



British Association of
Perinatal Medicine



Why NeoFOCUS-UK?

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British Association of
Perinatal Medicine

NeoFOCUS-UK 2024



Why NeoFOCUS-UK?

1. Emerging evidence of the role of neonatal functional haemodynamics & POCUS.
2. Increasing interest to learn those skills.
3. Lack of a recognised training framework and accreditation pathway.

1. Emerging Evidence

Singh *et al. Critical Care* (2020) 24:65
<https://doi.org/10.1186/s13054-020-2787-9>

Critical Care

RESEARCH

Open Access

International evidence-based guidelines on Point of Care Ultrasound (POCUS) for critically ill neonates and children issued by the POCUS Working Group of the European Society of Paediatric and Neonatal Intensive Care (ESPNIC)



Singh *et al. Critical Care* 2020 Feb 24;24(1):65

1. Emerging evidence

American Academy
of Pediatrics



DEDICATED TO THE HEALTH OF ALL CHILDREN™

Clinical & Technical Reports

Use of Point-of-Care Ultrasonography in the NICU for Diagnostic and Procedural Purposes

Dan L. Stewart, MD, FAAP,^a Yasser Elsayed, MD, FRCPC,^b María V. Fraga, MD,^c Brian D. Coley, MD, FAAP, FACR,^d
Aparna Annam, DO, FAAP,^e Sarah Sarvis Milla, MD, FAAP,^f COMMITTEE ON FETUS AND NEWBORN AND SECTION ON RADIOLOGY



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Stewart DL et al, PEDIATRICS Volume 150, number 6, December 2022

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1- Emerging Evidence

European Journal of Pediatrics
<https://doi.org/10.1007/s00431-021-04186-w>

CLINICAL ALGORITHM



“Playing it SAFE in the NICU” SAFE-R: a targeted diagnostic ultrasound protocol for the suddenly decompensating infant in the NICU


Nadya Yousef¹ · Yogen Singh^{2,3} · Daniele De Luca^{1,4}

European Journal of Pediatrics
<https://doi.org/10.1007/s00431-022-04636-z>

ORIGINAL ARTICLE



Point-of-care ultrasound (POCUS) protocol for systematic assessment of the crashing neonate—expert consensus statement of the international crashing neonate working group

Yasser Elsayed¹ · Muzafar Gani Abdul Wahab² · Adel Mohamed³ · Nadya Ben Fadel⁴ · Shazia Bhombal⁵ · Nadya Yousef⁶ · María V. Fraga⁷ · Jehier Afifi⁸ · Pradeep Suryawanshi⁹ · Abbas Hyderi¹⁰ · Anup Katheria¹¹ · Martin Kluckow¹² · Daniele De Luca^{2,13} · Yogen Singh^{14,15} 

1. Emerging Evidence



Guidelines and Recommendations for Targeted Neonatal Echocardiography and Cardiac Point-of-Care Ultrasound in the Neonatal Intensive Care Unit: An Update from the American Society of Echocardiography



Patrick J. McNamara, MD, MSc, FASE (Chair), Amish Jain, MD, PhD, FASE, Afif El-Khuffash, MB BCh, Regan Giesinger, MD, FASE, Dany Weisz, MD, MSc, Lindsey Freud, MD, FASE, Philip T. Levy, MD, Shazia Bhombal, MD, Willem de Boode, MB BS, Tina Leone, MD, Bernadette Richards, RDCS, Yogen Singh, MB BCh, Jennifer M. Acevedo, ACS, John Simpson, MB BCh, FASE, Shahab Noori, MD, and Wyman W. Lai, MD, FASE, *Iowa City, Iowa; Toronto, Ontario, Canada; Dublin, Ireland; Boston, Massachusetts; Atlanta, Georgia; Nijmegen, the Netherlands; New York, New York; Columbus, Ohio; Loma Linda, Los Angeles, and Orange, California; Chicago, Illinois; and London, United Kingdom*

Patrick McNamara et al. J Am Soc Echocardiogr. 2024 Feb;37(2):171-215.

1. Emerging Evidence

ORIGINAL ARTICLE

Impact of Early Hemodynamic Screening on Extremely Preterm Outcomes in a High-Performance Center

Regan E. Giesinger¹, Danielle R. Rios¹, Trassanee Chatmethakul^{1,5}, Adrienne R. Bischoff¹, Jeremy A. Sandgren¹, Alison Cunningham², Madeline Beauchene², Amy H. Stanford¹, Jonathan M. Klein¹, Patrick Ten Eyck³, and Patrick J. McNamara^{1,4}

Giesinger RE et al. Am J Respir Crit Care Med -2023

2. Increasing Interest

UK survey on neonatal lung ultrasound

Only 6% of neonatal units in the UK use LU

Interest to learn the skill according to grade:

- 97% of neonatal trainees
- 84% of neonatal consultants
- 78% of ANNPs

Interest according to level of care:

- Level 3 units 90%
- Level 2 units 76%
- Level 1 units 62%

2. Increasing Interest

ORIGINAL ARTICLE



Lung ultrasound in Italian neonatal intensive care units: A national survey











Iuri Corsini MD¹ | Niccolò Parri MD² | Benjamim Ficial MD³ |
Martina Ciarcià MD¹ | Fiorella Migliaro MD⁴ | Letizia Capasso MD, PhD⁴ |
Marilena Savoia MD⁵ | Camilla Gizzi MD⁶ | Maria Clemente MD³ |
Francesco Raimondi MD, PhD⁴ | Carlo Dani MD⁷

Iuri Corsini et al. *Pediatric Pulmonology*. 2022

2. Increasing Interest

Original research

Use of neonatal lung ultrasound in European neonatal units: a survey by the European Society of Paediatric Research

Almudena Alonso-Ojembarrena ,^{1,2} Harald Ehrhardt ,³ Merih Cetinkaya,⁴ Anna Lavizzari ,⁵ Tomasz Szczapa ,⁶ Victor Sartorius ,⁷ Gustavo Rocha ,⁸ Richard Sindelar,⁹ Martin Wald,¹⁰ Christian Heiring,¹¹ Hanna Soukka,¹² Olivier Danhaive,^{13,14} Charles C Roehr ,^{15,16,17} Manuela Cucerea,¹⁸ Andrea Calkovska,¹⁹ Gabriel Dimitriou,²⁰ Bernard Barzilay,^{21,22} Claus Klingenberg ,^{23,24} Sven Schulzke ,²⁵ Richard Plavka,²⁶ Rasa Tameliene,²⁷ Colm Patrick Finbarr O'Donnell ,^{28,29} Anton H van Kaam ,^{30,31} on behalf of the ESPR Pulmonary Research Consortium

Alonso-Ojembarrena A, et al. Arch Dis Child Fetal Neonatal Ed 2024

3. Lack of National Training Framework

Perceived barriers for implementing LU in neonatal units

	N (%)
<u>No experience with image interpretation</u>	323 (58%)
<u>No experience with image acquisition</u>	273 (49%)
Limited staff	225 (40%)
No access to clinical experts	153 (27%)
Time constraints	138 (25%)
No machine/probe	70 (13%)
Lack of interest	51 (9%)
Lack of space to store images	33 (6%)
Opposition from radiologists	28 (5%)

Alonso-Ojembarrena A, et al. Arch Dis Child Fetal Neonatal Ed 2024

2. Increasing Interest

Open access

Original research letter

BMJ
Paediatrics
Open

Targeted neonatal echocardiography training: a survey of trainees in a region of England

Alexander J Cleator , Nimish V Subhedar

- 98% (46/48) of the responding trainees **want to learn and develop TNE as a skill.**
- 94% (45/48) of them highlighting that a formal training programme would be welcomed.
- Over half of the trainees felt very strongly about TNE, expressing that a **formal training programme should be considered a compulsory element of subspeciality training.**

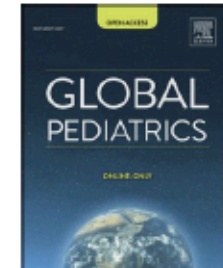
3. Lack of National Training Framework and Accreditation Pathway



Contents lists available at [ScienceDirect](#)

Global Pediatrics

journal homepage: www.elsevier.com/locate/gpeds



Neonatal lung ultrasound in the UK: A framework for practice

Virginie Meau-Petit ^{a,b,*}, Mahmoud Montasser ^{c,1}, Anna Milan ^a






Meau-Petit V, Montasser M, Milan A. Global Pediatrics 2023

3. Lack of National Training Framework and Pathway

Original research

Development of the Children's ACuTe UltraSound (CACTUS) point-of-care ultrasound (POCUS)-accredited training in the UK: a descriptive study

Michael J Griksaitis ^{1,2}, Bogdana Zoica,³ Dusan Raffaj,⁴ Jennie Stephens,⁵ Avishay Sarfatti,⁶ Veena Rajagopal,⁷ Antonia Hargadon-Lowe,¹ Jessica Green,⁸ Peter Shires ¹, Louis Skevington-Postles,⁹ Patrick Davies ⁴, on behalf of the Children's ACuTe UltraSound (CACTUS) group

Griksaitis MJ, et al. Arch Dis Child 2024;0:1–7

Our answer : NeoFOCUS-UK!

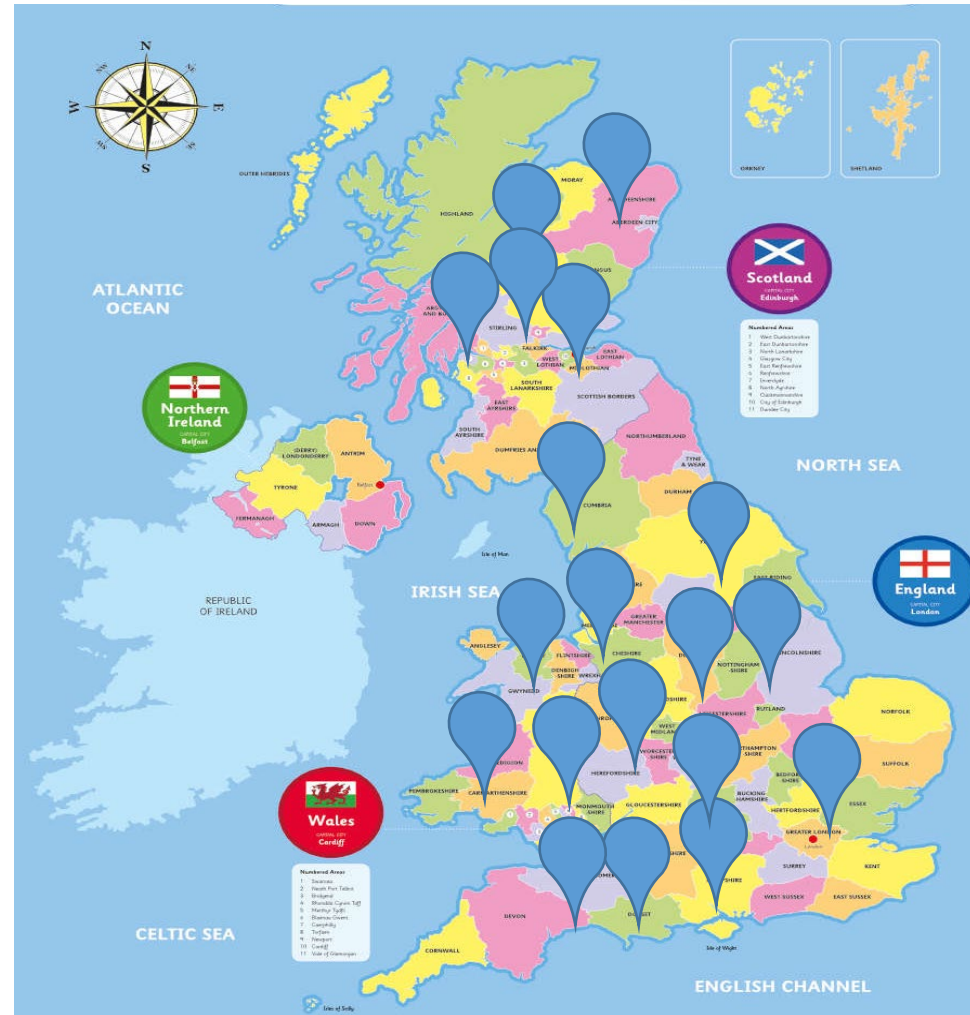


Who we are?

Started in Scotland in 2021

Now:

- London (>10 centers)
- Liverpool
- Oxford
- Cambridge
- Kent
- Bristol
- Birmingham
- Middlesbrough
- Brighton
- Cardiff
- Hall
- Bolton
- Burnley
- Leeds
- Sheffield
- Bradford
- Portsmouth
- Poole



Our collaborations

- France



- Spain



- Italy



- Canada



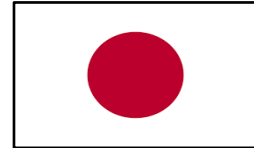
- Ireland



- USA



- Japan



- Australia



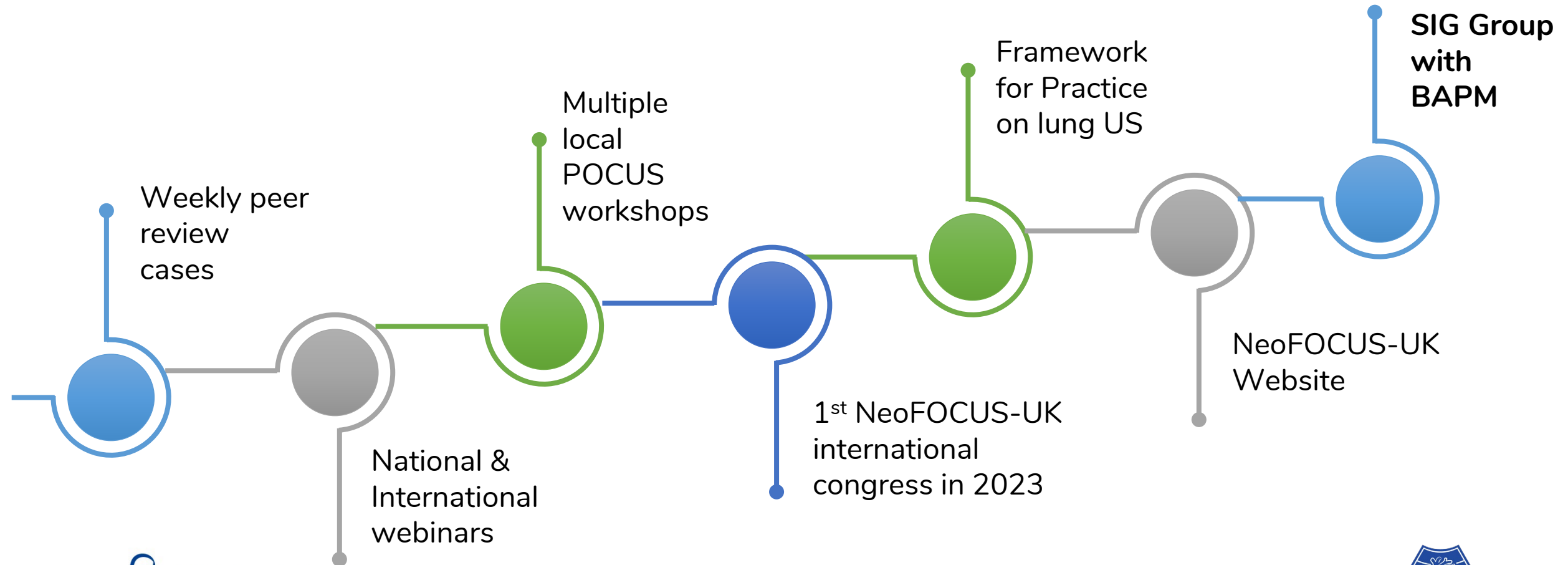
- Egypt



- Saudi Arabia



What have we done so far?





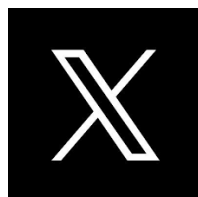


Neonatal Functional
Haemodynamics &
Point-of-Care
Ultrasound

neofocus-uk.com



ZOOM case discussion
Friday at 2pm



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THANK YOU!



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