# Better Use of (electronic patient record infant) Data to improve parent Satisfaction with neonatal care (BUDS)

Submission date	Recruitment status No longer recruiting	<ul><li>Prospectively registered</li></ul>		
07/03/2019		[X] Protocol		
Registration date	Overall study status	Statistical analysis plan		
09/04/2019	Completed	[X] Results		
<b>Last Edited</b> 02/10/2023	Condition category Neonatal Diseases	[] Individual participant data		

# Plain English summary of protocol

Background and study aims

One in eight babies born in the UK are too unwell to go home and need to stay in hospital on a neonatal unit. This is stressful for parents, who rely on neonatal staff for updates about their baby, and often feel they aren't involved in their baby's care. Parents usually receive written information at the beginning of their baby's stay and at the end, but are hardly ever given written information about their baby during the neonatal stay. All neonatal units in the UK use an electronic patient record system (EPR): a form of computerised medical notes. Doctors and nurses use this to record a lot of information about babies each day, such as their weight, amount of milk they took and any breathing support they needed. The researchers want to improve how parents receive information, and how involved they feel in their baby's care, by regularly sharing some of this information with them in a way that is easy to understand. They want to give every parent a daily printed summary of their baby's information, taken from the electronic system. They have designed this with parents of babies that needed neonatal care and now want to test it on a neonatal unit.

Who can participate?

Parents of babies who are receiving care on the neonatal unit

# What does the study involve?

Parents are asked some basic details about themselves and their baby. Then they are given a printed summary sheet containing updates about their baby ('My Baby's Summary Report') every morning on the unit on weekdays (Monday to Friday). Parents are asked to complete an anonymous questionnaire before they start receiving the summaries and then twice a week until their baby is discharged. This includes questions on how they feel about how they receive their baby's information and how involved they feel in their baby's neonatal care. It also includes questions on how to further improve the content, layout and wording of the summaries. The summaries are tested on the neonatal unit over 2 months, moving from the lower intensity unit area to the highest. The number of times parents are asked to complete the questionnaire depends on how long their baby is likely to stay on the unit and which unit area their baby is in at the time of recruitment. Parent involvement ends when babies are discharged from the unit. At

the same time points of distributing the parent questionnaire (twice weekly) the researchers distribute a three-question staff survey to all neonatal staff on duty in the respective unit areas ( to assess staff workload). Data completeness and accuracy is also assessed at the start of the study and every day by comparing EPR-recorded data to handwritten nursing documentation. Finally, one-on-one interviews are conducted with staff members and parents before the researchers start sharing the summaries with parents and after the piloting stage of the project has finished.

What are the possible benefits and risks of participating?

It is not thought that there are any risks or disadvantages of taking part in this study. It is hoped that the written summaries will improve parents' understanding of their baby's condition and their neonatal experience in general. Parent involvement will also help improve the summaries for use by future parents.

Where is the study run from?
Chelsea and Westminster Hospital NHS Foundation Trust (UK)

When is the study starting and how long is it expected to run for? October 2018 to March 2019

Who is funding the study?

- 1. National Institute for Health Research (NIHR) (UK)
- 2. Rosetrees Trust (UK)

Who is the main contact? Dr Susanna Sakonidou s.sakonidou@imperial.ac.uk

# Contact information

# Type(s)

**Public** 

#### Contact name

Dr Susanna Sakonidou

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# Type(s)

#### Scientific

#### Contact name

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# Additional identifiers

# Clinical Trials Information System (CTIS)

Nil known

# Integrated Research Application System (IRAS)

232205

# ClinicalTrials.gov (NCT)

Nil known

#### Protocol serial number

Protocol v1.3/ Sponsor ref 18HH4522, IRAS 232205

# Study information

#### Scientific Title

Better Use of Data to improve parent Satisfaction (BUDS): a mixed method project using qualitative and improvement science methodology to improve parent experience of neonatal care

# Acronym

**BUDS** 

#### **Study objectives**

Having a baby that requires neonatal care is stressful and traumatic for parents, who often report dissatisfaction with communication of clinical infant information. A large percentage of parents in neonatal care experience post traumatic stress disorder, anxiety and depression, which interferes with parent-child bonding and affects infant outcomes. Doctors and nurses routinely record neonatal daily data onto an electronic patient record system (EPR) in the UK, from which de-identified data form a research database: the National Neonatal Research Database (NNRD). The aim of this study to evaluate the impact of sharing neonatal EPR data with parents in neonatal care, on parent—reported satisfaction, parent interactions with staff, staff workload and NNRD data completeness.

Hypothesis: Sharing individualised, daily, clinical electronic patient record infant data with parents, in a parent-centred way, will lead to higher parent-reported satisfaction with communication of clinical information and involvement in neonatal care, and higher data completeness in the National Neonatal Research Database.

# Ethics approval required

Old ethics approval format

# Ethics approval(s)

Approved 21/06/2018, amendment submitted 23/11/2018 and approved 12/12/2018, West Midlands - South Birmingham REC, The Old Chapel, Royal Standard Place, Nottingham, NG1 6FS. Email: NRESCommittee.WestMidlands-SouthBirmingham@nhs.net, REC ref: 18/WM/0175, Protocol number: Sponsor ref 18HH4522

# Study design

Prospective mixed method study using qualitative and improvement science methodology

# Primary study design

Observational

#### Study type(s)

Other

# Health condition(s) or problem(s) studied

Neonatal care

#### **Interventions**

Through qualitative work with parents of babies previously needing UK neonatal care, the researchers identified the type of infant information parents find important in neonatal care. They matched this information to the available EPR infant data items neonatal staff update daily throughout the UK and developed parent-friendly EPR data explanations. With parents, they codesigned a communication tool template for parents called "My Baby's Summary Report": a printed sheet of paper including individualised, daily infant updates for parents derived from EPR data, in parent-centred language. They will provide an individualised written summary report to each parent on weekdays. This will initially be offered to parents in the low-intensity neonatal unit area (Special Care Baby Unit) before expanding to approach all parents (High Dependency Unit and Intensive Care Unit). The communication tool's impact will be measured and Plan-Do-Study-Act (PDSA) improvement science cycles will inform the tool's continual improvement.

#### Intervention Type

Other

#### Primary outcome(s)

Parent satisfaction with communication of clinical information and involvement in care, assessed using validated self-administered parent questionnaire, the Parents' Experiences of Communication in Neonatal Care (PEC) questionnaire at baseline, twice weekly and at the end of piloting phase.

# Key secondary outcome(s))

- 1. Parent interactions with staff, assessed with PEC questionnaire at baseline, twice weekly and at the end of piloting phase
- 2. Neonatal staff workload, assessed with self-administered staff questionnaire at baseline, twice weekly and at the end of piloting phase
- 3. Data completeness, assessed using historical completeness data from the National Neonatal Research Database and current completeness data from the live neonatal EPR at baseline, every day and at the end of piloting phase
- 4. Parent/staff interaction and parental views on information communication assessed with one-on-one interviews with parents and staff at baseline and at end of piloting phase

# Completion date

02/09/2019

# **Eligibility**

#### Key inclusion criteria

- 1. Parents (male or female) of babies who are currently inpatients on the neonatal unit
- 2. The parental age lower limit will be 16 years
- 3. The researchers will start recruiting parents with babies in the lower intensity part of the unit (SCBU- Special Care Baby Unit) who are medically stable and not acutely unwell, in order to minimise the risk of causing anxiety to parents
- 4. They will recruit parents in SCBU only for 4 weeks, include High Dependency Unit parents in recruitment for 2 weeks and include Intensive Care Unit parents in the final 2 weeks

# Participant type(s)

Other

# Healthy volunteers allowed

No

# Age group

Adult

#### Sex

All

#### Key exclusion criteria

- 1. Parents who cannot speak and/or read English will be excluded as the study's information documents and communication tool are in English
- 2. Parents younger than 16 years of age

#### Date of first enrolment

08/10/2018

#### Date of final enrolment

05/04/2019

# Locations

#### Countries of recruitment

#### United Kingdom

England

# Study participating centre Chelsea and Westminster Hospital NHS Foundation Trust

369 Fulham Road London United Kingdom SW10 9NH

# Sponsor information

#### Organisation

Imperial College London

#### **ROR**

https://ror.org/041kmwe10

# Funder(s)

#### Funder type

Government

#### **Funder Name**

National Institute for Health Research

#### Alternative Name(s)

National Institute for Health Research, NIHR Research, NIHRresearch, NIHR - National Institute for Health Research, NIHR (The National Institute for Health and Care Research), NIHR

# **Funding Body Type**

Government organisation

# **Funding Body Subtype**

National government

#### Location

**United Kingdom** 

#### **Funder Name**

Rosetrees Trust

# Alternative Name(s)

Teresa Rosenbaum Golden Charitable Trust, Rosetrees

# **Funding Body Type**

Private sector organisation

# **Funding Body Subtype**

Trusts, charities, foundations (both public and private)

#### Location

**United Kingdom** 

# **Results and Publications**

# Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are/will be available upon request from Dr Chris Gale (christopher.gale@imperial.ac.uk). Type of data: anonymised, coded data (no free text). When the data will become available and for how long: After study results published and indefinitely. By what access criteria data will be shared including with whom: For research purposes and following review of individual requests. For what types of analyses and by what mechanism: Anonymised analyses reviewed on case by case basis. Whether consent from participants was obtained: Only anonymised data will be shared and consent was obtained for this. Extract from consent form: "I understand all data collected during the project, may be looked at by individuals from the sponsor (Imperial College London JRCO), NHS and regulatory authorities where it is relevant for regulatory purposes, as well as by approved researchers." Comments on data anonymisation: Only coded data, no free text.

# IPD sharing plan summary

Available on request

# **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol article	protocol	25/06/2019	26/10/2020	Yes	No
HRA research summary			28/06/2023	No	No
Other unpublished results			02/10/2023		No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes
Study website	Study website	11/11/2025	11/11/2025	No	Yes