The Declaration of Madrid (1993 and 1999) has been revised and updated in order that member Associations which comprise of the European federation of Critical Care Nursing associations, can consider its adoption as a framework for developing educational standards for critical care nursing across Europe, particularly beyond the period following registration.

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EfCCNa

Revised by
Birte Baktoft (Denmark), John Albarran (UK) and Elio Drigo (Italy) on behalf of the Education committee, which also counts:

Maria Kalafati (Greece), Anne Kokko (Finland) Heike Strunk (Germany) and Marusa Bvar (Slovenia)
1. PREAMBLE

Critical or intensive care is a complex specialty developed to serve the individual and delicate health care needs of patients and families with actual and potential life-threatening conditions.

The role of the critical care nurse is essential in delivering evidenced-based care to critically ill patients and remains a vital component of the multidisciplinary team. Critical care nursing embraces a holistic approach to the care of patients bringing a unique combination of knowledge, skills, attitudes and competencies not typically included in pre-registration nursing.

Due to the increasing complexity of care, demographic changes in the population, increased accountability, demands of patients and European Union directive on junior doctors working hours, it is envisaged that nurses’ roles will expand and develop new ways of working [1]. This could include leading services based on protocols [2,3]. Nurses should therefore be equipped theoretically and practically to assume a growing number of clinical responsibilities at specialist or advanced levels. Performing clinical assessments, interpreting patient data and making discretionary judgements will be important expectation of those authorised to operate at an independent level.

Governmental, professional and educational bodies with influence on the practice of nursing must recognise the importance of designing specialised educational programmes for critical care nurses in order to impact on physical and psychological patient outcomes. This declaration presents a set of guidelines revised, by critical care professionals within European Federation of Critical Care Nursing Associations (EfCCNa), from previous published documents [4, 5] in order that they may be adapted to support the development of critical care educational programmes and standards.

2. CENTRAL PRINCIPLES

2.1 Patient and families with specialist health care needs, have the right to receive individualised critical care from appropriately qualified professional nurses.

2.2 Critical care nurses must posses the appropriate knowledge and skills to assess and effectively respond to the complex needs of patients, to the demands of a changing society, and to challenges of advancing technology.

2.3 Nurses with specialised knowledge and expertise in the provision of care to critically ill patients should play an integral part in the education of critical care nurses, even when a multi-disciplinary approach to care is utilised.

2.4 The preparation of critical care nurses must be based on the most current available information and research. This should include learning how access and utilise sources of evidence.

2.5 Critical care education must be coherent and structured and be delivered by qualified nurses with the relevant expertise, ideally at masters or doctoral level.

2.6 The notion of Life-long Learning should be fostered in every critical care nurse and the completion of a course should not be seeing as end of personal development.

3. RECOMMENDED CONTENT AREAS

As a minimum, dimensions of the following topics should be included in programmes, which prepare critical care nurses to function in a modern health care system. The following topic areas are not listed in
order of importance, but merely as suggestions:

- Anatomy & physiology
- Pathophysiology
- Pharmacology
- Clinical (physical) assessment
- Illnesses & alternations of vital bodily functions
- Medical indications and prescriptions with resulting nursing care responsibilities
- Psychological, social and spiritual aspects
- Use of, and application of technology
- Professional and nursing roles in critical care
- Evidence based multidisciplinary care
- Appropriate use of current research findings
- Information technology
- Communication and interpersonal skills

4. RECOMMENDED EDUCATIONAL PRINCIPLES

The European federation of Critical Care Nursing associations (efCCNa) believes that nurses with specialist skills and knowledge must care for patients with specialist needs. To support this objective the following educational principles are also proposed and previously endorsed by the Australian College of Critical Care Nursing [5] and the European Network of Nurses Organisations [6].

4.1 All post-registration nurse education that is concerned with preparing nurses to function and perform at a specialist level, or equivalent, should be provided by Higher Education institutions or similarly professionally accredited organisations [5, 6].

4.2 Post-registration critical care education programmes must provide a minimum of 50% practice [4]. There must be a clear emphasis on the application of theory to practice with the assessment of clinical competence as an essential component. It is also recommended that the European Credit Transfer system [7] be adopted in designing the curriculum and for the purposes of determining the academic credit to be awarded for each unit of study.

4.3 Post-qualifying programmes in Critical Care must comprise of a series of core modules (units of study) relating to specialist critical care subjects as listed above, as well as include quality assurance concepts and research methods (critical appraisal skills, epidemiology, searching the literature and application of evidence based-practice) [8]. Optional modules relating to professional (ethics) and clinical practice (management of change, pain control) may be offered as alternatives to specific awards, (certificate, diploma or degree, see table 1).

4.4 The competence of nurses undertaking critical care programmes must be assessed regularly and according to nationally recognised frameworks. Assessors must be appropriately trained.
4.5 The preparation of nurses for specialist practice should also involve the input of other members of the multidisciplinary team.

4.6 Methods of educational delivery should be flexible and interactive as well as incorporate classroom teaching, e-learning, simulations, practical skills, Objective Structured Clinical Examinations (OSCEs), which are underpinned by learning contracts and personal portfolios. In addition to enhancing clinical skills, the aim of teaching and learning strategies should be about developing analytical and problem-solving skills to enable nurses to demonstrate competency in decision-making and discretionary judgments. The emphasis on teaching and learning strategies should adopt a philosophy of andragogy or adult-centred learning.

4.7 Links between theory and practice: nurses must be able to demonstrate a detailed understanding of the application of relevant theories to the delivery of care, problem-solving and analytical reasoning skills. As stated earlier, it is recommended that curriculum should reflect a mix of 50% theory and 50% practice. The measure of competency should be according to nationally recognised standards. The development of research skills, access to researchers and integration of evidence-based practice is vital to promoting excellence in care.

4.8 EfCCNa supports the recommendations of the Australian College of Critical Care Nurses [4] that there should be appropriate opportunities and resources to enable nursing students to meet the learning objectives in practice. The role of a personal mentor is one way of facilitating the student maturing into a competent professional.

The European federation of Critical Care Nursing associations (EfCCNa) supports the principle all critical care learners should be provided with an appropriately experienced and educated mentor who can facilitate the development of skills, knowledge and achievement competency in the critical care students [4]. The mentor should be pedagogically trained, motivated and enthusiastic in their role as mentor. They must take responsibility for the student’s learning and to determine the individual’s competency based on recognised standards. Mentors should demonstrate evidence of ongoing personal development. Where relevant, mentors from other disciplines may be involved in supporting the critical care student to meet specific learning objectives whether in the form of knowledge, skills or attitudes.

For the student to develop into a competent and confident critical care nurse, they should have close and regular contact with their supervising mentors. The use of a learning contract or portfolio of learning experiences must be reviewed jointly between student and mentor and structured feedback on progress provided accordingly. It is also important that students and clinical mentors meet with academic staff to evaluate the achievements of the learner and identify areas for future developments.

4.9 The success of a student accomplishing their objectives depends on the learning environment; the quality of mentorship and educational input, for this reason EfCCNa agrees that close collaboration between higher education institutions and health service providers is crucial. It is essential that the learning environment be audited on a regular basis to ensure that high standards of practice education, mentorship, and
scholarship are being maintained and further promoted.

Along with other proposals [3], EfCCNa endorses the recommended methods of fostering close cooperation, this include:

- Collaboration in the design development, monitoring and evaluation of critical care programmes;
- Curricula must be current and equip nurses with a mix of knowledge and skills to manage the complexity of practice, the needs of a multicultural society and age groups;
- Dissemination and generation of research should be vital components in any post-registration programme;
- Involvement of clinical personnel in the delivery of content for critical care programmes;
- The appointment of joint posts between education and practice;
- The implementation of research projects that are developed in collaboration and that feed into the curriculum;
- The implementation of professors in critical care nursing with a clear remit of developing practice and patient care services.

4.10. Those responsible for developing critical care nursing programmes must standardise the number of educational hours of delivery and student-learning time to an appropriate tariff as agreed by the Treaty of Bologna in 1998 [7]. The arrangements of credits must relate to hours of theory and the relevant level of academic study.

Policies on credit transfer must be clearly expressed, be flexible and approved by educational authorities in each country. Mechanisms must be organised to enable potential students to be awarded academic credit for evidence of learning in practice in relation to agreed objectives.

There must be a standardised method for accessing post registration programmes of critical care nursing, which must take into account the individuals previous clinical experiences, level of expertise and contributions to service delivery in addition to their prior educational learning. It is recommended, that the decisions to support critical care nursing students to undertake further study should involve the manager and the academic representative.

4.11 It is recognised that accessibility to critical care courses which require regular attendance can be problematic for students in terms of travel or being released from the clinical environment. In addition face-to-face education is but one way of delivering taught components, higher education institutions must therefore consider alternative, innovative and flexible methods such as e-technology, CD-roms and study block options to ensure wider accessibility to critical care courses.

Post-registration students working in small units or rural centres may be limited in the range of clinical experiences available to them. EfCCNa therefore recommends that such issues be addressed fully by the manager, academic staff and student prior to commencing the course. It is important
that students are not disadvantaged from achieving the learning outcomes and clinical competencies of their respective programmes. Facilitating a range of learning opportunities (i.e. specific practise placement in another hospital) to enable students to succeed and equipped to be “fit for practice” is a priority. However, critical care education must be responsive to healthcare trends and local requirements, which may be addressed by a needs analysis [9].

The economic situation of each country within Europe varies moreover government support to meet the cost of critical care courses differs significantly. In some countries there is financial support to meet the costs of post-registration courses, in others nurses must pay the fees if they wish to attend and complete a post-registration in critical care nursing. EfCCNa therefore recommends equal assistance for all those nurses wishing to develop in the area of critical care nursing so they can serve the community at large.

**Summary**

The European federation of Critical Care Nursing associations believes that appropriately trained and educated nurses with specialist expertise must care for the critically ill patient with specialist needs. Nurses working in critical care areas should have a combination of transferable skills and knowledge to enable them to provide high quality holistic patient care and to perform their role efficiently and affectively. Key to the successful preparation of critical care nurses is the completion of nationally recognised clinical and professional competencies, which can promote nurses to be confident in their duties.

 Appropriately qualified educators in the field of critical care practice, theory and research should provide the education of critical care nurses. There is an expectation that critical care nursing programmes are delivered in higher education institutions or professionally accrediting organisations and that certification of completion is recognised by relevant health service authorities and users. It is further proposed that in the fullness of time these certificates and associated competencies will be widely accepted across the European Community allowing nurses to move freely within countries of the EU.

EfCCNa recognises that within Europe there is a variation in terms of economic resources, Information Technology infrastructure and educational developments, but would encourage that member countries of the EU work together towards promoting greater equity of opportunity in accessing high quality education for all nurses.

The challenges facing health care providers are becoming more complex and decisions have to be made within financial constraints. However, it is well established that investment in post-basic nursing education can translate to improvements in meeting the needs of critically ill patients [10, 11] well-educated workforce is also associated with high quality of nursing care and a reduction in the number of complications, which directly impacts on the outcomes of morbidity and mortality. EfCCNa believes that nurses remain the most valuable and talented resource in healthcare and their contribution to the patient and relatives experience is positive and unique.

Nurses do not work in isolation but as part of the multidisciplinary team and through their coordinated efforts make a difference to the care and management of the critical ill patient. It is the collaboration with other disciplines that guarantees the patients’ care remains
individualised, deliberate, holistic and relates to their specialist needs.

This document adopts the principles laid down by ACCCN (1999), and embody many of the values and beliefs held by EfCCNa. This set of guidelines has been prepared with the aim of developing and improving standards in critical care nurse education within the European Countries; as such the content within should not be interpreted to be prescriptive. It is also our vision that these guidelines begin the process of unifying critical care education to support the free movement of critical care nurse specialists within the EU.

References.


5. Marianne Underwood et al (1999) Position statement on post-graduate nursing education, developed by the Critical Care Education Advisory Panel on behalf of the Australian College of Critical Nurses


**Additional reading**

Barr H (2002) Inter-professional Education: Today, Yesterday and Tomorrow  
[www.health.ltsn.ac.uk/miniproject/hughBarrFinal.htm](http://www.health.ltsn.ac.uk/miniproject/hughBarrFinal.htm)

Royal College of Nursing (2004) The future nurse: The future of nurse education~ a discussion paper,  


Table 1
Comprehensive articulation of the modules of the complete course for critical care area nursing education with different addresses for operative settings.

Common process:
hours 700
Credits 28

Characterising process:
hours 800
Credits 32

- General intensive care nursing
- Specialist intensive care nursing
- Nursing care in territorial emergency situations
- Nursing care in maxiemergencies and military health
- Nursing care in the endoscopic procedures
- Nursing care in Operating Room
- Nursing care in Anaesthesia and antalgy care
- Nursing care in pain management
- Nursing care in oncology
- Nursing care in palliative care
- Nursing care in Nephrology
- Nursing care in emodialisys
- Nursing care for the kidney-transplanted person
- Nursing care in DIALISYS