www.icnarc.org

Cambridge University Hospitals NHS Foundation Trust

UNIVERSITY OF CAMBRIDGE

UNIVERSITY OF LIVERPOOL

icnarc intensive care national audit & research centre

A pilot cluster randomisation clinical trial of the use of selective gut decontamination in critically ill children (Paediatric Intensive Care and Infection Control)

Chief Investigator: Dr Nazima Pathan

Refresher Session

FUNDED BY NIHR | National Institute for Health Research

Period Two- Usual Care

www.icnarc.org

PICnIC is a feasibility study designed to determine whether it is possible to conduct a cRCT of SDD in critically ill children who are likely to be ventilated for ≥48 hours.

Also, to explore the acceptability of key components of the study to healthcare professional and families of patients

www.icnarc.org

Objectives

Pilot cRCT

- Ability to randomise PICUs
- Willingness & ability of healthcare professionals to screen and recruit
- Recruitment rate
- Adherence to SDD protocol
- Assess procedures for clinical ecological outcomes

www.icnarc.org

Objectives

Perspectives of PICU practitioner

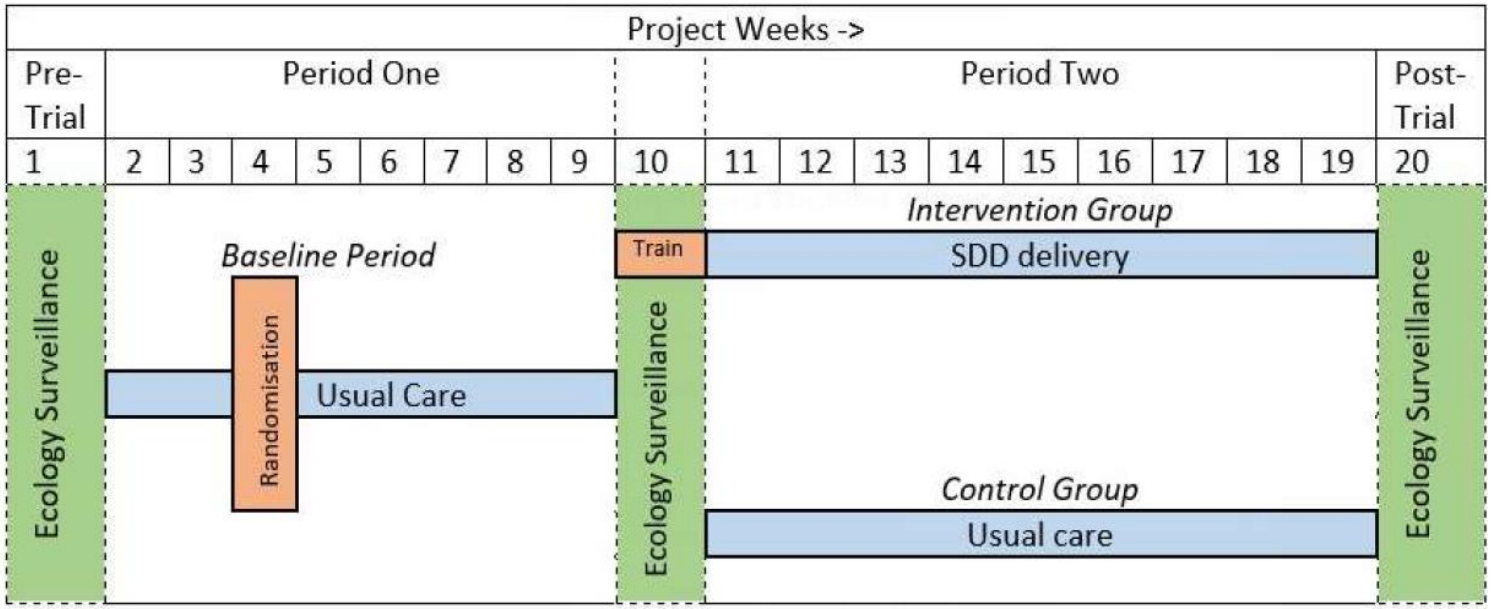
- SDD intervention, recruitment, consent procedures
- Clinical and ecological data collection
- Interest in definitive trial in the wider PICU community

Perspectives of parents/guardians

- Definitive trial that includes SDD intervention
- Recruitment and consent procedures, including information materials
- Patient-centred primary and secondary outcomes for definitive trial

www.icnarc.org

Trial Design



Week 11 shall be treated as a transition period

Timeframe	Weeks	Recruitment
Ecology Surveillance	1, 10, 20	All patients admitted to PICU during designated weeks
Period One (Usual Care)	2 - 9	144 patients – Usual Care
Period Two (Intervention and Usual Care)	11 - 19	90 patients - Intervention 90 patients - Usual Care

- Six PICU sites

Period Two: 3 sites Usual Care

3 sites Intervention

Week 1	20 September	Ecology Surveillance
Week 2	27 September	Start of Period One
Week 10	22 November	Ecology Surveillance First SDD delivery to randomised sites
Week 11	29 November	Start of Period Two (transition week)
Week 20	31 January	Ecology Surveillance

- Embedded questionnaires & interviews with parents / guardians
- Focus groups with PICU practitioners

Ecology Surveillance (weeks 1, 10, 20)

Screening and Enrolment

All patients admitted during the Ecology Surveillance Periods and have samples taken are enrolled and assigned an Ecology Surveillance Number.

Do not assign a number if samples have not been taken.

Please attempt to get consent for additional samples if routine/admission samples are missed.

Patients who have been previously enrolled into PICnIC should not be enrolled again.

Eligibility

Inclusion Criteria: All patients admitted to PICU regardless of ventilation status

Exclusion Criteria: None

Sampling for Ecology weeks

Taken on admission and then following consent, taken once more (e.g. on a Friday, if not taken in the previous 48 hours)

See SOP 012 – PICnIC Samples for further details on Laboratory Analysis

Period Two (week 11 -19)
Usual Care

Screening and Enrolment

A patient is screened and deemed eligible based on the inclusion/exclusion criteria.

On the log please include:

- Patients who fulfil all inclusion an no exclusion criteria
- Patients who fulfil all inclusion but meet one or more exclusion criteria
- Patients who fulfill all inclusion criteria and no exclusion criteria but are not enrolled (give reason).

See SOP 003 – Patient Screening and enrolment for further details

Following eligibility confirmation, patients are enrolled into PICnIC and assigned a Study Number.

Please attempt to get consent for additional samples if routine/admission samples are missed.

Patients who have been previously enrolled into PICnIC should not be enrolled again.

www.icnarc.org

Eligibility

Inclusion Criteria

- >37 weeks corrected gestational to ≤16
- Receiving mechanical ventilation, expected to last at least 48 hours
- Expected to remain on mechanical ventilation until the day after tomorrow (from the time of screening)

Exclusion Criteria

- Known allergy, sensitivity or interaction to polymyxin E (colistin), tobramycin or nystatin
- Known to be pregnant
- Death perceived as imminent

Sampling

Taken on admission then twice-weekly until discharge. For stays <7 days, should be taken at discharge

Sampling

Samples taken as part of routine care (e.g. admission samples) will be used without consent. These include:

- A nasopharyngeal swab
- A stool/rectal swab

If clinically indicated (processed as per routine local protocol):

- Urine
- Sputum/secretions from the endotracheal tube
- Wound swabs, if present

Any additional samples should be taken following consent

See SOP 012 – PICnIC Samples for further details on Laboratory Analysis

Consent

Consent **will** be required for:

- additional study-specific samples, before they are taken (expect if using bereaved CF)
- identifiable data being collected and processed for the embedded study (contact details for interviews)
- Monitoring of medical records

Consent

Consent **will not** be required for:

- samples that are collected as part of routine care (e.g. at admission)
- anonymised data collection and processing from routine sources (to be captured on CRFs)

Consent on MACRO

- Ensure to enter study number
- Record each aspect that was consented ‘yes’ or ‘no’
- Add date of consent/refusal

- Selecting ‘unable to approach for consent’ will blank all consent options out. Please provide reason.
- If parent/guardian was approached but you’re unable to get a completed consent form, choose ‘no’ options, add date and add a comment explaining this.
- If withdrawal occurs following consent, add date & reason.

Mixed methods embedded study

- Questionnaire and interviews with parents following consent
- Two focus groups with site staff - including doctors, nurses, pharmacists and allied health professionals)
- Up to 10 telephone/online interviews will be conducted with practitioners who cannot attend the focus groups
- Online survey of staff

The researcher will contact you to arrange focus groups and interviews and online survey of staff.

Questionnaire/interview enrolment

Sites provided with questionnaires and stamped self-addressed envelopes addressed to Kerry Woolfall's team at the Institute of Population Health at the University of Liverpool.

Please give a copy of the questionnaire to each parent/legal representative to complete (if consented).

If both parents are present, both will be asked to consent and complete a questionnaire. Completed questionnaires will be placed in a stamped self-addressed envelope and returned the PICnIC team member (e.g. within 12 hours) via post to the University of Liverpool team.

UoL researcher will be conducting interviews of the parents/guardians. A research team member at site will be contacted prior to the telephone interview to check the status of the child.

Case Report Forms

- Ecology Surveillance CRFs (for weeks 1, 10, 20)
  - surveillance & microbiology results

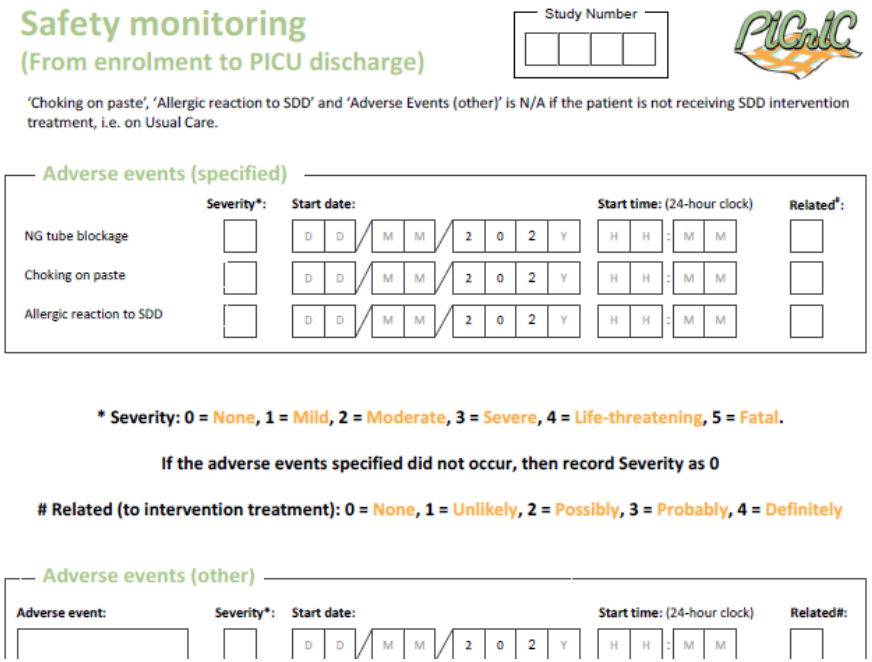
- PICnIC Period Two Usual Care
  - admission
  - weekly surveillance
  - HACI, microbiology results
  - antibiotic use
  - discharge
  - Safety monitoring

  - SAE Reporting Form

See SOP 007 – Guidance for completion of Case Report Forms for further details

www.icnarc.org

Safety Monitoring CRF



Safety monitoring
(From enrolment to PICU discharge)

Study Number

'Choking on paste', 'Allergic reaction to SDD' and 'Adverse Events (other)' is N/A if the patient is not receiving SDD intervention treatment, i.e. on Usual Care.

Adverse events (specified)

	Severity*:	Start date:	Start time: (24-hour clock)	Related#:
NG tube blockage		D D / M M / 2 0 2 Y	H H : M M	
Choking on paste		D D / M M / 2 0 2 Y	H H : M M	
Allergic reaction to SDD		D D / M M / 2 0 2 Y	H H : M M	

*** Severity: 0 = None, 1 = Mild, 2 = Moderate, 3 = Severe, 4 = Life-threatening, 5 = Fatal.**

If the adverse events specified did not occur, then record Severity as 0

 # Related (to intervention treatment): 0 = None, 1 = Unlikely, 2 = Possibly, 3 = Probably, 4 = Definitely

Adverse events (other)

Adverse event:	Severity*:	Start date:	Start time: (24-hour clock)	Related#:
		D D / M M / 2 0 2 Y	H H : M M	

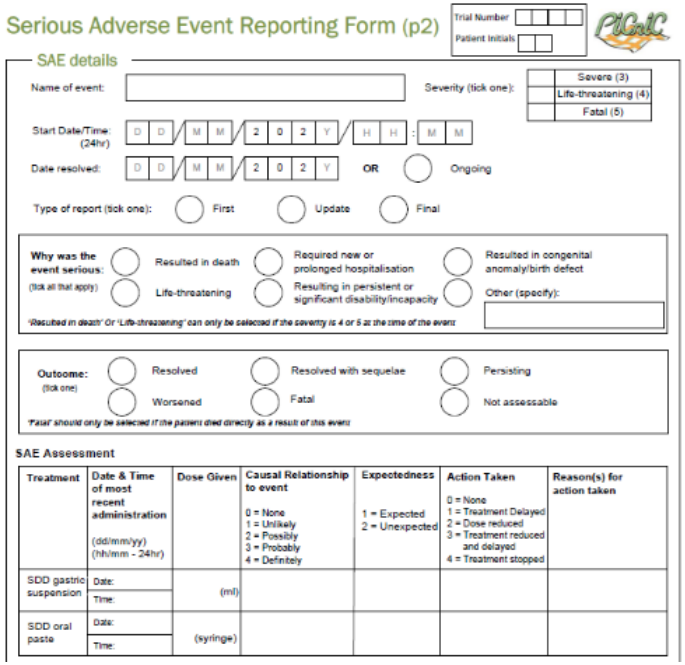
Should be completed for all patients enrolled during Period Two until discharge

Only NG tube blockage needs to be completed (whether occurred or not)

If Severity = severe, life-threatening or fatal then SAE Reporting Form needs to be completed

See SOP 007 – Guidance for completion of Case Report Forms for further details

SAE Reporting Form



Serious Adverse Event Reporting Form (p2)

Trial Number

Patient Initials

SAE details

Name of event:

Severity (tick one): Severe (3) / Life-threatening (4) / Fatal (5)

Start Date/Time: (24hr) D D / M M / 2 0 2 Y H H : M M

Date resolved: D D / M M / 2 0 2 Y OR Ongoing

Type of report (tick one): First Update Final

Why was the event serious: (tick all that apply) Resulted in death; Life-threatening; Required new or prolonged hospitalisation; Resulting in persistent or significant disability/incapacity; Resulted in congenital anomaly/birth defect; Other (specify):

'Resulted in death' Or 'Life-threatening' can only be selected if the severity is 4 or 5 at the time of the event

Outcome: (tick one) Resolved; Resolved with sequelae; Persisting; Worsened; Fatal; Not assessable

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

SAE Assessment

Treatment	Date & Time of most recent administration (dd/mm/yy) (hh/mm - 24hr)	Dose Given	Causal Relationship to event (0 = None, 1 = Unlikely, 2 = Possibly, 3 = Probably, 4 = Definitely)	Expectedness (1 = Expected, 2 = Unexpected)	Action Taken (0 = None, 1 = Treatment Delayed, 2 = Dose reduced, 3 = Treatment reduced and delayed, 4 = Treatment stopped)	Reason(s) for action taken
SDD gastric suspension	Date: / Time:	(ml)				
SDD oral paste	Date: / Time:	(syringe)				

If Severity = severe, life-threatening or fatal then SAE Reporting Form needs to be completed

To be completed on paper CRF and uploaded and reported on Macro with 24 hours of the event.

Please inform trial team it has been uploaded (do not send copy via email)

SAE assessment section only to be completed if patient received SDD

See SOP 007 – Guidance for completion of Case Report Forms for further details

Q&A