

Introduction



Your EMPAN Quarterly – Summer 2025

Welcome to the **Summer 2025** edition of the **EMPAN Newsletter**—a special welcome to all new trainees joining the East Midlands Paediatric community this term. As you embark on your paediatric journey, EMPAN (East Midlands Paediatric Academic Network) invites you to **connect, collaborate, and grow** with colleagues dedicated to excellence in child health research and clinical care.

What is EMPAN?

EMPAN unites trainees and consultants with shared interests in academic paediatrics—offering a **supportive platform** to **exchange ideas, participate in research projects, and develop core capabilities** such as critical appraisal, quality improvement, and scientific communication. Your involvement enriches our network and plays a vital role in shaping research that informs—and transforms—clinical practice in our region.

How can you get involved?

Whether you have prior research experience or are just starting to explore, there are opportunities at every level. We encourage you to take part in our **ongoing projects**, join **educational events**, and contribute to future **EMPAN activities**. Through EMPAN, you can gain mentorship, discover research pathways, and help drive innovations that benefit both patients and the wider paediatric community.

In this edition, you will find:

- Highlights from the **PAS 2025 Conference in Hawaii**
- Practical advice on starting **Systematic Reviews**
- A guide to applying the **PICO method for clinical questions**
- Reflections from **ESPNIC 2025 in Alicante, Spain**
- Introducing the **EMPAN Regional Project**
- Experiences from trainees in **Quality Improvement courses**
- Details on **upcoming conferences, educational seminars, and training opportunities**

We look forward to your involvement—together, we can inspire, innovate, and improve care for children and young people across the East Midlands.

Welcome to EMPAN, and to a new chapter in your paediatric career!

Best wishes,
Hayat Nassar

EMPAN Communication Lead

Save the Date:



EMIPS Conference 2025

23 September, Leicester Tigers Stadium

Connect. Present. Celebrate.

Join us in showcasing the best of East Midlands paediatrics.

EMPAN Co-Chairs



Nurshifa
Shaari



Aarti
Mistry

QIC Representative



Rebecca
Calthorpe

Education Leads



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EMPAN Communication Team



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East Midlands Trainees Showcase Research PAS 2025, Hawaii



In April 2025, three paediatric trainees from the East Midlands participated in the annual **Pediatric Academic Societies (PAS)** Meeting in Honolulu, Hawaii—joining peers from across the globe at a premier forum for sharing paediatric research and innovations in child health.

Expanding the Global Reach of Regional Research

This ongoing tradition highlights both the strength of our local academic community and the East Midlands' engagement with international audiences. The work presented this year covered diverse areas in neonatology and paediatric care, demonstrating our region's commitment to advancing the field through collaborative, evidence-based inquiry.

Highlights from PAS 2025:

• Dr. T'ng Chang Kwok:

Mortality Prediction Tool in Extremely Preterm Infants

Dr. Kwok shared a **risk prediction model for extremely preterm infants**, utilising **perinatal clinical variables** and **machine learning**.

Analysing national data from England and Wales, this research aims to enhance perinatal decision-making and neonatal outcomes on a population scale.

[View the complete presentation here >>](#)

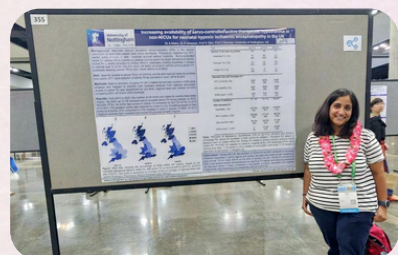


• Dr. Aarti Mistry:

Increasing Therapeutic Hypothermia Access for HIE

Dr. Mistry's poster detailed the **increasing availability of servo-controlled active therapeutic hypothermia outside NICUs for neonates with hypoxic ischaemic encephalopathy (HIE)**. The findings highlight progress across the UK, while also identifying areas that could benefit from additional focus and resources.

[View the poster here >>](#)



• Dr. Syed Taha:

Quantifying Parental Attention During Kangaroo Care

Dr. Taha presented a study using **eye-tracking technology** to assess **parental attention during kangaroo care in NICU environments**, offering new perspectives on how the clinical setting may influence parent-infant interaction.

[View the poster here >>](#)



If you are a trainee and would like your research, audit, or quality improvement work featured in a future EMPAN newsletter, please contact us at eastmidspan@gmail.com. We welcome submissions from trainees across the region.



Get Started with Systematic Reviews: Essential Guidance for Every Stage

Systematic literature reviews are integral to advancing paediatric practice and research. In this article, **Dr. Senali Seneviratne** offers a concise overview of strategies for conducting robust systematic reviews, tailored for both early-career and experienced clinicians.

The discussion outlines critical steps such as:

- **Formulating a focused clinical research question** (utilising frameworks like **PICO**)
- **Designing a comprehensive and reproducible search strategy**
- **Streamlining screening and data extraction** using practical tools
- **Managing challenges** like deduplication and quality assessment

*This summary highlights foundational approaches, aiming to instil confidence for those embarking on their first review or seeking to refine established methods. For comprehensive guidance and detailed methodologies discussed by **Dr. Seneviratne**, readers are encouraged to consult the [full article >>](#)*

Framing Clinical Questions with the PICO Method: Essential Skills for Evidence-Based Practice

Evidence-based practice is the cornerstone of modern paediatric decision-making, empowering clinicians to apply the most relevant research to patient care. **The PICO framework—Patient/Population, Intervention, Comparison, and Outcome** – is a structured approach that enables clinicians to formulate focused, answerable clinical questions and streamline the search for high-quality evidence.

In this presentation, **Dr. Aarti Mistry** provides a practical introduction to:

- **Understanding Evidence-Based Practice:** Defining its role within paediatrics and identifying the hierarchy of evidence sources.
- **The Five Steps of Evidence-Based Practice:** From formulating a clinical question to appraising and applying findings.
- **Constructing PICO Questions:** Step-by-step illustration of PICO using real paediatric case scenarios, such as neonatal vitamin K prophylaxis, bronchiolitis management, septic shock fluid therapy, and the impact of responsive caregiving on child development.

Key Takeaways:

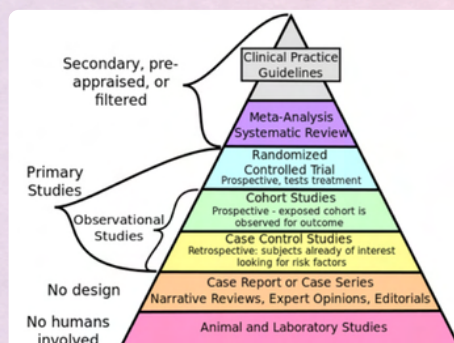
- Mastering the PICO framework helps you translate day-to-day clinical uncertainties into structured, searchable questions that drive efficient literature review.
- By embedding PICO into routine practice, paediatricians can clarify complex cases, compare interventions, and ensure that care decisions are solidly evidence-based.

For comprehensive examples and further guidance, readers are encouraged to review the full presentation by **Dr. Mistry**.

[View the complete presentation here >>](#)

For a comprehensive overview, refer to the hierarchy of evidence diagram below, which illustrates how the strength of research designs escalates from expert opinion to systematic reviews and meta-analyses.

Understanding this pyramid is essential when applying the PICO framework to clinical practice, guiding clinicians in selecting and appraising sources most relevant to patient care.



My ESPNIC 2025 Adventure – Alicante, Spain

By: Nurshifa Shaari / 25–28 June 2025



Hola from sunny Alicante!

This June, I had the absolute pleasure of attending (and presenting at!) the **ESPNIC Conference 2025** — Europe's biggest gathering for all things **paediatric and neonatal intensive care**.

The vibe? Think beach meets brains!

The event ran over four exciting days — 3 packed with lectures and plenaries, plus a bonus masterclass day to really dive deep into hot topics. The energy was contagious, the talks inspiring, and the learning? Next level.



Key Takeaways for Us Trainees:

Neonatal POCUS is on the rise!

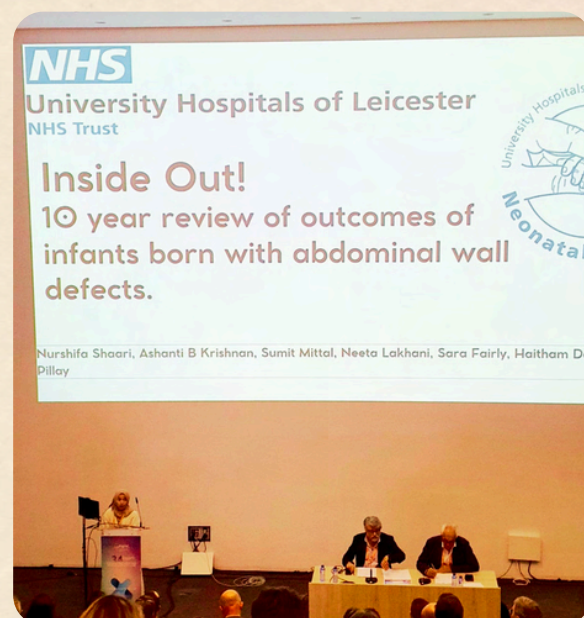
European centres are leading the way with point-of-care ultrasound in neonates, and it's only a matter of time before we see more of this in the UK. Think of it like a mini-FAST scan to help us better manage a deteriorating baby — especially when choosing between fluids or inotropes. Game-changer stuff!

Rethinking Ventilation

One message came through loud and clear: Don't just press buttons — know your lungs! Talks reminded us to go back to basics with respiratory physiology. Tailor your approach to the type of lung you're dealing with before adjusting ventilator settings. It's all about thoughtful ventilation, not one-size-fits-all.

If you're a trainee with even the slightest interest in neonates or PICU, ESPNIC is a must. From brilliant research to global networking (and let's be honest, some lovely tapas), it's an inspiring, educational, and fun experience.

Presented at ESPNIC 2025 in Alicante, **Dr. Nurshifa Shaari** shared a ten-year review of outcomes for infants with congenital abdominal wall defects at a major UK tertiary centre. The study provides insight into the surgical and clinical trajectories of gastroschisis and exomphalos, highlighting key differences in presentation, management approaches, and associated risks.



For detailed findings and implications for neonatal surgical care, [access the full presentation here >>](#)



EMPAN Regional Project: Building Collaboration Across the East Midlands

The **EMPAN Regional Project** is a unique trainee-led initiative designed to bring together paediatricians across our region, giving trainees structured opportunities to develop, lead, and participate in high-impact research, quality improvement, and audit projects.

The aim is to enhance clinical research skills, foster regional collaboration, and drive evidence-based improvements in paediatric care—all while aligning with core RCPCH curriculum outcomes.

How the Regional Project Works

Each year, East Midlands paediatric trainees are invited to submit project proposals for consideration. Proposals can span audits, service evaluations, QI work, or clinical research; successful projects should address a well-defined issue in regional paediatric practice, be relevant to the RCPCH curriculum, and demonstrate feasibility within EMPAN's collaborative network.

The selection process is as follows:

• Step 1: Feasibility Assessment

Proposals are reviewed for eligibility (submitted by a regional paediatric resident), clarity of objectives, and practical methodology.

• Step 2: Structured Scoring & Selection

Projects passing feasibility are formally assessed using eight criteria, including proposer engagement, project relevance, originality, planned methodology, feasibility, and absence of significant concerns.

Each is scored 1–5. Top-ranked proposals are selected for EMPAN support, with committee feedback for any requiring revision.

Once chosen, EMPAN assists the lead trainee with multi-site registration, recruitment, and guidance to ensure project success. All contributors are acknowledged in subsequent presentations and publications.

Looking Ahead

EMPAN is proud to support regional initiatives and looks forward to working with paediatric trainees and departments across the East Midlands to deliver meaningful improvements in clinical education and patient care.

Meet the 2025 EMPAN Regional Project

After an impressive selection process, we are delighted to announce the chosen project for 2025:

"Smart Insight Meetings: A Multicentre Paediatric Emergency Medicine Teaching Initiative" proposed by **Dr. Irene Braitto** (ST6, Paediatric Emergency Medicine, Royal Derby Hospital) with supporting consultant **Dr. Meenu Pandey**.

SMaRT Insights

Sharing Minds and Reflective Teaching





- A new Teaching Programme Initiative to share interesting and complex cases across different Paediatric Emergency Department sites in East Midlands!
- Bi-monthly on the first Tuesday of the month
- Can be attended face-to-face or remotely via Teams

Watch this space for more exciting news!

Contact us if you would like to be our new Champion!

SMaRT Insights is a regional QI project aimed at improving paediatric emergency medicine training across East Midlands hospitals.

Building on a local model from Royal Derby Hospital, it offers:

- Case-based teaching on real clinical scenarios
- Multidisciplinary participation and expert input
- A focus on reflection and shared learning
- Evaluation of educational impact across sites

The project supports consistent, high-quality training through collaborative education.

Interested in collaborating on the SMaRT Insights project?

If you would like to contribute or take part in this regional initiative, please contact us at eastmidspan@gmail.com

We welcome input and involvement from colleagues across the East Midlands.

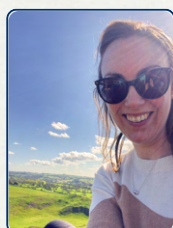




Q&A Feedback

Edited by: **Rebecca Calthorpe**
QIC Representative

Hester Fernee ST7 East Midlands North Trainee at the Royal Derby Hospital and **Rohma Umar** ST3 South Trainee working at Kettering General Hospital shared their recent experiences with us having attended the QICLearn: introduction to Quality Improvement (QI) course held in the East Midlands.



Hester Fernee

Q: What was your experience of quality improvement prior to doing the introduction to QIC Learn course?

R.U: Mostly a problem has many potential little causes and previously doing QIs I had a false expectation of tackling all the problems at once which led to frustration or an outcome which was not sustainable.

Q: What made you decide to sign up for the course?

H.F: Prior to the QIC course I had really limited experience in 'real' QI; I tick the portfolio box to provide evidence of audit and struggle to find the enthusiasm for more. But I have got to a point in my training where participation in audit feels increasingly frustrating. I want to make a difference to the care we provide and work towards addressing some of the inefficiencies I can see at work. I was frustrated with just ticking that portfolio box - this is why I signed up to the QIC course.

Trailing through mountains of notes for audit has always made my heart sink, we present our hard work and often nothing seems to come of our recommendations. Completing the Intro to QI course has given me a new perspective! If we approach QI as we would do our patients with curiosity; understand their journey, complete tests and follow through on our interventions then things are much more interesting.

The course taught me to break down a problem using tools and use PDSA cycles to make trial changes (think micro audit with quick results). Yes, audit is important but QI is more than that; if as trainees we had a better understanding of QI then I'm sure we would be better drivers for change and improvement of patient care - it really is possible to make a difference in a short time frame!

Q: Tell us about the format of the sessions, how did you find it?

R.U: The "Introduction to QI Workshop" was a two-day virtual course however it was really engaging and interactive. I really liked the idea of getting built in time for self-reading the modules rather than someone presenting them.

Q: What were your best take home messages from the course?

H.F: QI is so much more than audit! If you make small successful changes, they are much more likely to become established practise than the list of recommendations you make after an audit!

R.U: "Think Big, Start Small, Test Fast" and "Fail safe"

Q: How do you think it will change your approach to QI in the future?

R.U: The course has helped to understand the approach of looking at a problem, finding your limitations, involving the right people from the beginning and focus on one thing at a time. I believe it is very crucial before you jump into a problem.

Q. How have you used the skills you've learn since doing the course?

H.F: I'm getting stuck into a QI project in my current post; I've been asked to tackle something big but if I can break it down and understand the 'micro problems' and make 'micro changes' my work will make a difference, remembering we can't fix the world but we can make it a better place. I feel empowered to spread the word about QI - be curious, find out more, it's so much more than the stack of audit notes! I feel strongly that if we as the next generation of paediatricians can approach QI successfully, we will make such a difference to the care we provide.

Q. What would you say to others who may consider doing the course in the future?

H.F: If you're considering this course as a way to understand QI or want to be more successful in implementing change then I'd recommend it.

R.U: I would totally recommend this to my colleagues especially as it is HEE funded so you can claim the Study Leave and Budget.





Autumn 2025 East Midlands Paediatric Academic Network Introduction to QI: Virtual Workshops

QIClearn know that effective learning occurs in vibrant social spaces brimming with conversation. We help you to choose something that is achievable, bite-sized and results in evidence to support your learning, credentials and make change happen.

[Book here](#)



Take part in **2 full day virtual workshops** that focus on the practical elements of improvement science and how improvement works on the ground in your own healthcare context.

Workshop 1

Wednesday 19 November, 9.30 – 4 PM

Objectives

- Understand the difference between different approaches to delivery quality in the NHS
- Understand how quality improvement features in your journey to becoming a consultant How using the Plan-Do-Study-Act cycle allows you to learn fast and fail safe
- Be aware of three QI tools used at the start of a quality improvement to better understand a problem
- Receive an invitation to practice using ONE diagnostic tool before the next workshop

Workshop 2

Wednesday 10 December, 9.30 – 4 PM

Objectives

- Learn from one another about using ONE QI tool to better understand a problem
- Explore everyday barriers to practicing Quality Improvement
- Describe the place of Plan-Do-Study-Act within an evidence-based approach to change
- Understand how use of a structured approach to change can deliver improvements in practice
- Be aware of other opportunities
- to grow your QI skills

Join in & learn with other healthcare professionals



Upcoming Conferences & Trainings



RCPCPCH

Academic Trainees Day

Join us for a free online event designed to assist postgraduate doctors training in paediatrics with a keen interest in research

We will delve into different aspects of research, including infrastructure, methodology, tools, and collaboration



Workshop topics

- How to put together a multi-centre research project
- Clinical trial units: their role, how they work and how to access their support
- Utilising large data sets to support research
- Epidemiological research
- Patient and Public Involvement and Engagement (PPIE) in research
- How to utilise Artificial Intelligence (AI): strengths, pitfalls and ethics

Event details

Thursday 6 November 9:00-17:00

virtual via Microsoft Teams

What can you expect

- Expert-led sessions
- Networking opportunities
- Q&A sessions
- Choice of workshops to attend

Find out more and [register to attend](#)



Any questions? Contact us



research@rcpch.ac.uk



Upcoming Conferences & Trainings

East Midlands School of Paediatrics Conference 2025

TUE 23 SEP | Leicester Tigers Stadium | 09:00–17:00

Come listen to a variety of speakers, learn about the great work that's taking place throughout the region, and connect with others.

Please register [here](#) to book onto this conference.



Join experts at JENS 2025, the leading congress in neonatal care and research. Explore groundbreaking advancements in neurology, respiratory support, perinatal pharmacology, NICU quality improvement, and more. Stay at the forefront of neonatal innovation!

21-25 October

[Register now >](#)



Trainee Research nEtnetwork Education Seminars (TREES)

TREES is a monthly webinar series from the RCPCH Trainee Research Network, designed especially for paediatricians in training. Streaming on the last Tuesday of every month, each seminar helps trainees get involved in research and develop key capabilities in the Progress+ curriculum's research and scholarship domain.

[Read more >](#)

When you [register](#) for this webinar via MedAll, you can opt in to get notified of upcoming TREES sessions and watch previous sessions on-demand through that platform.

[Register now >](#)

*RCPCH Trainee research network education series (TREES)

Last Tuesday of the month, 13.00-13.45



Next seminar: Tues 5 August 13:00

The role of research in addressing child health inequalities

Professor Ian Sinha
Consultant Respiratory Paediatrician at Alder Hey Children's Hospital
Professor in the Division of Child Health at the University of Liverpool



Sign up using the QR code or visit:
<https://ow.ly/RQEX50UT6cF>

***RCPCH**
Royal College of Paediatrics and Child Health
Leading the way in Children's Health

Thank you for reading this edition of the EMPAN Newsletter!

Stay connected, explore new opportunities, and make the most of the resources available through EMPAN and EMIP website.

If you have any suggestions or want to get involved, reach out to us at eastmidspan@gmail.com. See you in the next issue!

