

Evidence Brief: Neonatologists

Contents

Key publications – the big picture.....	2
Case Studies.....	3
HEE Star	3
Statistics.....	3
HEE National Data Programme	3
Published Peer Reviewed Research	3
Supply.....	3
Covid-19	4
Training and Education.....	5
Workforce	11
Diversity and Inclusion.....	12
*Help accessing articles of papers	12

Produced by the HEE Knowledge Management team Evidence Briefs offer a quick overview of the published reports, research, and evidence on a workforce-related topic.

Date of publication: September 2022

Please acknowledge this work in any resulting paper or presentation as:

Evidence Brief: Neonatologists. Katie Nicholas. (September 2022). UK: Health Education England Knowledge Management Team

There may have been an update to this Evidence Brief - to check you are reading the most current version please see the links below:

- [Complete Evidence Brief list – link for HEE staff](#)
- [Complete Evidence Brief list – link for External staff](#)

Key publications – the big picture

[Neonatology: GIRFT Programme National Speciality Report](#)

Free registration to FutureNHS Platform required to join the workspace and view the report

Author(s): Adams et al.

Source: NHS Getting It Right First Time (GIRFT)

Publication date: April 2022

The GIRFT neonatology review follows NHS England's Neonatal Critical Care Transformation Review (NCCR), which published an action plan in December 2019 focused on aligning and investing in capacity, developing the expert neonatal workforce and improving the experience for families. The GIRFT review provides more granular detail on progress in these areas (see also GIRFT's Neonatology Workforce Report), as well as exploring new areas for improving clinical care and patient safety.

See also "[Neonatology supplementary workforce report](#)"

[RCOG Workforce Report 2022](#)

Source: Royal College of Obstetricians and Gynaecologists

Publication date: February 2022

Since the last RCOG workforce report in 2018, the O&G profession has faced many challenges. Although the birth rate is falling nationally, there are rising levels of clinical complexity, budget cuts and staffing shortages of doctors, midwives, nurses and other allied professionals. Whilst demand for services in some areas is declining, there are increased requirements in other areas due to demographic shifts, an aging population and rising levels of obesity. All of this has been magnified and compounded by the Covid-19 pandemic which has required health professionals to work differently and adapt services to continue to provide care to women.

[The complete guide to becoming a neonatologist](#)

Source: BMJ Careers

Publication date: 5th October 2021

The Role Of A Neonatologist

A neonatologist is a doctor who specialises in the care of newborn babies. The birth of a child being a life-changing event, a career in neonatology is accompanied by rewarding and emotionally challenging scenarios alike.

When newborns require extra support, being part of the team with the ability to provide this, can not only save the infant's life but can also have a huge impact on the surrounding family.

A [career in neonatology](#) spans a spectrum of clinical conditions; the care required can vary from critically ill preterm babies in the neonatal intensive care unit (NICU), to the care of well term babies on the postnatal ward(1).

[A snapshot of neonatal services and workforce in the UK](#)

Source: Royal College of Paediatrics and Child Health

Publication date: September 2020

The current study was conducted on a weekday and weekend day in September 2019, and surveyed 191 neonatal services. Results from this snapshot were reported back to neonatal services in January 2020 through individual benchmarking reports produced by the GIRFT team. This report summarises the findings at a national level.

[Exploring new ways of working in the neonatal unit](#)

Source: HEE and London School of Paediatrics and Child Health

Publication date: 2017

This project has been commissioned by the London School of Paediatrics / Health Education England to explore new ways of working within neonatal units across London with an aim to provide collaborative recommendations on ways to reduce the dependence of service delivery on the paediatric medical

workforce by providing a more stable, mixed, neonatal workforce. Workforce issues are not limited to medical rotas; review of national and local data has found that there is a considerable vacancy across the different professional groups nationally and within London. Neonatal units across London have a paucity of qualified in speciality (QIS) nurses and there is a wide variability in the availability of enhanced and advanced roles in neonatal nursing.

Case Studies

[A Collaborative model for providing fetal maternal medicine](#) See p. 122

Source: Royal College of Obstetricians and Gynaecologists

Publication date: February 2022

In May 2019 GSTT, London and William Harvey Hospital, Kent jointly appointed a consultant who provides sub-specialist fetal medicine service (3 PAs) in Kent; two sessions on the same day with availability via telephone for clinical and administrative queries in between the clinic during the working week. (see benefits for neonatologists)

HEE Star

More resources and tools are available in the **Maternity and Childrens** section of the [HEE Star](#)

Statistics

You can find relevant statistics on the [Health and Care Statistics Landscape](#) under “**Health and Care**”

HEE National Data Programme

HEE staff can look at the [National Data Warehouse \(NDL\)](#) SharePoint site to find out more about datasets and Tableau products.

Published Peer Reviewed Research

Supply

[Essentials of Neonatal-Perinatal Medicine Fellowship: careers in Neonatal-Perinatal Medicine](#)

Item Type: Journal Article

Authors: Trzaski, Jennifer M.;Kiefer, Autumn S.;Myers, Patrick;ONTPD Fellowship Directors Writing Group and Johnston, Lindsay C.

Publication Date: Aug ,2022

Journal: Journal of Perinatology 42(8), pp. 1135-1140

Abstract: The clinical and academic landscape of Neonatal-Perinatal Medicine (NPM) is evolving. Career opportunities for neonatologists have been impacted by shifts in compensation and staffing needs in both academic and private settings. The workforce in NPM is changing with respect to age and gender. Recruiting candidates from backgrounds underrepresented in medicine is a priority. Developing flexible positions and ensuring equitable salaries is critically important. Professional niches including administration, education, research, and quality improvement provide many opportunities for scholarly pursuit. Challenges exist in recruiting, mentoring, funding, and retaining physician-scientists in NPM. Creative solutions are necessary to balance the needs of the NPM workforce with the growing numbers, locations, and complexity of patients. Addressing these challenges requires a multi-faceted approach

including adapting educational curricula, supporting trainees in finding their niche, identifying novel ways to address work/life integration, and attracting candidates with both diverse backgrounds and academic interests. Copyright © 2022. The Author(s), under exclusive licence to Springer Nature America, Inc.

Covid-19

[Effect of Coronavirus Disease-2019 on the Workload of Neonatologists.](#)

Item Type: Journal Article

Authors: Machut, Kerri Z.;Kushnir, Alla;Oji-Mmuo, Christiana N.;Kataria-Hale, Jasmeet;Lingappan, Krithika;Kwon, Soyang and Dammann, Christiane E. L.

Publication Date: Mar ,2022

Journal: Journal of Pediatrics 242, pp. 145-151.e1

Abstract: OBJECTIVE: To describe the impact of coronavirus disease-2019 (COVID-19) on the neonatology workforce, focusing on professional and domestic workloads. STUDY DESIGN: We surveyed US neonatologists in December 2020 regarding the impact of COVID-19 on professional and domestic work during the pandemic. We estimated associations between changes in time spent on types of professional and domestic work and demographic variables with multivariable logistic regression analyses. RESULTS: Two-thirds (67.6%) of the 758 participants were women. Higher proportions of women than men were in the younger age group (63.3% vs 29.3%), held no leadership position (61.4% vs 46.3%), had dependents at home (68.8% vs 56.3%), did not have a partner or other adult at home (10.6% vs 3.2%), and had an employed partner (88.1% vs 64.6%) (P Copyright © 2021 Elsevier Inc. All rights reserved.

[Sustaining careers of physician-scientists in neonatology and pediatric critical care medicine: formulating supportive departmental policies](#)

Item Type: Journal Article

Authors: Christou, Helen;Dizon, Maria L. V.;Farrow, Kathryn N.;Jadcherla, Sudarshan R.;Leeman, Kristen T.;Maheshwari, Akhil;Rubin, Lewis P.;Stansfield, Brian K. and Rowitch, David H.

Publication Date: 2016

Journal: Pediatric Research 80(5), pp. 635-640

Abstract: Understanding mechanisms of childhood disease and development of rational therapeutics are fundamental to progress in pediatric intensive care specialties. However, Division Chiefs and Department Chairs face unique challenges when building effective laboratory-based research programs in Neonatal and Pediatric Intensive Care, owing to high clinical demands necessary to maintain competence as well as financial pressures arising from fund flow models and the current extramural funding climate. Given these factors, the role of institutional support that could facilitate successful transition of promising junior faculty to independent research careers is ever more important. Would standardized guidelines of such support provide greater consistency among institutions? We addressed preliminary questions during a national focus group, a workshop and a survey of junior and senior academicians to solicit recommendations for optimal levels of protected time and resources when starting an independent laboratory. The consensus was that junior faculty should be assigned no more than 8 wk clinical service and should obtain start-up funds of \$500K-1M exclusive of a 5-y committed salary support. Senior respondents placed a higher premium on protected time than junior faculty.

Training and Education

[Components of interprofessional education programs in neonatal medicine: A focused BEME review: BEME Guide No. 73](#) Abstract only*

Item Type: Journal Article

Authors: Parmekar, S.;Shah, R.;Gokulakrishnan, G.;Gowda, S.;Castillo, D.;Iniguez, S.;Gallegos, J.;Sisson, A.;Thammasitboon, S. and Pammi, M.

Publication Date: 2022

Journal: Medical Teacher (pagination), pp. no pagination

Abstract: Background: Care delivery in neonatology is dependent on an interprofessional team. Collaborative learning and education amongst professionals can lead to successful management of critically ill patients. This focused BEME review synthesized the components, outcomes, and impact of such interprofessional education (IPE) programs in neonatal medicine. Method(s): The authors systematically searched four online databases and hand-searched MedEdPublish up to 10 September 2020. Two authors independently screened titles, abstracts, full-texts, performed data extraction and risk of bias assessment related to study methodology and reporting. Discrepancies were resolved by a third author. We reported our findings based on BEME guidance and the STORIES (STructured apprOach to the Reporting in health education of Evidence Synthesis) statement. Result(s): We included 17 studies on IPE in neonatal medicine. Most studies were from North America with varying learners, objectives, instruction, and observed outcomes. Learners represented nurses, respiratory therapists, neonatal nurse practitioners, patient care technicians, parents, early interventionists, physicians, and medical trainees amongst others. Risk of bias assessment in reporting revealed poor reporting of resources and instructor training. Bias assessment for study methodology noted moderate quality evidence with validity evidence as the weakest

domain. IPE instruction strategies included simulation with debriefing, didactics, and online instruction. Most studies reported level 1 Kirkpatrick outcomes (76%) and few reported level 3 or 4 outcomes (23%). Challenges include buy-in from leadership and the negative influence of hierarchy amongst learners. Conclusion(s): This review highlights IPE program components within neonatal medicine and exemplary practices including a multimodal instructional approach, asynchronous instruction, an emphasis on teamwork, and elimination of hierarchy amongst learners. We identified a lack of reporting on program development and instructor training. Future work should address long term knowledge and skill retention and impact on patient outcomes and organizations. Copyright © 2022 AMEE.

[Essentials of neonatal-perinatal medicine fellowship: innovations in medical education](#) Abstract only*

Author(s): Schwarz

Source: Journal of Perinatology 42 pp. 677-682

Publication date: 2022

Due to the changing complex healthcare environment, educational innovation is essential to meet the needs of current and future neonatal-perinatal medicine (NPM) leaders. Greater clinical demands, decreased academic funding, and expanded graduate medical education program requirements have negatively impacted time for teaching and educational scholarship potentially limiting innovation in the field. By focusing on adult learning principles, embracing technology, and promoting collaboration, today's educators are preparing the next generation of neonatologists. Current innovations include regionalizing simulation boot camps, leveraging virtual learning to increase accessibility, developing niche training opportunities, and incorporating population health principles within existing quality initiatives. Areas in need of additional innovation include faculty and fellow development for teaching

skills, expansion of educational networks, and dissemination and financial support of educational scholarship. These efforts and future innovations will require medical institutions and national NPM organizations to further invest in the medical educator as part of their missions.

[Gaps in palliative care education among Neonatology Fellowship Trainees](#)

Author(s): Wraight et al.

Source: Palliative Medicine Reports 2(1)

Publication date: July 2021

Background: To provide proper care for infants at risk for death, neonatologists need expertise in many areas of palliative care. Although neonatology training programs have implemented a wide variety of palliative care educational programs, the impact of these programs on trainees' skills and effective communication regarding end-of-life issues remains unclear.

Objective: To determine whether neonatology fellowship programs are providing formal palliative care education and assess whether this education is effective at increasing fellows' self-reported comfort with these important skills. Methods: An anonymous survey was sent to program directors (PDs) and fellows of ACGME accredited neonatology fellowship programs in the United States. Using a 5-point Likert scale, participants were asked about the palliative care education they received, and their comfort level with several key aspects of palliative care. Results: Twenty-four (26%) PDs and 66 (33%) fellows completed the survey. Fourteen PDs (58%) reported including palliative care education in their formal fellowship curriculum, whereas only 20 (30%) responding fellows reported receiving palliative care education. Of the responding fellows, most (80%) reported being uncomfortable or only somewhat comfortable with all assessed areas of palliative care. Fellows who received formal education were more comfortable than those without it in leading goals of care conversations ($p = 0.001$), breaking bad

news ($p = 0.048$), discussing change in code status ($p = 0.029$), and grief and bereavement ($p = 0.031$). Conclusions: Most fellows report being uncomfortable or only somewhat comfortable with essential areas of palliative care. Formal palliative care education improves fellows' self-reported comfort with important aspects of end-of-life care. To promote a well-rounded neonatology fellowship curriculum, inclusion of formal palliative care education is recommended.

[Telesimulation as a modality for neonatal resuscitation training](#)

Author(s): Mileder et al.

Source: Medical Education Online 26(1)

Publication date: February 2021

Introduction: Telesimulation may allow simulationists to continue with essential simulation-based training programs during the COVID-19 pandemic. Hence, we investigated the feasibility of telesimulation for neonatal resuscitation training, assessed participants' attitudes towards telesimulation as well as its effect on neonatal resuscitation knowledge, and compared results between medical students and neonatal nurses. Methods: For this prospective observational pilot study, medical students and neonatal nursing staff were recruited on a voluntary basis. Pre- and post-training knowledge was assessed using a 20-question questionnaire. Following the educational intervention, participants further answered a six-item questionnaire on their perception of telesimulation. For the telesimulation session, participants received a simulation package including a low-fidelity mannequin and medical equipment. The one-hour telesimulation session was delivered by an experienced instructor and broadcasted via Cisco Webex for groups of 2–3 participants, covering all elements of the neonatal resuscitation algorithm and including deliberate technical skills practice. Results: Nine medical students and nine neonatal nurses participated in a total of seven telesimulation sessions. In general, participants enjoyed the

telesimulation session, acknowledged a positive learning effect and found telesimulation suitable for neonatal resuscitation training, but were critical of potential technical issues, training logistics, and the quality of supervision and feedback. Neonatal resuscitation knowledge scores increased significantly after the educational intervention both for medical students and nurses. Conclusions: Telesimulation is feasible for neonatal resuscitation training and associated with significant improvements in knowledge of current resuscitation guidelines, without differences between medical students and neonatal nurses.

[Value, Strengths, and Challenges of e-Learning Modules Paired with the Flipped Classroom for Graduate Medical Education: A Survey from the National Neonatology Curriculum.](#) Abstract only*

Item Type: Journal Article

Authors: Gray, M. M.;Dadiz, R.;Izatt, S.;GillamKrakauer, M.;Carbajal, M. M.;Falck, A. J.;Bonachea, E. M.;Johnston, L. C.;Karpen, H.;Vasquez, M. M.;Chess, P. R. and French, H.
Publication Date: 2021

Journal: American Journal of Perinatology 38, pp. E187-E192
Abstract: Objective This study aimed to determine the value, strengths, and challenges of implementing an e-learning based flipped classroom (FC) educational modality as part of the standardized physiology National Neonatology Curriculum (NNC), created for neonatal-perinatal medicine (NPM) fellow learners and faculty educators. Study Design This is a cross-sectional study of NPM fellows and faculty educators who utilized at least one of the e-learning based NNC FC respiratory physiology programs between May and September 2018. Participants were surveyed anonymously regarding their experiences participating in the NNC, including measures of preparation time. A combination of descriptive statistics and proportion comparisons were used for data analysis. Results

Among 172 respondents, the majority of fellow and faculty respondents reported positive attitudes toward the educational content and case discussions, and the majority supported national standardization of NPM physiology education (92%). Fellows reported greater preclass preparation for their FC compared with previous didactic lectures (30-60 vs. 0-15 minutes, p Copyright © 2021 Thieme Medical Publishers, Inc.. All rights reserved.

[Perspectives: The Flipped Classroom in Graduate Medical Education](#) Abstract only*

Item Type: Journal Article

Authors: French, Heather;Arias-Shah, AnnaMarie;Gisondo, Carly and Gray, Megan M.

Publication Date: 2020

Journal: Neoreviews 21(3), pp. e150-e156

Abstract: Andragogy, the art and science of helping adults learn, is a learner-centric conceptual framework that considers adult learner characteristics and their motivations for learning. These motivations range from internal will, readiness to learn, and relevance to one's own life. The flipped classroom, an increasingly popular educational method for both learners and educators, aligns with an andragogical approach as it uses classroom time for application of knowledge and critical thinking rather than for a passive didactic lecture. The growing body of educational research demonstrating increased performance and knowledge retention using this method has led to its incorporation into graduate medical education materials, including the National Neonatology Curriculum. In this article, the authors review how the flipped classroom, an active educational method that embraces the tenets of adult learning theory, may be more effective in graduate medical education compared with traditional lecture. Copyright © 2020 by the American Academy of Pediatrics.

[Effect of 24/7 attending coverage in the neonatal intensive care unit on fellow education.](#)

Item Type: Journal Article

Authors: Sahni, M. and Mowes, A.

Publication Date: 2020

Journal: BMC Medical Education 20(1), pp. no pagination

Abstract: Background: There is a current change in type of attending coverage in the Neonatal Intensive Care Unit (NICU) from home calls to 24/7 in house coverage. Effects of this increased attending physician presence on education of NICU fellows has not been studied. The objective of this study is to evaluate the fellows' perception of in house attending coverage on their education and evaluate its effect on their perceived autonomy. Method(s): A secure, anonymous, web-based survey was designed using RedCap. The web-based survey was sent via the section of Neonatal Perinatal Medicine of the American Academy of Pediatrics, to all members of Training & Early Career Neonatologists. Questions were focused on perception of IH attending coverage on fellows' educational experience including the respondent's perceived ability to make independent decisions (autonomy). Chi-square tests were used to compare responses between groups, with Fisher Exact tests used when the expected cell frequencies were small. Result(s): One hundred and twenty-three surveys were analyzed, that included responses from 82 fellows & 41 early career neonatologists. 52% reported having 24/7 attending in-house (IH) coverage. Thirty of the 123 respondents experienced a change in model of attending coverage during their training. Among these 30, only 26.6% preferred the model of attending IH coverage. The respondents currently working in IH models, when compared to those in non-IH coverage models felt IH attending coverage was beneficial for fellow education (p

Result(s): One hundred and twenty-three surveys were analyzed, that included responses from 82 fellows & 41 early career neonatologists. 52% reported having 24/7 attending in-

house (IH) coverage. Thirty of the 123 respondents experienced a change in model of attending coverage during their training. Among these 30, only 26.6% preferred the model of attending IH coverage. The respondents currently working in IH models, when compared to those in non-IH coverage models felt IH attending coverage was beneficial for fellow education (p

Conclusion(s): In our survey respondents with in house attending, had a more favorable view of its benefit on fellow education. Institutions practicing or considering IH attending coverage should consider use of adequate measures to balance fellow supervision and education. Copyright © 2020, The Author(s).

[Educational efficacy of high-fidelity simulation in neonatal resuscitation training: a systematic review and meta-analysis](#)

Item Type: Journal Article

Authors: Huang, Jichong;Tang, Ying;Tang, Jun;Shi, Jing;Wang, Hua;Xiong, Tao;Xia, Bin;Zhang, Li;Qu, Yi and Mu, Dezhi

Publication Date: Aug 29 ,2019

Journal: BMC Medical Education 19(1), pp. 323

Abstract: BACKGROUND: The training of neonatal resuscitation is an important part in the clinical teaching of neonatology. This study aimed to identify the educational efficacy of high-fidelity simulation compared with no simulation or low-fidelity simulation in neonatal resuscitation training. METHODS: The PubMed, EMBASE, Cochrane Library, ClinicalTrials.gov, Chinese databases (CBM, CNKI, WanFang, and Weipu), ScopeMed and Google Scholar were searched. The last search was updated on April 13, 2019. Studies that reported the role of high-fidelity simulation in neonatal resuscitation training were eligible for inclusion. For the quality evaluation, we used the Cochrane Risk of Bias tool for RCTs and Risk Of Bias In Non-randomized Studies of Interventions (ROBINS-I) tool for non-RCTs. A standardized mean difference (SMD) with a 95% confidence interval (CI) was applied for the

estimation of the pooled effects of RCTs. RESULTS: Fifteen studies (10 RCTs and 5 single arm pre-post studies) were ultimately included. Performance bias existed in all RCTs because participant blinding to the simulator is impossible. The assessment of the risk of bias of single arm pre-post studies showed only one study was of high quality with a low risk of bias whereas four were of low quality with a serious risk of bias. The pooled results of single arm pre-post studies by meta-analysis showed a large benefit with high-fidelity simulation in skill performance (SMD 1.34; 95% CI 0.50-2.18). The meta-analysis of RCTs showed a large benefit in skill performance (SMD 1.63; 95% CI 0.49-2.77) and a moderate benefit in neonatal resuscitation knowledge (SMD 0.69; 95% CI 0.42-0.96) with high-fidelity simulation when compared with traditional training. Additionally, a moderate benefit in skill performance (SMD 0.64; 95% CI 0.06-1.21) and a small benefit was shown in knowledge (SMD 0.39; 95% CI 0.08-0.71) with high-fidelity simulation when compared with low-fidelity simulation. CONCLUSIONS: Improvements of efficacy were shown both in resuscitation knowledge and skill performance immediately after training. However, in current studies, the long-time retention of benefits is controversial, and these benefits may not transfer to the real-life situations.

[Families as educators: a family-centered approach to teaching communication skills to neonatology fellows.](#) Abstract only*

Item Type: Journal Article

Authors: Parham, D.; Reed, D.; Olicker, A.; Parrill, F.; Sharma, J.; Brunkhorst, J.; NoelMacDonnell, J. and Voos, K.

Publication Date: 2019

Journal: Journal of Perinatology 39(10), pp. 1392-1398

Abstract: Objective: To determine whether the use of family members as educators in a structured educational intervention would increase neonatology fellows' confidence in performing core communication skills targeted to guide family decision-

making. Study Design: Neonatology fellows at two centers participated in simulation-based training utilizing formally trained family members of former patients. Fellows completed self-assessment surveys before participating, immediately following participation, and 1-month following the training. Family members also evaluated fellow communication. Result(s): For each core competency assessed, there was a statistically significant increase in self-perceived preparedness from pre-course to post-course assessments. Fellows additionally endorsed using skills learned in the curriculum in daily clinical practice. Family educators rated fellow communication highest in empathetic listening and nonverbal communication. Conclusion(s): Participation in a communication skills curriculum utilizing formally trained family members as educators for medical trainees successfully increased fellows' self-perceived preparedness in selected core competencies in communication. Family educators provided useful, generalizable feedback. Copyright © 2019, The Author(s), under exclusive licence to Springer Nature America, Inc.

[Education, training, and accreditation of Neonatologist Performed Echocardiography in Europe – framework for practice](#)

Author(s): Singh et al.

Source: Paediatric Research 84 pp. 13-17

Publication date: August 2018

There is a growing interest worldwide in using echocardiography in the neonatal unit to act as a complement to the clinical assessment of the hemodynamic status of premature and term infants. However, there is a wide variation in how this tool is implemented across many jurisdictions, the level of expertise, including the oversight of this practice. Over the last 5 years, three major expert consensus statements have been published to provide guidance to neonatologists

performing echocardiography, with all recommending a structured training program and clinical governance system for quality assurance. Neonatal practice in Europe is very heterogeneous and the proximity of neonatal units to pediatric cardiology centers varies significantly. Currently, there is no overarching governance structure for training and accreditation in Europe. In this paper, we provide a brief description of the current training recommendations across several jurisdictions including Europe, North America, and Australia and describe the steps required to achieve a sustainable governance structure with the responsibility to provide accreditation to neonatologist performed echocardiography in Europe.

[Training in research competencies: a strategy for neonatology](#)

Author(s): Gopi et al.

Source: Archives of Disease in Childhood 102(1)

Publication date: February 2017

The report 'Turning the tide' highlighted the need to increase the capacity for clinical research in child health. 1 The increase in training posts funded by the National Institute for Health Research (NIHR) will slow the fall in academic consultant positions. 2 The rapid growth in clinical trials in neonatology (figure 1), however, means that all neonatal professionals need to have the necessary awareness and skills. Research involvement within a clinical service should be considered a sign of healthcare quality. 3 With the separation of academic and clinical specialist training, most trainees have little involvement in research 4 and proposed changes could make this worse. 5 The paediatric curriculum does include research skills that are currently being refined and linked to assessment of competencies by the Royal College of Paediatrics and Child Health (RCPCH). There is, however, no easily accessible training, and it is thus not surprising that trainees lack confidence in this area. 1 Nurses are the primary source of information for parents of babies in neonatal units 6 and are

thus potentially important advocates for research. Nurse training curricula include no research competencies, although the specific roles of the clinical research nurse and nurse researcher have recently been defined. 7

[Mapping the nursing competences in neonatology: a qualitative research.](#)

Item Type: Journal Article

Authors: Alfieri, Emanuela;Alebbi, Alessia;Bedini, M.

Giovanna;Boni, Laura and Foa, Chiara

Publication Date: 07 18 ,2017

Journal: Acta Bio-Medica De L Ateneo Parmense 88(3S), pp. 51-58

Abstract: BACKGROUND AND AIM: There are several studies that support the importance of advanced expertise and specialization of the neonatal pediatric nurse. However, proceeding with a analysis of the scientific literature regarding the nursing advanced competence in neonatology, very few studies specify and define these competences. The aim of the study is investigate and analyze skills, tasks and responsibilities of the neonatal pediatric nurse, to map a "neonatal nurse competence profile", offered from the points of view of the Neonatology Units professionals. METHODS: 32 professionals (nurses, physicians, psychologists, healthcare assistants) operating in the Neonatal Intensive Care Unit of two Italian Hospitals were interviewed. The semi-structured interviews have been performed, transcribed and analyzed following the Levati's model (based on Activity, Expectations and Evaluation system). RESULTS: About the nurses activities, the participants underlined the newborn care, the care of the caregiver and the "bureaucratic" activities. About the system of expectations, the participants marked on specific skills but those are described only comprehensively. About the evaluation system there are different perceptions among the professionals, but the nurses themselves feel that they have to answer for their actions

primarily to infants and families, indicating a sense of responsibility towards the patients. CONCLUSIONS: On the basis of the interviews a profile of a neonatal nurse competences has been drawn up. This consists of 42 competences that future studies can further specify, integrate and expand.

[Cost-effective and low-technology options for simulation and training in neonatology](#) Abstract only*

Item Type: Journal Article

Authors: Bruno, Christie J. and Glass, Kristen M.

Publication Date: 2016

Journal: Seminars in Perinatology 40(7), pp. 473-479

Abstract: The purpose of this review is to explore low-cost options for simulation and training in neonatology. Numerous cost-effective options exist for simulation and training in neonatology. Lower cost options are available for teaching clinical skills and procedural training in neonatal intubation, chest tube insertion, and pericardiocentesis, among others. Cost-effective, low-cost options for simulation-based education can be developed and shared in order to optimize the neonatal simulation training experience. Copyright © 2016 Elsevier Inc. All rights reserved.

[Neonatology faculty development using simulation](#) Abstract only*

Item Type: Journal Article

Authors: French, Heather M. and Hales, Roberta L.

Publication Date: 2016

Journal: Seminars in Perinatology 40(7), pp. 455-465

Abstract: The goal of faculty development activities is to supply the public with knowledgeable, skilled, and competent physicians who are prepared for high performance in the dynamic and complex healthcare environment. Current faculty development programs lack evidence-based support and are

not sufficient to meet the professional needs of practicing physicians. Simulation activities for faculty development offer an alternative to traditional, teacher-centric educational offerings. Grounded in adult learning theory, simulation is a learner-centric, interactive, efficient, and effective method to train busy professionals. Many of the faculty development needs of clinical neonatologists can be met by participating in simulation-based activities that focus on technical skills, teamwork, leadership, communication, and patient safety. Copyright © 2016 Elsevier Inc. All rights reserved.

Workforce

[The changing UK paediatric consultant workforce: report from the Royal College of Paediatrics and Child Health](#) Abstract only*

Item Type: Journal Article

Authors: McColgan, Martin;Winch, Rachel;Clark, Simon J.;Ewing, Carol;Modi, Neena and Greenough, Anne

Publication Date: Feb ,2017

Journal: Archives of Disease in Childhood 102(2), pp. 170-173

Abstract: OBJECTIVES: To determine if there had been changes in the size of the UK paediatric workforce and working patterns between 1999 and 2013. DESIGN: Analysis of prospectively collected datasets. SETTING: UK consultant paediatricians. INTERVENTIONS: Data from the Royal College of Paediatrics and Child Health's workforce census from 1999 to 2013 and the annual surveys of new paediatric Certificate of Completion of Training (CCT) and Certificate of Equivalence of Specialist Registration (CESR) holders between 2010 and 2013. MAIN OUTCOME MEASURES: Paediatric consultant numbers, programmed activities (PAs) and resident shift working. RESULTS: The UK paediatric consultant workforce grew from 1933 in 1999 to 3718 in 2013. Over the same time period, there was a decline in the number of consultants with a

primary academic contract from 210 to 143. There was an increase in the proportion of consultants who were female (40% in 1999 to 50% in 2013, p Copyright Published by the BMJ Publishing Group Limited. For permission to use (where not already granted under a licence) please go to <http://www.bmj.com/company/products-services/rights-and-licensing/>.

Diversity and Inclusion

[Seeking racial and ethnic equity among neonatologists](#)

Author(s): Horowitz et al.

Source: Journal of Perinatology 41 pp. 422-434

Publication date: 2021

Objective Racial and ethnic inequities in leadership achievement, compensation, scholarly productivity, and grant funding exists among physicians. This study explores whether similar inequities exist among neonatologists within the United States. Study design A voluntary anonymous survey was distributed to members of the American Academy of Pediatrics Section on Neonatal–Perinatal Medicine with 560 respondents. Logistic regression and ordinary least squares were used to assess whether racial and ethnic identity is associated with clinical time, leadership, compensation, publication, grant funding, or academic rank. Results As compared to non-Hispanic White neonatologists, statistical differences were found for underrepresented minorities in medicine in: regions of the country where they worked, total cash compensation received, being awarded an NIH grant, and location of graduate medical education. Fewer differences were found for Asian neonatologists and included location of graduate medicine education. Conclusion Racial and ethnic identity remains a significant independent factor influencing professional achievement and compensation.

*Help accessing articles of papers

Where a report/ journal article or resource is freely available the link has been provided. If an NHS OpenAthens account is required this has been indicated. It has also been highlighted if only the abstract is available. If you do not have an OpenAthens account you can self-register here.

If you need help accessing an article, or have any other questions, contact the Knowledge Management team for support KnowledgeManagement@hee.nhs.uk