Call for Proposals

Systematic Review on Hemodynamic-Based Management Strategies Incorporating Targeted Neonatal Echocardiography in Newborn Infants

About NeoFOCUS-UK and BAPM

NeoFOCUS-UK is a collaborative clinical special interest group dedicated to advancing the science and clinical application of functional echocardiography in neonatal care. The group's mission is to promote high-quality research, education, and clinical practice in neonatal hemodynamics, ensuring that newborn infants benefit from evidence-based, precision approaches to cardiovascular support. NeoFOCUS-UK is a special interest group of The British Association of Perinatal Medicine (BAPM).

BAPM is a professional association which aims to improve standards in perinatal care by supporting those involved to optimise their skills and knowledge, promote high quality, safe and innovative practice, encourage research, and speak out for the needs of babies and their families.

Background

Targeted neonatal echocardiography (TnECHO) or neonatologist performed echocardiography (NPE) has become an important tool in the assessment and management of newborn infants with hemodynamic instability. However, the evidence base for integrating hemodynamic-based management strategies incorporating TnECHO into clinical practice requires comprehensive evaluation.

Neo-FOCUS UK seeks to commission a systematic review to address this need which may be used for:

- A Neonatal Haemodynamic Framework, co-produced by Neo-FOCUS UK and the British Association of Perinatal Medicine (BAPM).
- Publication as a separate scientific manuscript in a peer-reviewed journal

Scope of Work

The commissioned individual or team will conduct a systematic review to provide a comprehensive literature review and summary on the topic: 'Evidence for hemodynamic-based management strategies incorporating targeted neonatal echocardiography in newborn infants.'

Process and key responsibilities

- Systematic review to be conducted by the commissioned team in accordance with PRISMA 2020 guidance. Page MJ et al. *BMJ*. 2021;372:n71.
- Register the systematic review on PROSPERO.
- Perform structured literature searches in databases such as PubMed, Embase, Cochrane Library, and CINAHL
- Screen abstracts and full-text articles using pre-defined neonatal-specific inclusion/exclusion criteria
- Extract and organize clinical data related to neonatal outcomes or interventions
- Assess study quality and risk of bias using appropriate tools (e.g., ROB 2, Newcastle-Ottawa Scale)
- Contribute to meta-analytic synthesis using statistical software (e.g., RevMan, R, Stata – as needed)
- Drafting review manuscript (methods, results, tables)
- Collaborate with subgroup members of NeoFOCUS team to ensure clinical relevance and methodological rigor
- Maintain accurate documentation of meetings, tasks and contribute to project timelines

Timescales and Deliverables

1. The systematic review should be conducted over a maximum period of 3 months and will culminate in the production of a full report. Anticipated commencement date 01/10/25.
2. At commencement: agreed scope, search terms and search strategy
3. Two weeks prior to final submission: presentation of draft report for feedback from Neo-FOCUS UK Haemodynamic Framework Evidence Group.
4. At completion: Submission of a comprehensive report incorporating feedback on draft report, including:
    - Report structured as scientific publication (sections to include Background, Aims, Methods, Results, Discussion, References)
    - Completion of PRISMA checklist and PRISMA diagram
    - Search terms and search strategy.
    - Full synopsis of included studies.
    - Structured summary tables.
    - Reference list.

Process

- Agreement of search terms with Neo-FOCUS UK Haemodynamic Framework Evidence Group prior to literature screening.
- Fortnightly update meetings with the Neo-FOCUS UK Leadership Group.
- Submission & presentation of draft report two weeks before final submission
- Delivery of final systematic review on or before final submission deadline.

Minimum Experience Required

- Degree in medicine, nursing, biomedical science, public health, epidemiology, or related field (Master's or PhD preferred)
- Prior experience with systematic reviews and/or meta-analyses
- Familiarity with PRISMA guidelines and review software tools (e.g., Covidence, Rayyan, EndNote)
- Strong critical appraisal, scientific writing, and data extraction skills
- Excellent organizational skills and ability to meet deadlines in a collaborative environment

Desirable Experience

- Experience in neonatal clinical sciences.
- Track record of research and publication in neonatal hemodynamics or echocardiography.

Timeline

- Deadline for proposals: 19th September 2025.
- Shortlisted applicants may be invited for interview.
- Contract will be awarded and remitted by BAPM.

Copyright and ownership

The completed systematic review and all associated copyright will be the sole property of NeoFOCUS-UK and BAPM. The commissioned individual or team will be included as authors on any publication of the systematic review and acknowledged in any publication incorporating data from the systematic review.

Submission & Enquiries

- Proposals should be completed using the Proposal Template and include:
- Cover letter summarising relevant expertise.
- Description of methodology and approach.

- CV(s) of key personnel.
- Timeline and budget.

Please submit proposals or direct any queries to: Dr Anay Kulkarni,mailto:anay.kulkarni@stgeorges.nhs.uk .

Proposal Template

Applicants are encouraged to structure their proposals using the following headings:

1. Cover Letter (Max 100 words)
   - Summary of interest and suitability.
   - Contact details and lead applicant information.

2. Background & Rationale (Max 50 words)
   - Understanding of the review topic.
   - Relevance of team expertise to neonatal hemodynamics and echocardiography.

3. Proposed Methodology (Max 300 words)
   - Proposed search terms and databases.
   - Screening and inclusion/exclusion criteria.
   - Data extraction and synthesis approach.
   - Plans for presenting results (tables, narrative synthesis, etc.).

4. Work Plan & Timeline (Max 200 words)
   - Stepwise timeline for the 3-month project.
   - Milestones (agreement of search terms, interim updates, draft submission, final report).

5. Team Expertise & Experience (Max 100 words)
   - CVs of key personnel.
   - Evidence of prior systematic reviews/publications.
   - Relevant neonatal research or clinical experience.

6. Budget & Justification (Max 100 words)
   - Breakdown of costs (personnel, resources, overheads).
   - Total requested budget.

7. Additional Information (optional)

Proposal Evaluation Scoring Matrix

Systematic Review on Hemodynamic-Based Management Strategies Incorporating Targeted Neonatal Echocardiography in Newborn Infants

Scorer Name:

Proposer:

Evaluation Criteria	Description	Weighting (%)	Score (1–5)	Weighted Score
1. Methodology & Approach	Clarity, robustness, and appropriateness of proposed search strategy, inclusion/exclusion criteria, and synthesis methods. Alignment with systematic review best practice.	30%		
2. Expertise & Experience	Relevant qualifications, track record in systematic reviews, publications, and (desirable) neonatal hemodynamics/clinical sciences experience.	25%		
3. Feasibility & Work Plan	Realistic timeline for 3-month completion, clear milestones (search term agreement, interim updates, draft and final reports).	20%		
4. Budget & Value for Money	Appropriateness and justification of proposed budget in relation to scope of work.	15%		
5. Presentation & Clarity of Proposal	Overall quality, organisation, and clarity of the proposal submission.	10%		

TOTAL: 100% | Final Score: /5.0

Scoring Scale

5 (Excellent): Exceeds requirements with clear strengths.
4 (Good): Meets requirements fully, with minor weaknesses.
3 (Adequate): Meets most requirements, some gaps present.
2 (Weak): Significant gaps or concerns.
1 (Poor): Does not meet requirements.