

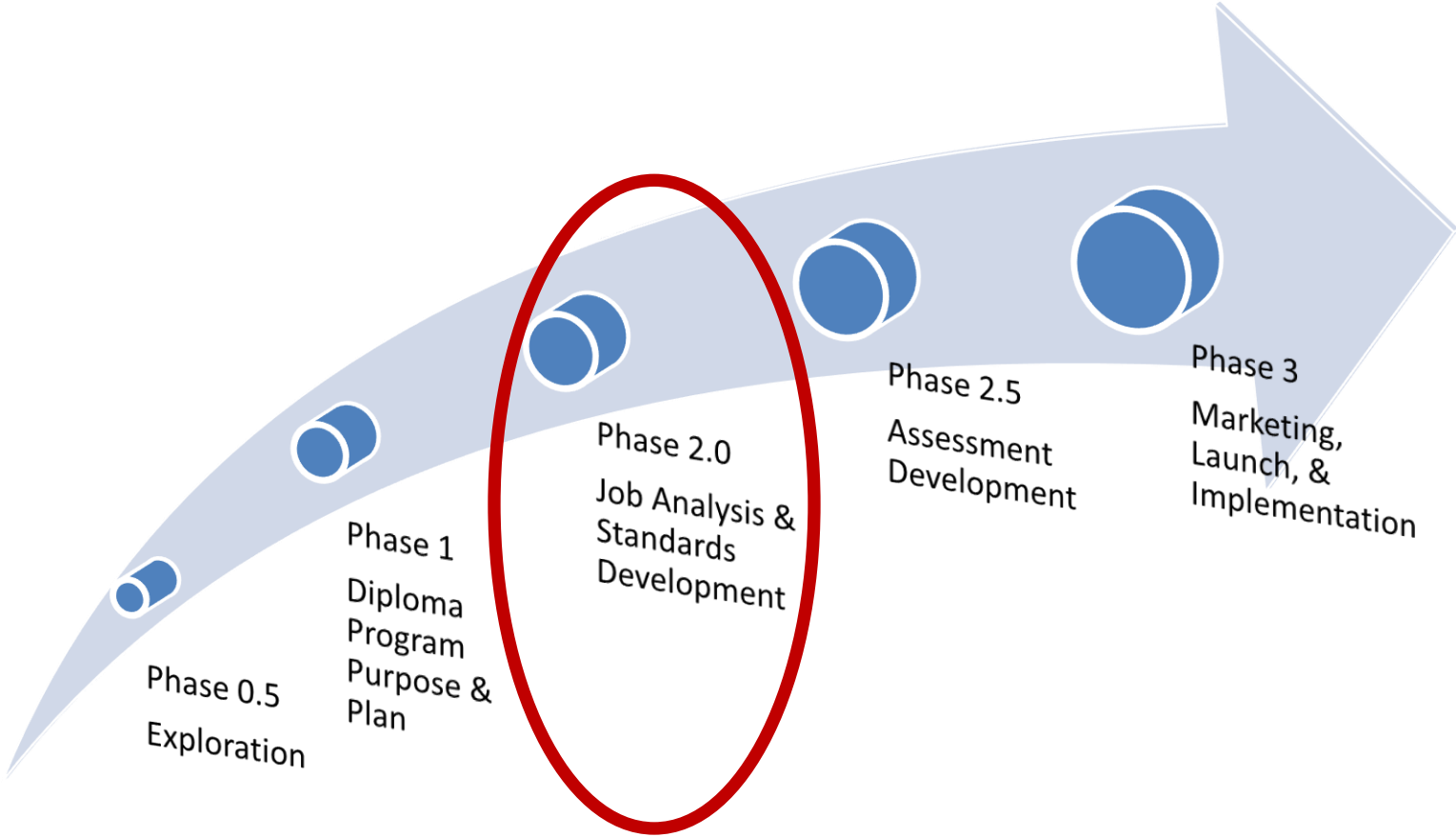
# ESPNIC



## ***Diploma Program in Paediatric and Neonatal Intensive Care*** **Status Report – 13 December 2014**

J David M Rozsa, CAE, ACA  
*Consultant Director of Credentialing*

# Diploma Program Development Process



# ***Why*** Develop a Diploma Program?

The purpose of the Diploma in Paediatric and Neonatal Intensive Care Program is to *harmonize and improve quality standards* for safe, independent practice in paediatric and neonatal intensive care in Europe and elsewhere.

The Diploma Program assesses the minimal competencies necessary to practice as a paediatric / neonatal intensive care specialist.

The Diploma Program is intended to be *complementary to national standards* and enhance the *competent, ethical, and professional* care of critically ill children.

# Diploma Program Vision

**The Diploma in Paediatric and Neonatal Intensive Care is recognized as the reliable standard of quality care of critically ill children throughout Europe and beyond.**

## Three Basic Principles

- ✓ Have a rational basis for every decision, aligned with the program purpose
- ✓ Do what you say you are going to do
- ✓ Avoid undue influence

# Best Practices in Certificate / Diploma Program Development

## Cross-Occupational Accreditation Standards

- History
- Purpose
- Content
- Use



ANSI/NOCA 1100 -

### Standard for Assessment-Based Certificate Programs

*An American National Standard*

March 2009 (e)



Approved as an American National Standard by ASTM International  
**INTERNATIONAL ANSI/ISO/IEC  
STANDARD 17024**

First edition  
2003-04-01

**Conformity assessment — General  
requirements for bodies operating  
certification of persons**

*Evaluation de la conformité — Exigences générales pour les  
organismes de certification procédant à la certification de personnes*

National Commission for Certifying Agencies

Standards for the  
Accreditation of Certification Programs



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Approved February 2002  
Revised September 2004  
Revised November 2006 (editorial only)

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# Best Practices in Certificate / Diploma Program Development Regional Standards for Medical Specialty Education



**UNION EUROPÉENNE DES MÉDECINS SPÉCIALISTES  
EUROPEAN UNION OF MEDICAL SPECIALISTS**

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## GLASGOW DECLARATION

Representatives of the following UEMS Sections/Boards met in Glasgow on the 9<sup>th</sup> February 2007 and unanimously agreed the following:

- The role of European Board Examinations is complementary to National Examinations where they exist.
- Countries which do not have their own examination are encouraged to consider using the appropriate European Board Examinations.
- European Board Examinations are regarded as a quality mark for safe independent practice at the end of specialist training.
- All European Board Examinations shall publish both a syllabus and minimum requirements for examination.
- Candidates for examination should be certified specialist or have been trained according to the relevant syllabus.
- A trainee may sit the final part of a European Board Examinations provided they have fulfilled the requirements of their national training body where one exists or when approaching the end of the training.
- Candidates of any nationality shall be eligible to sit the European Board Examinations.
- Candidates who pass a European Board Examination and who are certified specialists in an EU/UEMS member state may call themselves "Fellow of the European Board". Other successful candidates will be "European Board Certified".
- Trade sponsorship should not be used to subsidise the examination.
- It is proposed to establish a Council for European Specialist Medical Examinations (CESME) as an advisory body to the UEMS and its sections.

Neurosurgery  
Nuclear Medicine  
Orthopaedics and Traumatology  
Paediatric Surgery  
Pathology  
Plastic, Reconstructive and Aesthetic Surgery  
Pneumology  
Urology  
Vascular Surgery

President: Dr. Zlatko Fras  
Treasurer: Dr. Vincent Lamy

Secretary General: Dr. Bernard Maillet  
Liaison Officer: Dr. Gerd Hofmann



**Standards for  
curricula and  
assessment systems**

**General  
Medical  
Council**  
Regulating doctors  
Ensuring good medical practice

## Accredited Voluntary Registers

Standards for organisations holding a voluntary register for health and social care occupations

December 2012



professional  
standards  
authority



**MEDICAL COUNCIL ACCREDITATION STANDARDS  
FOR  
POSTGRADUATE MEDICAL EDUCATION AND TRAINING**

### 1. CONTEXT OF EDUCATION AND TRAINING

#### 1.1 GOVERNANCE

- 1.1.1 The training organisation's governance structures and its education and training, assessment and continuing professional development functions are defined.
- 1.1.2 The governance structures describe the composition and terms of reference for each committee, and allow all relevant groups to be represented in decision-making.
- 1.1.3 The training organisation's internal structures give priority to its educational role relative to other activities.

#### 1.2 PROGRAMME MANAGEMENT

- 1.2.1 The training organisation has established a committee or committees with the responsibility, authority and capacity to direct the following key functions:
  - o planning, implementing and reviewing the training programme(s) and setting relevant policy and procedure
  - o setting and implementing policy and procedures relating to the assessment of overseas-trained specialists
  - o setting and implementing policy on continuing professional development and reviewing the effectiveness of continuing professional development activities.
- 1.2.2 The training organisation's education and training activities are supported by appropriate resources including sufficient administrative and technical staff.
- 1.2.3 Funding and resource allocation - there must be a clear line of responsibility and authority for budgeting of training resources. The training bodies must be adequately funded in order to plan and deliver the programme.

#### 1.3 EDUCATIONAL EXPERTISE AND EXCHANGE

- 1.3.1 The training organisation uses educational expertise in the development, management and continuous improvement of its education, training, assessment and continuing professional development activities, as required.
- 1.3.2 The training organisation collaborates with other educational institutions and compares its curriculum, training programme and assessment with that of other relevant programmes.

...etc.



**German Medical Association  
(Joint Association of the State Chambers of  
Physicians in Germany)**

(Model) Specialty Training Regulations  
2003

As amended on 25.06.2010

# Best Practices in Certificate / Diploma Program Development

## ANSI/ICE 1100 Standard v. GMC Standards



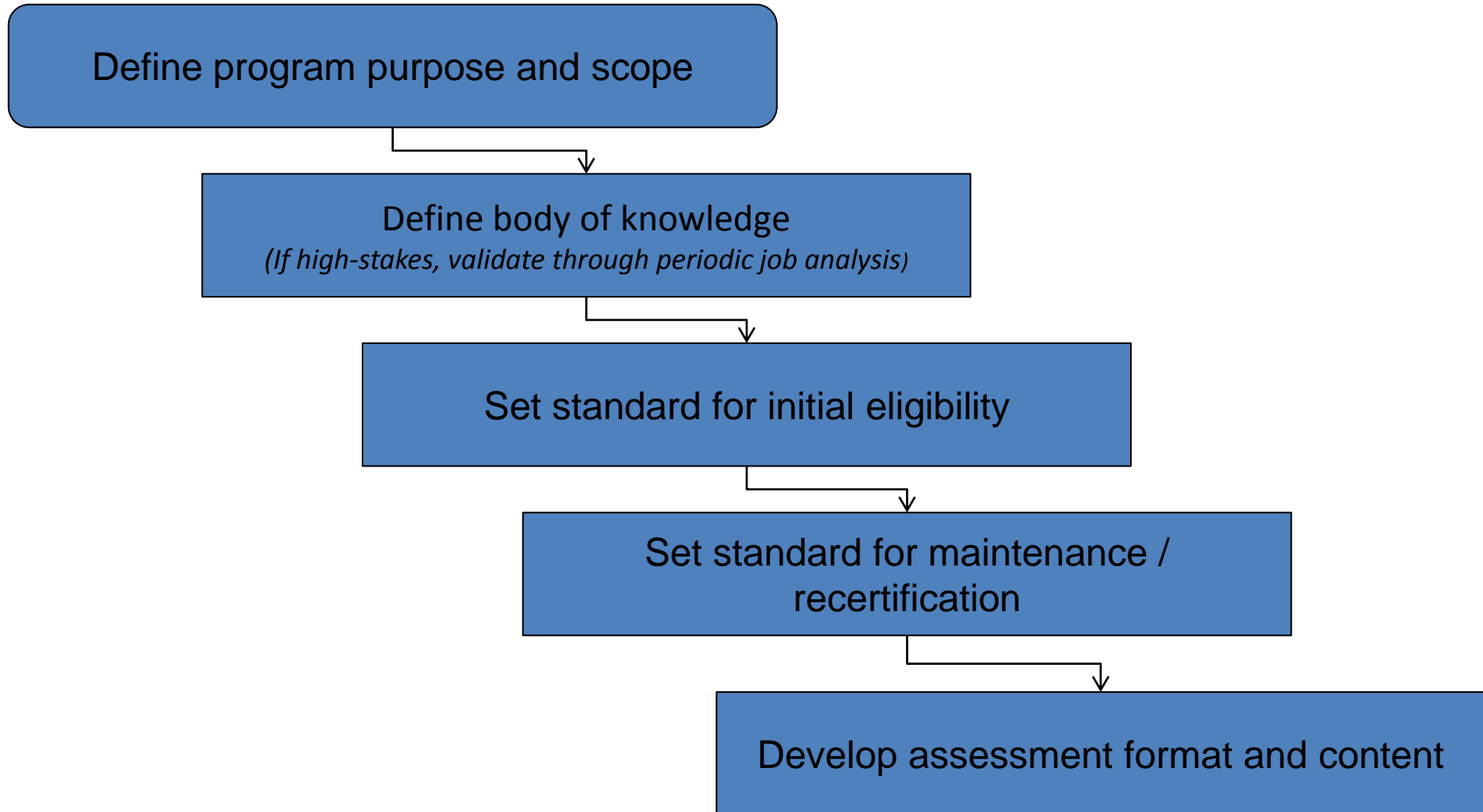
- The certificate provider shall be structured so as to give stakeholders confidence in its competence and integrity and shall **publish** all essential information related to the assessment-based certificate program to ensure that stakeholders understand its **purpose**, scope, and requirements.
- The certificate provider is responsible for all activities performed on its behalf and shall ensure these activities are performed properly by qualified individuals.
- The certificate provider shall **maintain orderly and accurate records**, documents, and/or other materials and manage them in a responsible manner.
- The certificate provider shall set **quality standards** for the certificate program and shall **evaluate the program** using these standards.
- The certificate provider shall ensure that the **education/training is developed and delivered by qualified individuals** and that the **content, design, and delivery are suited to the intended learning outcomes and consistent with generally accepted instructional design principles**.
- The certificate provider shall conduct an assessment of participants' accomplishment of the intended learning outcomes and shall ensure that the procedures used to develop and conduct the **assessment(s)** and to evaluate/score participants' performance are **consistent with accepted measurement principles and the intended use of the certificate**.
- A certificate shall be issued only in accordance with documented requirements and procedures, and certificate holders shall be informed of the proper uses of the certificate.



- The **purpose** of the curriculum must be **stated**, including linkages to previous and subsequent stages of the trainees' training and education. The appropriateness of the stated curriculum to the stage of learning and to the specialty in question must be described.
- The overall **purpose** of the assessment system must be **documented** and **in the public domain**.
- The curriculum must set out the general, professional, and specialty-specific content to be mastered, including: (a) the acquisition of knowledge, skills, and attitudes demonstrated through behaviours, and expertise; (b) the recommendations on the sequencing of learning and experience should be provided, if appropriate; (c) the general professional content should include a statement about how *Good Medical Practice* is to be addressed.
- **Assessments** must **systematically sample the entire content**, appropriate to the stage of training, with reference to the common and important clinical problems that the trainee will encounter in the workplace and to the wider base of knowledge, skills and attitudes demonstrated through behaviours that doctors require.
- Indication should be given of how curriculum implementation will be managed and assured locally and within approved programmes.
- The **curriculum must describe the model of learning appropriate to the specialty and stage of training**.
- Recommended learning experiences must be described which allow a diversity of methods covering, at a minimum: (a) learning from practice; (b) opportunities for concentrated practice in skills and procedures; (c) learning with peers; (d) learning in formal situations inside and outside the department; (e) personal study; (f) specific trainer/supervisor inputs.
- The choice of **assessment method(s)** should be **appropriate to the content and purpose** of that element of the curriculum.
- Mechanisms for supervision of the trainee should be set out.
- **Assessors/examiners will be recruited against criteria** for performing the tasks they undertake.
- Assessments must provide relevant feedback to the trainees.
- The methods used to set standards for classification of trainees' performance/competence must be transparent and in the public domain.
- **Documentation will record the results** and consequences of assessments and the trainee's progress through the assessment system.
- Plans for curriculum review, including **curriculum evaluation and monitoring**, must be set out.
- Resources and infrastructure will be available to support trainee learning and assessment at all levels (national, deanery and local education provider).
- There will be lay and patient input in the development and implementation of assessments.
- The curriculum should state its compliance with equal opportunities and anti-discriminatory practice.



# Program Development Process

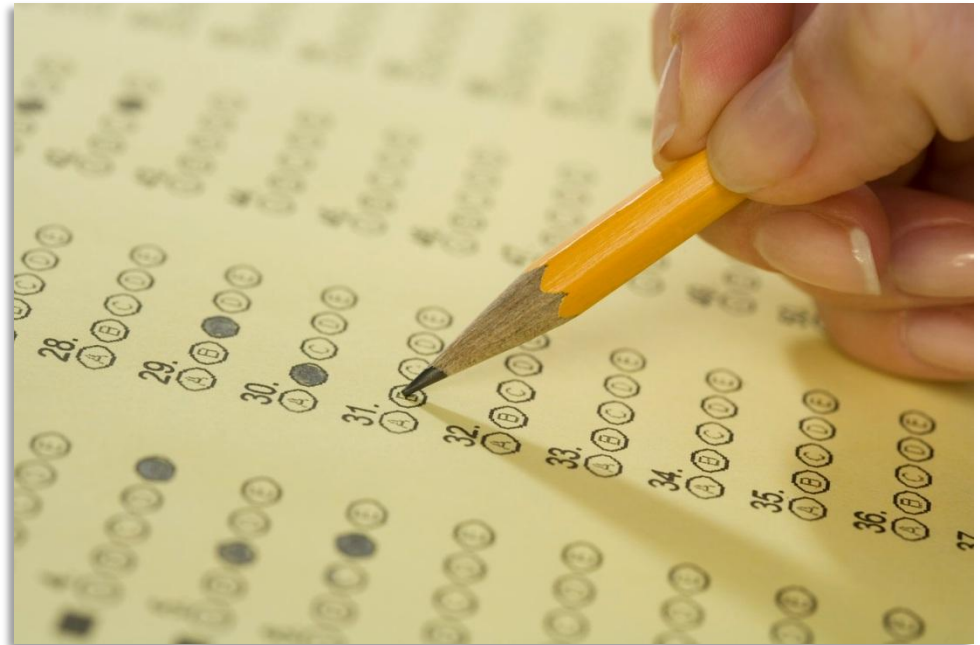


## Assessment Development Process

- Assessment format decisions
- Test specifications / exam blueprint / detailed content outline
- Item writing and refinement, with references to authority
- Form construction
- Beta testing
- Cut-score setting
- Assessment delivery
- Item, form, and distractor analysis
- Ongoing refresh of item bank and exam forms

# Assessment Format Options

- Knowledge, application, and synthesis
  - Multiple choice
  - Short answer
  - Essay
  - Matching
  - Games
- Performance



# Best Practices in Certificate / Diploma Program Development

## Assessment Delivery Platform Options

- Paper-Based Knowledge Test



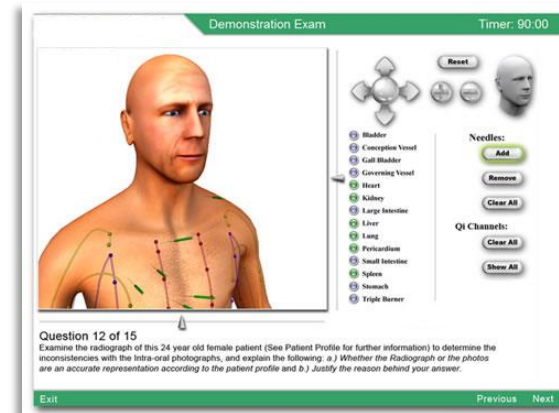
- Computer-Based Knowledge Test



- Observational Performance Test



- Computer-Based Performance Test



# A Word About Performance Testing

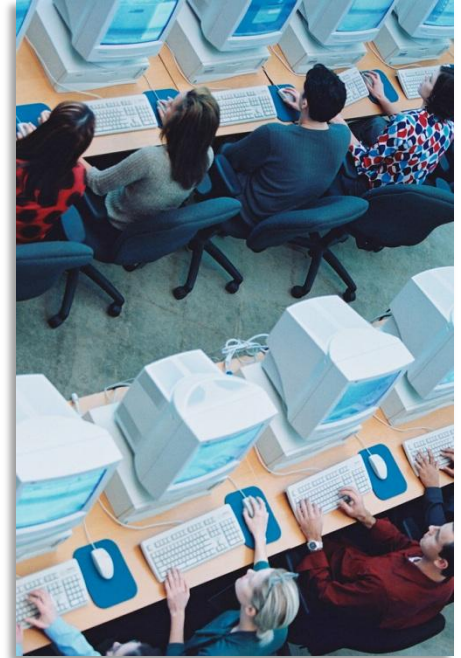
- Ensuring consistent and unbiased application of standards by raters
- Delivery and other costs



# Best Practices in Certificate / Diploma Program Development

## Assessment Delivery Venue Options

- Organization's office
- Conference or classroom
- Authorized proctors at candidate's office
- Internet
- Secure test centers



# The Transnational Market

- Localization
  - Scope of practice
  - Occupational language
- Delivery footprint
- Intellectual property



# High-Level Comparison of Similar Programs

Organization / Program	Program Scope	Eligibility Requirements	Preparatory Resources	Assessment format	Assessment Languages	Maintenance Requirements
ESICM / EDIC	KSA needed to practice competently – “entire spectrum of intensive care medicine”	<ul style="list-style-type: none"> <li>• MD in good standing</li> <li>• Primary base specialty</li> <li>• 24 months training in target specialty</li> <li>• 6 months training / employment in target specialty in Europe</li> </ul>	Comprehensive syllabus taught at ESICM conference	<ul style="list-style-type: none"> <li>• Part 1 – Paper-based knowledge exam</li> <li>• Part 2 – Observational performance exam</li> <li>• Part 3 – Oral knowledge exam</li> </ul>	Multiple local	None
ESA / EDAIC	KSA needed to practice competently - “relevant basic sciences and clinical subjects appropriate for a specialist anaesthesiologist”	<ul style="list-style-type: none"> <li>• MD in good standing</li> <li>• Certification in anaesthesiology</li> </ul>	<ul style="list-style-type: none"> <li>• Reading list</li> <li>• Internet-based practice test</li> </ul>	<ul style="list-style-type: none"> <li>• Part 1 – Paper-based knowledge exam</li> <li>• Part 2 – Oral knowledge exam</li> <li>• <i>Optional</i> – Observational performance exam</li> </ul>	Multiple local	None



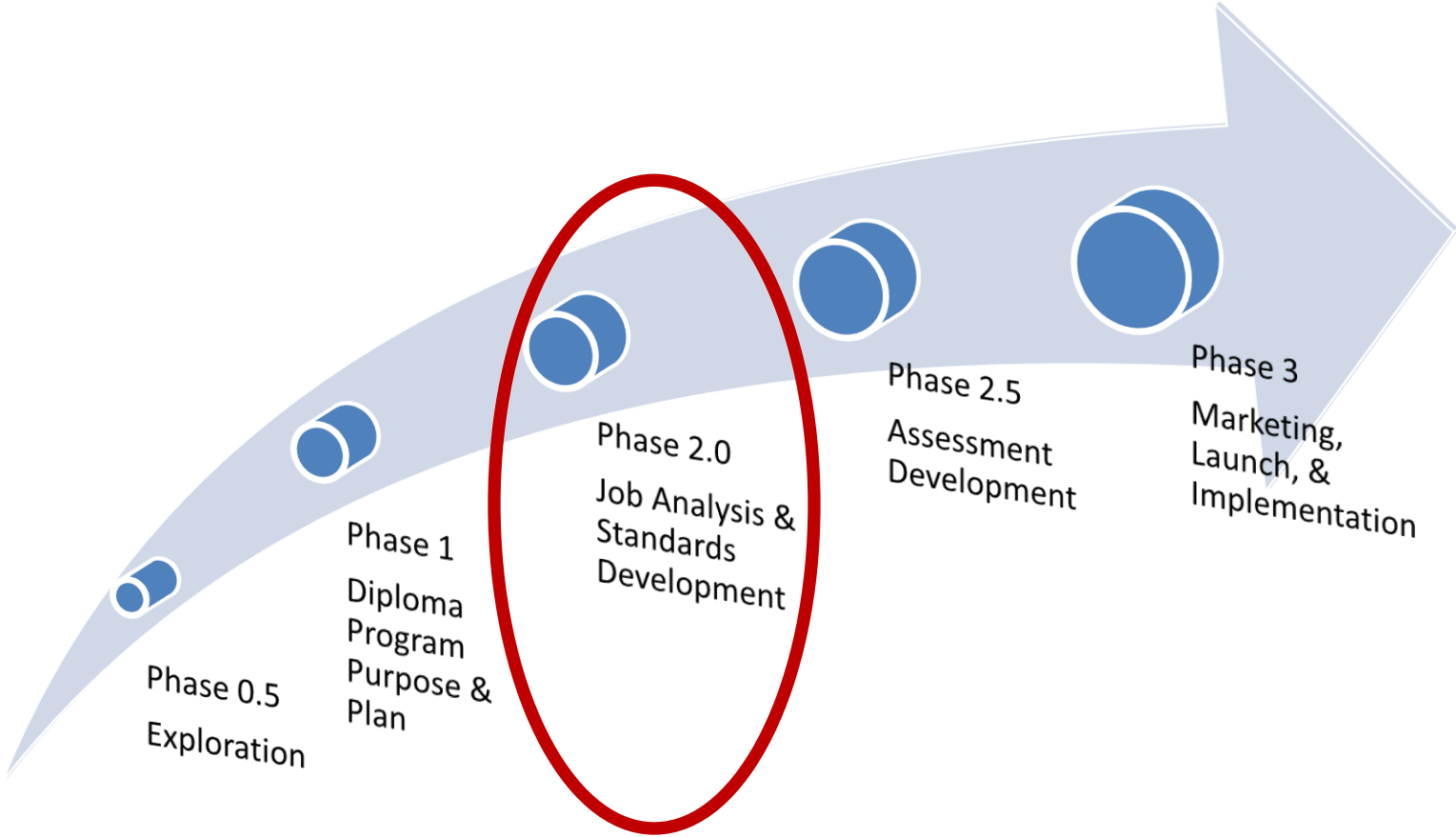
# Diploma Program 5-Year Goals

- **Participation of at least 5% of the practitioners in Europe.**
- **Representative participation diversity across geographic regions within Europe.**
- **National regulatory authorities are aware of the Diploma program and its value.**
- **Operational costs are self-sustaining.**

# Diploma Program 1-Year Objectives

- **Have 10-20 people engaged in Part 1 of the program.**
- **Have a clearly defined pathway for those Part 1 candidates.**
- **Have initiated conversations with national regulatory authorities, asking them to accept the Diploma as satisfying local licensing requirements.**

# Diploma Program Development Process



# Diploma Program Governance Structure

- **Diploma Advisory Board**
  - **Job Analysis Task Force**
  - **Assessment Development Committee**
    - **Cut Score Task Force**
    - **Item Writers**
  - **Ethics & Professionalism Committee**
  - **Appeals Committee**
  - **Preparatory Resources Committee**

# Diploma Program Development Timeline

- **25 March 2013** – Phase 0.5 Exploration meeting – Amsterdam
- **7-8 October 2013** – Phase 1 Planning meeting – Amsterdam
- **29-29 April 2014** – Phase 2.0 Job Analysis Task Force meeting – London
  - 20 delegates, representing the demographic diversity within the specialty
  - UK, Netherlands, Switzerland, Poland, France, Germany, Lithuania, Italy, Hungary, Romania, Russia, Japan, India, China (Hong Kong), USA, & Australia were represented
- **9 & 15 May 2014** – Job Analysis Task Force webconferences to refine survey
- **28 May – 5 June 2014** – Job Analysis survey pilot
- **8 June 2014** – Job Analysis Task Force webconference to refine job analysis survey based on pilot participants' feedback

# Diploma Program Development Timeline

- **5 August – 8 September 2014** – Job Analysis survey open
  - Distributed globally to 1,750 paediatric and neonatal intensive care physicians and ANPs
  - Open link to forward survey to colleagues
  - Redistributed by American Board of Pediatrics to sections on Critical Care & Neonatology
  - Exceeded the number of responses needed for statistical reliability (>200)
- **22-23 September 2014** – Job Analysis Task Force meeting – Budapest

Based on the survey results, developed recommendations on:

  - Exam specifications (topical domains and weighting)
  - Recertification period
    - Driven by pace of change
    - Dual purpose of recertification:
      - Ensure continued minimal competence by exam every 5 years; or
      - Ensure continual enhancement of competence by CPD every year throughout 5-year recertification period
  - Program scope (geographic, level of experience, whether to include ANPs and other allied health professionals, and whether to include Neonatal Intensive Care)
  - Language(s): English first, then phase in localized translations through investment by (and profit-sharing with) national societies

# Diploma Program Development Timeline

***Note: We are exactly on schedule***

- **22 October 2014** – Diploma Advisory Board meeting – Barcelona
  - Reviewed and approved recommendations of Job Analysis Task Force
  - Set initial eligibility requirements
  - Set recertification standards
  - Determined assessment format(s)
  - A non-voting observer attended, representing the Scandinavian perspective
- **31 December 2014** – *Phase 2.0 Report* delivered to ESPNIC Executive Committee (EC)
- **31 January 2015** – EC decides whether to proceed with Phases 2.5 and 3.
- **February 2015** – *If EC approves proceeding with Phases 2.5 and 3*: Phase 2.5 – Constitute the Assessment Development Committee and train its members as item writing mentors
- **February 2015** – Recruit and train item writers

# Diploma Program Development Timeline

- **February 2015 and forward** –Phase 3 – Launch marketing and start accepting applications for Part 1, providing eligible candidates with a certificate of recognition
- **February – September 2015** – Phase 2.5 – Draft and refine exam items and forms
- **10-13 June 2015** – ESPNIC Congress 2015 in Vilnius, Lithuania; promote Diploma Program and recruit beta test candidates
- **October – December 2015** – Phase 3 – Administer exam (Part 2) as a beta test to first cohort of eligible candidates, awarding successful candidates with the Diploma in Paediatric and Neonatal Intensive Care
- **January – May 2016** – Phase 2.5 – Based on beta test, refine and finalize exam items and forms; set cut (passing) score
- **June – July 2016** – Phase 3 – Publish exam to global network of secure, computer-based test (CBT) sites
- **August 2016 and forward** – Administer exam



# Diploma Advisory Board Decisions

- The geographic scope of the Diploma Program is European, with the possibility of developing endorsement modules for other geographic regions in the future.
- The first language of the Diploma assessment(s) and other materials will be English, with localized translations to be phased in over time.
- The scope of the Diploma Program will include neonatal intensive care, but not neonatology aside from neonatal intensive care.
- Advanced nurse practitioners and equivalent high-level allied health professionals performing essentially the same role as paediatric / neonatal intensive care physicians will be eligible to participate in the Diploma Program.
- The Diploma assessment should be summative at a single moment in time, not formative and continuous, and the assessment format should be MCQ only.
- The Diploma Program has a dual purpose and pathway for recertification:
  - 1) Ensure continued minimal competence by MCQ exam every 5 years; or
  - 2) Ensure continual enhancement of competence through continuing professional development every year throughout a five-year recertification period
- The revalidation period for the Diploma assessment specifications will be every five years.

# Diploma Program – Initial Eligibility Standards

## **General Medical Training**

Medical school / faculty / university degree

## **Primary Specialty Training**

Completion of a training programme in one of the following primary specialties: Anaesthesiology, paediatrics, paediatric surgery, or intensive care

## **Trainer Reference**

None

## **Licensure**

A valid (current), unrestricted medical license in at least one jurisdiction. If multiple licenses are held, each must be valid and unrestricted.

# Diploma Program – Initial Eligibility Standards

## Subspecialty Training

1) **Certificate** awarded upon:

a) One year of training in paediatric / neonatal intensive care

b) Complete training (verified) in the following core topics (equivalent allowed if approved by ESPNIC):

i. BASIC course

ii. Paediatric sepsis

iii. Liver and nutrition in the ICU

iv. Renal support and paediatric CRRT

v. Ventilation

vi. Neuro trauma and critical care

c) Pass "**Part 1**" of the MCQ Diploma exam, containing those topical domains that align with the core topics listed above

Completion of 1)a)-c) = ***Certificate in Paediatric and Neonatal Intensive Care***

# Diploma Program – Initial Eligibility Standards

## Subspecialty Training (continued)

2) **Diploma** awarded upon:

a) Certificate training completed

b) An additional year (beyond the one year required for eligibility to take Part 1 exam) of training in paediatric / neonatal intensive care

c) Complete training (verified) in the following advanced subspecialty topics:

vii. Ethics, family-centred care, and professionalism

viii. Safe unit structure, staffing, and leadership

ix. Safe transport and advanced monitoring

x. Neonatal intensive care, and care of term and surgical infant

xi. Cardiac ICU / ECMO / VAD

d) Pass "**Part 2**" of the MCQ Diploma exam, containing those topical domains that align with the advanced topics listed above

Completion of 2)a)-d) = ***Diploma in Paediatric and Neonatal Intensive Care***

# Diploma Exam Specifications / Blueprint

Domains	Weight
1. Resuscitation and initial management of the acutely ill child	10%
2. Clinical assessment, investigation, data interpretation and monitoring	9%
3. Organ system support and therapeutic interventions	13%
A: Brain and nervous system	15% of 13
B: Respiratory system	30% of 13
C: Cardiovascular system	25% of 13
D: Liver and gastrointestinal system	7% of 13
E: Renal system and electrolytes	10% of 13
F: Skin	1% of 13
G: Haematology and coagulation	8% of 13
H: Endocrine	4% of 13
4. Perioperative care	5%
5. Compassionate and family-oriented care and end-of-life care	4%
6. Patient safety	5%
7. Transport	3%
8. Trauma and burns	5%
9. Sepsis	7%
10. Professionalism and ethics	5%
11. Basic sciences	3%
12. Pharmacology and toxicology	5%
13. Unit management/governance	3%
14. Congenital defects / prematurity	4%
15. Long-term care, home care, and discharge planning	2%
16. Environmental emergency	1%
17. Infectious disease	6%
18. Metabolism and nutrition	5%
19. Haemato-oncology, oncology, and haematopoietic stem cell transplantation (HSCT)	3%
20. Management of the older child in the ICU	2%

# Diploma Program – Recertification / Maintenance Standards

<b>Frequency of Recertification Period</b>	<p>5 years, either by exam (to ensure continued minimal competence) or by continuing professional development (CPD) (to ensure continual enhancement of competence).</p> <p>If by CPD, must engage in some CPD activity every year throughout the 5-year recertification period.</p>
<b>By Exam</b>	<p>Full-length, current version of the initial certification exam as of the last year of the recertification period.</p>
<b>By Continuing Professional Development</b>	<p>100 CPD points over the course of the 5-year recertification period, with at least 1 CPD point earned every year.</p> <p>All CPD activity topics must align with the ESPNIC Diploma Program exam specifications to count towards Diploma recertification.</p> <p>CPD activities to include:</p> <ol style="list-style-type: none"><li>1) CME (1 CPD point per 60 minutes of instructional time of a CME activity accredited by ECCME or ACCME, minimum 30 minutes) (at least 40 CPD points must be in this category)</li><li>2) Teaching (2 CPD points per 60 minutes of instructional time, minimum 30 minutes)</li></ol>

# Diploma Program – Recertification / Maintenance Standards

## **By Continuing Professional Development** *(continued)*

3) Research / Authorship (5 CPD points for lead development and presentation / 2 CPD points for contributing development and presentation of a peer-reviewed poster at a medical congress; 10 CPD points for lead authorship / 5 CPD points for contributing authorship of a peer-reviewed article in a journal or a peer-reviewed chapter in a textbook; 20 CPD points for lead authorship / 10 CPD points for contributing authorship of a peer-reviewed textbook)

4) Quality improvement (20 CPD points for completing a quality improvement project that incorporates strategies for improvement and tracks performance over time) (at least 20 CPD points must be in this category)

5) Leadership and service (1 CPD point per hour of actual meeting time for service on a relevant committee or board; 1 CPD point per draft Diploma exam item accepted as viable by the ESPNIC Assessment Development Committee)

## **Professional Standing / Probity / Personal Health**

A valid, unrestricted medical license in at least one jurisdiction. If multiple licenses are held, each must be valid and unrestricted.

# *NEXT STEPS* - Phase 3 (Marketing, Launch, & Operations)

- Compelling marketing
- Promotion of the credential's value to the various stakeholders
- Customer service, satisfaction, and relationship management
- Initial certification application processing
- Initial certification exam administration and scoring
- Certificant recognition
- Certificant engagement
- Recertification application processing
- Committee support
- Budgeting, payment processing, banking, investment management, and accounting
- Vendor management
- Continual improvement and periodic revalidation of the Diploma program



# ESPNIC



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