British Association of Perinatal Medicine and Neonatal Society

711 BABY IT'S COLD OUTSIDE! REDUCING ADMISSION HYPOTHERMIA FOR NEWBORN BABIES QIP

Hannah Devlin, Danica Shinee Hapuarachchi, Jesus Fernandez, Louisa Cantwell, Eleanor Hulse. *West Middlesex University Hospital*

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Background Newborn babies are regularly admitted to neonatal units hypothermic (<36.5°C). Hypothermia is associated with an increased risk of morbidity and mortality. Baseline data from January-June 2019 at our unit showed that 16% of premature (<36/40 gestation) and 6% of term (≥36/40 gestation) neonates were admitted hypothermic.

Objectives We initiated a QIP to reduce the number of hypothermic admissions in November 2019. Our primary aim was to reduce the number of premature babies admitted with hypothermia from 16% to 5% by the end May 2020. Our secondary aim was to reduce term hypothermic admissions from 6% to <5%.

Methods We included all premature and term babies admitted to SCBU for their first episode of care. We excluded all second episodes and external place of delivery.

Our outcome measure was the first axillary temperature on admission recorded on BadgerNet. Our balancing measure was to monitor the number of hyperthermic (≥37.5°C) admissions.

We ran a series of PDSA cycles over a 6-month period from November 2019-May 2020 (table 1).

Results There was a reduction in hypothermic admissions for all premature babies from 15% to 12% (table 2). When sub-categorised into very preterm (<32/40) we noted a marked reduction from 24% to 11%. We reduced hypothermic admission for term babies from 6% to 4%. Overall, we did not see an increase in hyperthermic admissions.

Conclusions Our QIP has led to a reduction in the number of hypothermic admissions for term and preterm infants, with the most notable decrease for very preterm infants.

Abstract 711 Table 1 PDSA cycles tested from November 2019–May 2020

PDSA Test	Date	Plan	Do	Study	Act
1	03/11/19	Thermal care education	Targeted teaching session to junior doctors	Improvement- likely transient	Again - at new starters induction
2	17/01/20	Reduce evaporation as form of heat loss using hats	Appropriately sized hats on resuscitaire for premature babies	No improvement- lack of appropriately sized hats readily available	Adapt- find a supply of hats
3	03/03/20	Ensure supply of appropriately sized hats	Red Hats initiative. Social media campaign for supply of knitted red hats. MDT collaboration.	Improvement	Continue

Abstract 711 Table 2 Admission temperatures before and after PDSA cycle interventions

Gestational age	Data set	Total number of eligible babies	Temperature on admission:			Average percentage of hypothermic admissions
			<36.5°C	36.5–37.5 °C	>37.5 °C	
All preterm (<36/40)	Baseline data	102	16 (16%)	80 (78%)	6 (6%)	15%
	PDSA 1	28	3 (11%)	25 (89%)	0 (0%)	11%
	PDSA 2	13	2 (15%)	10 (77%)	1 (8%)	15%
	PDSA 3	32	4 (13%)	26 (81%)	2 (6%)	12%
	Cumulative PDSA	73	9 (12%)	61 (84%)	3 (4%)	12%
Very preterm (<32/40)	Baseline data	21	5 (24%)	13 (62%)	3 (14%)	24%
	Cumulative PDSA	9	1 (11%)	6 (67%)	2 (22%)	11%
Term (≥36/40)	Baseline data	219	13 (6%)	196 (89%)	10 (5%)	6%
	PDSA 1	48	3 (6%)	44 (92%)	1 (2%)	6%
	PDSA 2	22	1 (5%)	20 (91%)	1 (5%)	5%
	PDSA 3	88	2 (2%)	82 (93%)	4 (5%)	2%
	Cumulative PDSA	158	6 (4%)	146 (92%)	6 (4%)	4%

Quality Improvement and Patient Safety

715 THE DEVELOPMENT OF A FAMILY LIAISON TEAM TO IMPROVE COMMUNICATION BETWEEN ICU PATIENTS AND THEIR FAMILIES DURING THE COVID-19 PANDEMIC

¹Susie Gabbie, ²Karnika Raja, ²Santanu Maity. ¹Royal Free; ²Royal Free Hospital

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Background High quality family centred care is an integral part of how sick patients are managed in modern healthcare systems, and remains imperative in times of crisis. However in the 2020 COVID-19 pandemic the necessity of isolation and social distancing prevented families accessing the support they usually would when a relative is on ICU, exacerbating the family's worries and feelings of fear about their loved one.

Additionally, in order to increase capacity 4 fold, ICU teams were not able to prioritise communication with families due to clinical pressures.

Objectives Paediatricians with pre-existing transferable skills developed and embedded a communication strategy within ICU for the duration of the COVID-19 surge.

The aim was for all families to be updated at least once daily and offered the option of using video links to speak to their relatives.

Methods A proposal was agreed with the ICU matrons. With their approval a team of acute and community paediatricians was assembled.

QI methodology was used and 4 PDSA cycles recorded.

Results PDSA cycle 1:

3 paediatricians immersed themselves into 3 different clinical subsections of ICU.

Ward rounds were attended following which families were phoned with updates. Difficulties for the team included a lack of understanding about a new disease, unfamiliarity in looking after adult patients. Communication with families whilst wearing full PPE was challenging. The team undertook a daily debrief.

PDSA cycle 2:

4–5 paediatricians attended daily, in blocks of at least 3 days in a row, which allowed for continuity and comprehensive cover of the ICU patients. A proforma was designed to standardise what information was helpful to record on the ward round based on common recurring questions.

PDSA cycle 3:

A trial of a video-link virtual visit was conducted in 1 patient per clinical area. Patient feedback was recorded.

PDSA cycle 4:

The use of video links was expanded. Medical students were trained to facilitate video calls.

Numbers of incoming family calls to ICU were monitored.

Records were kept as part of a communication daily sheet within the ICU notes.

Conclusions Paediatricians and other health professionals have transferable skills which enable them to work in ICU settings

The project was successful due to a combination of clinical need, the feeling of 'all being in it together' and building joint resilience when faced with working in unfamiliar environments. Lasting collaborations between colleagues remain.

Keeping the team small at the start of the project enabled us to develop proformas, anticipate components of successful phone calls and standardise them accordingly.

Medical students were invaluable in setting up and facilitating video calls to families. They were able to schedule shift timings so that calls could be undertaken at a wider range of points in the day.

As Covid subsides, the regular calls, video links and holistic thinking about families has been spotlighted within ICU and plans to maintain the service are being developed.

It is possible to set up a Family Liaison Team in a short space of time, and would be replicable should a further COVID surge arise.

British Association of Paediatricians in Audiology

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THE IMPACT OF COVID-19 ON THE ENGLISH NEWBORN HEARING SCREENING PROGRAMME – MINIMISING DELAYS IN THE IDENTIFICATION OF PERMANENT CHILDHOOD HEARING IMPAIRMENT

Helen Lewis-Parmar, Jane Hibbert, Julie Tucker, Michael Wilding, Adam Bruderer. *Public Health UK*

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Background The newborn hearing screening programme (NHSP) in England was impacted by the COVID-19 pandemic as screening and audiology services initially stopped outpatients, some parents declined or delayed screening and services struggled to manage capacity with reduced staffing.

To monitor the impact Public Health England (PHE) produced weekly data reports. A modelling tool was developed for providers to identify babies still awaiting screening or audiological assessment using the national IT system, SMAR-T4Hearing (S4H) and audiology data. This information was used to track screening completion and to support restoration of hearing screening prioritising babies with the greatest chance of permanent childhood hearing impairment (PCHI).

Objectives Development of a modelling tool to

- provide assurance of screening pathway completion,
- map additional audiology capacity required for babies deferred from screening and
- prioritise babies that need to be seen first on the basis of risk to minimise delays in the diagnosis of PCHI

Methods Weekly data reports extracted from S4H highlighting services with less than 90% coverage and more than 40% of screen referrals awaiting audiology to support commissioner assurance of screening and audiological capacity.

Development of a modelling tool for use by screening providers and audiology services

Results The programme saw a significant reduction in the number of babies with a completed screen outcome, a slight rise in the number referred to audiology and an increasing number of babies awaiting diagnostic assessment.

1. Coverage

Week on week coverage for April 2020 – end of March 2021 compared to April 2019 – March 2020 These data describe an initial drop in coverage at the start of the pandemic from 98.8% to 76.1% with return to near expected levels of coverage over time. There remain more babies that did not have hearing screening compared to the year before.

2. Providers with <90% coverage, >40% screening referrals awaiting audiology

Tracking of progress by highlighting services meeting these criteria in a national summary report for screening commissioners supported by detailed metrics for each provider.

3. Comparison of diagnosis of permanent childhood hearing impairment

The number of unilateral and bilateral cases of permanent childhood hearing impairment diagnosed within the screening programme in 2020/21 is compared to 2019/20 tracking babies deferred for behavioural testing in audiology at the age 7–9 months.

Conclusions The COVID-19 pandemic initially impacted the coverage for the newborn screening programme. Coverage has improved over time but there remains a proportion of babies that were not offered initial screening or deferred screening until audiological assessment at 7–9 months of age. These babies are now reaching the age to be seen in audiology. Weekly reporting and use of the modelling tool to support screening and audiology capacity mapping has provided assurance to screening commissioners that the babies at greatest risk have been prioritised. Final full year figures will estimate the potential number of delayed diagnoses of permanent childhood hearing impairment in 2020/21. Paediatric services need to be aware of the impact of COVID-19