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Research Article

Piloting *Eyes on the Baby*: A Multiagency Training and Implementation Intervention Linking Sudden Unexpected Infant Death Prevention and Safeguarding

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We describe the coproduction, pilot implementation, and user evaluation of an evidence-based training intervention addressing prevention of Sudden Unexpected Deaths in Infancy (SUDI) for the multiagency workforce supporting vulnerable families with babies in a northern English county. We aimed in this pilot study to improve knowledge, skills, and engagement of professionals and support staff providing services for vulnerable families with increased risk of SUDI. The training intervention was co-produced by the academic team and the project Steering Committee which comprised senior leaders from the local authority, health and care sectors, and third-sector organisations, and rolled out to multiagency teams between November 2022 and March 2023. Evaluation data were collected using a post-training questionnaire, followed up by the Normalisation Process Theory (NPT) NoMAD survey issued at two time-points post-training, and interviews with stakeholders. The evaluation, conducted from January to May 2023, aimed to assess how well the multiagency workforce accepted SUDI prevention as part of their remit and incorporated SUDI prevention activities into their everyday work. Most multiagency professionals and support staff were enthusiastic about the training and their role in SUDI prevention. Fewer health professionals completed the training than expected. Forty percent (397/993) of invited staff completed the training. Our results revealed initial lack of knowledge and confidence around SUDI prevention and targeted provision for vulnerable families which improved following the *Eyes on the Baby* training. The proportion of nonhealth professionals rating their knowledge of SUDI prevention as good or excellent increased significantly from 28% before training to 57% afterwards. Self-rated confidence in discussing SUDI prevention with families increased significantly from 71% to 97%. Health professionals' ratings increased significantly for knowledge from 62% to 96%, and confidence from 85% to 100%. Use of NPT allowed us to identify that by the time of evaluation, the earliest adopters were cognitively involved with the programme and engaged in collective action, while later adopters had not yet reached this stage. We conclude that effective implementation of multiagency working for SUDI prevention can be accomplished by providing clear training and guidance for all staff who have regular or opportunistic contact with vulnerable families. Our next step is to evaluate the sustainability of MAW SUDI prevention over the medium to long term and assess the responses of recipient families to this approach.

1. Introduction

Sudden Unexpected Death in Infancy (SUDI) encompasses all cases in which there is death (or collapse leading to death) of an infant (up to 24 months of age), which would not have been reasonably expected to occur 24 hours previously and in whom no pre-existing medical cause of death is apparent [1]. Sudden Infant Death Syndrome (SIDS) is the sudden unexpected death of an infant under 1 year of age, with onset of the fatal episode apparently occurring during sleep that remains unexplained after a thorough investigation, including performance of a complete autopsy and review of the circumstances of death and the clinical history [2]. Successful SUDI/SIDS prevention has reduced unexpected infant deaths dramatically over the past 30 years by providing parents with infant sleep safety guidance [3].

In England, SUDI now clusters in the most vulnerable families for whom the universal provision of infant sleep safety guidance appears to be ineffective. The Child Safeguarding Practice Review Panel (2020) reported that "in spite of substantial reductions in the incidence of SUDI in the 1990s, at least 300 infants die suddenly and unexpectedly each year in England and Wales" [4]. The report summarised evidence from 40 infant death cases reported in 2018, highlighting that not only do these deaths now cluster among families in deprived socioeconomic circumstances, increasingly many of the families at risk for SUDI are also at risk for a host of other adverse outcomes, including child abuse and neglect. The report noted that although universal SUDI prevention information is rigorously delivered by health professionals, many of the families most at-risk of SUDI are unwilling or unable to receive or act on this information, and that "something needs to change in the way we work with these most vulnerable families" to prevent avoidable SUDI [4]. Likewise, the 2022 National Child Mortality Database (NCMD) report emphasised that 42% of unexplained deaths of infants occurred in the most socioeconomically deprived neighbourhoods [5].

The Practice Review report authors recommended SUDI prevention should be understood as relationship-based safeguarding work to include partnership working within local areas for responding to issues of neglect, social and economic deprivation, domestic violence, parental mental health concerns, and substance misuse. This work, they noted, "needs to be embedded in multiagency working and not just seen as the responsibility of health professionals" [4]. Local authorities and safeguarding partnerships were encouraged to implement targeted multiagency workforce (MAW) approaches for these families. Although MAW has been implemented for investigation of infant deaths in England since the Kennedy Report in 2004 [6], it has only recently been applied to SUDI prevention. There is currently no guidance for stakeholders wishing to implement multiagency SUDI prevention strategies, and the authors were unable to find examples of good practice in the academic literature.

MAW approaches have been used in other areas of public health and safeguarding where targeted interventions are needed for supporting at-risk or vulnerable individuals. Examples include child safeguarding in the context of domestic violence [7, 8], parental alcohol abuse [9], hoarding disorder [10], and juvenile suicide [11]. Co-production has been a key feature of these interventions, which involves academic teams working in partnership with stakeholders and/or service users to design and evaluate research or intervention projects [12]. The Normalisation Process Theory (NPT) has been used to characterise and explain the mechanisms that promote and inhibit implementation and embedding of new health-related interventions by the workforce. NPT provides a framework to aid intervention development and implementation planning as well as evaluating and understanding the processes of implementation [13]. Given the existing learning in this area, we chose to approach this multiagency project with an intention for stakeholder co-production using NPT as a guiding framework.

This project was instigated by the local Child Death Overview Panel (CDOP), who noted that SUDIs were consistently occurring among vulnerable families in County Durham. Two stakeholders who subsequently became members of the project Steering Committee approached the academic lead about undertaking this work. To inform our pilot programme, we first systematically reviewed SUDI prevention policies issued by local authorities and NHS trusts across England. This explored and appraised the implementation of multiagency SUDI prevention in England to understand local variations and evaluate strengths and weaknesses. We found variable modes of SUDI prevention across England, with few policies explicitly mentioning a MAW approach, and considerable variation in the degree to which this was planned and executed. We concluded that guidance on implementing and evaluating MAW SUDI prevention was needed, and that all individuals who work with at-risk and vulnerable families should be trained to develop knowledge, skills, and confidence in removing barriers to safer infant sleep and thereby supporting SUDI prevention efforts [14].

We conducted a mapping exercise of universal and targeted SUDI prevention in County Durham in 2022. Stakeholder meetings with staff and service leads revealed that both midwifery and health visiting staff would benefit from up-to-date training on SUDI prevention, particularly for vulnerable families. Many staff lacked confidence in discussing the latest national guidance [15] or were unaware it had been updated. We therefore expanded the scope of our training to include health practitioners.

The final aims of this project were to co-produce, pilot, and evaluate a multiagency workforce training and implementation programme for SUDI prevention among vulnerable families in County Durham, working with the local authority public health leads, family facing adult and child services, members of the local Child Death Overview Panel, key NHS staff, and third sector partners.

2. Materials and Methods

We used an academic-stakeholder co-production approach to design and implement the programme [12] which we called *Eyes on the Baby*. Details of the stakeholders who

formed the Steering Committee and co-production group are shown in Table 1. The study was approved by the Durham County Council Research Ethics Board and Durham University's Research Ethics Committee.

In designing the *Eyes on the Baby* programme our objectives were as follows:

(a) Define the scope of the multiagency workforce (all partners) (Phase 1a)

(b) Develop a training programme for MAW to understand how sudden unexpected infant deaths occur and their role in preventing SUDI (all partners) (Phase 1b)

(c) Provide training to upskill MAW to address modifiable SUDI risks and offer support (academic team) (Phase 1c)

(d) Foster effective multiagency working and promote SUDI prevention in vulnerable families (stakeholders) and support engagement in a community of practice using a Normalisation Process Theory approach (academic team) (Phase 1d)

We used mixed methods to evaluate the implementation of the *Eyes on the Baby* programme due to the complexities of implementation across a variety of contexts. In evaluating the initial phases of implementation our objectives were to:

(a) Assess feedback on the training and its uptake in County Durham using training completion data and post-training surveys (Phase 2a)

(b) Evaluate the implementation of *Eyes on the Baby* in County Durham from multiple perspectives including the workforce (Phase 2b) and strategic stakeholders using the Normalisation Process Theory to assess implementation progress (Phase 2c)

2.1. Phase 1a: Defining the Scope of the Multiagency Workforce. The Steering Committee determined the scope of the multiagency workforce to support SUDI prevention in County Durham informed by the policy review report [14]. There was unanimous support for taking a broad role-based approach to include the following key groups:

(a) Staff whose work takes them inside homes of vulnerable families

(b) Staff who provide help in a crisis

(c) Staff who work directly with vulnerable families in any setting

(d) Healthcare and allied professionals who encounter vulnerable families with babies

(e) Healthcare professionals who are tasked with SUDI prevention

A list of potential job roles to be included was compiled and organised into three core strands reflecting specific training needs and modes of implementation (Table 2).

2.2. Phase 1b: Engaging and Supporting the Multiagency Workforce. Training content was co-produced via iterative development of training presentations. Training videos were then recorded by the project team and uploaded to a customised online learning platform together with links to pre- and post-training surveys, post-training quizzes, resource links, and a completion certificate. Strand 1 training consisted of one 50 minute video-talk while Strand 2 and 3 training consisted of three 30 minute video-talks. Staff groups were invited to register for online individual or group training via their managers and team leaders. Where possible staff were assigned protected time to complete the training and discuss implementation within their teams. A dedicated website served as a portal to access the sign-up process for training, the online training platform, and the resources available and created for this project to support the MAW in implementing SUDI prevention, a list of which is shown in Table 3.

We used the NPT principles to foster engagement and encourage embedding of SUDI prevention into everyday work [16]. NPT is an action theory that supports the analysis of what people do to change their existing practice rather than focusing on their attitudes or what they believe. NPT principles encourage cognitive participation and coherence by supporting the development of communities of practice and encourage reflexive monitoring and supporting individual and collective sense-making [16] (Figure 1).

To support the development of a community of practice we offered online drop-in SUDI discussion forums every 6–8 weeks; the sessions were intended for staff to ask questions or discuss situations they had encountered. For the duration of the project the project team mobilised volunteer SUDI Champions to support their teams by raising awareness of SUDI prevention and the *Eyes on the Baby* training and connecting their colleagues with the SUDI forums and resources. We sent monthly *Eyes on the Baby* newsletters to all trainees containing short articles exploring SUDI risks and various MAW job-roles such as the role of drugs and alcohol in SUDI and the links between domestic abuse and SUDI.

2.3. Phase 2: Evaluation. Immediately before and after training staff completed two short surveys (Phase 2a), and in the following months were invited to complete two longer surveys about implementing SUDI prevention in practice (Phase 2b) (four surveys in total). The short pretraining survey (T1) assessed SUDI knowledge and confidence prior to training, and a post-training survey (T2) captured trainees' feedback, knowledge, and confidence after completing the course. The two identical follow-up surveys (F1 and F2) based on the NoMAD (NPT) implementation survey [17], spaced 4–8 weeks apart, assessed how SUDI prevention activities were embedded in workplaces over time. Training uptake and completion rate data were collected and summarised. All evaluation survey data were recorded anonymously. Outcomes were summarised descriptively, and pre-post knowledge and confidence ratings were compared using chi-square tests.

Table 1: Nonacademic steering committee members.

Role	Organisation
Public Health Strategic Manager	Durham County Council
Designated Dr. Safeguarding Children*	North East and North Cumbria ICB
Intensive Family Support Manager	Durham County Council
Service Manager for 0–25 Family Health	Harrogate and District NHS Foundation Trust
Director of Public Health*	Durham County Council
Associate Director of Governance	Family Health Care Group, County Durham
Specialist Midwife for Infant Feeding	County Durham and Darlington NHS Foundation Trust
Strategic Manager Children's Social Care	Durham County Council
Chief Executive	Lullaby Trust

(*Denotes co-investigator, the academic lead was PI and Steering Committee Chair).

To capture the views of those staff members and strategic leaders most closely engaged in the project, we conducted semi-structured interviews with four of fourteen SUDI champions (LC) and eight of the nine non-academic members of the Steering Committee (HB) during April and May 2023 (Phase 2c). Consent was sought verbally and in writing, all interviews were conducted online; recorded and transcribed using anonymous identifiers, and focussed (as relevant) on previous SUDI prevention experience of the interviewees, how they had supported SUDI prevention in their roles throughout the project, challenges encountered, strengths and weaknesses of the programme, and views on the future of local and national MAW SUDI prevention. Interviews lasted between 30 and 90 minutes. Interviewers (LC and HB) used descriptive themes to summarise the observations and experiences of the interviewees, cross-checking one another's transcripts and summaries [18].

3. Results

The intervention process and uptake outcomes are shown using the TiDier checklist in Figure 2.

3.1. Quantitative Results

3.1.1. Training Uptake (Phase 1). A wide range of staff ($n = 993$) encompassing 47 job roles registered themselves or were registered by a manager or team leader for *Eyes on the Baby* training. Details of the job roles, the corresponding training strand, and job category for each role are shown in Table 4. Job categories were devised by the project team to facilitate analysis and were informed by the job-clusters identified in the initial policy review [14].

Figure 3 shows that 397 staff in County Durham completed the Eyes on the Baby training between October 2022 and March 2023, the largest group belonging to Strand 2 (staff in roles that involve contact with vulnerable families on a regular basis). Of the 993 registered staff members 57% ($n = 570$) logged on to the training platform at least once, and 70% ($n = 397$) of these completed the training (gaining 80% on each quiz). Although staff assigned to Strand 1 was the fewest, they had the greatest percentage uptake with 69% (74/107) of registered staff completing the training. The overall largest group of MAW staff to register ($n = 481$) and complete the training ($n = 256$, 53%) was Strand 2, while health practitioners in Strand 3 were the least likely to complete the training (67/405, 17%). 59 individuals took part in the online SUDI forums (11 Strand 1, 34 Strand 2, and 14 Strand 3).

For Strands 1 and 2 sign-up by a Team Leader was the most successful recruitment method in terms of number of registrations and completions. However, self-sign-up was the most successful recruitment methods for Strand 3 staff completing the training. Although a large proportion of Strand 3 staff was registered by senior managers there were few completions (3.9%). All staff were encouraged to complete the training within a month of registering: average completion-time was 20 days with no strand taking more than 30 days on average.

3.1.2. Staff Knowledge and Confidence regarding SUDI Prevention (Phase 2a). *Eyes on the Baby* training was associated with an increase in the confidence and knowledge of those in the multiagency workforce. Trainees who accessed the learning platform rated their knowledge and confidence before commencing (T1, 73%, $n = 415/570$) and after completing (T2, 25% $n = 101/397$) training using a multipoint scale. The proportion of staff rating their knowledge as good or excellent in Strands 1 and 2 at T1 was 28% (88/308) and 95% (71/75) at T2 with a significant relationship between self-rated knowledge and training completion ($X^2 = 108.5$, $p < 0.0001$). Likewise, staff rating their knowledge as good or excellent in Strand 3 was 62% (60/97) at T1 and 96% (25/26) at T2 ($X^2 = 11.3$, $p < 0.001$). Self-rated confidence (somewhat or very confident) was 70% (215/308) at T1 and 97% (73/75) at T2 in Strands 1 and 2 ($X^2 = 114.7$, $p < 0.0001$), with 85% (82/97) at T1 100% (26/26) at T2 in Strand 3 ($X^2 = 30.2$, $p < 0.0001$).

3.1.3. Doing SUDI Prevention (Phase 2b). Though SUDI prevention was new to most of the Strand 1 workforce, 75% of respondents to the post-training survey (T2, $n = 101$) could see the value of engaging with *Eyes on the Baby* programme and believed that taking part in SUDI prevention was a legitimate part of their role. Domestic abuse team members were particularly positive about this. Likewise, most Strand 2 respondents ($n = 51$) felt SUDI prevention was part of their work (65%), while 87% saw the value of SUDI prevention training and believed SUDI

Table 2: Workforce training strands.

Strand	Roles	Training content	Modes of implementation
1	Staff who encounter vulnerable families occasionally as part of every-day work	SUDI risks; key safety messages; talking about bed-sharing; what to see, to say, to do	(i) Keeping an eye open for babies in unsafe sleep scenarios (ii) Mentioning sleep safety guidance to parents to check on their awareness (iii) Signposting, referring, or reporting to services as appropriate
2	Staff who provide direct support to vulnerable families	How SUDI has changed and is explained; universal messages; what to look out for; tailoring messages; planning ahead	(i) Having nonjudgemental conversations and asking "what if?" questions about unplanned scenarios (ii) Advocating on families' behalf for suitable equipment, housing, and support (iii) Referring or reporting to services as appropriate
3	Health professionals involved in routine or emergency care of vulnerable families	Universal provision and evidence; new safer sleep discussion tools; why and how guidance has changed; risk minimisation and tailored guidance; vulnerable families and SUDI; referrals and interventions	(i) Supporting families to follow safer sleep guidance by offering tailored guidance (ii) Responding to other MAW services seeking guidance and/or referral

Table 3: Resources available to multiagency workforce.

Resource	Description	Strand 1	Strand 2	Strand 3
Lullaby Trust "safer sleep for babies" quick reference card	Key safety information to give to parents	X		
UK sling consortium TICKS guidance	Information about safe baby-wearing/sling use	X		
Safer sleep checklist*	A graphic reminder of the key risks	X	X	X
Decision Tree*	A flowchart to help staff decide appropriate action	X	X	X
Lullaby Trust "safer sleep for babies" leaflet	Booklet aimed at parents		X	X
Lullaby Trust "saving babies' lives" leaflet	Booklet aimed at health professionals		X	X
Baby Sleep Info Source's infant sleep info app	App produced by Durham Infancy and Sleep Centre with bed-sharing decision tool		X	X
Change for our Children's "through the tubes" teaching tool information	Discussion tool to visualise babies' airways		X	X
Out of routine conversation prompt*	Prompts to discuss unplanned/out of routine sleep scenarios		X	X
ABM breastfeeding and bed-sharing protocol	Clinical protocol from the Academy of Breastfeeding Medicine			X
RCM safer sleep guidance	Guidance for professionals from the Royal College of Midwives			X

*Denotes original material designed for this project. All project resources can be viewed at https://www.eyesonthebaby.org.uk.

COGNITIVE PARTICIPATION	REFLEXIVE MONITORING	COHERENCE	COLLECTIVE ACTION
Relational work that is done to build and sustain a community of practice around SUDI prevention	Appraising the worth and usefulness of SUDI prevention in the context of the workplace	Individual and collective sense making work to incorporate SUDI prevention in the workforce	The operational work people do to enact SUDI prevention

Figure 1: NPT domains.

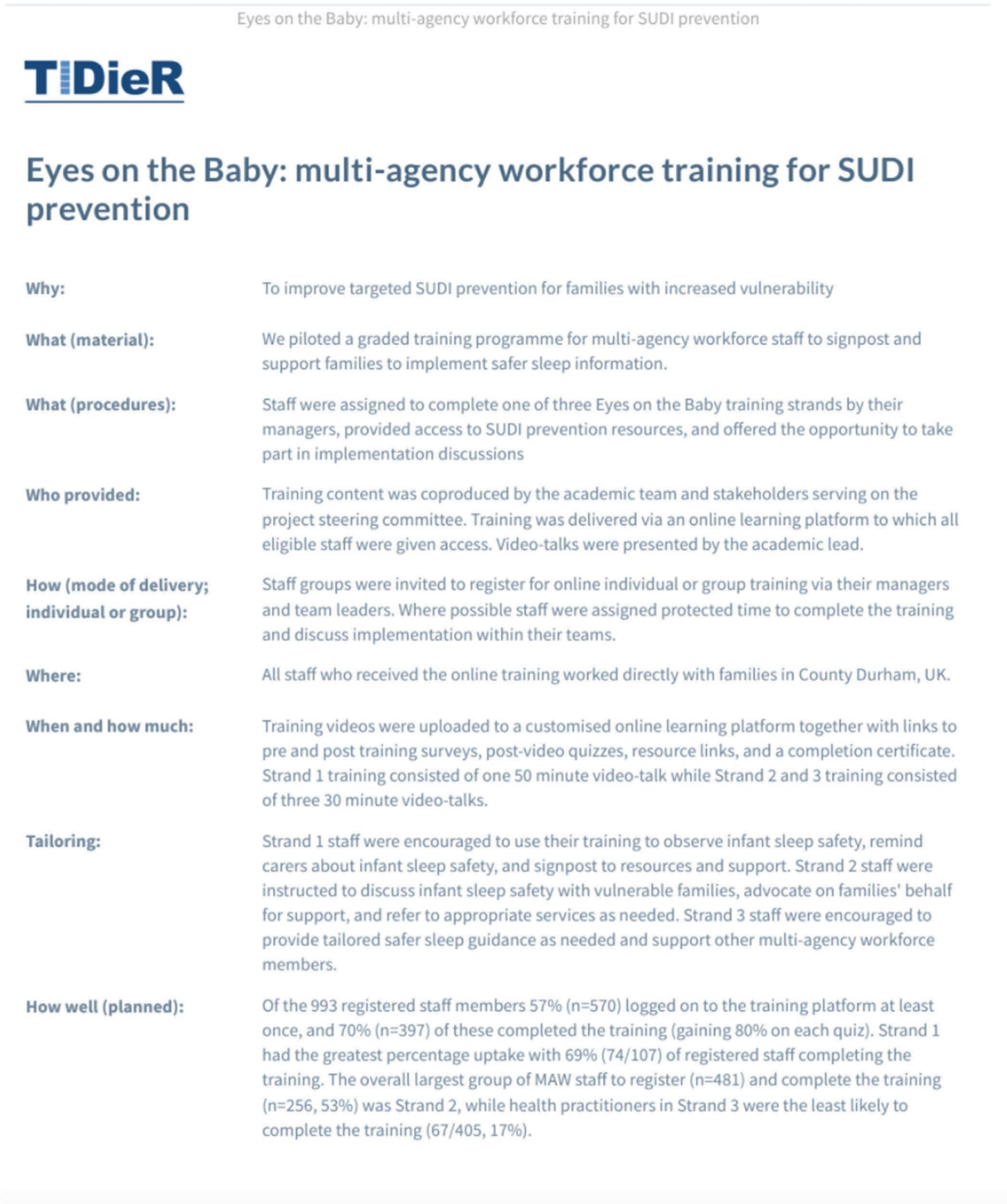

Figure 2: (TiDier checklist).

Table 4: Job roles in County Durham included in MAW for SUDI prevention.

Strand	Category	Job role
Strand 1: workforce members who access homes to provide routine services, or support in crisis situations	Public service staff/crisis support Social care (general)	Police officers, firefighters, police community support officers, paramedics, urgent treatment centre staff, youth offending officers, food bank/milk bank/baby bank staff, fire service, community support officers, probation officers Housing officers, temporary housing staff, shelter/supported housing staff, refugee services, domestic abuse teams, other strand 1
Strand 2: workforce members who provide direct support to vulnerable families	Education/care Social care (families) VCS	Foster carers/connected carers, early years/nursery staff, childminders Children's services staff, early help practitioners, one point key workers/ families first staff, family/social workers children and families social prescriber, complex key worker, floating/support worker, peer supporter (Strand 2), pharmacy staff, mental health support staff, drugs and alcohol support staff, breastfeeding support staff, Gypsy and Roma support staff Voluntary and community sector/charity services
Strand 3: health practitioners involved in routine or emergency care of pregnant and postpartum people and babies	Healthcare practitioners	Perinatal mental health, midwives and maternity care assistants, community midwives, smoking cessation services, neonatal care staff, peer supporter (Strand 3), infant feeding leads, health visitors/home visitors, paediatrician/ paediatric nurse, paediatric OTs and PTs, family health nurse/family nurse, partnership/family health practitioner, safeguarding/child protection nurse or practitioner, school nurse/children's nurse, GPs, and practice nurses

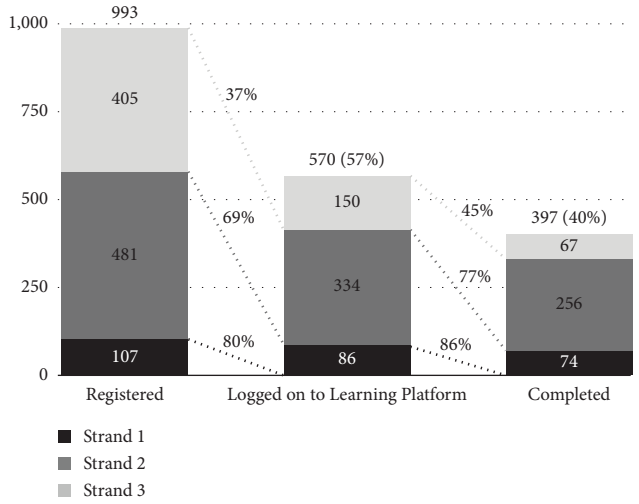

Figure 3: Proportion of staff completing training by strand.

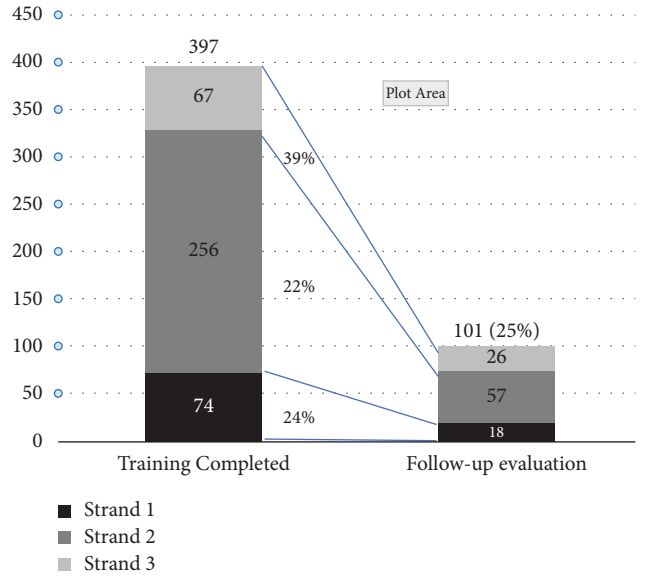

Figure 4: Proportion of staff in each training strand who completed training and follow-up evaluation.

prevention was a legitimate part of their role; 96% agreed they would continue to support SUDI prevention. 88% of participants felt they could easily integrate SUDI prevention into their existing work and valued the effect the training had on their work. Not surprisingly, 92% of Strand 3 respondents reported that SUDI prevention was currently part of their work. All participants could see the value of SUDI prevention training, agreed that SUDI prevention was a legitimate part of their role, and would continue to support SUDI prevention. 92% of Strand 3 respondents also felt that they could easily integrate SUDI prevention into their existing work, and all valued the effect the training had on their work.

3.1.4. Familiarity with SUDI: Coherence and Cognitive Participation. Of the staff members completing the training, 25% (101/397) completed the NPT follow-up surveys reflecting a completion rate of between 39% and 22% of staff in each training strand (Figure 4). The follow-up survey was issued twice, 1 month apart. F1 was completed by 40 staff, F2 by 61. As the survey was anonymous we cannot know how many, if any, staff completed it twice, however due to the small number of survey completers we combine them in Figure 4.

At completion of F1 approximately one month after training, Strand 1 participants 38% (3/8) were unsure about how the training would affect the nature of their work. By the time of F2 80% (8/10) of respondents indicated they now understood how SUDI prevention affected the nature of their work. Across all NPT statements relating to coherence and cognitive participation, Strand 1 responses improved over time as they became more familiar with their role in SUDI prevention (Figure 5). In Strand 2 both negative and positive changes in responses were observed between F1 (18 responses) and F2 (39 responses), while for Strand 3 the response proportions remained the same (often they were at 100% for F1, 14 responses) or increased for F2 (12 responses) (Figure 5).

3.1.5. Embedding Implementation: Collective Action and Reflexive Monitoring. MAW staff groups experienced different training and implementation trajectories through the project with some completing training early in the project with longer to embed SUDI prevention in their daily activities than those who were trained later. A pooled analysis of survey results at F1 and F2 includes staff at different stages in their implementation journey, so to examine the effect of time-since-training, we extracted the data from two large groups of early and late adopters to compare their outcomes post hoc. Children's Services staff completed the training at the beginning of the 6 month training phase (early adopters), while Drug and Alcohol Support Staff completed it almost 6 months later at the end of the training phase (late adopters).

A comparison of follow-up survey responses between these early and late adopters indicated a positive trend over time for 3 out of 4 of the statements relating to collective action, and all the statements relating to reflexive monitoring. For example, 66% (12/18) of respondents within Drug and Alcohol support services agreed with the statement "I can easily integrate SUDI prevention into my existing work," compared with 93% (13/14) among early adopters within Children's Services team who had been working on implementation for a longer period.

3.2. Qualitative Results (Phase 2c). Four of the fourteen SUDI Champions volunteered to be interviewed. They had supported their colleagues in similar ways such as promoting the training, making resources available, sharing updates, sourcing relevant information, and adding SUDI prevention to meeting agendas. The role was seen positively and not considered to affect workload. Champions noted that the resources provided could be distributed without redesign

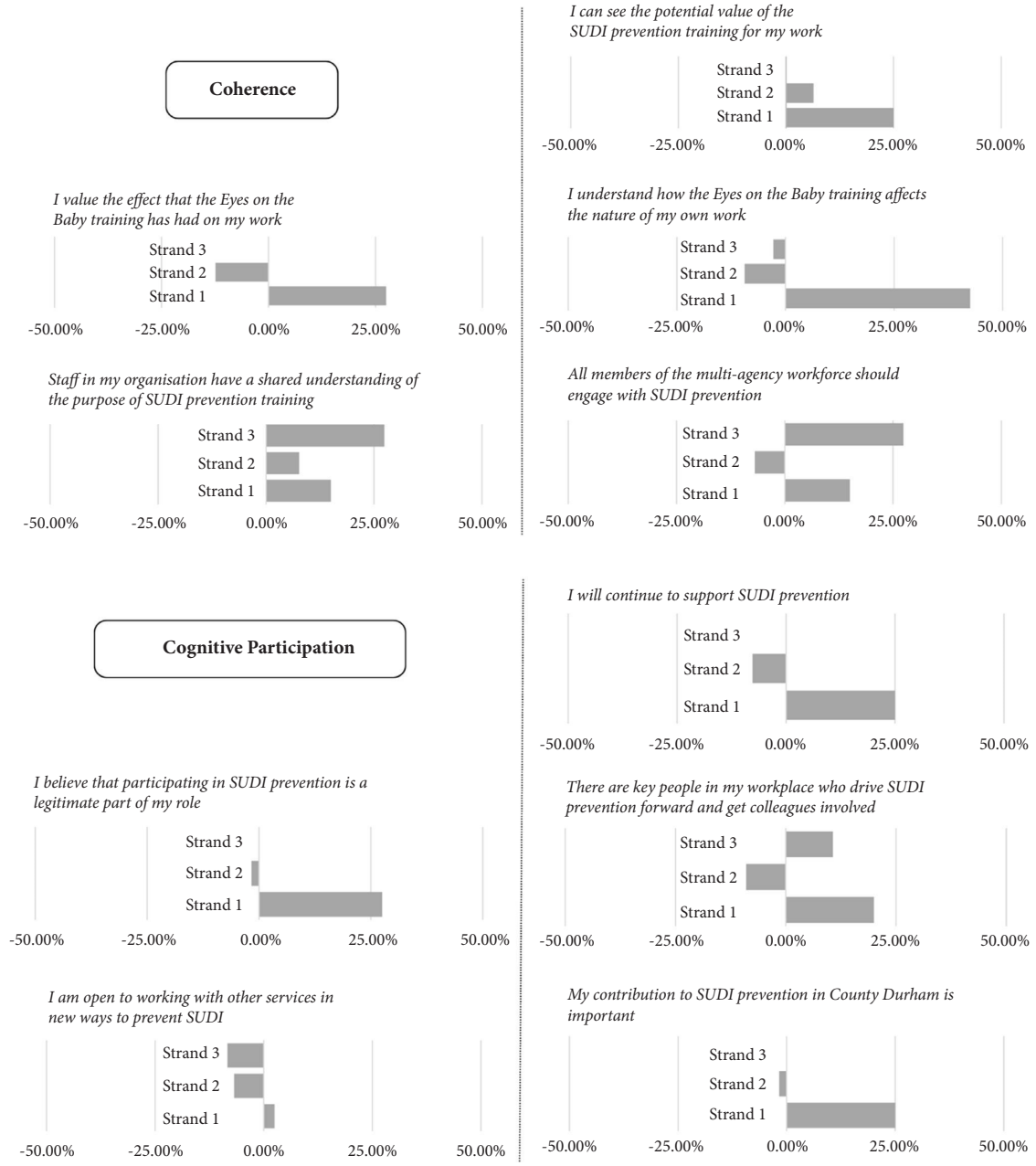

Figure 5: Change in follow-up survey responses between first and second timepoints.

indicating they are appropriate for use by different MAW teams. SUDI Champions felt buy-in and support from senior leaders was strong and champions across a range of areas were allocated time in team meetings each month to discuss SUDI prevention: "*if I needed to take any time up to do anything around the SUDI [prevention], my manager will definitely give me that time to do it.*"

The challenge of sustaining staff awareness of SUDI prevention was raised for MAW who do not regularly have pregnant mothers or babies in their caseload, exacerbated by high staff turnover and growing organisations. Embedding the SUDI prevention training within regular safeguarding training was seen as beneficial. Having the training online and it being delivered via short talks made it accessible to staff as it could be fitted into a busy schedule. "*I think if they're regularly informed and updated on things, it will refresh their memory because sometimes they don't have any unborns or babies on their caseload, so then they may forget slightly.*"

3.2.1. Steering Committee Member Interviews. All Steering Committee Members agreed to be interviewed and 8/9 was available to take part. Prior to joining the *Eyes on the Baby* project SUDI prevention was not a workplace priority for the local authority strategic managers, while it was a moderate priority for members with NHS roles and a high priority for those directly involved with child deaths; it was lower on the

agenda and considered primarily the domain of health professionals by those running family-facing council services. Those in health-facing roles felt well informed about the inequalities apparent in sudden infant deaths, however local authority strategic leads and managers had been on a steep learning trajectory with one commenting: "*This [project] has been quite an eye-opener for me—interesting and informative—as historically I have not had a lot to do with it [SUDI prevention] at all.*"

Local authority and NHS managers found their involvement to be transformative—exposing them to new ways of implementing SUDI prevention and sharpening their knowledge of infant sleep risks and vulnerable families. They felt their staff, in both health care and social care roles, had gained renewed confidence and were better equipped to have conversations about SUDI prevention because of their involvement. One stakeholder commented: "*The staff absolutely accept that it's everybody's responsibility . . . and they can see that where we have a lot of interactions with families, especially prebirth or in those first few weeks and months, they definitely think it's their responsibility to have those conversations.*"

Interviewees' reflections on the practicalities of implementing the MAW approach to SUDI prevention are described below around co-production and collaboration, initiating and sustaining change, staff responses to MAW, barriers to participation, and fostering future innovation.

3.2.2. Co-Production and Collaboration. A universal sentiment expressed by interviewees was the importance of the diversity of roles and experience reflected in the membership of the Steering Committee. This was felt to be one of the key foundations for a successful MAW project—that the stakeholders involved in driving the project worked closely with the diverse staff groups who would be recipients of the training and become engaged in SUDI prevention. There was enthusiasm at the outset to cast the MAW net widely and give everyone the opportunity to find a role for themselves in this work. This "wide net" was part of the initial brief from the local CDOP who initiated this project, to consider who were the most vulnerable families in this area, and to think about who worked with those families most closely.

Interview participants appreciated the opportunity presented by their involvement in the project to forge links across services that "*didn't exist in County Durham beforehand*," while the broad reach of SUDI prevention as being "everybody's business" resonated in key partner agencies. One stakeholder who had had been involved in the early initiation of this work reflected upon engagement with academia as part of the co-production approach noting: "*It's taken the project somewhere we hadn't expected it to go to when the initial conversations were happening in CDOP, and I see that as a very strong positive really.*" Working in collaboration with academics was a novelty for many members of the steering committee, an experience that they found to be "useful" and "enjoyable" and would like to do again.

3.2.3. Initiating and Sustaining Change. Stakeholders reflected during interviews on the changes we were asking staff to make in their work roles, and what would be needed to ensure these changes became embedded in everyday working practices. Some local authority services had made substantial progress on this by the time of these interviews, and the importance of engaging the right people early was clearly recognised. "*Like most change management, it's getting those early adopters and early implementers and engaging with senior managers.*" Within family social care and family centres interviewees reported clear examples of engagement, as both prebirth and post-birth services and early help teams had stepped quickly into the early adoption and implementation space, using the opportunity presented by the training to review all their intervention packages with targeted groups of families. "*It's really early in terms of showing that longer term impact, but we can see the conversations have changed in relation to this. We are not thinking about an add on or saying we need to think about it. We are doing it. It's already more entwined, I think.*"

3.2.4. Responses of Staff to MAW. Some family services and social care staff were surprised by the inclusion of members of the workforce whose role did not involve offering direct family support (e.g. housing officers, domestic abuse teams, paramedics). "*I think they [members of my team] were quite shocked that the training was gonna be that far reaching, but I think they could see clearly why that was really important to do.*" The uptake of Strand 1 training by paramedics, housing officers and others indicated to the stakeholders that there was definite value in involving these groups of staff in SUDI prevention work, and they could see tangible evidence of an investment from partner agencies and the wider workforce. "*The world is becoming a bit more open to the fact that we cannot leave this all to health—they don't have enough contact with the most vulnerable families—or even any families—it is becoming a bit easier to get the idea of MAW into people's minds.*"

As previously noted, some staff completed the training individually as and when they had the time, while others were allocated protected time during group sessions. Interviewees recognised that offering a range of delivery approaches meant staff who had autonomy over their workday could fit the training in around other commitments, while others benefitted from scheduled group training sessions that they were expected to attend. "*Feedback within my area of the service was that people felt that it definitely worked better during the training as a group. I saw that obviously when [project team member] came to my centre "cause that sparked quite a lot of conversation afterwards within that group of professionals.*"

3.2.5. Barriers to Participation. Interviewees reflected on the barriers they had encountered in engaging staff groups such as police and GPs that they had initially anticipated would see the value of a MAW approach to SUDI prevention. Staff turnover came up in several interviews, both in reference to

key leaders who had supported the project, and in terms of keeping SUDI prevention on the agenda in services with heavy staff workloads and high turnover. "*People sometimes have not got head space, and when they think of training, they think 'Oh God, I have not got time for any of that'*." This was a particular issue in primary care, with both health visitors and GPs feeling overstretched and lacking capacity to engage in SUDI prevention training, despite potential for these roles to have a real impact.

3.2.6. Future Commitment and Spreading Innovation. All stakeholders interviewed expressed their commitment to the future of MAW SUDI prevention, either locally in County Durham or by spreading the information about this approach regionally or nationally. "*My colleagues elsewhere [. . .] have been very interested, particularly about the multiagency aspect of it. They're the ones that have directly approached me to talk about it.*" At a local level, stakeholders were keen to see *Eyes on the Baby* continue past the end of the funded-pilot phase, with the training made available to the MAW via the Durham Safeguarding Children Partnership training website, overseen by the multiagency workforce development and learning group and implemented by the DSCP Learning Development Officer. Some interviewees felt *Eyes on the Baby* should become a mandatory course for all members of the workforce who might have contact with families with babies as part of their annual safeguarding training to ensure SUDI prevention was on everyone's radar.

It was recognised by many of the interviewees that more time was needed to embed this approach within teams in County Durham than the project funding allowed. Ongoing evaluation was felt to be needed past the end of the project to capture evidence of change in a range of settings and that SUDI prevention may drop off the MAW radar without enthusiastic and committed leadership from the local authority. On a regional or national scale several participants articulated the need to spread the word about MAW SUDI prevention, and to make *Eyes on the Baby* available to other local authorities or to scale it up as a national programme. "*I definitely think it's a national thing. It's not something that's isolated to Durham in relation to this study, is it? . . .. It's wherever there's clusters of deprivation you've got this issue. And that is across the board.*"

4. Discussion

Since the recommendation of the Child Safeguarding Practice Review Panel report [4] that SUDI prevention among vulnerable families be brought under the multiagency safeguarding umbrella, only a handful of local authorities have attempted to implement a comprehensive MAW approach for SUDI prevention [14]. None have publicly documented and evaluated the process of implementation to date; this report therefore documents how the *Eyes on the Baby* project team co-produced, piloted, and undertook an initial evaluation of a MAW training and implementation programme in County Durham and shares the learning from this process.

To focus as many eyes on vulnerable babies as possible, we collaboratively and deliberately produced SUDI prevention training and implementation tools for a wide range of multiagency staff. These were designed to help staff to offer resources, discussion, and support around SUDI prevention to vulnerable families, over and above the universal education provided by midwives and health visitors. Staff in family-facing services (Strand 2) enthusiastically embraced the opportunity for training and to implement this into practice. Interviews with SUDI champions and strategic leaders emphasised a picture of commitment, collective working, and enthusiasm for SUDI prevention work among staff, although a poor response to the follow-up evaluation surveys makes it difficult to assess how far this extended.

For staff with ad-hoc contact with vulnerable families (Strand 1), implementing SUDI prevention was a new ask, although some had familiarity with MAW from previous initiatives. While some key teams did not engage in this project (notably police due to the short timescales required by the project funding which could not be accommodated in the police training cycle) others such as Housing seized the opportunity. Despite some staff being dubious about their potential to impact SUDI, the majority of respondents to the follow-up evaluation showed commitment and engagement and evaluated their involvement positively, although the number of Strand 1 staff responding to the evaluation was disappointing. Future iterations of this or similar projects will engage stakeholders from this strand of the workforce on the Steering Committee from the outset to facilitate buy-in to all project components.

Despite large numbers of health practitioners (Strand 3) being signed up for the training programme by strategic managers, only a small proportion took up the offer due to high workloads and staff shortages. Those health practitioners who engaged with the evaluation embraced MAW SUDI prevention. In future iterations of the project, it will be important to ensure better communications with midwives, health visitors, and other health practitioners via their service leads to facilitate training and evaluation uptake.

Strengths of this project included the graded training programme which enabled us to engage a wide range of multiagency staff with SUDI prevention information tailored to their job role, and the use of NPT to capture how the implementation process unfolded over time for staff, allowing us to identify what successful implementation looked like, and how it was produced. The three formal propositions of NPT are that:

(a) Interventions become normalized and embedded as people do the work (both individually and collectively) to enact them.

(b) This work is done through four mechanisms (coherence; cognitive participation; collective action;

reflexive monitoring) which promote or inhibit implementation.

(c) Ongoing implementation and integration require people to be continuously invested in the intervention [19].

MAW staff in all three training strands who responded to the implementation surveys showed an understanding of the role we were asking them to perform (coherence) and of thinking about the value of SUDI prevention (reflexive monitoring), while only the staff groups that completed the training early and were able to fully embed SUDI prevention in their work showed evidence of enacting SUDI prevention (collective action) and developing a SUDI community of practice (cognitive participation). This highlights a key limitation of this project in the short time period available for late adopters to implement the training and embed SUDI prevention in their work before receiving the follow-up evaluation surveys. For some teams, these follow-up surveys came too soon after training and were not spaced sufficiently far apart, illustrated by the low completion rates of the training evaluation and follow-up surveys. We are also unable to report on whether individuals completed one or both follow-up surveys due to anonymous completion.

5. Conclusion

As a co-produced research project, *Eyes on the Baby* secured buy-in from a wide range of professionals in social care, health care, safeguarding, and academia who worked together to devise a tailored SUDI programme that suited the needs of the local context. Steering Committee members enthusiastically engaged in the project, using their status and connections to promote *Eyes on the Baby* to their colleagues and staff and setting expectations that the MAW over whom they had influence would engage with training and implementation. The use of NPT allowed us to track and understand the initial stages of the implementation process, although poor engagement with follow-up surveys limits the outcomes. Further work is also needed to fully embed MAW for SUDI prevention in County Durham and establish sustainability. This work is now being taken forward by the Durham Safeguarding Children Partnership to ensure ongoing training provision and evaluation, and the *Eyes on the Baby* project continues to be developed and refined in collaboration with additional local authorities in north-east England.

Data Availability

The data used to support the findings of this study are available from the corresponding author upon reasonable request.

Additional Points

What Is Known about This Topic. (i) Sudden Unexpected Infant Deaths (SUDI) in UK cluster in the most vulnerable families. (ii) It is recommended that local authorities (LAs) implement multiagency SUDI prevention to reach these families. (iii) There is little consistency across LAs or guidance on best practice. *What This Paper Adds*. (i) Academic-stakeholder co-production was an effective approach for designing and implementing a multiagency SUDI prevention programme. (ii) Multiagency staff in a wide array of non-health facing roles responded positively to incorporating SUDI prevention into their roles. (iii) Further work is needed to evaluate how to sustain multiagency engagement and gain feedback from service users.

Disclosure

The views expressed are those of the authors and not necessarily those of the NIHR or the Department of Health and Social Care.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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