**Study Title:** Prospective and retrospective study of clinical features and outcomes of critical illness polyneuropathy and/or myopathy in children and young people, Version 2

**Internal Reference Number / Short title:** PID19228 / CIP/CIM in children and young people, version 2

**Ethics Ref:** 25/SC/0395

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**Version No and Date:** V1.1 07 January 2026

| | |
|---|---|
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| **Sponsor:** | Oxford University Hospitals NHS Foundation Trust |
| **Funder:** | The Norman Collisson Foundation |
| **Chief Investigator Signature:** |  |

**Conflict of interest** - No potential conflicts of interest.

**Confidentiality Statement -** This document contains confidential information that must not be disclosed to anyone other than the Sponsor, the Investigator Team, HRA, host organisation, and members of the Research Ethics Committee unless authorised to do so.

## Protocol signature page

**Study Title:** CIP/CIM in children and young people, version 2

**Protocol date and version No:** V1.1 07 January 2026

The undersigned has read and understood the trial protocol detailed above and agrees to conduct the study in compliance with the protocol.

| **Principal Investigator** (Please, print name) | **Signature** | **Date** |
|---|---|---|

**Site name or ID number**

Following any amendments to the protocol, this page must be updated with the new protocol version number and date and re-signed by the site PI.


 

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## 1. KEY CONTACTS

| | |
|---|---|
| **Chief Investigator** | **Dr Sithara Ramdas**<br>Consultant Paediatric Neurologist<br>Level 2, NHS offices<br>Childrens Hospital<br>John Radcliffe Hospital<br>Oxford<br>OX3 9DU<br>Email: sithara.ramdas@ouh.nhs.uk |
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| **Funder(s)** | **The Norman Collisson Foundation**<br>25a Market Square<br>Bicester, Oxon<br>OX26 6AD |
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## 2. LAY SUMMARY

Critical illness polyneuropathy and myopathy (CIP/CIM) are rare disorders seen in patients admitted with severe illness to intensive care. They occur both in children and adults. Patients have severe muscle weakness (paralysis) which prolongs hospital stay and many do not recover fully. The underlying reason for this is still not fully understood. Several large studies have looked into CIP/CIM in adults including long-term outcomes but this information is lacking in children. This study will aim to gather information to better understand the risk factors and long-term outcomes in children and young people with CIP/CIM to better inform clinicians, patients and families about this rare disorder.


 

## 3. SYNOPSIS

| | | | |
|---|---|---|---|
| **Study Title** | Prospective and retrospective study of clinical features and outcomes of critical illness polyneuropathy and/or myopathy in children and young people | | |
| **Internal ref. no. / short title** | CIP/CIM in children and young people, version 2 | | |
| **Study registration** | N/A | | |
| **Sponsor** | Oxford University Hospitals NHS Foundation Trust | | |
| **Funder** | The Norman Collisson Foundation | | |
| **Study Design** | Observational study | | |
| **Study Participants** | Children from 1 month to 18 years with a diagnosis of critical illness polyneuropathy and/or myopathy admitted to paediatric intensive care. | | |
| **Sample Size** | Estimated 15 patients | | |
| **Planned Study Period** | Three years | | |
| | **Objectives** | **Outcome Measures** | **Timepoint(s)** |
| **Primary** | Long-term outcomes of motor function (muscle weakness) | Hughes Score and total MRC score. | At diagnosis, hospital discharge, 6 months, 12 months, and 24 months (where available). |
| **Secondary** | • Describe the demographics of the patient cohort | NA | At PICU admission |
| | • Describe the details of ICU presentation | Diagnosis for PICU admission, duration of stay, duration of ventilatory support, medications, blood parameters and neurophysiology findings. | At PICU admission |


 

## 4. ABBREVIATIONS

| | |
|---|---|
| BPNSU | British Paediatric Neurology Surveillance Unit |
| CI | Chief Investigator |
| CIM | Critical Illness Myopathy |
| CIP | Critical Illness Polyneuropathy |
| CMAP | Compound Muscle Action Potential |
| CRF | Case Report Form |
| GCP | Good Clinical Practice |
| ICU | Intensive Care Unit |
| NHS | National Health Service |
| PCCSSG | Paediatric Critical Care Society Study Group |
| PI | Principal Investigator |
| PICU | Paediatric intensive care unit |
| R&D | NHS Trust R&D Department |
| REC | Research Ethics Committee |
| RES | Research Ethics Service |
| SOP | Standard Operating Procedure |
| UK | United Kingdom |

## 5. BACKGROUND AND RATIONALE

Critical illness polyneuropathy (CIP) and myopathy (CIM) are complications of critical illness and present with skeletal muscle weakness and failure to wean off mechanical ventilation with absent or reduced deep tendon reflexes. CIP and CIM are on a continuum of neuromuscular disorders associated with critical illness; CIP primarily affects the nerves and in CIM, muscles are primarily involved with a spectrum with critical illness polyneuropathy and myopathy [1].

CIP and CIM not only prolong the duration of mechanical ventilation and hospitalisation but also mortality and may result in long-term disability. The pathological abnormalities in CIP and CIM include axonal nerve degeneration, muscle myosin loss, and muscle necrosis.

In adults, CIP is reported to affect between 30-50% of severely critically ill patients and is the most frequent acute polyneuropathy in intensive care units (ICU)[1]. The literature in children in children is limited [2-8]. The reported incidence is between 1.7% - 32.4%[6-8] which is much lower than adults and may be related to challenges in recognising especially milder disease in children. There are no studies describing the long-term outcomes in children and young people, crucial information not only for treating clinicians but also patients and families.

This study aims to identify patients under 18 years of age with CIP and/ or CIM. This will be done using established clinical networks in the UK. Clinical information collected as part of standard NHS care will be


 

shared by the patient's clinician with the investigators. The investigators will then follow up the participants virtually for 2 years following discharge from intensive care.

## 6. OBJECTIVES AND OUTCOME MEASURES

| **Objectives** | **Outcome Measures** | **Timepoint(s) of evaluation of this outcome measure (if applicable)** |
|---|---|---|
| **Primary Objective**<br>Long-term outcomes of motor function (muscle weakness) | Hughes score<br>Total MRC score | At diagnosis, discharge, 6, 12, 24 months (where available) |
| **Secondary Objectives**<br>• Describe the demographics of the patient cohort | NA | At PICU admission |
| • Describe the details of ICU presentation including | Diagnosis for PICU admission, duration of stay, duration of ventilatory support, medications, blood parameters and neurophysiology findings. | At PICU admission |

## 7. STUDY DESIGN

This is an observational study for children and young people with a diagnosis of CIP and/or CIM. It aims to identify as many patients as possible diagnosed with CIP and/ or CIM within an 8-year period including the previous 5 years (retrospectively) or the next 3 years (prospectively) and follow them up to assess long-term outcomes. It is estimated that there will be around 15 - 20 patients in this period.

As these are rare conditions, it is difficult to predict where cases may arise, therefore this study will use a combination of established research sites and advertising across paediatric neurology and paediatric intensive care networks; the British Paediatric Neurology Surveillance Unit (BPNSU) and the Paediatric Critical Care Society Study Group (PCCSSG), to identify patients. When a potential participant is identified by doctors through either of these networks, the study team will set up their centre as a site.

Prospective participants (who are currently inpatients) and their parent(s) or legal representative, will be approached in person by the local clinical team and provided with information sheets. If they are happy to participate, informed consent (and assent if appropriate) will be received by the site team.

Retrospective participants (who are not currently in hospital) and their parent(s) or legal representative, will be contacted by their local clinical team via phone or email to ask if they would be interested in hearing about the study, information sheets will be provided. If interested, the clinical team will ask for contact details and consent for the study team to contact the young person and/or parent(s)/ legal representatives. Remote consent and assent, if appropriate, will then be received by the central study team.


 

Once a participant is consented, they will be assigned a unique study ID which will be used on all study documents. The local site team will complete a CRF which will capture data that is already routinely collected as part of standard NHS care including demographic details, diagnosis and medical details from their stay in PICU (see section 9.4), this data will be pseudonymised identified only by the study ID.

For prospective participants, Hughes scoring will be performed 6, 12, 18- and 24-months post PICU admission. If the participant remains in hospital, this should be performed by the local paediatric neurologist/ intensivist. If the participant has been discharged this will be done remotely by the central study team via video call. The Hughes score will be recorded in the follow up CRF.

For retrospective participants, if Hughes scores were carried out in the 2 years post ICU admission, the results will be obtained from the medical records and collected in the follow up CRF.

All completed CRFs will be returned to the study team via secure email. The pseudonymised data will be entered into a password protected Microsoft Excel spreadsheet by the study team. At the end of the study this data will be analysed to explore the following parameters:

1. Clinical features including underlying primary diagnosis and investigations
2. Short term and long-term motor outcomes
3. Predictors of co-relation between clinical factors and motor outcomes

## 8. PARTICIPANT IDENTIFICATION

### 8.1. Study Participants

Patients with a probable or definite diagnosis of CIP, CIM, or combined CIP and CIM from 1 month to 18 years of age at the time of diagnosis will be included. The diagnosis of CIP, CIM, or combined CIP and CIM relies on clinical features, electrophysiological, and muscle biopsy characteristics.

**Diagnostic criteria** [1]

Critical illness polyneuropathy

1. The patient is critically ill (multiorgan dysfunction and failures)
2. Limb weakness or difficulty weaning patient from ventilator after non-neuromuscular causes such as heart and lung disease have been excluded
3. Electrophysiological evidence of axonal motor and sensory polyneuropathy
4. Absence of a decremental response on repetitive nerve stimulation

Definite diagnosis of critical illness polyneuropathy is established if all four criteria are fulfilled. Probable diagnosis of critical illness polyneuropathy is established if criteria 1, 3, and 4 are fulfilled. Diagnosis of intensive care unit-acquired weakness is established if only criteria 1 and 2 are fulfilled.


 

Critical illness myopathy

1. The patient is critically ill (multiorgan dysfunction and failures)

2. Limb weakness or difficulty weaning patient from ventilator after non-neuromuscular causes such as heart and lung disease have been excluded

3. CMAP amplitudes less than 80% of the lower limit of normal in two or more nerves without conduction block

4. Sensory nerve action potential amplitudes more than 80% of the lower limit of normal

5. Needle electromyography with short duration, low-amplitude motor unit potentials with early or normal full recruitment, with or without fibrillation potentials in conscious and collaborative patients; or increased CMAP duration or reduced muscle membrane excitability on direct muscle stimulation in non-collaborative patients

6. Absence of a decremental response on repetitive nerve stimulation

7. Muscle histopathological findings of primary myopathy (e.g., myosin loss or muscle necrosis)

A definite diagnosis of critical illness myopathy is established if all seven criteria are fulfilled. A probable diagnosis of critical illness myopathy is established if criteria 1 and 3–6 are fulfilled. Diagnosis of intensive care unit-acquired weakness is established if only criteria 1 and 2 are fulfilled.

### 8.2. Inclusion Criteria

- Patients aged one month to 18 years admitted to paediatric intensive care during the study period or within the previous 5 years.
- Patients fulfil the above diagnostic criteria for probable or definite CIP and/or CIM.
- Participant, or parent(s)/ legal representative as appropriate, is willing and able to provide informed consent.

### 8.3. Exclusion Criteria

- Patients with alternative cause for critical care-related muscle weakness.
- Patients with a preceding history of suspected or confirmed neuromuscular disorder.

## 9. PROTOCOL PROCEDURES

### 9.1. Recruitment

Due to the difficulty in predicting where patients will present, it is not practical to set up all possible PICUs as sites for this study. We are therefore using two approaches to identify potential participants; setting up several large centres across the UK as research sites and advertising the study via paediatric neurology and


 

paediatric intensive care networks; the British Paediatric Neurology surveillance unit (BPNSU) and the Paediatric critical care society study group (PCCSSG).

10 Paediatric Neuroscience centres will be set up as research sites. They will review their records for patients diagnosed with CIP and/or CIM in the last 5 years (retrospective cohort). They will also prospectively screen for patients diagnosed with CIP and/or CIM during the 3-year study period. Further centres who report cases via BPNSU or PCC network will be set up during the study period.

Advertising via the networks will vary slightly:

**BPNSU**: The BPNSU sends a monthly email to all Paediatric Neurologists registered within the UK. This contains a list of notifiable conditions with inclusion and exclusion criteria available on the website. This study will be added to this list. Paediatric Neurologists can click on the link and this will inform the British Paediatric Neurology Surveillance Unit that they have a possible case. The BPNSU will inform the study team. The study team will contact the Paediatric Neurologist via secure email.

**PCCSSG**: The study will be presented at the PCCSSG conference, any centres/doctors who express interest in the study will be asked to share their contact details with the study team. The study team will then contact them on a regular basis over the study period to remind them of the inclusion/exclusion criteria and ask if they have any appropriate cases.

When a potential participant is identified by doctors through either of these networks, the study team will set up their centre as a site via a minor amendment.

Prospective participants (who are currently inpatients) and their parent(s) or legal representative, will be approached in person by the local clinical team and provided with information sheets. If they are happy to participate, informed consent (and assent if appropriate) will be received by the site team.

Retrospective participants (who are not currently in hospital) and their parent(s) or legal representative, will be contacted by their local clinical team via phone or email to ask if they would be interested in hearing about the study. If yes, verbal information will be provided and information sheets sent via email or post. The clinical team will ask for consent to pass on their contact details (year of birth, NHS number, participant name, parent/ legal representative name, email address and phone number) to the study team. The clinical team will record this information in the participant contact information form which will be emailed securely to the study team who will then carry out remote informed consent (and assent if appropriate).

### 9.2. Screening and Eligibility Assessment

Potentially eligible patients will be identified by the patient care team. All patients who fit the inclusion criteria and do not meet any exclusion criteria will be included.

### 9.3. Informed Consent

All potential participants and/or their parent(s)/ legal representative will be provided with verbal and written study information by their clinical team detailing no less than: the exact nature of the study; what it will involve for the participant; the implications and constraints of the protocol; and any risks involved in taking part. It will be clearly stated that the participant is free to withdraw from the study at any time for any reason without prejudice to future care, without affecting their legal rights, and with no obligation


 

to give the reason for withdrawal. If a potential participant is over the age of 16 years, the person who is obtaining in the informed consent will assess their capacity to provide informed consent. If the patient is deemed to have capacity they will be asked to consent for themselves. If they lack the capacity to provide informed consent they will not be included in the study. Participants under the age of 16 years will be offered the opportunity to sign an assent form but their parent or legal representative must provide informed consent. Age appropriate information sheets (6-10 and 11-15 and 16+) will be available in addition to the parent/ legal representative information sheet.

The participant and their parent(s)/ legal representative will be allowed as much time as wished to consider the information, and given the opportunity to question the Investigator, their GP or other independent parties to decide whether they will participate in the study.

For prospective patients (or retrospective participants where in person informed consent is possible) written informed consent will be obtained by means of participant or parent/ legal representative dated signature and dated signature of the person who presented and obtained the Informed Consent. The person who obtained the consent must be suitably qualified and experienced and have been authorised to do so by the Chief/Principal Investigator. A copy of the signed Informed Consent Form will be given to the participant/ parent or legal representative. The original signed form will be retained at the study site.

For retrospective patients, remote consent will be offered. The clinical team will contact the patient and their parent(s)/ legal representative via phone or email and provide the study information. If they are interested in participating, the clinical team member will ask for consent to pass on their contact details (year of birth, NHS number, participant name, parent/ representative name, an email address and phone number) to the central study team. The clinical team will record this information in the participant contact information form which will be emailed securely to the study team. The study team will then contact the participant/ parent or legal representative on the phone number provided to complete the consent form remotely. A suitably qualified, trained and delegated member of the study team will perform the remote consent by reading out each line of the consent form and marking the participant/ parent or legal representative's agreement to each statement. The name of the person consenting will then be filled in along with the date consent was received. The staff member taking consent will sign and date the consent/ consultee declaration form. A witness will be present while the remote consent is being completed and will counter sign the form. A copy of the completed form will be sent to the participant/ parent or legal representative via email or post to be retained in their records. The original signed form will be retained at the study site.

If a participant reached 16 years of age during the study they will be asked to consent to the study for themselves. If they do not wish to do so, or do not have the capacity to do so, they will be withdrawn from the study.

## 9.4. Description of study procedures

### 9.4.1 Initial data collection

Once a participant is consented, the paediatric neurologist/paediatric intensivist or member of their team will complete the study CRF with patient data which is collected as part of routine NHS care. This will include;


 

- Study ID number
- Demographic details (age at diagnosis, sex and ethnicity)
- Diagnosis
- Duration of stay in PICU (including dates of admission and discharge)
- Duration of ventilatory support
- Medications
- Results of blood tests
- Neurophysiology results
- Examination findings (including MRC score, Hughes score at diagnosis and discharge, and deep tendon reflexes at diagnosis only)
- Discharge location

Once completed the CRF will be returned to the central study team via secure email. The central study team will then enter this into a password protected Microsoft excel spreadsheet within the NHS firewall. Within this spreadsheet the data will be held in pseudonymised form identified only by the study ID number. The site team will also provide the participant contact information form at this time, if not already provided to enable to remote consent process. This will be held securely separately from the study data.

#### 9.4.2 Follow Up data collection (6, 12, 18 and 24 months)

The central study team investigators will contact young person and/ or parent/carer via telephone/email at 4 times points post ICU admission (6 months, 12 months, 18 months and 24 months) to book a 30-minute virtual consultation to allow the collection of the Hughes score only. In the event that the participant is still an inpatient at the research site, the local team will be asked to perform this assessment. The Hughes score will be added to the study excel spreadsheet.

### 9.5. Withdrawal of Participants

During the course of the study a participant and/ or their parent(s)/ legal representative may choose to withdraw at any time (up to the point of data publication). They may choose to withdraw from prospective data collection in which case their data will remain in the study but no further data will be collected, or they may wish to withdraw from the study as a whole. In this event all data collected for that participant will be deleted and will not be included in the study analysis. A request for data to be deleted must be made in writing. They do not need to provide a reason for withdrawal but if one is given it will be recorded in the CRF as will the date of withdrawal.

Participants who turn 16 years old during their time in the study who are unwilling or unable to consent for themselves will be withdrawn from the study. No further data will be collected from the participant but data collected up to the point of turning 16 years of age will be remain in the study and be included in the analysis unless a .

If a clinician wishes to withdraw their patient at any point (until data publication) they will inform the study team. The study team will then delete the data they hold for the patient and it will not be included in the data analysis. The date and reason for withdrawal (if available) will be recorded in the CRF.

### 9.6. Definition of End of Study

The study will end on 31 October 2028. All patients identified up to that date will be included in the study.


 

## 10. SAFETY REPORTING

This section is not applicable due to the observational, low risk nature of this study.

## 11. STATISTICS AND ANALYSIS

Data will be analysed using absolute and relative frequencies. Univariant and multivariant analysis will be performed. Statistical analysis will be completed with software including SPSS and R.

### 11.1. Procedure for Accounting for Missing, Unused, and Spurious Data

The study team will contact the patient's clinical team to gather missing data.

## 12. DATA MANAGEMENT

The plan for the data management of the study are outlined below. There is not a separate Data Management document in use for the study.

### 12.1. Source Data

Source documents are where data are first recorded, and from which participants' CRF data are obtained. These include, but are not limited to, hospital records (from which medical history and previous and concurrent medication may be summarised into the CRF), clinical and office charts, laboratory and pharmacy records, and correspondence.

CRF entries will be considered source data if the CRF is the site of the original recording (e.g. there is no other written or electronic record of data). All documents will be stored safely in confidential conditions. On all study-specific documents, other than the signed consent and participant contact information form, the participant will be referred to by the study participant number/code, not by name.

### 12.2. Access to Data

Only delegated members of the study team will have access to the data which will be password-protected in Oxford University Hospitals NHS Foundation Trust's secure electronic network.

Direct access will be granted to authorised representatives from the sponsor, host organisation, its designees, and appropriate regulatory agencies to examine records for quality assurance reviews, audits, and monitoring of the study progress.

### 12.3. Data Recording and Record Keeping

The investigator is responsible for ensuring the accuracy, completeness, legibility, and timeliness of the data reported. All source documents should be completed in a neat, legible manner to ensure accurate


 

interpretation of data. When making a change or correction, cross out the original entry with a single line and initial and date the change. Do not erase, overwrite or use correction fluid or tape on the original.

All research data will be entered onto the study CRFs. This data will be pseudonymised identified only by the participants unique study number. The research site will send the complete CRFs to the study team via encrypted email. Once received this data will be entered into a password protected Microsoft Excel spreadsheet held on Oxford University Hospital NHS Foundation Trust servers within the NHS firewall accessible only to members of the study team. This data will be kept until the youngest participant turns 21 or for at least 5 years, whichever is longer following the completion of the study as per the sponsors policy for paediatric trials.

Identifiable data, namely the participant contact information sheet, will be emailed to the study team via encrypted email separately to the research data. This will be held on Oxford University Hospital NHS Foundation Trust servers within the NHS firewall accessible only to members of the study team. This data is held only to enable the study team to contact the participant for remote consent and follow up visit and will therefore be deleted at the end of the study.

Study sites will retain all documents pertaining to the conduct of this study, including personal data, until the youngest participant turns 21 or for at least 5 years, whichever is longer following the completion of the study as per the sponsors policy for paediatric trials. All study records will be kept in a locked file cabinet or maintained in a locked room at each participating research site. Electronic files will be password-protected.

## 13. QUALITY ASSURANCE PROCEDURES

The study will be conducted per the procedures identified in the protocol.

### 13.1. Study monitoring

Due to the low-risk profile of this study, monitoring or auditing activities are not expected to take place. However, monitoring or auditing may be conducted to ensure that data collection and study conduct are of high quality and meet protocol procedures, sponsor, GCP, and regulatory guidelines.

### 13.2. Study Committees

There are no oversight committees for this study due to its observational, low risk nature.

## 14. PROTOCOL DEVIATIONS

A study related deviation is a departure from the ethically approved study protocol or other study document or process (e.g. consent process or administration of study intervention) or from Good Clinical Practice (GCP) or any applicable regulatory requirements. Any deviations from the protocol will be documented in a protocol deviation form and filed in the study master file.


 

Each investigator will be responsible for enrolling only those study participants who have met protocol eligibility criteria.

## 15. SERIOUS BREACHES

A "serious breach" is a breach of the protocol or of the conditions or principles of Good Clinical Practice which is likely to affect to a significant degree –

(a) the safety or physical or mental integrity of the trial subjects; or

(b) the scientific value of the research.

In the event that a serious breach is suspected the Sponsor must be contacted within 1 working day. In collaboration with the CI, the serious breach will be reviewed by the Sponsor and, if appropriate, the Sponsor will report it to the approving REC committee and the relevant NHS host organisation within seven calendar days.

## 16. ETHICAL AND REGULATORY CONSIDERATIONS

### 16.1. Declaration of Helsinki

The Investigator will ensure that this study is conducted in accordance with the principles of the Declaration of Helsinki (2024).

### 16.2. Guidelines for Good Clinical Practice

The Investigator will ensure that this study is conducted in accordance with relevant regulations and with Good Clinical Practice.

### 16.3. Approvals

Following Sponsor approval, the protocol, informed consent form, participant information sheet will be submitted to an appropriate Research Ethics Committee (REC), and HRA (where required) and host institutions for written approval.

The Investigator will submit and, where necessary, obtain approval from the above parties for all substantial amendments to the original approved documents.

### 16.4. Other Ethical Considerations

Cognitive impairment can accompany CIP/CIM, therefore there is the possibility that participants who are over the age of consent (16 years) may not be able to provide consent for themselves. In order to not burden these participants, they will be withdrawn from the study once they turn 16 years of age. Data collected prior to their 16$^{th}$ birthday will still be included in the study analysis.


 

### 16.5. Reporting

The CI shall submit once a year throughout the study, or on request, an Annual Progress report to the REC Committee, HRA (where required), host organisation, sponsor and funder (where required). In addition, an End of Study notification and final report will be submitted to the same parties.

### 16.6. Transparency in Research

Not applicable the research is non-interventional.

### 16.7. Participant Confidentiality

The study will comply with the UK General Data Protection Regulation (GDPR) and Data Protection Act 2018, which require data to be de-identified as soon as it is practical to do so. The processing of the personal data of participants will be minimised by making use of a unique participant study number only on all study documents and any electronic database(s), except for documents where identifiable information is needed to allow the participant to be contacted for remote consent or follow up calls. All documents will be stored securely and only accessible by study staff and authorised personnel. The study staff will safeguard the privacy of participants' personal data.

The results of the research study may be published but study participant's names or identities will not be revealed. Records will remain confidential. To maintain confidentiality, all documents will be stored securely and only accessible by study staff and authorised personnel.

### 16.8. Expenses and Benefits

There will be no payment to participants for taking part in this study. Due to the observational nature of this study with no in person visits and remote visits scheduled at a time convenient for the family, no costs will be incurred by the participants or their families.

## 17. FINANCE AND INSURANCE

### 17.1. Funding

This study is being funded by a grant from the Norman Collisson Foundation.

### 17.2. Insurance

NHS bodies are legally liable for the negligent acts and omissions of their employees. If a participant were to be harmed whilst taking part in a clinical research study as a result of negligence on the part of a member of the study team, this liability cover would apply.

Non-negligent harm is not covered by the NHS indemnity scheme. The Oxford University Hospitals NHS Foundation Trust, therefore, cannot agree in advance to pay compensation in these circumstances.


 

In exceptional circumstances, an ex-gratia payment may be offered.

### 17.3. Contractual arrangements

Appropriate contractual arrangements will be put in place with all third parties.

## 18. PUBLICATION POLICY

The Investigators will be involved in reviewing drafts of the manuscripts, abstracts, and any other publications arising from the study. Authors will acknowledge that the study was funded by The Norman Collisson Foundation. Authorship will be determined in accordance with the ICMJE guidelines and other contributors will be acknowledged.

## 19. DEVELOPMENT OF A NEW PRODUCT/ PROCESS OR THE GENERATION OF INTELLECTUAL PROPERTY

Not applicable as this study will not lead to generation of IP.

## 20. ARCHIVING

Records and documents pertaining to the conduct of this study, including source documents and consent forms must be retained by the investigator until the youngest participant turns 21 or for at least 5 years, whichever is longer following the completion of the study as per the sponsors policy for paediatric trials.

No study records shall be destroyed without prior authorisation from the sponsor. However, these documents should be retained for a longer period if required by local regulations.

It is the responsibility of the sponsor to notify the investigators when these documents no longer need to be retained.


 

## 21. REFERENCES

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## 22. APPENDIX A: AMENDMENT HISTORY

| Amendment No. | Protocol Version No. | Date issued | Details of Changes made |
|---|---|---|---|
| Initial application | 1.0 | 05 November 2025 | Document creation |
| Changes after REC provisional approval | 1.1 | 07 January 2026 | Potential participants unable to consent for themselves have been removed from the study. Participant's who lack capacity to consent for themselves will be withdrawn from the study at the age of 16. |
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