Supplementary File - List of Contents:

SPIRIT 2025 checklist of items to address in a randomized trial protocol*

Section / Topic	No	SPIRIT 2025 checklist item description	Reported on page no.
Administrative information			
Title and structured summary	1a	Title stating the trial design, population, and interventions, with identification as a protocol	Title page
	1b	Structured summary of trial design and methods, including items from the World Health Organization Trial Registration Data Set	Supplemental file
Protocol version	2	Version date and identifier	P14 and supplemental file
Roles and responsibilities	3a	Names, affiliations, and roles of protocol contributors	Title Page
	3b	Name and contact information for the trial sponsor	P2 and supplemental file
	3c	Role of trial sponsor and funders in design, conduct, analysis, and reporting of trial; including any authority over these activities	Supplemental file
	3d	Composition, roles, and responsibilities of the coordinating site, steering committee, endpoint adjudication committee, data management team, and other individuals or groups overseeing the trial, if applicable	P14 and supplemental file
Open science			
Trial registration	4	Name of trial registry, identifying number (with URL), and date of registration. If not yet registered, name of intended registry	P8 and supplemental file
Protocol and statistical analysis plan	5	Where the trial protocol and statistical analysis plan can be accessed	P14
Data sharing	6	Where and how the individual de-identified participant data (including data dictionary), statistical code, and any other materials will be accessible	Supplemental file
Funding and conflicts of interest	7a	Sources of funding and other support (e.g., supply of drugs)	P2 and supplemental file
	7b	Financial and other conflicts of interest for principal investigators and steering committee members	P2
Dissemination policy	8	Plans to communicate trial results to participants, healthcare professionals, the public, and other relevant groups (e.g., reporting in trial registry, plain language summary, publication)	P14 and supplemental file
Introduction			
Background and rationale	9a	Scientific background and rationale, including summary of relevant studies (published and unpublished) examining benefits and harms for each intervention	P4-5
	9b	Explanation for choice of comparator	P4-5

Objectives	10	Specific objectives related to benefits and harms	P4-5
Methods: Patient and public involvement, trial design			
Patient and public involvement	11	Details of, or plans for, patient or public involvement in the design, conduct, and reporting of the trial	P13-14
Trial design	12	Description of trial design including type of trial (e.g., parallel group, crossover), allocation ratio, and framework (e.g., superiority, equivalence, non-inferiority, exploratory)	P5 and supplemental file
Methods: Participants, interventions, and outcomes			
Trial setting	13	Settings (e.g., community, hospital) and locations (e.g., countries, sites) where the trial will be conducted	P5
Eligibility criteria	14a	Eligibility criteria for participants	Table 1 and supplemental file
	14b	If applicable, eligibility criteria for sites and for individuals who will deliver the interventions (e.g., surgeons, physiotherapists)	P6
Intervention and comparator	15a	Intervention and comparator with sufficient details to allow replication including how, when, and by whom they will be administered. If relevant, where additional materials describing the intervention and comparator (e.g., intervention manual) can be accessed	P6
	15b	Criteria for discontinuing or modifying allocated intervention/comparator for a trial participant (e.g., drug dose change in response to harms, participant request, or improving/worsening disease)	P6
	15c	Strategies to improve adherence to intervention/comparator protocols, if applicable, and any procedures for monitoring adherence (e.g., drug tablet return, sessions attended)	P6
	15d	Concomitant care that is permitted or prohibited during the trial	P6
Outcomes	16	Primary and secondary outcomes, including the specific measurement variable (e.g., systolic blood pressure), analysis metric (e.g., change from baseline, final value, time to event), method of aggregation (e.g., median, proportion), and time point for each outcome	P5 , 8, 9 and supplemental file
Harms	17	How harms are defined and will be assessed (e.g., systematically, non-systematically)	P7 and supplemental file
Participant timeline	18	Time schedule of enrollment, interventions (including any run-ins and washouts), assessments, and visits for participants. A schematic diagram is highly recommended (see Figure)	Supplemental file
Sample size	19	How sample size was determined, including all assumptions supporting the sample size calculation	P10
Recruitment	20	Strategies for achieving adequate participant enrollment to reach target sample size	Supplemental file
Methods: Assignment of interventions			
Randomization:			

Sequence generation	21a	Who will generate the random allocation sequence and the method used	P6 and supplemental file
	21b	Type of randomization (simple or restricted) and details of any factors for stratification. To reduce predictability of a random sequence, other details of any planned restriction (e.g., blocking) should be provided in a separate document that is unavailable to those who enroll participants or assign interventions	Supplemental file
Allocation concealment mechanism	22	Mechanism used to implement the random allocation sequence (e.g., central computer/telephone; sequentially numbered, opaque, sealed containers), describing any steps to conceal the sequence until interventions are assigned	Supplemental file
Implementation	23	Whether the personnel who will enroll and those who will assign participants to the interventions will have access to the random allocation sequence	Supplemental file
Blinding	24a	Who will be blinded after assignment to interventions (e.g., participants, care providers, outcome assessors, data analysts)	Supplemental file
	24b	If blinded, how blinding will be achieved and description of the similarity of interventions	NA
	24c	If blinded, circumstances under which unblinding is permissible, and procedure for revealing a participant's allocated intervention during the trial	NA
Methods: Data collection, management, and analysis			
Data collection methods	25a	Plans for assessment and collection of trial data, including any related processes to promote data quality (e.g., duplicate measurements, training of assessors) and a description of trial instruments (e.g., questionnaires, laboratory tests) along with their reliability and validity, if known. Reference to where data collection forms can be accessed, if not in the protocol	Supplemental file
	25b	Plans to promote participant retention and complete follow-up, including list of any outcome data to be collected for participants who discontinue or deviate from intervention protocols	Supplemental file
Data management	26	Plans for data entry, coding, security, and storage, including any related processes to promote data quality (e.g., double data entry; range checks for data values). Reference to where details of data management procedures can be accessed, if not in the protocol	P9 and supplemental file
Statistical methods	27a	Statistical methods used to compare groups for primary and secondary outcomes, including harms	P10-13
	27b	Definition of who will be included in each analysis (e.g., all randomized participants), and in which group	P10-13
	27c	How missing data will be handled in the analysis	P11-12
	27d	Methods for any additional analyses (e.g., subgroup and sensitivity analyses)	P11-12
Methods: Monitoring			
Data monitoring committee	28a	Composition of data monitoring committee (DMC); summary of its role and reporting structure; statement of whether it is independent from the sponsor and funder; conflicts of interest and reference to where further details about its charter can be found, if not in the protocol. Alternatively, an explanation of why a DMC is not needed	P14 and supplemental file
	28b	Explanation of any interim analyses and stopping guidelines, including who will have access to these interim results and make the final decision to terminate the trial	P10-11 and 14

Trial monitoring	29	Frequency and procedures for monitoring trial conduct. If there is no monitoring, give explanation	P14 and supplemental file
Ethics			
Research ethics approval	30	Plans for seeking research ethics committee/institutional review board approval	P8 and supplemental ile
Protocol amendments	31	Plans for communicating important protocol modifications to relevant parties	\supplemental file
Consent or assent	32a	Who will obtain informed consent or assent from potential trial participants or authorized proxies, and how	P6-7 and supplemental file
	32b	Additional consent provisions for collection and use of participant data and biological specimens in ancillary studies, if applicable	P6-7 and supplemental file
Confidentiality	33	How personal information about potential and enrolled participants will be collected, shared, and maintained in order to protect confidentiality before, during, and after the trial	P9, 13 and supplemental file
Ancillary and post-trial care	34	Provisions, if any, for ancillary and post-trial care, and for compensation to those who suffer harm from trial participation	Supplemental file

*We strongly recommend reading this checklist in conjunction with the SPIRIT 2025 Explanation and Elaboration and the SPIRIT 2025 Expanded Checklist for important clarifications on all the items. We also recommend reading relevant SPIRIT extensions. See www.consort-spirit.org

Citation: Chan A-W, Boutron I, Hopewell S, Moher D, Schulz KF, et al. SPIRIT 2025 statement: updated guideline for protocols of randomised trials. BMJ 2025;389:e081477. https://dx.doi.org/10.1136/bmj-2024-081477

2. GASTRIC-PICU Structured Summary

WHO Data Set Item	
Primary Registry and Trial Identifying Number	ISRCTN The UK's Clinical Study Registry Number: ISRCTN79668198 https://www.isrctn.com/ISRCTN79668198
Date of Registration in Primary Registry	5 April 2023
Secondary Identifying Numbers	Swiss National Clinical Trial Portal (SNCTP000006200)
International Standard RCT	ref. 79668198
Source of Monetary or Material Support	National Institute of Health and Care Research (NIHR)
Sponsor	Intensive Care National Research and Audit Centre (ICNARC)
Sponsor's Role	ICNARC, as the Sponsor of the GASTRIC-PICU Trial, holds primary responsibility for the overall conduct and governance of the study. This includes assuming legal accountability for trial management, ensuring compliance with all applicable regulatory requirements, and reviewing study documentation prior to submission for ethical approval. The Sponsor will participate in the interpretation of trial data and the results.
Protocol Version	4.0, 7 February 2025
Protocol Amendments	The Trial Management Group will determine whether protocol amendments are required during the course of the trial, informed by discussions and feedback from the Trial Steering Committee, the Data Monitoring and Ethics Committee, study progress, and input from sites and the trial team. Any amendments will be submitted to the Research Ethics Committee for approval and, once approved, will be communicated promptly to the funder, committees, trial team, and research sites via email and/or site calls. Updated documents will also be made available on the Sponsor's website and other relevant trial registration platforms.
Protocol and Statistical Analysis Plan	The trial protocol is available on the registry page: https://www.isrctn.com/ISRCTN79668198 Statistical Analysis Plan has been finalised and will also be available on the registry page soon.
Contact for Public Queries	gastric@icnarc.org
Contact for Scientific Queries	Professor Lyvonne Tume Lyonne.tume@edgehill.ac.uk
Public Title	GASTRIC-PICU
Scientific Title	Randomized clinical trial to evaluate not routinely measuring gastric residual volume to guide enteral feeding versus routine measurement in mechanically ventilated critically ill children.
Countries of Recruitment	England, Scotland, Wales, Northern Ireland, Switzerland
Health Conditions	Nutrition in intensive care

Intervention	No Routine gastric residual volume (GRV) measurement

Key Inclusion and Exclusion Criteria	POPULATION
	Children admitted to paediatric intensive care units who are receiving invasive mechanical ventilation and meet the eligibility criteria:
	
	INCLUSION CRITERIA:
	• Aged ≥ 37 weeks corrected gestational age and < 16 years at the time of recruitment,
	• Enrolled within 24 hours of first meeting all the following criteria:
	  ○ Receiving invasive mechanical ventilation (with extubation not planned in the next 48 hours),
	  ○ Intention to start feeding or started feeding via the gastric route (including gastrostomy).
	EXCLUSION CRITERIA:
	• Post pyloric feeding or jejunostomy,
	• End-of-life care plan in place with limitation of resuscitation,
	• Children on long term invasive mechanical ventilation,
	• Current or recent gut pathology or surgery (e.g., necrotising enterocolitis (NEC), active GI bleeding, or any intestinal surgery),
	Known to have been enrolled in the GASTRIC-PICU trial in the last 6 months.

Study Type	Multi-centre, randomised, noninferiority, open-label trial with inbuilt pilot phase (with clear stop/go progression criteria to full trial) and health economic evaluation and patient follow-up 6 months.
Date of First Enrolment	29 June 2023
Sample Size	4,700
Recruitment Status	Recruiting
Strategies to reach the sample size	Regular all-site meetings with research staff; regular review of recruitment numbers and identifying recruitment issues from early stages of recruitment (staff survey); feedback from research sites
Primary Outcome(s)	The two clinical co-primary outcomes are: 1) Composite outcome of survival and days free from mechanical ventilation at 30 days (non-inferiority), and 2) Percentage of the child's estimated energy requirements achieved by 72 hours after randomisation (superiority). The primary outcome of cost-effectiveness analysis is incremental net monetary benefits at six months.
Secondary Outcomes	1) Time to achievement of target energy requirement

	2) Time to achievement of target protein requirement 3) Diagnosis of Ventilator Associated Pneumonia (VAP) 4) Diagnosis of necrotising enterocolitis (NEC) in infants 5) Duration of time with no enteral feed in the first 7 days after randomisation 6) Incidence of vomiting leading to feed stoppage in the first 7 days after randomisation 7) Documented healthcare acquired infections 8) Length of PICU stay and hospital stay 9) Mortality at 30 days and 6 months 10) Resource use and costs 11) Health-related Quality of Life (assessed using PedsQL and CHU-9D questionnaire data) 12) Quality-Adjusted Life Years (QALYs) 13) Feeding component of the Functional Status Score
Ethics Review	Status: Approved Approval Date: 10 May 2023 Contact: London – Bloomsbury Research Ethics Committee: Bloomsbury.rec@hra.nhs.uk
Data Sharing Statement	The study team will make a de-identified dataset available to external investigators upon reasonable request. Investigators may be asked to provide evidence of research ethics approval (or exemption) and/or to complete a data-sharing agreement. Requests for data should be submitted to the corresponding author for review and consideration. Please note that exclusive access to the data will be retained until the primary trial results have been published. Thereafter, access to anonymised data may be granted following a thorough review process.
Dissemination Policy	The results of the GASTRIC-PICU trial will be disseminated actively and extensively. This will cover both progress during the trial period and the results at the end of the study. The outputs for the GASTRIC-PICU trial will include, but will not be limited to, the following areas: - meeting and conference presentations (national and international) of study progress and results - publication of study results (1) primary results and (2) longer-term outcomes, including economic evaluation; and - incorporation into clinical guidelines. These separate outputs will be targeted at relevant stakeholders in formats suitable for the target audience. This will ensure that the potential benefit of GASTRIC-PICU is maximised. Following publication, the results will also be disseminated using social media for both professionals

	and a lay summary that will be co-designed with the Patient Advisory Group (PAG). Dissemination will also be via UK, European and International PICU networks at meetings and special dissemination events.
Insurance	The Sponsor, has appropriate insurance in place in the unlikely event that a participant suffers any harm as a direct consequence of participation in this study.

3. Randomization procedures (Sealed Envelope)

The GASTRIC-PICU trial uses an independent online system, Sealed Envelope, to randomize patients. The system is designed to allocate patients while stratifying by age, hospital, and primary reason for admission. No patient-identifiable information is entered and only the following data are required prior to randomization:

- Patients initials,
- Age at admission recorded as: < 1 month, ≥1 month to <12 months, or ≥12 months,
- Main reason for admission recorded as: structural disease of the heart vs other.

This is then followed by recording inclusion/exclusion criteria.

Random allocation is generated by automated system upon entering patient's inclusion and exclusion criteria. A study number will be displayed once randomization has occurred, which will display the study allocation. Due to nature of the study, blinding will not be possible to staff as they will be delivering intervention.

Intervention arm flowchart (No GRV measurements to guide enteral feeding)

The GASTRIC-PICU Study

Confirm NGT position by testing pH but don't aspirate the whole stomach

Start enteral feeds as soon as per standard unit practice
Daily nutritional goals calculated with aim to achieve this target by 72 hours

Monitor for feed intolerance using clinical signs only:
- Vomiting
- Abdominal distention
- Abdominal pain or tenderness
- General clinical status of the child

DO NOT USE GRV MEASUREMENTS

Tolerating Feeds
If there are no clinical signs of feed intolerance, then increase feeds as per unit protocol

Consider other possible causes
- Vomiting – is child coughing on tube, awake & distressed
- Is gastric tube in stomach – check tip on last CXR
- Sedation or opiate withdrawal
- Abdo distention due to swallowing air
- Diarrhoea –gut infection(e.g. Clostridium difficile), osmotic medication, non-invasive ventilation
- Reflux or Regurgitation

Confirm likely feed intolerance by discussion with senior clinicians and address these causes.
If feed intolerance is confirmed → stop feeds as per your usual practice, re-assess clinical signs and restart feeds at previous rate

Not Tolerating Feeds → follow unit guidance to promote tolerance, consider:
- Changing from bolus to continuous feeds,
- Adding oral prokinetics,
- Changing to jejunal feeding, or
- Discuss with dietitian changing feed formula or starting PN

5. GASTRIC-PICU Safety Monitoring and Reporting and how harms are defined

Adverse Event (AE) reporting will follow the Health Research Authority guidelines on safety reporting in studies which do not use Investigational Medicinal Products (non-CTIMPs).

Definitions

Term	Definition
Adverse Event	Any untoward medical occurrence or effect in a patient participating in a trial. It does not necessarily have to have a causal relationship with the trial intervention.
Serious Adverse Event	A serious adverse event is an untoward medical occurrence that: - results in death - is life-threatening* - requires in-patient hospitalisation** or significant prolongation of existing hospitalisation - results in persistent or significant disability/incapacity - is a congenital anomaly/birth defect - is otherwise considered medically significant by the Investigator. * “Life threatening” refers to an event in which the subject was at risk of death at the time of the event. It does not refer to an event that hypothetically might have caused death if it were more severe. ** “Hospitalisation”, refers to inpatient admission, regardless of length of stay. This includes admission for continued observation. Any admission for pre-existing conditions that have not worsened, or elective procedures, do not constitute an SAE.
Serious Adverse Reaction	An adverse event that is both serious and, in the opinion of the reporting Investigator, believed with reasonable probability to be due to the trial intervention, based on the information provided.
Unexpected and Related Serious Adverse Event	A suspected Adverse Event related (possibly, probably, or definitely) to the trial intervention that is both unexpected (i.e., not consistent with the expected outcomes of the treatment being offered) and serious.

Assessment

The PI, or other medically qualified investigator as listed on the Delegation Log, should assess relatedness, expectedness and severity, categorised as follows:

Relatedness

None: there is no evidence of any causal relationship to the study treatment.

Unlikely: there is little evidence to suggest a causal relationship to the study treatment (e.g., because the event did not occur within a reasonable timeframe after administration of the trial treatment), and there is another reasonable explanation of the event (e.g., the participant's clinical condition, other concomitant medications).

Possibly: there is some evidence to suggest a relationship to the study treatment (e.g., because the event occurred within a reasonable timeframe after administration of the trial procedure). However, the influence of other factors may have contributed to the event (e.g., the participant's clinical condition, other concomitant medications).

Probably: there is probable evidence to suggest a causal relationship to the study treatment, and the influence of other factors is unlikely.

Definitely: there is clear evidence to suggest a causal relationship to the study treatment, and other possible contributing factors can be ruled out.

Expectedness

Expected: the event is listed as an expected event in the Appendix 2.

Unexpected: the event is not listed as an expected event in the Appendix 2.

Severity

None: indicates no event or complication.

Mild: complications result in only temporary harm and do not require clinical treatment.

Moderate: complications require clinical treatment but do not result in significant prolongation of hospital stay. Does not usually result in permanent harm and where this does occur the harm does not cause functional limitations to the patient.

Severe: complications require clinical treatment and results in significant prolongation of hospital stay and/or permanent functional limitation.

Life threatening: complications may lead to death.

Fatal: indicates that the patient died as a direct result of the complication/adverse events.

Recording and Reporting Procedures

The key safety outcomes in the GASTRIC-PICU trial are ventilator-associated pneumonia (VAP) and necrotising enterocolitis (NEC). Incidence of these events will be captured via the Case Report Forms and does not need to be reported additionally as SAEs.

Considering that all children eligible for the GASTRIC-PICU trial are critically ill and, due to the complexity of their condition, are at an increased risk of experiencing AEs – occurrences of SAEs will only be reported if they are considered to be possibly, probably or definitely causally related to the study (i.e., either as a consequence of measuring GRV, or not measuring GRV). Non-serious adverse events do not require reporting for trial purposes.

The reporting period is from the time of randomisation until 30 days post-randomisation or until final discharge from critical care unit (whichever is sooner).

All reportable SAEs (i.e., serious events which are considered possible, probably, or definitely related to the study) must be reported to ICNARC CTU within 24 hours of the site research team becoming aware of the event. Related events must be assessed for expectedness. Staff should not wait until all information about the event is available before sending SAE notification. Information not available at the time of the initial report must be documented and submitted as it becomes available.

For Swiss participants, if it cannot be excluded that the SAE is attributable to the intervention under investigation, the Investigator will report it to the Ethics Committee via BASEC (Business Administration System for Ethics Committees) within 15 days.

Risk Assessment

Prior to trial commencement, ICNARC performed a risk assessment of the trial that will be reviewed at regular intervals according to its own Standard Operating Procedure. This trial is a comparison of standard treatments, which does not include a drug treatment, so does not fall under the auspices of the MHRA. Based on the assessment, this trial poses minimal risk, no greater than normal care within a PICU, to either the participants or the health care professionals delivering the trial.

6. Trial Outcome Definitions

NECROTISING ENTEROCOLITIS (NEC) (1): as a new diagnosis after randomisation for children who are under 1 year old. The diagnosis is to be based on a combination of systemic, abdominal and/or radiological signs.

- Systemic signs - Include temperature instability, apnoea, bradycardia, raised inflammatory markers, thrombocytopenia, shock features. In NEC these are present with abdominal and or radiological signs stated below.
- Abdominal - Intestinal signs include abdominal distension, reduced or absent bowel sounds, larger than normal gastric aspirates, gastric bleeding, rectal bleeding, abdominal tenderness, or cellulitis.
- Radiological signs - The following are radiological signs of NEC and cases with these should be counted as a case of NEC: pneumatosis coli, portal gas, perforation – pneumoperitoneum (excluding air under the diaphragm associated with insertion of a PD catheter in theatre or in ICU, or accidental opening of the peritoneum during the operation).

A child who develops only mild systemic and/or abdominal-intestinal signs and is treated only with a 24-48 hour rule out course of NBM and antibiotics followed by re-starting feeds based on improvement should not be counted as a case of NEC.

If a general surgeon assesses the child and based on features from the systemic signs and abdominal signs elects to treat the child as NEC with NBM for minimum 5 days, then this case should be counted as a case of NEC.

Any child with a surgical abdomen who has a more serious picture – perforation, peritonitis, abdominal mass, is to be counted. There is no requirement for grading, however as a practical guide the following simplified classification has been suggested

- Moderate - any child meeting the criteria who does not need surgery and survives.
- Severe - a child with NEC who needs surgery and/or dies.

VENTILATOR ASSOCIATED PNEUMONIA (VAP) (2): any new course of antibiotics prescribed for a presumed or proven VAP.

CATHETER RELATED BLOOD STREAM INFECTIONS (CLABSI) (2): proven or suspected CLABSI leading to commencement or continuation of antimicrobials (Appendix 3 of the protocol).

SURGICAL SITE INFECTION (SSI) (2): surgical site infection diagnosed within 30 days of the procedure, where the treating clinical team assesses the infection to be linked to the recent operation. A new course of antibiotics, or continuation of a current course for the clinical diagnosis of a surgical site infection. Surgical site infections also include those where a debridement or other surgical intervention is required to treat the infection.

ESTIMATED PROTEIN REQUIREMENT: 1.5g/kg (65% by 72 hours, 100% post-72 hours).

ESTIMATED ENERGY REQUIREMENT: estimated using the Schofield equation for age and gender (with no stress factors applied) (65% by 72 hours, 100% post-72 hours).

References:

1. Brown KL, Pagel C, Brimmell R, Bull K, Davis P, Franklin RC, et al. Definition of important early morbidities related to paediatric cardiac surgery. Cardiology in the Young. 2017;27(4):747-56.
2. National Healthcare safety Network (NHSN) Centre for Disease Control (CDC): Identifying Healthcare-associated Infections (HAI) for NHSN Surveillance. Updated guidance Jan 2021. https://www.cdc.gov/nhsn/pdfs/pscmanual/2psc_identifyinghais_nhsncurrent.pdf

7. Outcome Measures

Primary Outcome Measures

The two clinical co-primary outcomes are:

- Composite outcome of survival and days free from mechanical ventilation at 30 days from randomisation (non-inferiority), and
- Percentage of the child's estimated energy requirements achieved by 72 hours after randomisation (superiority).

The primary outcome of cost-effectiveness analysis is incremental net monetary benefits at six months.

Secondary Outcome Measures

Secondary outcomes during PICU stay:

- Time to achievement of target energy requirement
- Time to achievement of target protein requirement
- Diagnosis of Ventilator Associated Pneumonia
- Diagnosis of necrotising enterocolitis in infants
- Duration of time with no enteral feed in the first 7 days after randomisation
- Incidence of vomiting leading to feed stoppage in the first 7 days after randomisation
- Documented healthcare acquired infections

Secondary outcomes assessed at PICU discharge:

- Length of PICU stay (days)

Longer terms secondary outcomes (post-PICU discharge):

- Mortality at 30 days and 6 months post randomisation
- Length of hospital stay
- Health-related Quality of Life (assessed using PedsQL and CHU-9D questionnaire data)
- Feeding component of the Functional Status Score

These outcomes are consistent with core outcomes recommended for PICU trials (26) and this is consistent with our feasibility work consulting with parents and clinicians.

Cost-effectiveness outcomes

- Resource use and costs
- Total costs at six months.
- Quality-Adjusted Life Years (QALYs) at six months.

- Incremental net monetary benefits calculated at £20,000 per QALY at six months associated with intervention (No routine GRV measurement) versus control (standard GRV measurement).

The GASTRIC-PICU Study

icnarc intensive care national audit & research centre

Data Collection Worksheets

Trial number

G | | | | | | |

Randomisation

Date / Time of randomisation

Date: D D / M M / 2 0 2 Y Time: H H : M M (24-hour clock)

Treatment allocation

No routine GRV measurement (intervention) — N

Routine GRV measurement (control) — G

Baseline

Date/time of admission to PICU: D D / M M / 2 0 2 Y H H : M M (24-hour clock)

Age: Y Y Years M M Months *(If less than 1yr, put '00' in years (YY), then complete months (MM))*

Sex: Male M Female F

Weight: | | | . | kg Estimated E Measured M

Does the child normally eat and/or drink orally (including breastfeeding)? Yes Y No N

Intended feeding route: Gastric tube T Gastrostomy G

Did feeding via gastric route start between admission to hospital and randomisation? Yes Y No N

If yes: date/time feeding via gastric route started after admission to hospital: D D / M M / 2 0 2 Y H H : M M (24-hour clock)

Completed by: (print name) _____ **Date completed:** D D / M M / 2 0 2 Y

Feeding Record

Trial number: G | | | | | | | |

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Record feeding start and any unplanned interruptions to feeding for 7 days post-randomisation or until feeding via gastric route is stopped, PICU discharge or death (whichever occurs first).

Bolus fed patients: feed stop time should be the time that the next bolus feed was due to be given.

Continuously fed patients: record the actual stop time.

See CRF guidance document for full details.

Feed stoppage reason codes

1. High volume GRV
2. Vomiting
3. Procedure or investigation
4. Other clinical reason (inc. other signs of feed intolerance; patient deterioration)

	Date/time feeding start	Feeding method	Date/time feeding stoppage	Reason for feed stoppage
1	D D / M M / 2 0 2 Y H H : M M	Continuous C Bolus B	D D / M M / 2 0 2 Y H H : M M	1 2 3 4
2	D D / M M / 2 0 2 Y H H : M M	Continuous C Bolus B	D D / M M / 2 0 2 Y H H : M M	1 2 3 4
3	D D / M M / 2 0 2 Y H H : M M	Continuous C Bolus B	D D / M M / 2 0 2 Y H H : M M	1 2 3 4
4	D D / M M / 2 0 2 Y H H : M M	Continuous C Bolus B	D D / M M / 2 0 2 Y H H : M M	1 2 3 4
5	D D / M M / 2 0 2 Y H H : M M	Continuous C Bolus B	D D / M M / 2 0 2 Y H H : M M	1 2 3 4
6	D D / M M / 2 0 2 Y H H : M M	Continuous C Bolus B	D D / M M / 2 0 2 Y H H : M M	1 2 3 4
7	D D / M M / 2 0 2 Y H H : M M	Continuous C Bolus B	D D / M M / 2 0 2 Y H H : M M	1 2 3 4
8	D D / M M / 2 0 2 Y H H : M M	Continuous C Bolus B	D D / M M / 2 0 2 Y H H : M M	1 2 3 4
9	D D / M M / 2 0 2 Y H H : M M	Continuous C Bolus B	D D / M M / 2 0 2 Y H H : M M	1 2 3 4
10	D D / M M / 2 0 2 Y H H : M M	Continuous C Bolus B	D D / M M / 2 0 2 Y H H : M M	1 2 3 4
11	D D / M M / 2 0 2 Y H H : M M	Continuous C Bolus B	D D / M M / 2 0 2 Y H H : M M	1 2 3 4
12	D D / M M / 2 0 2 Y H H : M M	Continuous C Bolus B	D D / M M / 2 0 2 Y H H : M M	1 2 3 4
13	D D / M M / 2 0 2 Y H H : M M	Continuous C Bolus B	D D / M M / 2 0 2 Y H H : M M	1 2 3 4

Tick to confirm Daily Intake Chart is fully completed ☐

Completed by: (print name) _____ **Date completed:** D D / M M / 2 0 2 Y

Daily Intake Chart

Trial number

G						

The GASTRIC-PICU Study

Use standard chart days (see CRF guide for full detail)
Day 1: time of randomisation to end of standard chart time
Day 2–8: use standard chart date/time *(if day spans two dates, enter first date)*

Feeds

Day		1	2	3	4	5	6	7	8
Date		D D / M M / 2 Y	D D / M M / 2 Y	D D / M M / 2 Y	D D / M M / 2 Y	D D / M M / 2 Y	D D / M M / 2 Y	D D / M M / 2 Y	D D / M M / 2 Y
Fed via gastric route today (NGT/OGT/gastrostomy) **Y/N** If YES, complete total amount of each feed type received		Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N
Brand of feed *(e.g., Nutrison)*	**Name of feed** *(e.g., paediasure fibre)*								
Expressed breast milk: fully fortified (ml)									
Expressed breast milk: ½ fortified									
Expressed breast milk: non-fortified (ml)									
Water given via gastric route (ml)									

Other fluids

Day	1	2	3	4	5	6	7	8
Total Parenteral Nutrition (TPN): enter total volume received today (ml)								
Other fluids received today (ml): include maintenance fluid, drugs (do not include fluid boluses/blood products)								

Tick to confirm Daily Intake Chart is fully completed ☐

Signature: _____ **Completed by:** (print name) _____ **Date completed:** D D / M M / 2 0 2 Y

Gastric Residual Volume (GRV Measurements Log

Trial number

G						

The GASTRIC-PICU Study

Include all GRV measurements performed for 7 days post-randomisation, or until feeding via the gastric route is stopped, PICU discharge or death (whichever occurs first). Do not include aspirates performed only for testing tube position.

Use calendar days: Day 1 = from time of randomisation to midnight. Days 2–8 = subsequent days in date order.
See CRF guide for detail.

Day 1	Date: D D / M M / 2 0 2 Y	
No GRV measurements taken today ☐		
Time GRV taken	GRV volume	GRV returned (R) or discarded (D) or partially discarded (P)
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P

Day 2	Date: D D / M M / 2 0 2 Y	
No GRV measurements taken today ☐		
Time GRV taken	GRV volume	GRV returned (R) or discarded (D) or partially discarded (P)
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P

Day 3	Date: D D / M M / 2 0 2 Y	
No GRV measurements taken today ☐		
Time GRV taken	GRV volume	GRV returned (R) or discarded (D) or partially discarded (P)
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P

Day 4	Date: D D / M M / 2 0 2 Y	
No GRV measurements taken today ☐		
Time GRV taken	GRV volume	GRV returned (R) or discarded (D) or partially discarded (P)
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P

GRV Log (Part 2)

Trial number: G

The GASTRIC-PICU Study

Day 5	Date: D D / M M / 2 0 2 Y
No GRV measurements taken today ☐	

Time GRV taken	GRV volume	GRV returned (R) or discarded (D) or partially discarded (P)
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P

Day 6	Date: D D / M M / 2 0 2 Y
No GRV measurements taken today ☐	

Time GRV taken	GRV volume	GRV returned (R) or discarded (D) or partially discarded (P)
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P

Day 7	Date: D D / M M / 2 0 2 Y
No GRV measurements taken today ☐	

Time GRV taken	GRV volume	GRV returned (R) or discarded (D) or partially discarded (P)
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P

Day 8	Date: D D / M M / 2 0 2 Y
No GRV measurements taken today ☐	

Time GRV taken	GRV volume	GRV returned (R) or discarded (D) or partially discarded (P)
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P
HH:MM	ml	R D P

Completed by: (print name) _____ **Date completed:** D D / M M / 2 0 2 Y

Invasive Mechanical Ventilation

Trial number: G | | | | | | |

The GASTRIC-PICU Study

Date/time Invasive Mechanical Ventilation Started

D D / M M / 2 0 2 Y H H : M M (24-hour clock)

Use calendar days:
Day 1 = from time of randomisation to midnight.
Days 2-30 = subsequent days in date order.
See CRF guide for detail.

DAY	1	2	3	4	5	6	7	8	9	10
DATE	D D/M M/2 Y	D D/M M/2 Y	D D/M M/2 Y	D D/M M/2 Y	D D/M M/2 Y	D D/M M/2 Y	D D/M M/2 Y	D D/M M/2 Y	D D/M M/2 Y	D D/M M/2 Y
Invasive mechanical ventilation received at any time during this day	Y Yes N No P Not in PICU	Y Yes N No P Not in PICU	Y Yes N No P Not in PICU	Y Yes N No P Not in PICU	Y Yes N No P Not in PICU	Y Yes N No P Not in PICU	Y Yes N No P Not in PICU	Y Yes N No P Not in PICU	Y Yes N No P Not in PICU	Y Yes N No P Not in PICU
DAY	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
DATE	D D/M M/2 Y	D D/M M/2 Y	D D/M M/2 Y	D D/M M/2 Y	D D/M M/2 Y	D D/M M/2 Y	D D/M M/2 Y	D D/M M/2 Y	D D/M M/2 Y	D D/M M/2 Y
Invasive mechanical ventilation received at any time during this day	Y Yes N No P Not in PICU	Y Yes N No P Not in PICU	Y Yes N No P Not in PICU	Y Yes N No P Not in PICU	Y Yes N No P Not in PICU	Y Yes N No P Not in PICU	Y Yes N No P Not in PICU	Y Yes N No P Not in PICU	Y Yes N No P Not in PICU	Y Yes N No P Not in PICU
DAY	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**
DATE	D D/M M/2 Y	D D/M M/2 Y	D D/M M/2 Y	D D/M M/2 Y	D D/M M/2 Y	D D/M M/2 Y	D D/M M/2 Y	D D/M M/2 Y	D D/M M/2 Y	D D/M M/2 Y
Invasive mechanical ventilation received at any time during this day	Y Yes N No P Not in PICU	Y Yes N No P Not in PICU	Y Yes N No P Not in PICU	Y Yes N No P Not in PICU	Y Yes N No P Not in PICU	Y Yes N No P Not in PICU	Y Yes N No P Not in PICU	Y Yes N No P Not in PICU	Y Yes N No P Not in PICU	Y Yes N No P Not in PICU

Successful Extubation

Defined as extubation for at least 48 hours without reintubation.

Date/time of first successful extubation: D D / M M / 2 0 2 Y H H : M M (24-hour clock)

Signature: _____ **Completed by:** (print name) _____ **Date completed:** D D / M M / 2 0 2 Y

Consent

Trial number: G

The GASTRIC-PICU Study

Approach for Consent

Was the parent/guardian approached for consent during hospital admission? (select one)

- (Y) Yes and consent provided/refused
- (Y) Yes but patient died/discharged before consent obtained
- (N) No

If yes, date first approached: D D / M M / 2 0 2 Y

Section 1

Date consent provided/refused: D D / M M / 2 0 2 Y

If refused, provide reason (optional):

Name of person seeking consent:

Consent obtained for:

Continued participation and data collection	Yes (Y) No (N)
Access to medical records (NHS staff)	Yes (Y) No (N)
Processing identifiable information	Yes (Y) No (N)
Access to medical records (non-NHS staff)	Yes (Y) No (N)
Follow-up questionnaire	Yes (Y) No (N)
Receiving summary of trial results	Yes (Y) No (N)
Being contacted for future research	Yes (Y) No (N)

Was assent obtained from patient? Yes (Y) No (N)

Parent/Guardian Details

If consent for follow-up has been obtained, please enter parent name, surname, telephone number, email address, postal address and contact preference on MACRO, as appropriate.

Section 2

Parent/guardian not approached/ consented in person:

- (D) Patient died before consent obtained
- (H) Patient discharged before consent obtained

Provide explanation:

Phone call

Date of phone call: D D / M M / 2 0 2 Y

Response received? Yes (Y) No (N)

Letter

Date letter sent: D D / M M / 2 0 2 Y

Study opt-out

Complete after 4 weeks of date of letter.

Study opt-out request received? Yes (Y) No (N)

If yes, date received: D D / M M / 2 0 2 Y

If yes, opt out method:

Email (E) Post (P) Phone (T) Other (O)

If no, does the patient have a **National Data Opt-out**? Yes (Y) No (N)

Did parent consent to receive a follow-up questionnaire? Yes (Y) No (N)

Completed by: (print name)

Date completed: D D / M M / 2 0 2 Y

Demographics

Trial number

G						

The GASTRIC-PICU Study

Please, complete once the consent has been obtained.

First name:

Surname:

Date of birth: D D / M M / Y Y Y Y

PICANet Event ID:

NHS number:

Postcode:

Completed by:
(print name)

Date completed: D D / M M / 2 0 2 Y

Withdrawal of Consent

Trial number

G						

The GASTRIC-PICU Study

Complete if parent/guardian withdrew consent at any point while in the trial.

Date of withdrawal of consent: D D / M M / 2 0 2 Y

Withdrawing from:
(select all that apply)

Continued trial participation	Yes (Y) No (N)
Continued data collection	Yes (Y) No (N)
Use of patient identifiable data (for data linkage)	Yes (Y) No (N)
Follow-up questionnaire	Yes (Y) No (N)

Reason for withdrawal (if provided):

Completed by: (print name)

Date completed: D D / M M / 2 0 2 Y

Infection-related Outcomes

Trial number

G | | | | | | | |

The GASTRIC-PICU Study

From randomisation to PICU discharge or at day 30, whichever is sooner.

Date of assessment: D D / M M / 2 0 2 Y

Necrotising enterocolitis (NEC)

(Complete if the patient is <3 years old)

Diagnosed? Yes (Y) No (N)

If YES, date of documented diagnosis: D D / M M / 2 0 Y Y

If Yes, classify the severity: Moderate (Y) Severe (N)

Refer to CRF guide for more information.

Ventilator Associated Pneumonia (VAP)

Diagnosed? Yes (Y) No (N)

If YES, date of documented diagnosis: D D / M M / 2 0 Y Y

Catheter related blood stream infection (CLABSI)

Diagnosed? Yes (Y) No (N)

If YES, date of documented diagnosis: D D / M M / 2 0 Y Y

Surgical Site Infection (SSI)

Diagnosed? Yes (Y) No (N)

If YES, date of documented diagnosis: D D / M M / 2 0 Y Y

Any other documented healthcare acquired infection

Diagnosed? Yes (Y) No (N)

If YES, date of documented diagnosis: D D / M M / 2 0 Y Y

Completed by: (print name) _____ **Date completed:** D D / M M / 2 0 2 Y

Outcomes at Hospital Discharge

Trial number: G | | | | | | | |

The GASTRIC-PICU Study

Discharge from your PICU

Status: Alive (A) Dead (D)

Date/Time: D D / M M / 2 0 Y Y H H : M M (24-hour clock)

Date of final feed stoppage: *(via nasogastric tube or gastrostomy)* D D / M M / 2 0 2 Y OR ( ) Feeding ongoing at PICU discharge *(via nasogastric tube or gastrostomy)*

Location following discharge from your PICU

	Hospital*	Location#	Date of admission
( ) Hospital →			D D / M M / 2 0 2 Y
			D D / M M / 2 0 2 Y
			D D / M M / 2 0 2 Y
			D D / M M / 2 0 2 Y
			D D / M M / 2 0 2 Y
			D D / M M / 2 0 2 Y

*** Hospital:**
S = Same
O = Other

 # Location:
P = PICU
H = HDU
C = Combined PICU/HDU
W = Ward
O = Other

( ) Home

( ) Other, please specify:

Ultimate discharge from critical care (if transferred to another critical care unit)

Status: Alive (A) Dead (D)

Date/Time: D D / M M / 2 0 Y Y H H : M M (24-hour clock)

Ultimate discharge from acute hospital

Status: Alive (A) Dead (D)

Date: D D / M M / 2 0 Y Y

Time: H H : M M

Death after hospital discharge

Date of death: D D / M M / 2 0 Y Y

Co-enrolment(s)

Please record any other interventional trials to which the patient was enrolled

Is the patient enrolled into PRESSURE? Yes (Y) No (N)

PRESSURE Trial Number | | | | | | |

Please record any other interventional trials to which the patient was enrolled

Completed by: (print name)

Date completed: D D / M M / 2 0 2 Y

Outcomes - Survival Status

To be completed at 30 days and 6 months post randomisation.

Trial number

G						

The GASTRIC-PICU Study

30 days

(A) Alive

(D) Dead

(U) Unable to ascertain

Date: D D / M M / 2 0 2 Y

If alive, record date status confirmed.
If dead, record date of death on the Outcome form.
If unable to ascertain, record date last known alive.

If alive, confirmed via:

(S) Hospital records linked to NHS Spine

(G) Contact with GP on or after timepoint post-randomisation

(H) Contact with hospital on or after timepoint post-randomisation

Please check patient's contact details and update on the Consent form if necessary.

If unable to ascertain, record reason:

6 months

(A) Alive

(D) Dead

(U) Unable to ascertain

Date: D D / M M / 2 0 2 Y

If alive, record date status confirmed.
If dead, record date of death on the Outcome form.
If unable to ascertain, record date last known alive.

If alive, confirmed via:

(S) Hospital records linked to NHS spine

(G) Contact with GP on or after timepoint post-randomisation

(H) Contact with hospital on or after timepoint post-randomisation

Please, check patient's contact details and update on the Consent form if necessary.

If unable to ascertain, record reason:

Completed by: (print name)

Date completed: D D / M M / 2 0 2 Y

Serious Adverse Event Reporting Form

Trial number: G | | | | | | | |

The GASTRIC-PICU Study

Complete all sections. For guidance on which events to report, see study protocol.
Complete a separate form for each event that meets the SAE definition.

Name of event:

Severity (tick one):

- ☐ Severe
- ☐ Life-threatening
- ☐ Fatal

Start Date/Time: D D / M M / 2 0 2 Y H H : M M (24-hour clock)

Date/Time local research team became aware of event: D D / M M / 2 0 2 Y H H : M M (24-hour clock)

Type of report (tick one): ◯ First ◯ Follow-up ◯ Final

Why was the event serious: (tick all that apply)

- ◯ Resulted in death
- ◯ Required new or prolonged hospitalisation
- ◯ Resulted in congenital anomaly/birth defect
- ◯ Life-threatening
- ◯ Resulting in persistent or significant disability/incapacity
- ◯ Other medically significant event

'Resulted in death' Or 'Life-threatening' can only be selected if the severity is Life-threatening or Fatal at the time of the event

Outcome: (tick one)

- ◯ Resolved
- ◯ Resolved with sequelae
- ◯ Ongoing
- ◯ Worsened
- ◯ Fatal
- ◯ Not assessable

'Fatal' should only be selected if the patient died directly as a result of this event

Date/Time resolved: D D / M M / 2 0 2 Y H H : M M (24-hour clock)

If patient died during event, use date of death.

SAE Assessment

Causal relationship to the study?

◯ Not related* ◯ Unlikely* ◯ Possibly ◯ Probably ◯ Definitely

(i.e. is this event thought to be related to the GASTRIC-PICU study?)

**Event does not need reporting for trial purposes*

Event Summary Description

(Give a concise medical description of all relevant symptoms and progression of event, including any actions taken as a result of the event).

Local Sign off

Assessed by

Signature

Date D D / M M / 2 0 2 Y

Medically qualified investigator on Delegation Log

9. GASTRIC-PICU Data Management

All participant data collected will be entered onto a secure electronic data entry system. The option of entry first onto paper worksheets will be available to participating sites. The site PI will oversee and be responsible for data collection, quality and recording. Collection of data can be delegated (as per the Delegation Log) by the site PI to qualified members of the research team, on the understanding that the site PI retains responsibility for the data collection oversight.

Data entered onto the secure electronic data entry system will undergo validation checks for completeness, accuracy, and consistency of data. Queries on incomplete, inaccurate, or inconsistent data will be sent to the local research team at participating sites for resolution. The local PI will be responsible for ensuring all queries are addressed and for overall quality of their site data.

Security of the electronic data entry system is maintained through usernames and individual permissions approved centrally by the ICNARC CTU. Central back-up procedures are in place. Storage and handling of confidential trial data and documents will be in accordance with the Data Protection Act 2018.

Source Data

Source documents are where data are first recorded, and from which participants' CRF data are obtained. These may 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, the participant will be referred to by the study participant number/code, not by name.

Access to Data

Direct access will be granted to authorised representatives from the Sponsor, ICNARC and host institution for monitoring and/or audit of the study to ensure compliance with regulations.

Data collected for consent declines/withdrawals

In order to monitor non-consent, safety and outcomes, a minimal dataset will be collected for each parent/legal guardian who refuses participation: a) Screening and randomisation details; b) Treatment data up to the point of refusal; c) Ventilation requirement up to 30 days; d) Reason not consented (if parents/legal guardians are willing to provide reason for non-consent); e) Survival status up to 30 days; c) incidence of NEC up to 30 days; f) SAEs (if applicable).

Only randomisation arm and date/time of randomisation and consent record will be collected for those who request for all the data to be removed from the study.

10. Data linkage with PICANet

Data from PICANet used in the trial analysis will include:

• baseline demographics and risk factors, including the Paediatric Index of Mortality score;

• secondary outcomes of PICU mortality, duration of PICU and acute hospital stay; and

• critical care daily interventions (and associated costs), based on Healthcare Resource Groups, from the index admission and any subsequent readmissions.

Data will be collected via central linkage with PICANet for patients where parents/guardians have given explicit consent for data linkage and those covered by the conditions of section 251 support as approved by Confidentiality Advisory Group (CAG) Additional nutritional and other clinical data were required to be collected as each site, including the Swiss site. The Swiss site used the same case report form (CRF) but had to collect separately their length of invasive ventilation duration, PIM3 and mortality data.

11. Trial Committees Composition and Roles

- **Trial Management Group (TMG)**

The TMG comprises the GASTRIC-PICU Investigators and will be led by Chief Investigator, Professor Lyvonne Tume. Meeting of the TMG are held quarterly, or more frequently during key stages of the trial, to ensure effective communication.

The day-to-day trial team is led by the Trial Manager and comprise the Chief Investigator, Clinical Trials Unit co-investigators alongside the Trial Statistician, Research Assistants and Data Manager. The day-to-day trial team meet regularly to discuss and monitor progress.

- **Trial Steering Committee (TSC)**

A TSC was established in line with the latest NIHR HTA guidelines (i.e., consist of 75% independent members – including the Chair). The TSC is responsible for overall supervision on behalf of the Sponsor and Funder and ensures that the trial is conducted in accordance with the rigorous standards set out in the UK Policy Framework for Health and Social Care Research and the Guidelines for Good Clinical Practice. The TSC comprises of the Chief Investigator, a senior representative from the ICNARC CTU and independent members (including independent PPI representatives). Representatives from the Sponsor and Funder are invited to observe TSC meetings which are scheduled to take place at the following time points: (1) prior to the start of the trial; (2) following the internal pilot stage; (3-5) during the trial recruitment period; and (6) at the end of primary analysis.

TSC Composition:

- Chief Investigator (non-independent)
- Co-chief Investigator (non-independent)
- Independent Chair
- 5 Independent Members
- 2 Parent Representatives (independent)

- **Data Monitoring and Ethics Committee (DMEC)**

An independent DMEC will be set up to monitor recruitment and retention, protocol adherence (including adherence to treatment protocols) and patient safety and will review the interim analysis.

DMEC Composition:

- Independent Chair
- 2 Independent members

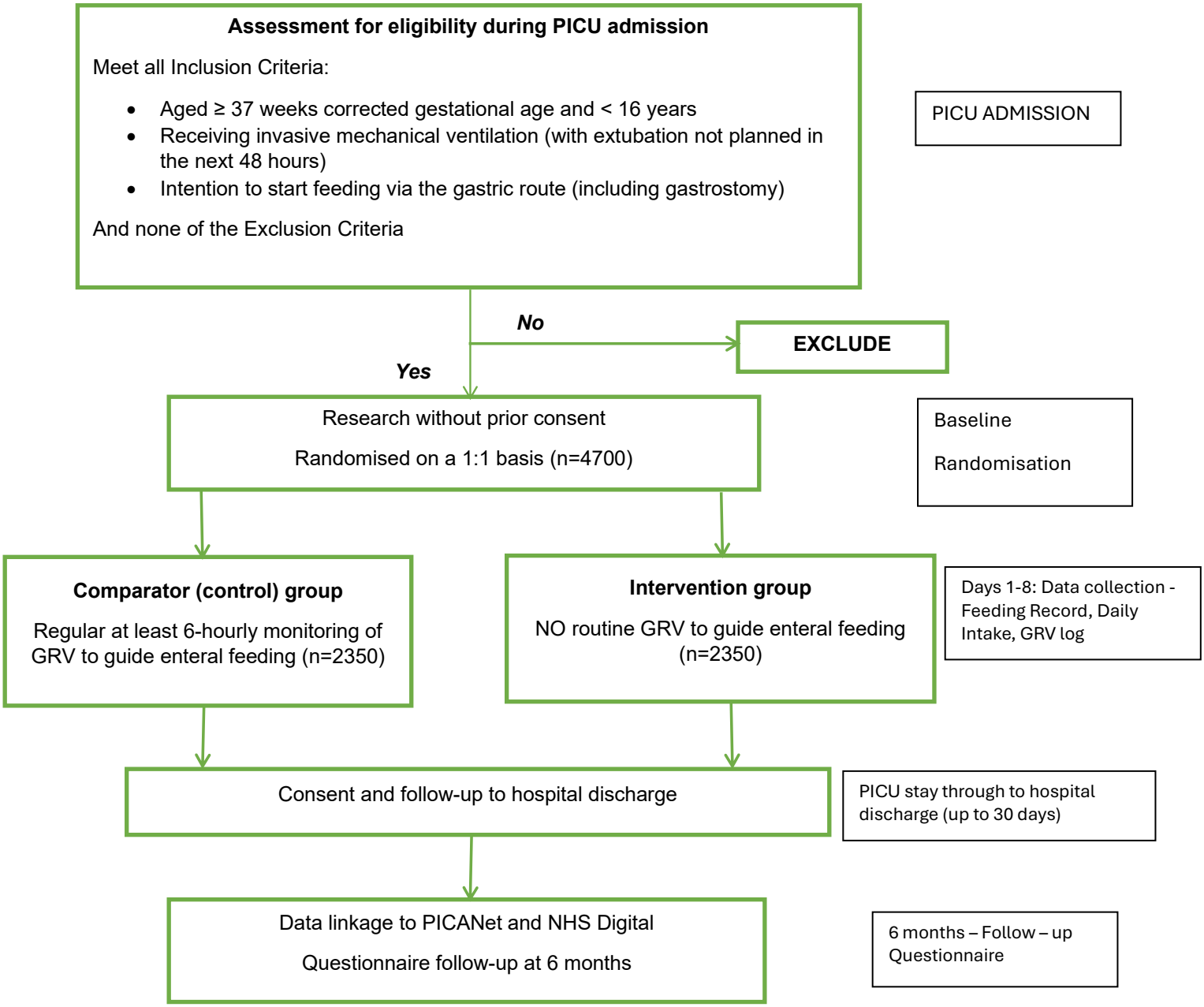
Representatives from the Sponsor and Chief Investigators are invited to observe the open sessions of the DMEC meetings.

All members of the TSC and DMEC have signed charters which are securely stored in the Sponsor’s site file.

12. List of acceptable protocol deviations:

- Clinical indication – abdominal distension/bloating/pain
- Clinical indication – acute/severe deterioration
- Clinical indication – vomiting
- Clinical indication – feed visible in nose/mouth (pooling)
- Clinical indication – other
- Patient developed an exclusion criterion post randomisation
- Patient met exclusion criterion at time of randomisation
- Palliative / supportive care only
- Ahead of procedure/proning/transfer
- Not being fed via gastric route
- Nil by mouth
- Protocol not followed whilst outside of ICU

13. Participant Timeline



14. Consent procedure for children under the care of the local authority

In cases where the Local Authority have share/full parental responsibility for a participant, the procedure for patients discharged prior to consent being sought should be followed: the Parent Information Sheet (PIS) and covering letter should be sent to the appropriate individual (e.g. the child's named social care worker or foster parent) to provide them with full study information and enable them to opt-out should they wish to.

If the Local Authority have shared responsibility for a participant, both parties with parental responsibility should be provided with the study information as described above.

If no objection is received within four weeks of receipt of the letter, then the participant's data will be included in the study.