the Each Baby Counts definition of stillbirth, early neonatal death or severe brain injury was 1 in every 569 term babies (1.76 per 1000 term births) (Table 1 and Figure 2).

**Table 1** Babies reported to Each Baby Counts over time

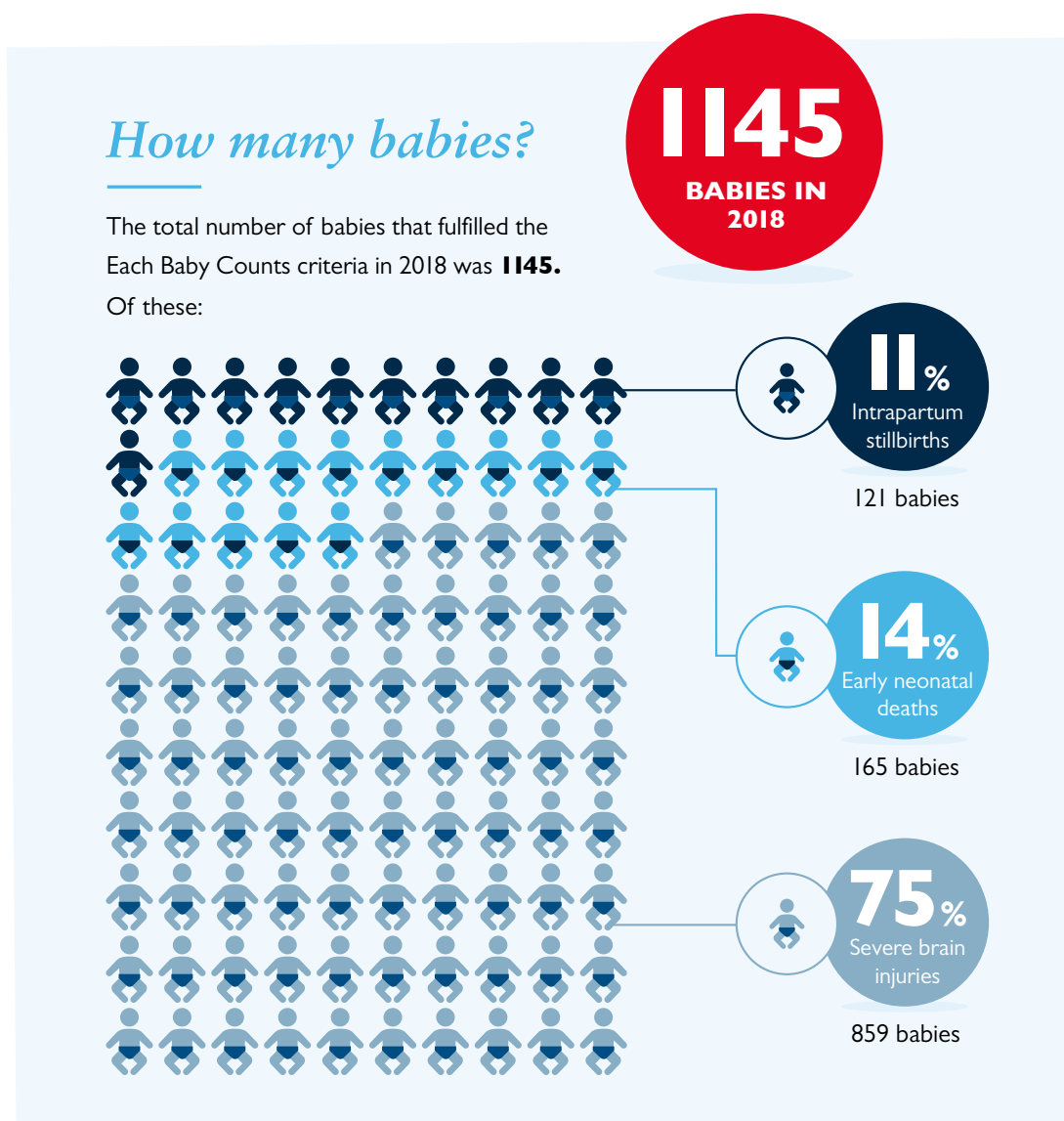
	2015	2016	2017	2018
Number of babies reported	1136	1123	1130	1145
Rate	1 in 637 (CI 600–675)	1 in 620 (CI 585–658)	1 in 599 (CI 565–636)	1 in 569 (CI 537–604)
Rate per 1000	1.57 (CI 1.48–1.66)	1.61 (CI 1.51–1.71)	1.67 (CI 1.57–1.77)	1.76 (CI 1.66–1.86)

95% confidence intervals presuming a normal distribution.

While the rates of babies reported year on year have increased slightly, there has been little change in the proportions of types of cases (Table 2).

\* MBRRACE-UK is the collaborative work with the Healthcare Quality Improvement Partnership (HQIP) to carry on the national programme of work conducting surveillance and investigating the causes of maternal death, stillbirths and infant deaths [npeu.ox.ac.uk/mbrance-uk].

† BadgerNet data are collated through the National Neonatal Research Database (NNRD), which is utilised for research, audit or health service evaluations and is approved by the National Research Ethics Service [www.imperial.ac.uk/neonatal-data-analysis-unit/neonatal-data-analysis-unit/utilising-the-national-neonatal-research-database].



Note: These categories are mutually exclusive. Babies with a severe brain injury who died within the first 7 days of life are classified as early neonatal deaths.

**Figure 2** Breakdown of babies reported to Each Baby Counts by eligibility (N= 1145)

**Table 2** Eligibility of cases reported to Each Baby Counts over time, with annual totals in brackets

	2015 (1139)	2016 (1123)	2017 (1130)	2018 (1145)
Stillbirth	126	124	130	121
Early neonatal deaths (0–6 days)	159	145	150	165
Severe brain injury	854	854	850	859

## Number of babies therapeutically cooled

In 2018, 81% of the liveborn babies reported to Each Baby Counts were actively therapeutically cooled for any length of time. This proportion has remained the same over the 4 years of data (2015 81%, 2016 82%, 2017 81%).\*

\* In previous reports, the proportion of babies who were actively therapeutically cooled was calculated by including the number of stillborn babies in the denominator; in this report, the stillborn babies are excluded from the calculation and the previous proportions mentioned here have been recalculated in the same way.

Therapeutic hypothermia (TH), a therapy whereby the whole body is cooled to 33.5°C for 72 hours, has been shown to be an effective treatment for moderate to severe HIE if initiated within the first 6 hours of life, resulting in a significant reduction in the combined outcome of mortality or major neurodevelopmental disability at 18 months and improved neurocognitive outcome at school age. Early cooling (within 3 hours of birth) is associated with improved motor outcomes at 18 months when compared with cooling initiated at between 3–6 hours after birth.<sup>2</sup>

TH is indicated in infants born at at least 36 weeks of gestation and who fit the criteria adopted in cooling guidelines from the Total Body Hypothermia for Neonatal Encephalopathy (TOBY) clinical trial.<sup>3</sup> Increasingly, TH is considered for use in late preterm neonates. For infants born at 34–35 weeks of gestation and weighing over 1.8kg, TH should be considered on a case-by-case basis; there is no evidence of benefit (owing to a lack of studies) but there is a growing number of reports of a lack of harm, although these are observational studies only. Any decision should be made by a level 3 NNU neonatologist or transport team, and in conjunction with parents. Caution is advised when considering TH in infants born at less than 36 weeks of gestation,<sup>4</sup> with further research being required to explore the safety and efficacy of TH in this group.

Current guidelines advocate cooling for infants with moderate to severe HIE assessed using the Sarnat staging tool.<sup>5</sup> However, a so-called ‘therapeutic creep’ has been observed whereby infants displaying mild HIE are treated with TH. This is possibly in response to emerging evidence of an increased risk of neurodevelopmental impairment in infants assessed as having mild HIE,<sup>6,7</sup> or a clinician’s opinion that TH may be of benefit and concern over misdiagnosis of HIE.<sup>8</sup>

The Each Baby Counts figures thus have to be interpreted alongside a known change in threshold for cooling of babies, such that more babies who are less severely compromised are now being cooled compared with when the programme started. This therapeutic creep might well be represented in the Each Baby Counts figures as an increase in case numbers as more babies meet the TH threshold and therefore the Each Baby Counts criterion for reporting despite being less severely compromised. This cannot be confirmed through current data collection, but it is an interesting research or audit question to explore further.

The Healthcare Safety Investigation Branch (HSIB) maternity investigation programme was established in 2018 and achieved full England coverage by April 2019. The driver for the creation of HSIB was the National Maternity Safety Ambition, and HSIB uses the Each Baby Counts criteria to identify cases to investigate. The methodology centres on using a standardised approach working with families and NHS staff and the HSIB review replaces the trust’s own internal investigations. In 2018, a proportion of local reviews in England assessed by Each Baby Counts were HSIB reviews.

During the 2020 changes in maternity safety reporting due to COVID-19, HSIB amended its reporting criteria to say ‘Since 23 March 2020, we have no longer been routinely investigating maternity cases involving cooled babies where there is no neurological injury

following cooling therapy<sup>\*\*</sup> to reduce the burden on trusts in relation to reporting.<sup>†</sup> It will be interesting to see from HSIB what effect this change has on the numbers of cases reviewed and whether or not the cooling of babies in its own right is reinstated as a criterion once the impact of the pandemic reduces.

## Demographics

Demographic characteristics for eligible babies are presented in Table 3. Data from the National Maternity and Perinatal Audit (NMPA) have been included for comparison.

**Table 3** Characteristics of Each Baby Counts eligible babies born in 2018

Characteristics		Reports with sufficient information uploaded to Each Baby Counts (N=687)		NMPA data	
		Number	Percentage	April 2016 to March 2017 <sup>a</sup>	April 2015 to March 2017 <sup>b</sup>
Singleton birth		662	96.4%	98.4%	97.0%
Multiple birth		25	3.6%	1.6%	3.0%
Actual place of birth	Obstetric unit	604	87.9%	85.5%	
	Alongside midwifery unit	43	6.3%	10.7%	
	Freestanding midwifery unit	7	1.0%	1.7%	
	Home	23	3.3%	2.0%	
	Other	3	0.4%		
	In transit	7	1.0%	0.2%	

<sup>a</sup> Source: NMPA Project Team. *National Maternity and Perinatal Audit: Clinical Report 2019*. Based on births in NHS maternity services between 1 April 2016 and 31 March 2017. London: RCOG; 2019 [https://maternityaudit.org.uk/pages/reports]. Data on multiplicity for England, Scotland and Wales; data on actual place of birth for England only.

<sup>b</sup> Source: Relph S, NMPA Project Team. *NHS Maternity Care for Women with Multiple Births and Their Babies: A study on feasibility of assessing care using data from births between 1 April 2015 and 31 March 2017 in England, Wales and Scotland*. London: RCOG; 2020 [https://maternityaudit.org.uk/pages/reports]. Data on multiplicity for England, Scotland and Wales.

## Analysis of local reviews

The information for 1093 (95%) of the 1145 babies reported for 2018 was fully completed by a lead reporter on the Each Baby Counts online reporting system. The other 52 reports on the system were started but were not completed by the lead reporter(s) of the relevant trusts/health boards. Of the 1093 completed reports, 1070 (98%) had undergone and completed a local review process.

### *Local reviews containing sufficient information to classify the care provided*

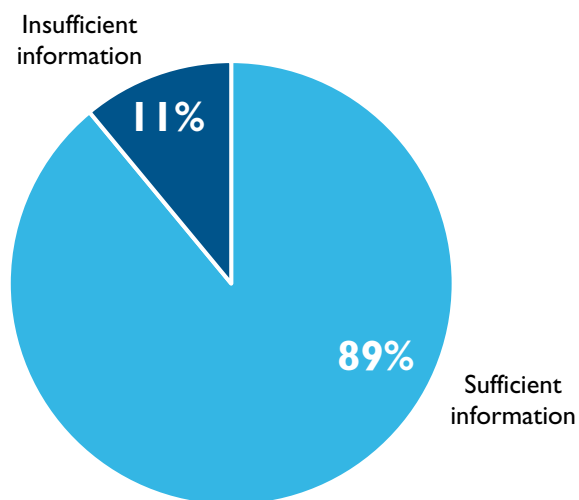
Overall, 687 (89%) of the 774 local reviews that progressed to assessment contained sufficient information for the expert reviewers to classify the care provided (Figure 3).

Previous Each Baby Counts progress reports have shown a steady increase each year in the proportion of local reviews that contained sufficient information, with 75% for 2015, 89% for

\* [www.hsib.org.uk/maternity](http://www.hsib.org.uk/maternity).

† Even when there is no apparent neurological injury, HSIB is still consulting with parents in these cases, and if the parents have concerns, and give their consent, an investigation is carried out.

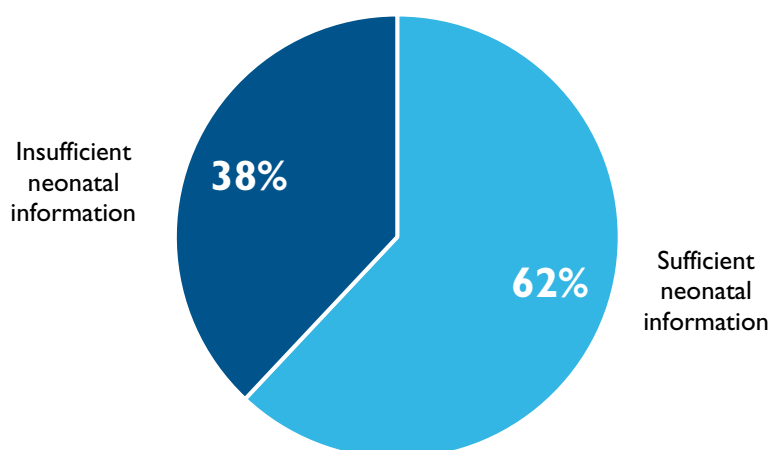
2016 and 95% for 2017. However, for 2018 there was a reduction in this proportion, which was directly attributable to the three-month project pause due to COVID-19.



**Figure 3** Proportion of completed investigation reports containing sufficient information to classify the care provided (N=774)

### *Neonatal cases containing sufficient information to classify the care provided*

For babies born in 2018, 512 reviews were assessed by Each Baby Counts neonatal reviewers to assess the care of liveborn babies or those undergoing resuscitation. Of these reports, 319 (62%) were assessed as containing sufficient information specifically about the neonatal care provided (Figure 4). This was substantially lower than the 89% proportion of reports containing sufficient information about overall care.



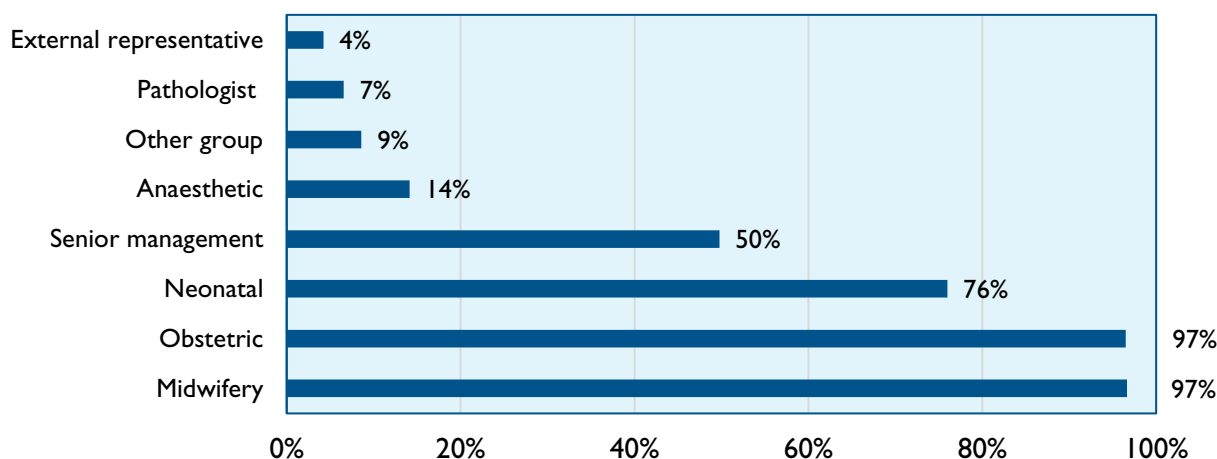
**Figure 4** Proportion of investigation reports assessed by neonatal specialists that contained sufficient neonatal information to classify the neonatal care provided (N=512)

### *Make-up of local review panels*

94% of the 687 local reports containing sufficient information were carried out by a multidisciplinary team (a panel that consists of clinicians from more than one specialty), which is in line with expected representation of the various specialties.

Midwives and obstetricians made up the majority of specialties present during the review process. The data show participation from other specialties, with neonatologists involved in 76% and pathologists involved in 7% of reviews. These figures are presented in Figure 5, which includes stillbirth cases with neonatal attendance. The 76% figure for involvement of neonatologists is reflective of the fact that only a proportion of cases (512 of 687) required neonatal review. Cross-referencing of cases suggests that neonatologists were involved in all reports where it would have been appropriate.

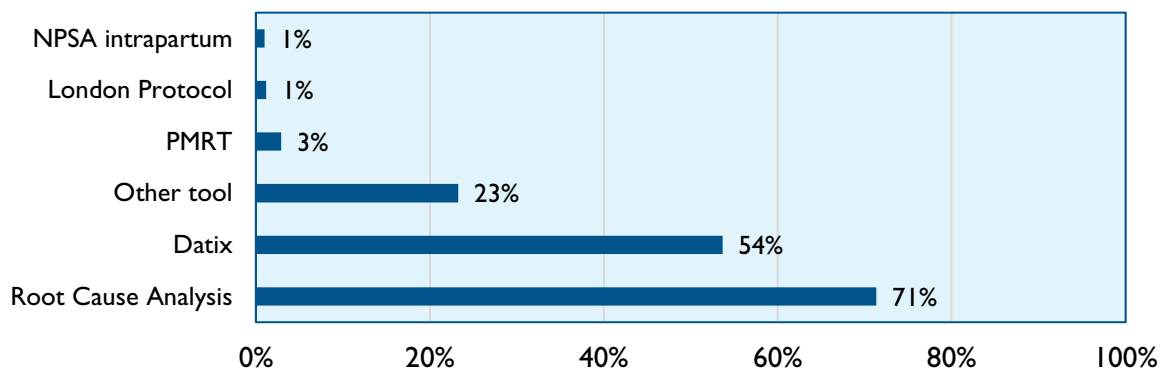
The figures do not reflect the increasing involvement of HSIB in the reviews in 2018, as the options list for indicating the review panel participants predated HSIB’s creation.



**Figure 5** Contributors to local review panels for reviews containing sufficient information (N=687)

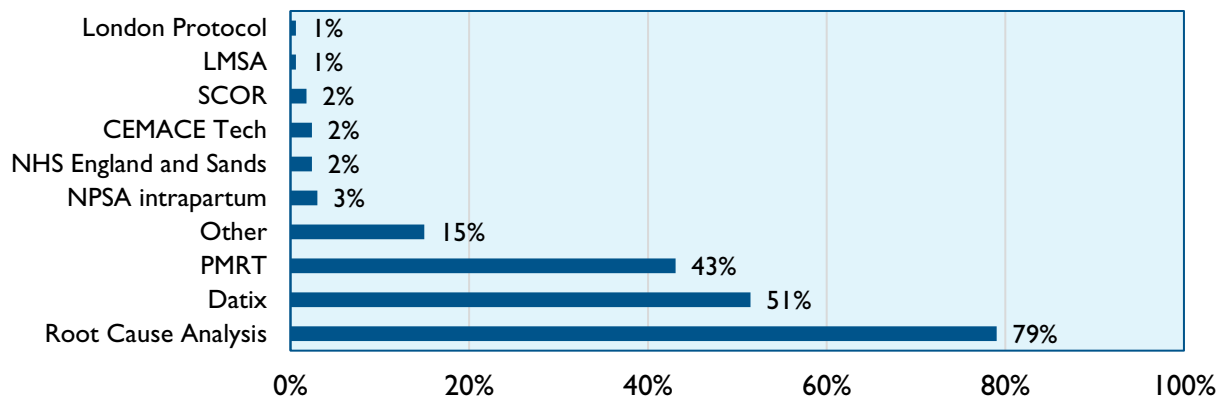
### Tools and methodologies used in reviews

In the 687 reports that contained sufficient information, trusts and health boards have applied one or more tools and methodologies when conducting the review. For the 2018 data, the use of these tools is presented separately for reviews where the baby was alive at day 29 and for those where the baby had died (Figures 6 and 7).



**Figure 6** Tools and methodologies used in local reviews containing sufficient information where babies were alive at day 29 (N=520)

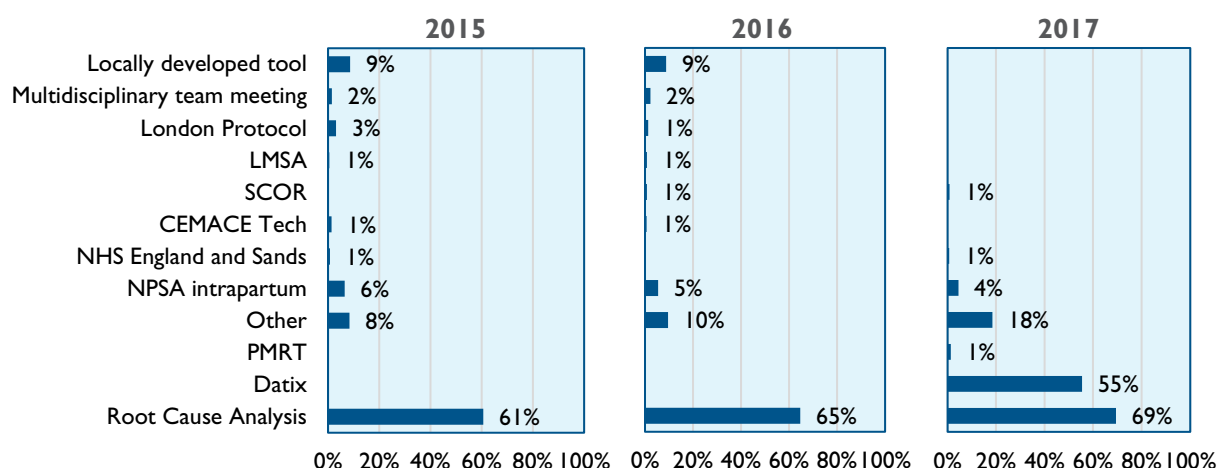




**Figure 7** Tools and methodologies used in local reviews containing sufficient information in stillbirths and neonatal deaths (N= 167)

A smaller range of tools were used for those babies who were alive at day 29 than for those who had died. The Perinatal Mortality Review Tool (PMRT), piloted in 2017, is now widely available for use. The tool is designed to explore the factors leading to perinatal death, but was nevertheless still used in 3% of cases where the baby was alive at day 29. According to the recent PMRT annual report,<sup>9</sup> the tool was used in 83% of reviews for eligible cases where babies died (all perinatal deaths) in 2018. The Each Baby Counts data reports this value at 43%, for the subset of cases that fit the Each Baby Counts criteria. The difference may reflect incomplete reporting of all tools used.

The most common process remains Root Cause Analysis, as illustrated in Figure 8. Root Cause Analysis is not without criticism, with some suggesting that it seeks to oversimplify the complex system failures that contribute to incidents in order to provide a simple linear narrative.<sup>10</sup> The PMRT is mandated for babies who die, through the Maternity Incentives Scheme in England, and all other babies will have HSIB reviews in England. This more centralised approach should reduce the variation of tools used and should lead to more consistent reporting.



**Figure 8** Tools and methodologies used in local reviews containing sufficient information over time

As in previous reports, the Each Baby Counts team continues to recommend that a PMRT-style tool could standardise the review of perinatal morbidity across NHS maternity and neonatal units in England, Scotland and Wales.

### Quality of reviews

The overall quality of reports received by Each Baby Counts in 2018 was high. This was reflected in the Each Baby Counts reviewers' comments on the quality of these reports. Below are some examples of positive feedback received during the review process:

- *'Generally, a well-structured review, appropriately quoting NICE guidance as supporting evidence for conclusions'*
- *'Good review and in my opinion good care provided by the homebirth team and quick escalation'*
- *'Thorough review of neonatal resuscitation with valid and well thought through conclusions drawn from the evidence available'*
- *'A well written report with evidence of thorough RCA undertaken'*
- *'Neonatal resuscitation well documented and further care on NNU including the decision for therapeutic hypothermia well documented'*
- *'Excellent and comprehensive review with good engagement of the family and point by point response to questions'*

The reasons why the Each Baby Counts reviewers classified 87 reviews (11%) as containing insufficient information were as follows:

- no detailed case description – 65 (75%)
- no timeline provided – 55 (63%)
- no specific tool used – 53 (61%)
- other – 73 (84%).

These reasons were not mutually exclusive, so reviewers could list multiple reasons for incomplete reports. Examples of 'other' reasons included:

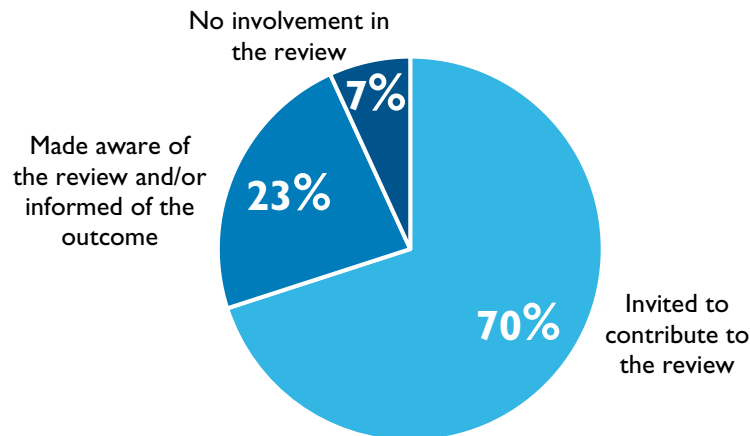
- *'No assessment of antenatal care leading up to attendance. No timeline for delivery.'*
- *'Neonatal care is summarised via tick box – no timeline, no evidence of how it was reviewed.'*
- *'Lacks analysis and information missing from early intrapartum care and decision making.'*
- *'Sketchy handwritten notes for the review, no details of all of the neonatal resuscitation and neonatal care. No details of what the outcome was for the mother and baby.'*

These reasons support the recommendation for a structured and consistent approach to recording local reviews which ensures that all staff understand and capture the key information that will allow the review to contribute to second-order learning across the maternity and neonatal landscape.

### Parental involvement in reviews

The level of parental involvement in local reviews is encouraging, with 70% of parents invited to contribute to the review in 2018 (Figure 9), compared with 50% in 2017<sup>11</sup> and 41% in 2016.<sup>12</sup>

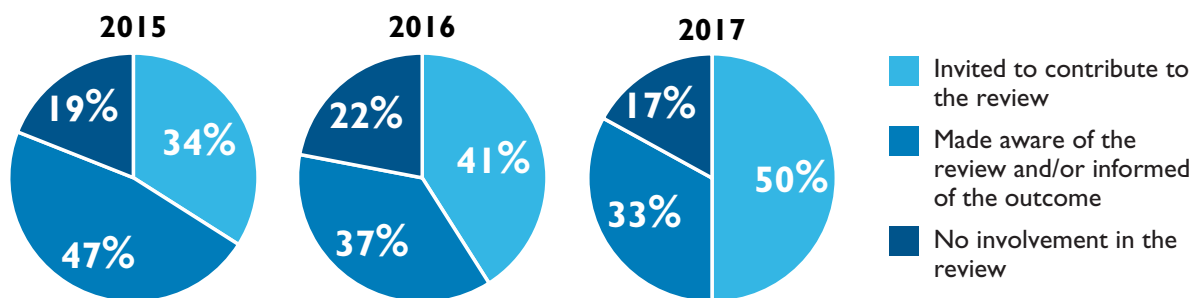
This increase is mirrored in the PMRT annual report, which identified that, for the period March 2019 to February 2020, parents were told the review was taking place in 84% of them, and 84% of reviews sought the parents' perspective; these compare with 75% and 73% respectively in the previous reporting period of January 2018 to February 2019.



**Figure 9** Parental Involvement in local reviews containing sufficient information (N= 687)

A possible contributory factor in this increase may be the fact that HSIB was rolled out in England over the course of 2018 to provide an external investigation of babies who met Each Baby Counts criteria. HSIB approaches parents and receives their consent to undertake its investigations, and it updates families throughout the investigation process. All families are invited to contribute to the HSIB review, with about 90% of families agreeing to participate. The HSIB review replaces the local review process, with the investigations being conducted in collaboration with the local units and the parents.

It should also be noted that in 7% of cases in 2018 parents were not involved in the local review process. This is a reduction from 17% in 2017 but is still an unacceptable proportion – ideally, parents will always be involved in the review. Informing and engaging parents continues to be a challenge that needs to be addressed for future work streams.



**Figure 10** Parental involvement in local reviews over time

As discussed in previous reports,<sup>11,12</sup> there are a number of different approaches that can be applied to invite parents to contribute to local reviews. Sands, the stillbirth and neonatal death charity, has information packs\* to help healthcare professionals engage with parents during the local review process, and these resources can be adapted in cases of therapeutically cooled babies. PMRT<sup>†</sup> and HSIB have also published work in this area.<sup>13</sup>

It is imperative that parents are made aware of the review process and that they are invited to give input and submit their thoughts. Inviting parents’ and their families’ contributions facilitates the local review process leading to a flow of information and promotes

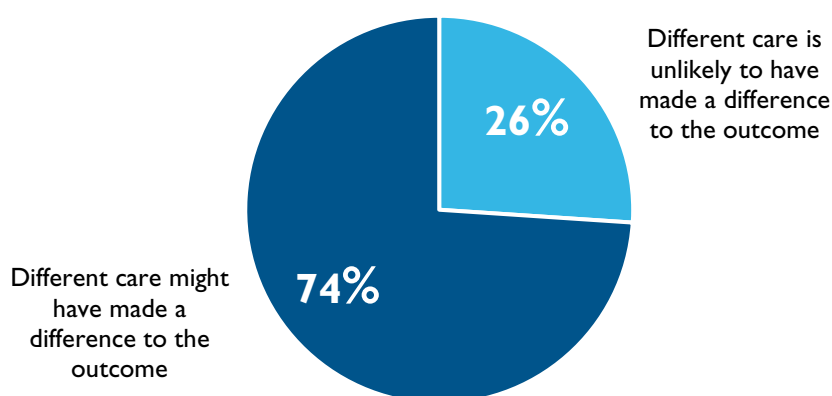
\* [www.sands.org.uk/professionals/resources-engaging-parents-reviewinvestigation](http://www.sands.org.uk/professionals/resources-engaging-parents-reviewinvestigation).

† [www.npeu.ox.ac.uk/pmrt/parent-engagement-materials](http://www.npeu.ox.ac.uk/pmrt/parent-engagement-materials).

transparency in the process. This will ensure that questions and concerns can be raised by all parties and subsequently addressed.

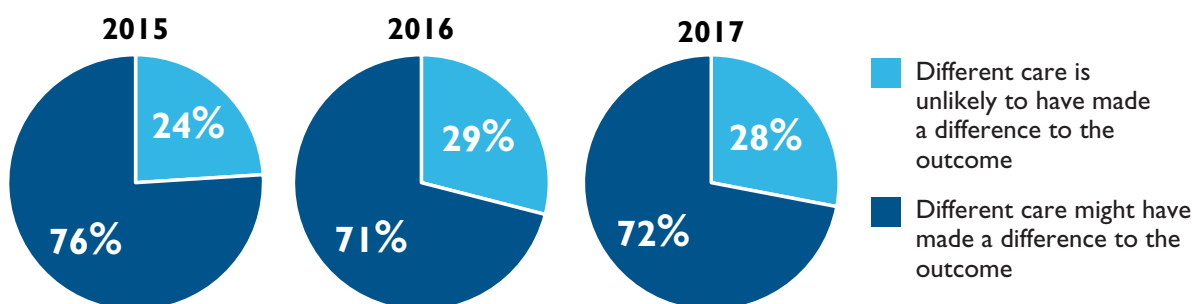
### Would different care have made a difference to the outcome?

In the event a reviewer indicates that there is sufficient information in the local review uploaded to the Each Baby Counts portal, they are advised to indicate whether, in their clinical opinion, different care might have made a difference to the outcome. In the analysis, 74% (508) of the babies were identified as having an outcome where at least one reviewer was of the opinion that different care might have made a difference (Figure 11), with the other 26% (179) of the babies having an outcome where different care is unlikely to have made a difference to the outcome.



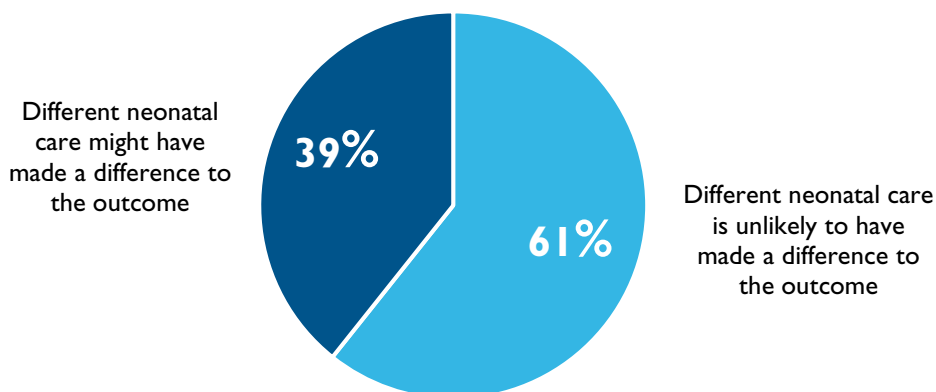
**Figure 11** Proportion of babies for whom different care might have made a difference to the outcome (N = 687)

These proportions have seen relatively little variation across the previous Each Baby Counts reports (Figure 12). This is consistent with the 2017 perinatal confidential enquiry into intrapartum-related stillbirths and neonatal deaths which also reported 78–79% where different care might have made a difference to the outcome.<sup>14</sup> There remains a question as to why this figure is so resistant to change. It may be a product of the Each Baby Counts methodology and that of other programmes that rely on the review of others’ practice from the position of hindsight. It is clear that even when the outcome is good, on review, improvements in care can still be found. Berglund et al.<sup>15</sup> showed that even in controls (where Apgar score was 10), improvements in care were identified in 36% of cases, as compared with improvements in care being identified in 63% of cases where the Apgar score was less than 7.



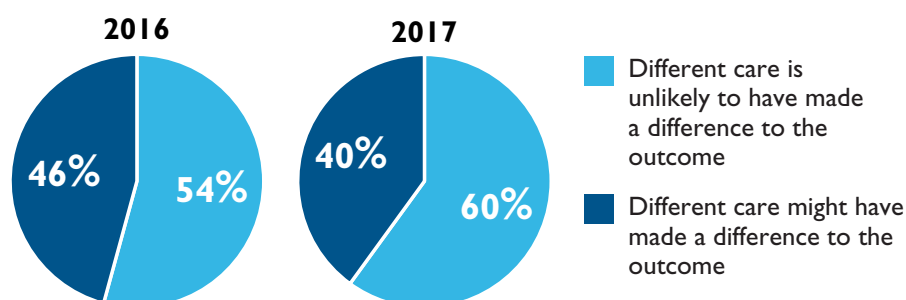
**Figure 12** Proportion of babies for whom different care might have made a difference to the outcome over time

The Each Baby Counts neonatology reviewers assessed the care of 319 babies whose reports were deemed to contain sufficient information to assess the neonatal care provided. In 123 (39%) of these, it was identified that different neonatal care might have made a difference to the outcome (Figure 13).



**Figure 13** Proportion of babies for whom different neonatal care might have made a difference to the outcome (N=319)

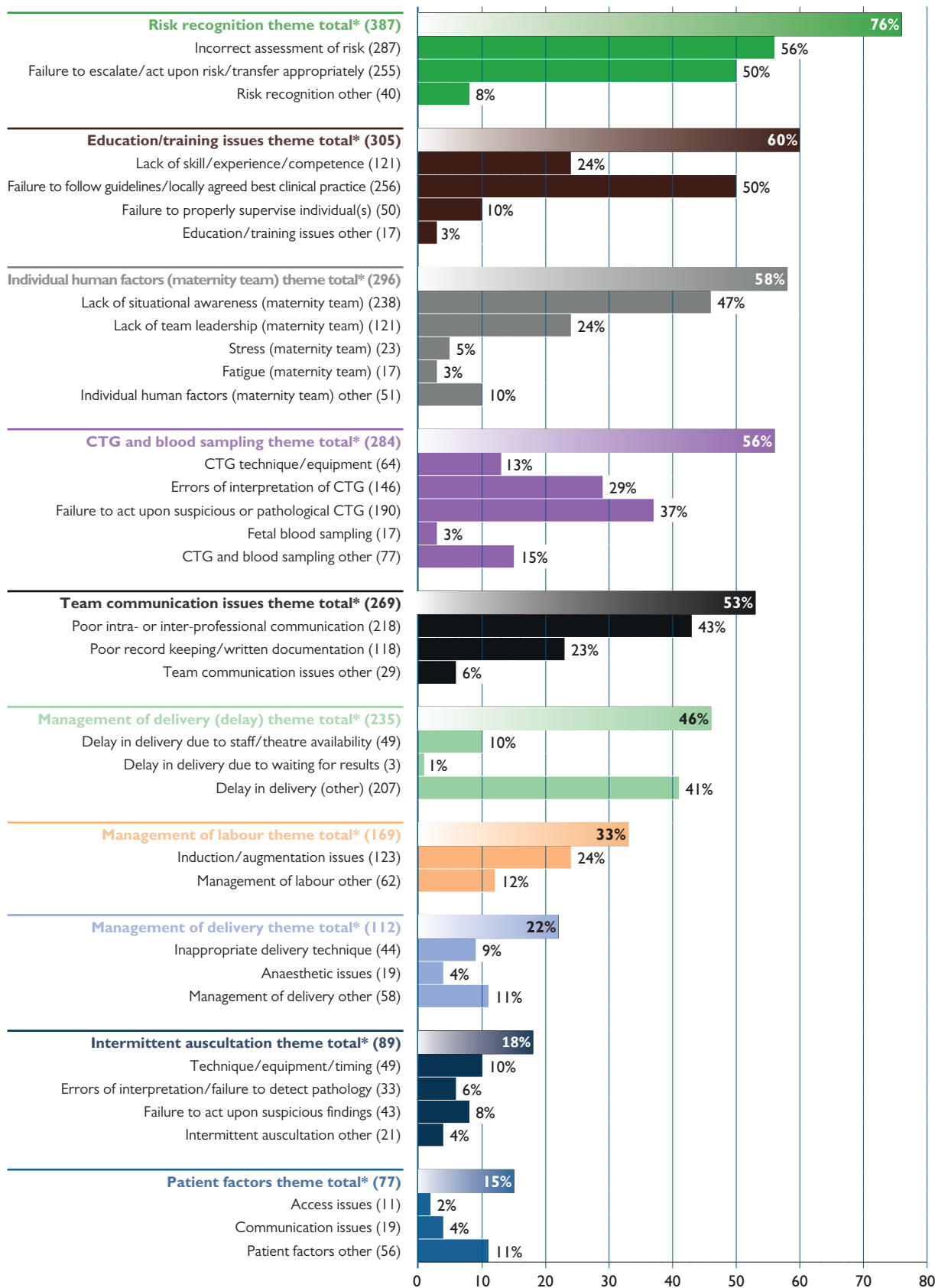
Similarly, this figure has not materially changed over the three reports for which it has been calculated (Figure 14).



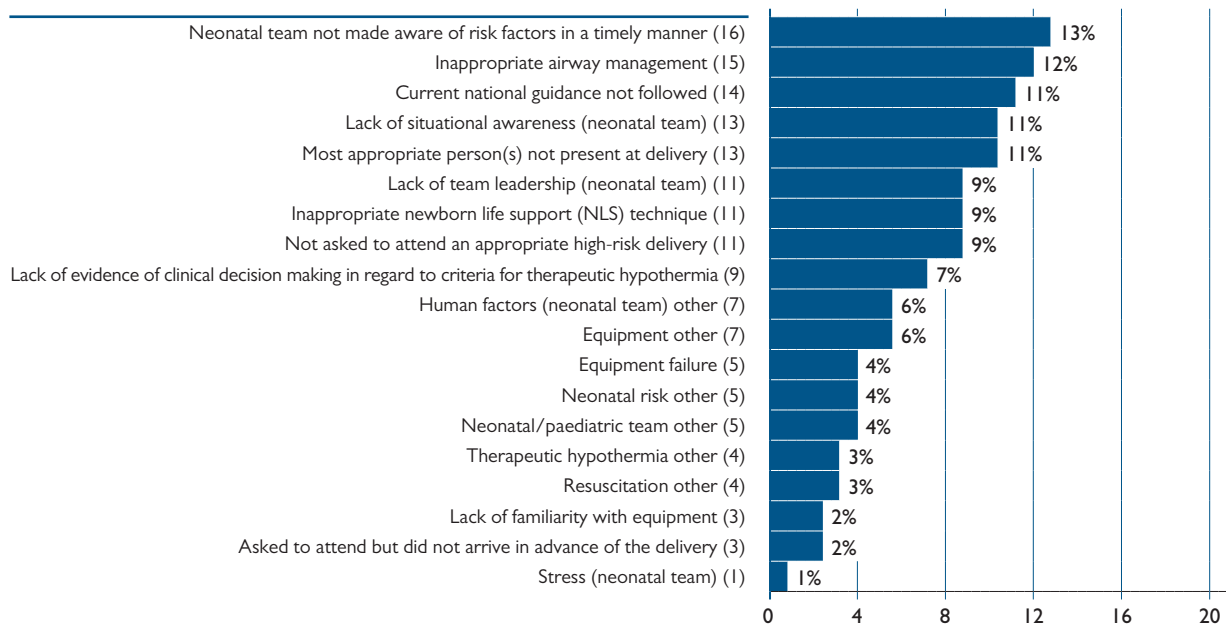
**Figure 14** Proportion of babies for whom different neonatal care might have made a difference to the outcome over time

This is substantially lower than the overall percentage but it should be borne in mind that by the time a neonatology review is requested, the baby may well be severely compromised and that, despite optimal care, the outcome may not change.

Where a reviewer considers that different care might have made a difference to the outcome, they are asked to indicate what they consider to be the critical contributory factors influencing the outcome. Each baby’s care can be reviewed by up to five multidisciplinary reviewers and they can each identify multiple critical contributory factors. These contributory factors are shown in Figure 15 for all themes (excluding neonatal care), which is outlined separately in Figure 16.

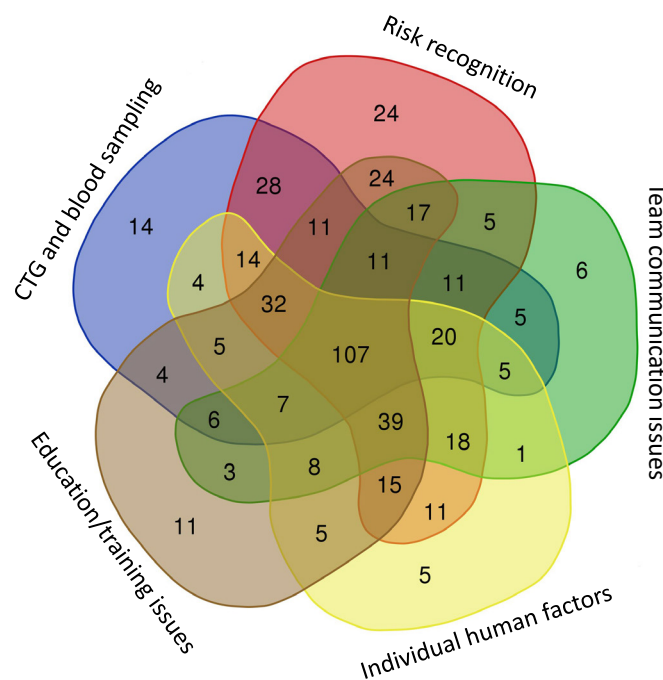


**Figure 15** Critical contributory factors identified in babies for whom different care might have made a difference to the outcome (N=508); note that each baby could have more than one reviewer identifying contributory factors, and multiple factors may apply to the same baby



**Figure 16** Critical contributory factors in neonatal care identified in babies for whom different care might have made a difference to the outcome (N = 123); note that each baby could have more than one reviewer identifying contributory factors, and multiple factors may apply to the same baby

These critical contributory factors (excluding neonatal care) are categorised into themes, with the five most common themes being cardiotocography (CTG) and blood sampling, risk recognition, team communication issues, individual human factors, and education/training (Figure 17). There were only 32 babies where reviewers did not identify any critical contributory factors falling under one of these themes.



**Figure 17** Interrelation of the five most commonly identified themes; diagram produced using <http://bioinformatics.psb.ugent.be/webtools/Venn/>

These top five themes have not changed over previous reports, despite recommendations specifically designed to address them. The focus needs to move from ‘what’ needs to change to ‘how’ that change can be delivered.

The Each Baby Counts approach has consistently illustrated that there is seldom just one, single, factor that leads to an adverse outcome for a baby. This supports the understanding that care provision is rarely carried out by single individuals in isolation.

“Health care provision is rarely carried out by single individuals. Safe and effective patient care is, therefore, dependent not only on the knowledge, skills and behaviours of the front line workers, but also how the workers work together in the particular work environment, which itself is usually part of a larger organization. In other words, patients depend on many people doing the right thing at the right time for them: that is, they depend on a ‘system’ of care.”<sup>16</sup>

Through the lens of system thinking, one can think more widely than the prima facie causes of incidents and explore what the antecedents of the final behaviour were. For example, it is known that a sufficiently staffed workforce and availability of equipment are essential to create the conditions for excellent care to take place, but if they are not in place then risk of error on the part of the workforce and incorrect use of equipment increases. It is recognised that workforce is a complex phenomenon in its own right, and that it is therefore necessary to be more sophisticated and move beyond talking about simple numbers to skill-mix (the different grades of staff present on the unit) and the preparation of these staff. Aligned to workforce, an increasing focus is being placed on culture and leadership; however, no amount of leadership training addresses not having enough staff present to deliver safe care.

It is also becoming increasingly obvious that training on its own is not a panacea to change behaviour. No amount of training can support someone to deliver care in a particular way if the resources to undertake the task are not present. Therefore, more sophisticated work on understanding systems and then on implementation is required, drawing from expertise within the implementation science community.



## Key messages

Research or audit activity should be commissioned to further investigate 'therapeutic creep' and how this might account for a lack of change in the Each Baby Counts numbers over time.

A structured and consistent approach to recording local reviews which ensures that all staff understand and capture the key information that will allow the review to contribute to second-order learning across the maternity and neonatal landscape should be established.

7% is still too high for the proportion of parents not informed about a review; informing and engaging parents continues to be a challenge that needs to be addressed in all future work streams.

It is vital that maternity safety remains on the map for the long term and that high-quality investigations are carried out into these events.

# The learning and legacy of Each Baby Counts

## Introduction

The aim of this chapter is to present findings from qualitative work exploring stakeholders' reflections on the Each Baby Counts programme, with a particular focus on the impact of the work to date as well as a consideration of the next steps in the wider national maternity landscape following the end of Each Baby Counts data collection.

## Methodology

Twenty-five semi-structured interviews were carried out to explore the views and thoughts of a number of key stakeholders involved either directly in the programme or in wider maternity safety work. Topics for discussion included the aim and purpose of Each Baby Counts, its strengths and limitations, and the programme's impact.

## Participants

Stakeholders were identified by the Each Baby Counts project team and represented a maximum variation sample. Participants were invited via an electronic letter from the Chair of the Each Baby Counts Independent Advisory Group and the RCOG Vice President for Clinical Quality.

The stakeholder groups approached included: the Each Baby Counts project team; Royal Colleges relevant to Each Baby Counts; third-sector organisations; patient and public involvement representatives; Each Baby Counts lead reporters and reviewers; devolved nation representatives; and NHS England and the Department of Health and Social Care (NHS Resolution, Healthcare Safety Investigation Branch (HSIB)).

## Data collection

Data were collected using semi-structured interviews during the months of October and November 2020. The interviews lasted between 30 minutes and 1 hour and, due to restrictions associated with COVID-19 and the impact on working practices, the interviews were all conducted using the online technology available via Microsoft Teams. A flexible topic guide was used to ensure that topics of interest were covered consistently across interviews. Stakeholders completed a consent form relating to recording of the interviews and to the use of any pertinent quotations.

All interviews were recorded using the system's functionality so that note-taking could occur in more detail after interviews were conducted. Interviews were not transcribed verbatim, but key quotations have been transcribed and are presented throughout this chapter to support the overall findings.

## Data analysis

Interviews were conducted and subsequently listened to again, in order to make substantial notes and summaries of the discussion within an exploratory matrix.

Themes aligning to the questions within the topic guide were drawn out, as were other pertinent areas raised by participants. Data are presented as described by the participants and direct quotations are used to illustrate the findings, shown with the individual's employment/role title.

## Findings

Thirty-eight individuals were invited to participate in a stakeholder interview. Of those, 12 did not respond to the invitation and one was unable to be interviewed owing to time constraints. The final number of stakeholders interviewed was thus 25.\* Quotations were approved for use and are attributed to individuals using their job role as confirmed by the individuals.†

The findings are presented in sections which broadly follow the topic guide used during the interviews. The overall section headings reflect the main themes:

- 1 Drivers and aims of Each Baby Counts
- 2 Value and impact
- 3 Functional limitations
- 4 Closure of Each Baby Counts and practical recommendations for future work.

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\* Views given by stakeholders are those of the individual and are not in any way attributed as views of any organisation or employer they represent or are part of.

† This title was agreed with interviewees ahead of publication, following their approval of the quotations being used.

## *I Drivers and aims of Each Baby Counts*

“Babies born at 37 weeks and beyond who are alive in labour should be born in good condition and go home with mum and family.” (Principal Investigator, Each Baby Counts)

Those interviewed shared the sentiment that the ethos of Each Baby Counts as a programme was to improve care during labour and the intrapartum period, and consequently to improve outcomes. While for some the specific details of the methods for achieving this were not entirely clear, for others there was a good understanding of the process by which Each Baby Counts planned to operate.

“Review of reviews – EBC uses the basic review that is going on at a local level, but then adds that external scrutiny to the review rather than the whole of the records, which means that we can look at every baby [...] every baby’s care will get scrutinised at a higher external level.” (Researcher)

Many interviewees commented that the area of investigation was much needed for the cohort of babies included in Each Baby Counts, that there was (at the time of the programme’s inception) nothing else like it in the national maternity landscape and that the ambition of the programme was a worthy one, if a little bold.

There was a real sense that those who have been included in the programme felt a level of pride at having been involved. There was an explicit gratitude to the programme and the team for working so hard to bring these issues to the attention of those within the professions working in this area, Government and ministers, and also to the wider field of maternity safety.

“[Each Baby Counts] was really trying to say these babies are important and we want as a profession to understand more and to learn and improve. I think it’s been a very powerful programme.” (HSIB clinical leadership team member)

Stakeholders all discussed a number of positives of the programme, both in terms of benefits of the programme itself and the wider impact of the work, and this will be reported in the next section.

## 2 Value and impact

### 2.1 Benefits

Some of the key benefits described by participants were raising the profile of harm during labour, and of maternity safety more globally, and shining a light on the cohort of babies included in Each Baby Counts, which previously had not been investigated in this way.

“It’s been incredible to raise the profile [...] from a parent point of view, it was incredibly important at that time because there wasn’t anything like this and it felt like we were finally being listened to [...] we were so hopeful that these babies were being looked at.” (Parent representative – Campaign for Safer Births)

In particular, the inclusion of babies in Each Baby Counts who have had a brain injury was seen to be a vital part of the programme and one that gave voice to this cohort that previously was not being heard. For many participants, the aspect of morbidity being included in this programme as well as the mortality of babies was seen as a real strength.

“There is a requirement to review the care of all babies that’ve died, but until EBC, there was no requirement to look at babies who’ve had brain injuries – that is a definite impact.” (Researcher)

“it’s incredibly important [...] whilst brain injuries in babies are rare events and it’s important to get the learning from those, they’re catastrophic for the families. We have a moral duty to do anything we possibly can to reduce them [these events].” (Director of Safety and Learning, NHS Resolution)

The definitions applied to collate the cohort of babies included in Each Baby Counts has been widely shared and used by other organisations, which is seen as a huge testament to the external impact of the programme. While Each Baby Counts is reported to have been the first programme to utilise these criteria, subsequent groups have aligned themselves for their respective work, including NHS Resolution, the Scottish Stillbirth Group and HSIB.

## 2.2 Impacts

A further strength and impact of the programme relates to the quality of the local reviews. While the aim of the programme was to externally review the local investigations of care, it was clear to many interviewees that the quality of the local investigation reports was highly variable.

“The local reviews are extremely heterogeneous; people use widely different processes to review a particular incident [...] there are some examples of reviews that are extremely thorough and really commendable [...] and how open they have been at identifying lessons and setting in [place] action plans for an incident and at the other extreme I have seen uploads which [are] essentially five slides from a perinatal mortality/morbidity meeting presentation and that’s what they call a review and that’s it, there is nothing else.”  
(Consultant in Neonatal Medicine)

For many, highlighting the issues in the quality of local reviews has enabled services to improve, and for those working as lead reporters and reviewers for the programme, being part of Each Baby Counts and being held to account in some way for the investigations carried out has impacted their own professional work.

“For me, it’s made me a lot more aware of my own practice, my own environment, and even the way I document things [...] only by reviewing and reflecting can you improve your own practice.” (Advanced Neonatal Nurse Practitioner)

A further impact identified by many of those interviewed is the increase in parental involvement in local reviews across the duration of the Each Baby Counts programme. This element is deemed vitally important as a way of ensuring parents and families are included in the trust’s maternity care practices, and ultimately learning, after such a tragic event.

“One of the key things for us is involving the parents. It was something that we didn’t probably do very well at all [...] we now encourage them to contribute, they have a named contact, and we share the review with them, and that’s definitely really come from a recommendation of EBC.” (Intrapartum Lead Midwife)

There was a real sense that learning from the investigations themselves and the thematic analysis provided by Each Baby Counts was a key impact of the programme. While some of the findings reported are not viewed as being new, the reporting of factors such as situational awareness and human factors has really enhanced the understanding of how maternity teams work and how incidents can arise. Giving a voice to these issues has enabled professionals to begin conversations around how and why incidents occur and how things can be changed to improve these outcomes.

“EBC has opened up the conversation about the bigger picture of why things go wrong, and it has used the thematic analysis to understand the system better.”  
(Executive Director – Midwife)

### 2.3 Systems approach

It has also highlighted the multifaceted nature of these incidents – there is not one solitary factor that leads to a negative outcome. Each Baby Counts has been seen by many as the first programme to report this complexity within maternity care, and this has been extremely valuable to those working on the front line, and in the wider maternity safety sphere. The shift from looking at individuals to a more systems approach has been viewed as a real success.

“There is not one silver bullet; there is not just one thing that we can do that is going to reduce the number of brain injury cases that result in clinical negligence – it’s a wider piece involving human beings and all their foibles. The more recent EBC reports [have] given us the evidence.” (Head of Maternity and Neonatal, Department of Health and Social Care)

The contribution of this multifactorial system to these incidents has meant that the findings of Each Baby Counts have been able to support some discussion points for clinicians and policymakers, but it has also meant a necessary acknowledgement that there is no ‘quick fix’ or solution for immediately improving outcomes. This and some other limitations of the programme are discussed in the next section.

### 3 *Functional limitations*

#### 3.1 **Need for action**

The lack of implementation and evaluation work following the Each Baby Counts findings was frequently mentioned as being a limitation of the programme. There was a real sense that the findings had shone a light on many of the factors that are present in the local investigations as needing attention, yet the recommendations were lacking in advice for local services to action them or indeed any wider follow-up of the Each Baby Counts programme findings in order to improve outcomes.

“We know what goes wrong; what we’ve not been so good at is understanding why that is[...] the difficulty is how does a service actually implement it, and that is not really in there [in the EBC reports].” (Executive Director – Midwife)

“I’m concerned about what’s going to happen with the recommendations, how are they going to be implemented, if anything is going to change from this.” (Parent representative – Campaign for Safer Births)

There was acknowledgement, however, that perhaps one reason why the programme had not achieved everything it could have done was the quality of local investigations. The whole premise of the programme was reliant on the integrity and content of local investigations. As noted earlier, in some instances they were comprehensive enough for review, but for many that was felt not to be true and so, while a number of important insights were identified, there was a sense that the impact could have been greater.

“We just did not realise how poor investigations were, so I don’t think the aims of EBC have been able to be met because we’ve been thwarted by the poor-quality reviews that haven’t led to the outcome as intended, but nonetheless has provided invaluable insights for the system.” (Head of Maternity and Neonatal Safety, NHS England and NHS Improvement)



### 3.2 The Each Baby Counts ambition

The ambitious aim of Each Baby Counts to reduce these incidents by 50% by 2020 was noted by some as a worthy goal but ultimately one that was not well resourced or planned in terms of the methods to achieve it. That said, there was an overarching feeling from those interviewed that, while the goal had not been achieved, the fact that maternity safety was ‘on the map,’ the profile of these cases had been raised and the professions involved had come together with a shared purpose to improve care were all worthwhile outcomes of this programme.

“I think they’ve [maternity professionals] felt empowered to talk about safety and I think that it [Each Baby Counts] has very firmly put maternity safety on the map.”  
(Each Baby Counts Quality Improvement Lead)

“EBC has hastened the breaking down of barriers there [with multidisciplinary team working], which I think is important.” (Professor of Neonatal Medicine)

A further limitation pertained to the time lag in Each Baby Counts being able to report findings. The reports published were describing data from two years previously which were not necessarily representative of the current picture. Having more contemporaneous data would have been valuable. That said, there was an acknowledgement of the resource required, particularly on the part of Each Baby Counts reviewers to complete the tasks needed, meaning there was a level of understanding of why the outputs were timed as they were. There was frequent mention that the programme was fully reliant on the ‘goodwill’ of those participating and that no additional funding or resource was available to those reporting or reviewing, highlighting an area of importance for any work going forward. Recognition of the need for protected time in particular, but also funding, for staff undertaking this type of work was seen as key to being able to implement long-term sustainable changes.

“It’s really hard to get them to concentrate in an area where they’re simply just trying to keep rotas going and to keep the service relatively safe [...] I think for anybody to make a really big change, for example if they think that there’s an issue with the culture, they need protected time to be able to stand back and concentrate on that.”  
(Consultant in Public Health)

### 3.3 Data collection and timeliness

Further to the issues of data lag, data anonymity within the programme was discussed. Each Baby Counts did not collect or review identifiable data, and while some stakeholders were not aware this was the case, for those who were, the response to the issue was mixed. For some there was strength in the data being anonymous, allowing for deeper and unbiased investigation, and for others the programme had not been designed to collect data on the individuals involved in the case as such, but rather the focus was on the quality of the review conducted. That said, for others the lack of demographic information was seen as a missed opportunity.

“The point of EBC was not to collect quantitative data, it was to look at the reviews and to draw out new themes about where we could make changes rather than contributing to surveillance.” (Researcher)

“It’s about ethnic inequalities, and also about inequalities due to social deprivation. It is critical both are part of whatever happens next.” (Research and Prevention Lead, Sands)

While the original programme never set out to explore individual demographic factors, many respondents felt that it would have been useful to collect ethnicity and socioeconomic status in order to add to the narratives of other national initiatives such as MBRRACE-UK. Having a conscious attention to diversity and inclusion was certainly highlighted as needing an essential presence from the outset in future work, and other areas of practical recommendations for future work are included in the next section.

## 4 Closure of Each Baby Counts and practical recommendations for future work

### 4.1 Closure of the programme

There was a mixed set of feelings relating to the closure of the programme, with a number of interviewees stating that they felt a sadness at Each Baby Counts closing and a subsequent concern about the work being forgotten or lost. That said, there was a balanced number of responses feeling that the programme has run its course, that the rates of outcomes identified in the original ambition of the programme have not been reducing as was hoped and that now work should be concentrating on how to implement the findings and change practice instead of continuing to report on the same issues.

“I feel very sad [about Each Baby Counts closing]. I feel it’s going to leave a big hole. It’s been a project that’s been highly respected by organisations.” (Governance Midwife)

“I think it has run its time. You can’t keep collecting the data and observing the same problem. The most important thing now is that we turn it into action and implementation and then it will really have made a difference, and that’s the most important part of these programmes, the impact.” (Director of Safety and Learning, NHS Resolution)

For many of the interviewees, one of the greatest ‘gaps’ being left by the closure of Each Baby Counts is the impact on the devolved nations. The work of HSIB is continuing the legacy of Each Baby Counts to some degree in England, but Scotland, Northern Ireland and Wales will need to consider their options for continuing this type of work in their respective nations. The small number of cases in these countries was identified as a potential issue, which reflected the added value brought by the UK-wide approach of Each Baby Counts.

Reporting to Each Baby Counts has often been seen as a duplication of effort and as just one more initiative in an ever-growing landscape of maternity safety programmes. For many, this repetition (particularly with the lack of new findings emerging) was frustrating – having to report the same or similar cohorts of babies to three or four organisations was seen as time-consuming and unnecessary. The future of work like this needs to take into account other existing and upcoming programmes and really strive for streamlining and the coalescing of intentions.

“Important to reduce the amount of players in that space and then widen their influence in this sphere.” (Consultant Obstetrician and Gynaecologist)

## 4.2 Future priorities

Further suggestions for future work of this type were focused on the implementation of the Each Baby Counts recommendations. For many, there has been a value to a programme like this being in existence and that, having brought these issues to the national agenda for maternity safety, work needs to be done to carry on the legacy and further drive towards improving outcomes.

“Keeping a programme going in itself keeps people thinking and keeps people alert to events [...] just the fact that something is ongoing can improve outcomes.” (Consultant in Neonatal Medicine)

“I don’t think we can let this area of harm go [...] I would not want to see in 5 years’ time that nobody remembers EBC.” (Head of Maternity and Neonatal Safety, NHS England and NHS Improvement)

Suggestions for future work were not abundant, but some offered thoughts around exploring the international research context of similar work and what could be learned from others working in this area. More widely, concerns around who would be responsible for continuing the Each Baby Counts legacy, for implementing and evaluating the findings, developing training and learning packages from the thematic findings, and ensuring that the quality of the local reviews continues to improve are all areas that could be a focus of future strands of work from Each Baby Counts.

“We’re all trying to solve the same problem, so what is the international research around about what works?” (Director of Safety and Learning, NHS Resolution)

“Going forward [...] what do we do with the learning, what learning packages can we develop, how can we implement them because the College has that clinical credibility and clinical know-how. I would want to see that EBC maintained a unique presence and a link with the College.” (Head of Maternity and Neonatal Safety, NHS England and NHS Improvement)

Finally, one of the overarching findings from this qualitative work is the sense that, on the whole, the maternity profession – including all disciplines involved in the care of women giving birth – are striving to improve care and outcomes. Committing time and investing energy in maternity safety programmes such as Each Baby Counts, often with no financial incentive and no resource or time allocation, demonstrates the keenness of these professions to ensure that babies do not die or acquire harm during the process of labour and birth. For the families affected by these outcomes, this work does not go unnoticed, but the impetus to continue to improve and make these vital changes cannot be left to break down, essentially leaving families questioning what changes have been made as a result of their and many others’ previous heartbreaking experiences.

## Conclusion

The very fact that so many people were happy to be interviewed about the project was indicative of the regard that the programme is held in. The value and impact of the programme is not just in the Each Baby Counts criteria that underpin many safety initiatives across all nations, but the catalyst for change that Each Baby Counts delivered. Participants cited Each Baby Counts as being the driving force behind involving parents in reviews, of driving improvement of local reporting and the realisation that each and every case was a combination of factors rather than perhaps a single cause.

It propelled human factors and teamworking in maternity care into the limelight and has consistently recognised key clinical challenges that have had resonance with the maternity and neonatal communities.

It has not been perfect and the data lag and data anonymity have been mentioned above. However, the key challenge is that not enough focus has been put on the implementation of the findings.

“As a parent, who’s lived through an experience like this, you want to know something is happening. You’re really fed up of hearing lessons will be learnt, and this will change, but every death in this area, you are looking at very similar failings over and over again, so really it’s ‘what are you going to do now, what is going to happen?’”  
(Parent representative – Campaign for Safer Births)

From the quote above we hear the call for action – to move from counting to action, to move from recommending to delivering change. This is the Each Baby Counts programme’s last chance to directly influence the maternity landscape.

The numbers over the 4 years have remained stubbornly static, with the chance of a term baby fitting the Each Baby Counts criteria being the same in 2018 as in 2015. While we have tentatively suggested some explanations for this, we need to continue to learn from each and every case to see what factors are present, or absent, in the system that mean this situation persists, despite considerable investment. A notable exception to the lack of improvement is in parental involvement, which has increased year on year, driven by the awareness raising of both programmes like Each Baby Counts and the tireless campaigning of baby-loss charities and individuals.

Realising the ambitious Each Baby Counts aim of reducing by 50% the incidence of stillbirth, neonatal death and severe brain injury as a result of incidents during term labour by 2020 was always going to be a complex problem. It has to be recognised that the answers to these complex problems don’t lie solely in the healthcare domain. Colleagues in social sciences and engineering can bring novel and innovative methodologies to bear on change-resistant problems.

It is with this in mind that the RCOG has partnered with The Healthcare Improvement Studies (THIS) Institute, exploring practical changes that will improve interpretation of electronic fetal heart monitoring,<sup>\*</sup> using ethnography to understand what makes a safe maternity unit,<sup>17</sup> and exploring, through the lens of behaviour change science, how to tackle escalation with the Each Baby Counts + Learn and Support team.<sup>†</sup>

The next phase of Each Baby Counts is the application of the knowledge and learning gained from 4 years of considered and high-quality investigations of intrapartum care. As a maternity community, we should reflect on what has gone before, building on what has worked and implement effective innovations. However, we can catalyse faster improvement using the new opportunities afforded by big data, digital technologies, broader academic collaborations and the skills and expertise of our clinical workforce, with families at the centre. Together, we can make the UK the safest and best place in the world to have a baby.

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\* [www.thisinstitute.cam.ac.uk/research-projects/improving-electronic-fetal-heart-monitoring](http://www.thisinstitute.cam.ac.uk/research-projects/improving-electronic-fetal-heart-monitoring).

† [www.rcog.org.uk/en/guidelines-research-services/audit-quality-improvement/ebc-learn-support](http://www.rcog.org.uk/en/guidelines-research-services/audit-quality-improvement/ebc-learn-support).

**Box 1** An extract from 'How to be a very safe maternity unit: an ethnographic study'<sup>17</sup>**What we found**

- A very well-founded training programme is very important to achieving safety, but on its own doesn't provide a full explanation of what makes a maternity unit safe.
- At Southmead Hospital, safe maternity care was influenced by a training intervention (PROMPT) as well as broader social, organisational and cultural factors.
- These factors include:
  - collective competence and agile professional boundaries
  - insistence on technical competence
  - systems to facilitate coordination and distributed cognition
  - clearly articulated and constantly reinforced standards of practice, behaviour, and ethics
  - monitoring multiple types of data about the unit's state of safety
  - a highly intentional approach to safety
- The mechanisms were also influenced by the unit's structural conditions, such as staffing levels and physical environment.
- The intervention (PROMPT) interacted constantly with these mechanisms. Though PROMPT was not a 'magic bullet' for safety, it both fostered and reinforced the conditions needed to achieve safety.
- Improvement interventions and the context that enables their success should be considered in tandem.

**Box 2** Each Baby Counts + Learn and Support (EBC L&S)**Emergence**

Funded by the DHSC, the RCOG and the RCM established the EBC L&S programme to address the findings from EBC reports which highlighted human factors such as situational awareness, stress, fatigue, clinical leadership and communication in multidisciplinary frontline teams as crucially important to safety and quality of care.

**Aims**

EBC L&S aims to build the capacity of 16 frontline health professionals in clinical leadership, safety thinking and quality improvement. They will be supported to prioritise, design and implement local practice changes using a structured approach based on behavioural science. This approach aims to increase the likelihood of recommendations being translated into practice that are sustainable, and replicable across settings. Each of these components will be evaluated to provide an evidence base going forward.

**Key focus**

Given the salience of clinical escalation highlighted in EBC and maternity safety reports, this will be a key focus of the quality improvement component of the EBC L&S programme.

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