The Thirlwall Inquiry

Neonatal Staff Survey

Date: May 2024

Picker

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- Empower those working in health and social care to improve experiences by effectively measuring, and acting upon, people's feedback.

Published by and available from:

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Registered Charity in Scotland: SC045048

Company Limited by Registered Guarantee No 3908160

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Contents

Background

The Thirlwall Inquiry has been set up to examine events at the Countess of Chester Hospital and their implications following the trial, and subsequent convictions, of former neonatal nurse Lucy Letby for the murder and attempted murder of babies at the hospital.

The Inquiry's Terms of Reference cover three broad areas of investigation. These include examining the effectiveness of both NHS management and governance structures and processes and of external scrutiny including professional regulation in keeping babies in hospital safe and well looked after. The Inquiry will consider what, if any, changes are necessary.

This section of the Inquiry includes a consideration of NHS culture, which includes gathering information from NHS trusts to build an understanding of the reality of how neonatal services work.

To further the Inquiry's work, and as referenced in the Chair's opening statement, the Inquiry appointed Picker, a health and care research charity, to administer a survey to midwives, doctors, nurses, and managers in hospitals with neonatal services. The survey aimed to collect views on the culture within neonatal units across England.

Key findings summary

Across all trusts, 32,121 staff were invited to take part in a survey measuring culture and relationships in NHS neonatal units. Nearly 7,500 staff working in or with NHS neonatal units in England provided responses resulting in an overall response rate of 24% (lower than the 48% who responded to the 2023 NHS Staff survey). Generalised claims about what constitutes an 'acceptable' or 'good' survey response rate are not advised as higher response rates cannot automatically be assumed to imply a more engaged workforce. At the overall level, the number of respondents for this survey results in a margin of error below 1% which means it is large enough to yield meaningful results.

Respondent profile summary:

- 80.8% of respondents said that they were directly responsible for giving care to patients (nurses, doctors, consultants, or midwives). A further 8.2% were in management roles and 11.1% described their role as 'other'.
- Almost a quarter of the respondent sample had been with their NHS trust long-term: 25.9% had been at their trust for over 15 years.
- The majority of nurses (93.4%), doctors (84.5%) and consultants (84.0%) said that they had worked regularly on the neonatal ward in the preceding six months. By contrast, the majority of midwives – 95.3% - had not worked any shifts on a neonatal ward in the previous six months.

Key findings:

- Over three-quarters (77.6%) of staff agreed that the culture of their trust's neonatal unit was good and a similar proportion felt that the culture encouraged open and frank discussions when something went wrong at the unit (76.5%). Midwives were the least likely group to agree with this, however (66.9%, compared to 87.9% of consultants, 86.0% of managers, 84.3% of senior managers and 84.2% of doctors).
- Senior managers viewed all their cross-working relationships far more positively than staff from other groups did.
- Managers viewed their working relationships with nurses and doctors far more positively than nurses or doctors did.
- Of staff that deliver care to babies, midwives were the least likely to report a positive relationship with other staff groups, whereas consultants were the most likely.
- Midwives' reported experiences working with nurses (77.8% who said the working relationship was good) and doctors (74.8%) far exceeded those groups' opinions of their own working relationships with midwives (nurses 54.6% and doctors 59.0%).

- Respondents working in ‘other’ roles reported more positive working relationships with nurses, doctors and consultants compared to midwives, managers, and particularly senior managers. Respondents who identified as working in ‘other’ roles included Advanced Neonatal Nurse Practitioners, Nursery Nurses, Healthcare assistants, Ward Clerks, Admin and Matrons.

Methodology

Questionnaire development

The questionnaire was designed by the Thirlwall Inquiry and reviewed by Picker. The questionnaire contained screener questions followed by three core questions and a set of questions specific to each job role. All the questions aimed to generate insight into the working relationships within neonatal units. At the end of the survey, respondents had the option to provide any additional comments about their experience and share their contact details with the Inquiry.

A copy of the questionnaire can be found in Appendix A1.

Sampling method and eligibility

The group of individuals that the Inquiry were looking to ask the survey questions to (the sample), were identified by conducting a census of staff in selected roles and working at least partly in neonatal services. The eligible population for the survey was defined as including all staff working in (or in connection to) neonatal services on the 1st February 2024 and employed in one of the occupational groups listed below. This included any bank staff who had been paid for any work within the Trust’s neonatal services within the last 6 months.

- Nurse
- Midwife
- Doctor
- Consultant
- Managers
- Senior managers

If in doubt about whether individuals should be included, workforce leads were encouraged to include them on the staff list.

The full eligibility criteria is outlined within the sampling handbook in Appendix B1.

Sampling process

The Inquiry identified 121 NHS trusts in England as having neonatal units. This list was obtained by the Inquiry from NHS England, initially in October 2023, and contained the Trusts in England that NHSE recognised as commissioned providers of neonatal critical care services (whether that be intensive care, high dependency or special care). Trusts that are children's hospitals with surgical units that perform neonatal surgery were also included at a later date.

To obtain a list of eligible staff from each trust, Picker required contact details of the workforce leads. For permission to access these details, the Inquiry contacted NHS England. Meanwhile, in February 2024, Picker initially reached out to 51 trusts for which they held contact details. Whilst awaiting approval from NHS England, the Inquiry reached out to all non-clinical directors to inform them of the upcoming survey. For the trusts where Picker did not hold contact details, this mailing requested that workforce leads contact Picker.

Later in February 2024, Picker sent out the data-sharing agreement to all trusts that had contact details assigned. This was shortly followed by a mailing which included the sampling handbook. Once NHSE approved the sharing of contact details, any remaining trusts were sent the data-sharing agreement and the sampling handbook. The original deadline for sample files to be uploaded was Wednesday 28th February, however, this was extended by a week to 5pm on Wednesday 6th March.

Overall, Picker received files containing a list of eligible staff from 118 of the 121 identified NHS trusts.

Survey Fieldwork

The survey was conducted online using a questionnaire available via individual links. Invitations containing unique survey links were sent by e-mail to each of the 32,121 selected members of staff.

Invitations were sent out in batches depending on when the trust sample file was received. A trust-level view of the fieldwork can be found in Appendix C1.

The survey was available online between 4th March 2024 and Monday 8th April 2024. Staff selected for the survey received up to six reminder e-mails across the five-week fieldwork period.

Questionnaire routing

To ensure the participants were eligible, a set of screener questions were added at the start of the survey. 765 individuals who do not work in or in connection with a neonatal unit were screened out. 449 respondents who self-selected as a nurse, doctor or consultant and stated they had not worked any shifts on a neonatal unit over the last six months were also

screened out (total of 1,214). This was perhaps a consequence of the sampling instructions that encouraged the inclusion of individuals where there was any doubt regarding their eligibility.

Following feedback from respondents, on the 19th of March the following response option was added to Q2b to prevent eligible respondents from being screened out 'My shifts are not based on a neonatal unit but I work on a neonatal unit regularly'.

To improve respondent experience, survey routing was implemented. This meant that survey respondents were only shown questions relevant to their job role and skipped other sections. For example, only respondents who indicated they were midwives were shown the question 'Working relationships between midwives in the neonatal unit are good.'

Data cleaning and validation

When the survey closed, the raw data was analysed and responses that did not meet the inclusion criteria were removed. Criteria for inclusion involved at least 1 completed question from Q3 to Q13 of the survey.

When the survey closed there were 9,107 responses, and five duplicates were removed. 1,605 responses did not meet the inclusion criteria and were also removed from the dataset. This 1,605 included the 1,214 responses that were screened out, in addition to 391 responses that did not complete at least 1 question from Q3 to Q13 of the survey.

The number of included responses is 7,497. The final adjusted response rate (excluding staff found to be ineligible) was 24.2%.

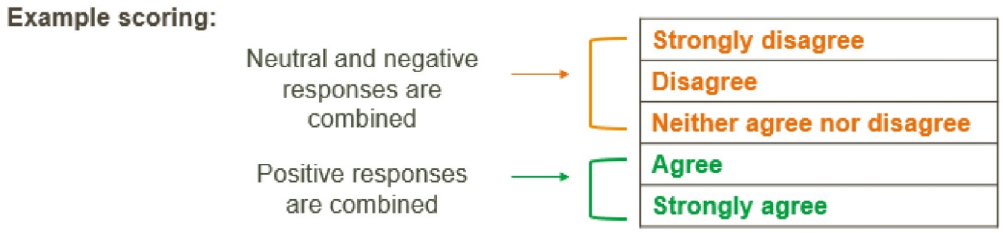
Suppression

To protect identity and reduce the risk of identifying individuals, data for groups of less than 11 have been suppressed. In this context suppression means excluding these groups from the report. This threshold is applied at an individual question level across all results breakdowns. Consequently, throughout, any group(s) that fall below 11 are not be displayed. This is standard practice for larger surveys and is consistent with the NHS staff survey methodology.

Data presentation

We use 'positive scores' as a summary measure for the results of this survey. Positive scores show the percentage of respondents who gave a favourable response to applicable questions (Figure 1). The scores remove any 'don't know' answers prior to calculating percentages. Not all questions can have a positive score; exceptions include demographic information such as length of service.

Figure 1. Example of creating a positive score.



Throughout this report, percentages have been rounded to the nearest 1 decimal place. This means that sometimes, the total for a single-response question can be just below or above 100.0%.

Respondent profile

Nearly all respondents (98%) were trust employees, in addition to 1% bank staff and 1% trust employees on secondments. Out of the staff invited to take part in the survey, only 5% indicated that the staff member was a bank worker. This, combined with potentially fewer shifts and limited access to their work email account, will have impacted the response figures for bank workers. It is not possible to validate whether this proportion of bank workers is representative due to the absence of a central register of staff involved in neonatal care. Table 1, below, shows the response profile by staff group. Note that trusts were asked to submit a list of staff who would fall into one of the following occupational groups: midwife, nurse, doctor, consultant, manager or senior manager.

The information below represents respondents' self-reported occupational group, including 11.1% who recorded themselves as 'other'. The 'other' group contained a range of clinical and non-clinical roles. Nurses made up the largest staff group, representing 41.2% of the respondent sample, with midwives representing a further fifth (20.1%). Managers and senior managers together comprised 8.2% of the respondent sample.

Table 1: Respondent sample by occupational group

Occupational group	Number (n=)	Percentage (%)
Midwife	1,506	20.1%
Nurse	3,086	41.2%
Doctor	696	9.3%
Consultant	767	10.2%
Manager	245	3.3%
Senior Manager	366	4.9%
Other	831	11.1%
Total responses	**7,497**	**100%**

Base: All respondents; n=7,497

Table 2 below shows the number of staff invited to take part in the survey. These numbers are based on the electronic staff record job roles listed in the sample files provided. The percentage of respondents per occupational group shown in Table 1 is reasonably consistent with the distribution of staff invited across the occupational groups in Table 2.

There are some notable differences when comparing the response sample to the number of staff invited. Namely, a higher proportion of nurses are included in the response sample and a lower proportion of midwives. The proportion of senior managers in the response sample is marginally less and the proportion of 'other' is marginally more.

Table 2 also shows the response rate by occupational group. Whilst 47% of managers responded, only 9% of senior managers responded.

Table 2: Educated estimation of staff invited and response rate by occupational group

Occupational group	Number (n=)	Percentage (%)	Response rate (%)
Midwife	9,607	30%	16%
Nurse	9,563	30%	32%
Doctor	3,532	11%	20%
Consultant	2,949	9%	26%
Manager	516	2%	47%
Senior Manager	3,963	12%	9%
Other	1,991	6%	42%
Total responses	**32,121**	**100%**	**24%**

Table 3, below, shows the regional distribution of respondents. Respondents were spread across all regions with the largest proportion (18.4%) of respondents from the North East and Yorkshire commissioning region. The East of England, North West and the South West had the lowest proportion (11.4, 11.6%, 11.0%) of respondents. This demonstrates a reasonably balanced distribution across each region.

Table 3: Respondent sample by commissioning region

Region	Number (n=)	Percentage (%)
East of England	851	11.4%
London	1,182	15.8%
Midlands	1,278	17.0%
North East and Yorkshire	1,381	18.4%
North West	868	11.6%
South East	1,109	14.8%
South West	828	11.0%
Total responses	**7,497**	**100%**

Base: All respondents; n=7,497

Table 4, below, shows respondents' reported length of service. Over a quarter (25.9%) of respondents stated that they had been with their trust for more than 15 years. Only 11.2% said they had been employed at the trust for less than a year.

Table 4: Respondent sample by length of service

Length of service	Number (n=)	Percentage (%)
Less than 1 year	842	11.2%
1-2 years	1,111	14.8%
3-5 years	1,246	16.6%
6-10 years	1,394	18.6%
11-15 years	957	12.8%
More than 15 years	1,940	25.9%
Total responses	**7,490**	**100%**

Base: All respondents who gave a response; n=7,490

Respondents were asked about the number of times in the previous six months that they had worked on a neonatal unit for their shift – Table 5 below. Over nine in ten (93.4%) nurses reported ten or more shifts, with similar proportions of doctors (84.5%) and consultants (84.0%) who said the same. Conversely, 95.3% of midwives said that they had not completed any shifts on a neonatal ward at all in the preceding six months.

Table 5: Number of shifts completed on neonatal unit in last six months – by total and occupational group

Number of shifts completed	Total (n=6,884)	Midwife (n=1,506)	Nurse (n=3,084)	Doctor (n=696)	Consultant (n=767)	Other role (n=831)
None	24.0%	95.3%	0.0%	0.0%	0.0%	26.2%
1 – 5	2.7%	1.3%	2.2%	5.7%	3.7%	4.2%
6 – 10	2.1%	0.1%	1.9%	5.3%	4.8%	1.2%
More than 10	67.8%	1.9%	93.4%	84.5%	84.0%	63.2%
My shifts are not based on a neonatal unit but I work on a neonatal unit regularly	3.4%	1.5%	2.5%	4.5%	7.6%	5.2%

Base: All respondents who gave a response; n=6,884

Results

Respondents were asked three questions relating to the overall culture at their trust, indicating their agreement on a five-point scale (strongly disagree; disagree; neither agree nor disagree; agree; strongly agree), plus a 'don't know' option. Results showing the positive scores overall and by occupational group are presented in Table 6 below.

Whilst 77.6% of staff believed that the culture of the neonatal unit was good, only 20.6% reported that improvement was not necessary. This is reflected in comments such as "*I think there is always room for improvement in culture but I do think our unit has a flat hierarchy and a good, open culture*."

Consultants (86.8%) and doctors (84.9%) were more likely than other occupational groups (particularly nurses, 75.0%, midwives, 75.1%, and those in other roles, 75.3%) to state that the working culture of the neonatal unit was good. Nurses (16.0%) were least likely to report that improvement was not necessary, compared to consultants (29.6%), doctors (24.9%), and midwives (26.3%).

Over three-quarters of staff (76.5%) agreed that the culture encouraged open and frank discussions when something goes wrong at the neonatal unit. Comments such as "*We have an open culture to speak up and support processes to enable this*" support this finding. Midwives and nurses were the least likely of all occupational groups to agree with this statement (66.9% and 73.8% respectively), compared to 87.9% of consultants, 86.0% of managers, 84.3% of senior managers, and 84.2% of doctors).

Table 6: Overall culture – positive scores by total and occupational group

Occupational group	Total (n≥7,475[1])	Midwife (n≥1,503)	Nurse (n≥3,073)	Doctor (n≥694)	Consultant (n≥766)	Manager (n=245)	Senior Manager (n=366)	Other role (n≥827)
The culture of the neonatal unit at the Trust is good.	77.6%	75.1%	75.0%	84.9%	86.8%	79.3%	78.2%	75.3%
Improvement in the culture of the neonatal unit is not necessary.	20.6%	26.3%	16.0%	24.9%	29.6%	19.0%	22.1%	17.8%
The culture encourages open and frank discussions when something goes wrong at the neonatal unit.	76.5%	66.9%	73.8%	84.2%	87.9%	86.0%	84.3%	76.2%

[1] Where the number of responses varied for the questions in this table, the lowest number of respondents for any single question is presented.

Base: All respondents who gave a response excluding Don't Know

Staff within each occupational group were asked their opinion of the working relationships within their own occupational group, and between their own and other groups. Results are presented in Table 7 below.

In terms of working relationships within occupational group, results show that doctors were the most positive about the working dynamic amongst doctors, with 95.0% who said this was good. Senior managers reported a similarly positive experience with 92.3% who said the relationships between senior managers were good. Midwives were least likely to report a good working relationship with other midwives, with just over three-quarters (78.4%) who said this was the case.

The results flagged several areas of note in terms of staff cross-working relationships (with these highlighted in bold in the table below), specifically:

- Senior managers viewed their working relationships with all other occupational groups far more positively than those other groups did:
    - Just 61.2% of midwives said that relationships between midwives and senior managers are good, contrasted with 83.5% of senior managers who reported this.
    - Only half of all nurses – 49.7% - felt that working relationships between nurses and senior managers are good versus 87.5% of senior managers who believed this.
    - Likewise, doctors and senior managers viewed their working relationships quite differently, with just 56.7% of doctors but 82.0% of senior managers who reported a good relationship.
    - Two-thirds (66.3%) of consultants felt that working relationships between consultants and senior managers are good compared to a far higher proportion - 82.1% - of senior managers who felt the same.
    - Just over three-quarters of managers – 76.2% - said that relationships between managers and senior managers are good contrasted with 91.9% of senior managers who reported this.

The comments provided support the findings. For example, "*Senior managers need to be more supportive of those working on the shop floor*" and "*Senior managers do not appear to act on concerns raised to them*".

- Managers, too, perceived their working relationships with nurses and doctors far more favourably than those groups did:
- Only 64.9% of nurses said that relationships between nurses and managers are good compared to 82.6% of managers who reported this.
- Doctors were less positive about cross-working between doctors and managers than managers were – 65.4% of doctors and 87.4% of managers viewed these relationships as good.

- 82.9% of senior managers viewed the relationship between the Board and their own occupational group as good.
- Of the staff groups that are directly responsible for delivering patient care – nurses, doctors, consultants or midwives – midwives were the least likely group to report a good working relationship with other medical professionals, and consultants, most likely.
- 77.8% of midwives felt that working relationships between midwives and nurses are good, compared to just 54.6% of nurses who felt the same way.
- 74.8% of midwives felt that interactions between midwives and doctors are good but only 59.0% of doctors said the same.

Table 7: Working relationships – positive scores by occupational group
Read by column e.g., asked of midwives, 'Working relationships between midwives and nurses in the neonatal unit are good' = 77.8%

	Respondent group						
Occupational group	**Midwife (n≥1,388)**	**Nurse (n≥3,032)**	**Doctor (n≥683)**	**Consultant (n≥758)**	**Manager (n≥242)**	**Senior Manager (n≥351)**	**Other role (n≥791)**
Midwife	78.4%	**54.6%**	**59.0%**	79.8%	74.3%	**83.5%**	72.4%
Nurse	**77.8%**	82.8%	84.1%	92.2%	**82.6%**	**87.5%**	86.2%
Doctor	**74.8%**	83.1%	95.0%	96.3%	**87.4%**	**82.0%**	82.9%
Consultant	72.6%	83.7%	90.2%	91.2%	82.4%	**82.1%**	82.0%
Manager	65.7%	**64.9%**	**65.4%**	75.5%	87.6%	**91.9%**	72.6%
Senior Manager	**61.2%**	**49.7%**	**56.7%**	**66.3%**	**76.2%**	92.3%	60.3%
Similar role	n/a	n/a	n/a	n/a	n/a	n/a	88.0%
Other medical professionals	70.5%	80.5%	89.7%	91.3%	n/a	n/a	79.6%
The Board	n/a	n/a	n/a	n/a	n/a	82.9%	n/a

Base: All respondents who gave a response excluding Don't Know

Discussion

Following the conviction of former neonatal nurse Lucy Letby for the murders of seven babies and the attempted murder of six others whilst working at the Countess of Chester Hospital, the Thirlwall Inquiry has sought to understand the working culture within neonatal units. This report provides evidence to support the Inquiry's aims, delivering feedback from those directly responsible for delivering care to babies and from those who have a managerial role that includes oversight of a neonatal unit. With almost 7,500 responses, the survey gives insight into the cultures and working relationships within neonatal units across the NHS in England.

Overall, the majority of staff working in neonatal units had positive views of the culture in their units. Three quarters of staff agreed that the culture in their unit was good (77.6%, ranging from 75.0% to 86.8% across different staff groups) and that open and frank conversations were encouraged when something went wrong (76.5%, ranging from 66.9% to 87.8%). Where differences were observed between staff groups, nursing and midwifery were notably less likely than colleagues in medical (doctors and consultants) and managerial (or senior manager) roles to report a good culture and a culture that encouraged open conversations. A majority of staff in all roles felt that improvement in the culture of their unit was necessary, although this can be interpreted either as a symptom of unresolved problems or, more positively, as an indication of a healthy commitment to continuous improvement.

Interestingly, the survey revealed several areas of disconnect between how different occupational groups perceived their working relationships with one another. Perhaps the starkest example of this was around senior managers' perceptions of their interactions with others. When asked whether working relationships with nurses, midwives, doctors, consultants and managers was good, in each instance over eight in ten senior managers agreed – but this was not always reciprocated, as far lower proportions from each of those other groups reported good working relationships with senior managers. Nurses, arguably the primary care giver to babies in the neonatal unit, were the least likely to report good working relationships with senior managers. Nurses and senior managers also showed the largest gap in responses: whilst 87.5% of senior managers described good working relationships with nurses, less than half (49.7%) of nurses reported good working relationships with senior managers.

Similarly, whilst only around two-thirds of nurses and doctors fed back that their working relationships with managers were good, managers themselves viewed these same relationships far more positively with 82.6% and 87.4% respectively who said that these relationships were good. To a lesser extent, relationships between midwives and certain other staff groups showed differences. Midwives were considerably more likely to report good working relationships with nurses and doctors than vice versa.

The survey presents findings about the working relationships between staff in neonatal units across England, but it does have some important limitations that should be acknowledged. Firstly, when the Inquiry approached NHS England for a list of trusts with neonatal units, this was not easily identifiable. Whilst we are grateful for the support of NHS trusts in assembling staff lists, the lack of any central register of staff involved in neonatal care makes it impossible to fully validate these lists: it is possible that different NHS trusts may have varied in their interpretation of the eligibility criteria, which could affect the representativeness of the

sample. In addition, NHS England were not able to promptly provide the contact details for trust workforce leads. Consequently, there was less time for trusts to fully understand what was required and accurately collate the staff lists.

The response figures for each occupational group were broadly consistent with the proportion of staff invited, there is a risk– as in any survey collection – that there may be some element of nonresponse bias. This is particularly worth noting for senior managers, where the response rate was less than 10%. Non-response bias occurs in surveys when the respondents who participate in the survey have systematically different views and experiences to those who chose not to. As a result, this difference can skew the results of the survey.

Despite these limitations, the survey provides important evidence that can inform the Inquiry by utilising the feedback given by nurses, midwives, doctors, consultants, managers, senior managers, and other professionals currently working in or alongside neonatal units in England.

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