Examination of the newborn: The franchise experience – integrating theory and practice

National educational programmes to assist midwives in the transition to extending their role are now rapidly expanding throughout the country with appropriate training and support. In the context of enhanced practice, midwives are ideally placed to conduct routine examinations of the full term healthy infant. In the same way, neonatal nurses have a role in the discharge of the healthy low birthweight infant from the neonatal unit environment. The franchise of the Examination of the Newborn module, provided by the University of Central Lancashire to The North Cheshire Hospitals NHS Trust, is designed to enable midwives and neonatal nurses to develop advanced clinical skills.

Anne Lomax
MEd, RN, RM, ADM, ENB 405, ENB N96, Cert Ed
Senior Lecturer, Department of Midwifery Studies, University of Central Lancashire

Claire Evans
BSc (Hons), RGN, RM, ADM, ENB 405, ENB N96, Dip Med Social Anthropol, Cert Ed
Neonatal Lecturer Practitioner, North Cheshire Hospitals NHS Trust – Warrington, and University of Central Lancashire

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Key points

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1. Practitioners are in a unique position to provide holistic care to the neonate and continuity of care to the mother and family.
2. Educational programmes must integrate theoretical knowledge closely with clinical practice so that practitioners can meet the requirements of a rapidly changing maternity service in line with current Department of Health plans.
3. The franchise process enables education to be provided within the clinical environment, responding directly to learning needs and service demand.
4. Appropriately trained staff must be allowed to integrate new skills and competencies into current service provision.

Maternity care provision within the UK has witnessed unprecedented change over the last decade in response to the evolving needs of its client population. The development of the midwifery profession in response to the Maternity Services Report: Changing Childbirth[1] has resulted in more effective care pathways for mothers and their infants. A major recommendation from this report involved midwives undertaking the 'routine' examination of the newborn, including auscultation of the heart and lungs, eye examination and examination of the hips. National educational programmes to assist midwives in developing these new clinical skills are now expanding rapidly throughout the country.

The aims of this role for midwives include provision of continuity of care to women in its true sense and a more realistic and practical delivery of holistic care to the neonate in accordance with the Midwifery Profession's legislative framework[2].

The philosophy of enhancing holistic care of the neonate in this way has been a focus for neonatal nurses for many years. Neonatal nurses have now formally advanced their practice through the Advanced Neonatal Nurse Practitioner (ANNP) programmes. These programmes address a more medical model of care. In contrast some neonatal nurses are choosing a more specific practice pathway by undertaking such courses as the Examination of the Newborn. This course of study enables experienced neonatal nurses to enhance the holistic care process without relinquishing their nursing role. Neonatal nurses within this context do not have the practice remit of their ANNP colleagues.

The examination of the newborn in context

Historically, a paediatrician, usually a senior house officer, conducted the first day/discharge examination of the newborn within 6-72 hours of birth[3]. However, the provision of maternity care in this country has now changed, the dominant focus being midwifery-led care and early discharge[4].

Whilst the 'Changing Childbirth' Report discussed the need for continuity of care for mother and infant, Court[5] generated further debate on this change of responsibility from doctors to midwives. To validate midwives, Hall[6] upheld the need for the 'routine' examination of the newborn to meet a 'good practice' standard. Furthermore, midwives are ideally placed to conduct the examination with appropriate training and support.

In addition, the move to reduce junior doctors' hours as recommended by The Calman Report[7] has led Trusts to consider extending the role of the midwife to include the examination of the newborn. Although the reduction in junior doctors' hours is not the primary driver for this initiative, it has provided a financial catalyst to facilitate this logical step

FIGURE 1 The newborn examination and the child surveillance programme starts here. Photo – Eddie Lawrence.

towards more effective care of the neonate.

In 1993 Middlesex University and the North Middlesex and Whittington Hospital NHS Trusts joined in partnership to produce a module that would qualify the midwife to undertake the examination normally carried out by a paediatrician[8].

A module to educate midwives in this way has been offered at the University of Central Lancashire (UCLan) since 1998 within the Department of Midwifery. A priority within the department is to provide education that meets the needs of a rapidly changing health service and ensures the development of appropriately skilled nurses and midwives. Government initiatives are providing the platform for changes in the way NHS staff work to reduce waiting times and deliver modern, patient-centred care. These initiatives include; Changing Childbirth Report[1]; Making A Difference[9]; The National Plan for the New NHS[10]; European Working Time Directive[11], and more recently, NHS Changing Workforce Programme[12].

It is imperative that the continued development of innovative educational programmes, which closely integrate theory with practice, remain a high priority within the department. Content and outcomes must be quality assured and continue to meet the needs of NHS service providers.

The Examination of the Newborn module demonstrates how close integration of theory to practice has been achieved by ensuring that clinicians are closely involved in curriculum planning, course management and delivery. The module has made a significant positive impact upon the provision of care within local Trusts. The initiative has also been recognised as an example of good practice within the Faculty of Health at the University of Central Lancashire and has attracted both national and international interest.

The Government believes that by liberating the potential of staff the NHS can shape its services around the needs of the patient. The Vision 2000 Executive Summary[4] calls on midwives to respond actively to initiatives that ensure high quality, evidenced-based, cost effective care. The summary emphasises the need for the service to uphold the philosophy of pregnancy and childbirth as a normal process, reducing the need for unnecessary medicalisation of low risk pregnancy and birth. This concept also applies to the neonatal unit environment for the discharge of the healthy low birthweight infant. This highlights the need to ensure clinical excellence through robust professional development opportunities.

This can be achieved by flexible and creative service planning supported by appropriate educational programmes teaching advanced clinical skills. Midwives and neonatal nurses now have an opportunity to embrace the wider implications for practice that are outlined in 'The National Plan for the New NHS'[10] and the 'RCM Vision 2000'[4] in order to increase autonomy and maximise continuity of carer.

Staff at the NHS Research and Development Health and Technology Assessment Programme based at Wessex University have recently completed a project to investigate the cost effectiveness of extending midwifery practice in routine examination of the newborn (EMREN trial)[13]. This research addresses general and specific issues of extending the midwifery role, concerns regarding junior doctors' hours and the timing of examination of newborn babies. Publication of this work is expected this year and is likely to inform NHS policy. Initiatives to standardise the procedure of detailed examination of the newborn and therefore provide consistency of practice are currently under development by the Royal College of Midwives in collaboration with the Royal College of Paediatrics and Child Health.

Not all midwives want to extend their role in this way. Sherliker[14] suggested that midwives had varied responses to undertaking this additional responsibility. Some midwives were keen to accept this role following appropriate training, while others demonstrated more mixed feelings even though they worked in midwifery-led units. These midwives also felt that there was still a place for medical input in the process of normal childbearing. Seymour[15] concluded that there is no real reason why midwives should not carry out the full examination of the newborn following appropriate training.

To undertake this role the practitioner must have a sound knowledge base of neonatal physiology. Neonatal nurses in particular, require a greater depth of altered physiology. This must be reflected by the content of an appropriate programme. The practitioner is only required to validate normality and recognise deviations from the normal and is not expected to make a diagnosis. This valuable role is essential in order to activate prompt referral and subsequent management of the neonate. The practitioner must therefore work effectively as part of a multidisciplinary team. An appropriate educational programme should integrate theoretical knowledge closely with clinical practice and enable the practitioner to achieve competence in all areas at the appropriate academic level.

The franchise process

The development of a franchise arrangement with North Cheshire Hospitals NHS

Trust evolved upon the joint appointment of Claire Evans as Neonatal Lecturer Practitioner. The project effectively allows the University of Central Lancashire to provide education on site as a direct response to training and service needs. The objective of the franchise is to facilitate the delivery of a validated Examination of the Newborn module on site at Warrington. The midwifery unit manager and clinical nurse manager had previously actively explored the viability of such an arrangement between the Trust and a Higher Education institution.

The Trust had well-established links with UCLan for provision of other neonatal educational programmes. The Department of Midwifery Studies at UCLan has provided mentorship for the Lecturer Practitioner. There was exclusive liaison between both the maternity unit and the neonatal unit in accommodating this training need. The geographical location of Preston in relation to Warrington (30 miles apart) created a problem for students with travel, which could be alleviated by a franchise. This type of relationship between Trusts is not a new concept. Moreover the collaboration between the NHS and Higher Education could only serve to strengthen the provision for life long learning as advocated in the Dearing Report[16]. Such a partnership required an educationally-led infrastructure that could be reflected in both establishments.

Funding for the franchise was secured from Practice Development monies directly financed by the Workforce Planning Confederation. The Midwifery Initiative Plan identified the need for an accredited in-service teaching programme for midwives and neonatal nurses undertaking the routine examination of the newborn. To further this aim a business plan was submitted and approved.

As part of the proposed franchise with the University of Central Lancashire it was necessary to assess clinical and training requirements, as well as facilitate and monitor the franchise process. In order to achieve this, a steering group was formed consisting of a multidisciplinary group of members with a focused approach to developing the franchise and implementing a quality programme meeting the requirements of the University of Central Lancashire.

North Cheshire Hospitals NHS Trust established a formal training programme for its own staff and for external surrounding Trusts. The Trust was proactive in identifying the educational and service needs required to enhance the existing provision for examination of the newborn. Objectives include:

- Continuity of care for mothers and their infants
- Integration of continuity of care to midwifery case-loads
- Facilitation of a 'home from home' low-risk total midwifery-led service
- Increased availability of the 6-hour discharge service for all women (often delayed due to lack of available paediatric medical staff to conduct the examination of the newborn)
- Integration of the skill to the Neonatal Nurse Specialist role to discharge the healthy low birthweight infant.
- Enhancement of the existing examination of the newborn service by paediatric medical staff

The Examination of the Newborn programme is also a key training resource for the Neonatal Nurse Specialists team which has recently been created. This role included provision of continuity for mothers with infants being cared for by the Transitional Care Service. The Neonatal Nurse Specialist has a pre-existing relationship with mother and baby as well as knowledge of the maternal history and infant's medical condition, which are so vital to the screening aspect of the examination[17, 18].

Extension of the programme to encompass aspects of altered neonatal physiology and immaturity-related complications is currently being implemented to accommodate the growing demand from neonatal nurses to utilise examination of the newborn programme skills within the context of the neonatal unit. In the first instance, the number of midwives and neonatal staff requiring training to establish the neonatal nurse specialist service was estimated, with a cost projection for subsequent annual intakes to help maintain the financial viability of the franchised module. In addition to Trust demand, external interest was generated through postal advertising. Visits to prospective external Trusts expressing an interest were offered. The visit included a presentation outlining the context of the examination of the newborn, the programme content and the benefits to midwifery service provision.

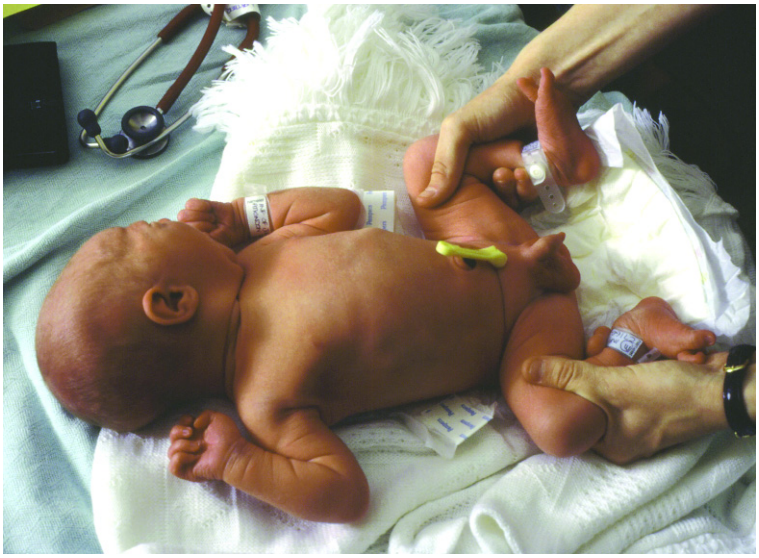

FIGURE 2 Screening for developmental dysplasia of the hips. Photo – Eddie Lawrence.

The role of the Lecturer Practitioner was extensive and involved close liaison with the module leader and Head of Midwifery Studies within UCLan. The Lecturer Practitioner ensured the integration of theory to practice within the clinical setting whilst contributing to the theory content of the programme. This is in line with Government policy which has recommended that education be strengthened with more practice-based teaching[9].

In line with Clinical Excellence and Governance pathways[19, 20] and accreditation frameworks e.g. Clinical Negligence Scheme for Trusts (CNST), it was necessary for the Trust to review existing practice guidelines in the light of the practitioners' expanded role. Guidelines for midwives and neonatal nurses would not only support practice but also help maintain the scope of practice within a new enhanced role in accordance with NMC legislation[2]. Referral pathways were reviewed to ensure prompt referral of neonates with identified problems or potential risk factors by all professionals

conducting the examination.

However, national guidelines for achieving 'best practice' are urgently required for all healthcare professionals conducting the routine examination of the newborn. A 'best practice' statement has been recently published by the NHS Quality Improvement Board, Scotland to improve the quality of health care and provide advice, guidance and support on effective clinical practice and service improvements[3].

A perinatal audit is currently underway to evaluate practice following implementation of the module at Warrington. It is hypothesised that this systematic clinical review of practice will monitor the effectiveness of midwives and neonatal nurses conducting the examination as recommended by the National Institute of Clinical Excellence[21].

Inappropriate timing of the newborn examination or inexperience on the part of the examiner may result in errors, especially with cardiac murmurs. In addition, oversight of potential risk factors may occur, for example risks for developmental dysplasia of the hip (DDH) screening. Midwives and neonatal nurses undertaking the examination will continue to improve detection rates as their skills develop with experience following completion of training. Thus, expertise is maintained within this professional body and not transferred six months later, as with senior house officers.

A recent national postal survey[22] reviewed the current practice of midwives conducting the examination of the newborn in England. The survey concluded from the 86% response rate that the majority of examinations were carried out by senior house officers (83%) with 44% of maternity units having at least one appropriately trained midwife to conduct the examination. Perhaps the most disturbing finding was the fact that only 2% of midwives in England are continuing to perform examinations after training. Consequently, a third of midwives trained to do so are not performing in this role. Trusts must be very specific as to how midwives and neonatal nurses, who have completed training to undertake the newborn examination, will be integrated into the existing service. Otherwise, as the results from the latter survey suggests, time, effort and finance will be wasted.

An additional aim of the franchise arrangement at Warrington is to ensure that appropriately trained practitioners are integrating this skill into current service provision. To date all midwives and neonatal nurses successfully completing the module have continued to undertake examinations on a regular basis to ensure maintenance of clinical practice[2]. A contributing factor to this is the continued collaborative support and motivation from the paediatric medical team and the midwifery directorate. Both disciplines share the mutual objectives of a sustained quality service for the neonate.

An Examination of the Newborn Practice Development Group has been formed at Warrington to ensure the consistency of best practice amongst practitioners. This group aims to:

- Review practice guidelines on a regular basis
- Contribute to review of referral pathways
- Provide peer assessment on a regular basis, monitor clinical competence and assist personal professional development
- Coordinate the Perinatal Audit into Examination of the Newborn, conducted by midwives and neonatal nurses.

The Trust and UCLan share a common agenda of facilitating change and enhancing care provision through the Clinical Effectiveness Governance Pathways[23]. Education serves as a change agent in securing future growth and development of clinical services within the respective professional networks. The franchise network may be one of the best methods of providing high quality continuing education, which is mutually beneficial to all parties. The module forms part of the BSc (Hons) in Midwifery Studies pathway, and also an optional choice module for the Masters in Neonatal Practice programme.

Acceptance of the examination of the newborn role by midwives and neonatal nurses can only serve to enhance and improve the quality and level of care given to the mother and her family. Practitioners and educationalists together have a great opportunity to ensure that continuity of carer remains at the forefront of contemporary maternity services.

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