



CONTINUING
PROFESSIONAL
DEVELOPMENT
PORTFOLIO



A Route to Enhanced Competence in **Critical Care Nursing**

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A Route to Enhanced Competence in Critical Care Nursing

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Introduction

A Route to Enhanced Competence in Critical Care Nursing

In Spring 2000 the National Board was approached by representatives of service management to assist in the consideration of a national approach to the preparation of an educational framework for career progression in critical care nursing.

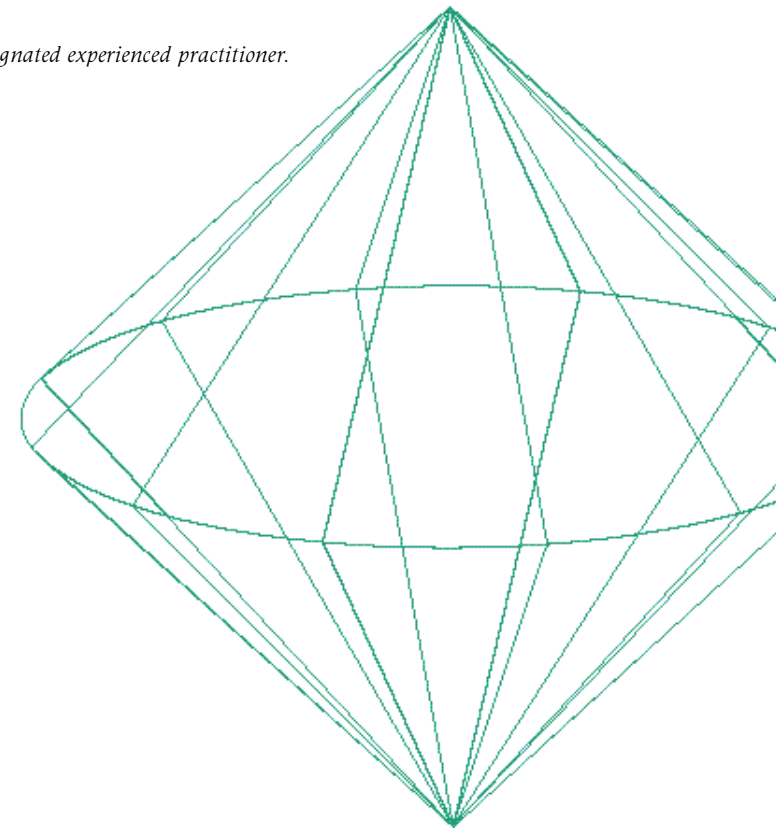
A working party made up of senior critical care nurses representing a range of NHS Trusts in Scotland and a representative from the independent sector was set up in August 2000.

As a first stage, the group recognised the need for the provision of clear descriptors of core competencies for the delivery of high quality critical care nursing. This publication is presented in the form of a portfolio route to enhanced competence in critical care nursing and embraces the eleven core competencies identified by the group.

The features of the portfolio are that it:

- ◆ *Is designed to meet the needs of staff nurses working in critical care units following a period of consolidation of initial training and be undertaken in association with the NBS Portfolio Route to Enhanced Competence.*
- ◆ *Will have application to the preparation of in-house clinical courses as well as having a place in informing curricula developed by Higher Education providers either in partnership with NHS Trust/s or independently.*
- ◆ *Can be achieved as a work based programme through rotational placements in identified, educationally audited practice placements.*
- ◆ *Is designed to articulate with programmes of preparation for the UKCC recordable qualification in specialist practice.*

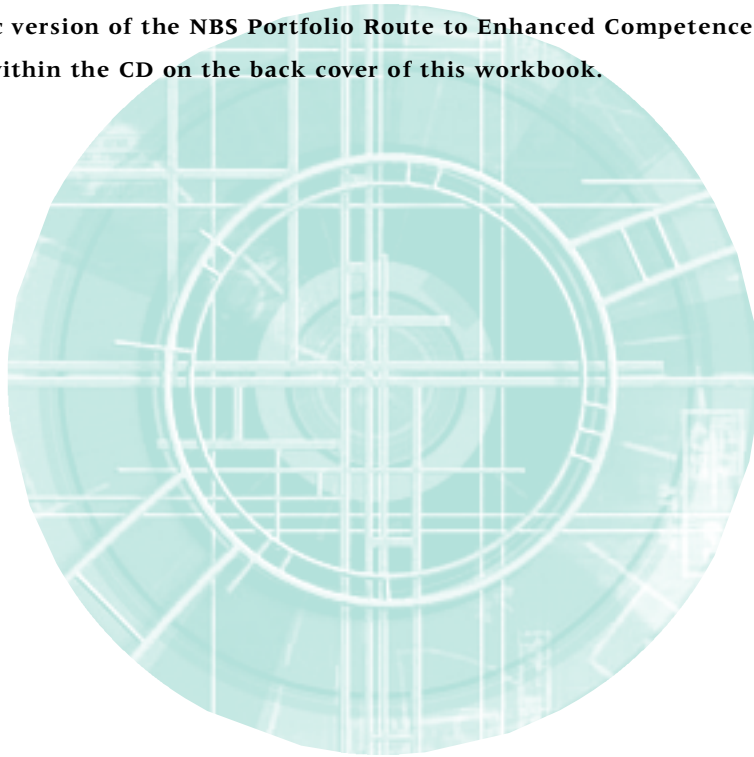
- ◆ *Will provide for the individual a bank of evidence of achievement in the core competencies which may have career development potential and could be presented for Accreditation of Prior Learning (AP(E)L) of Scottish Higher Education Level 3 points in relation to the Specialist Qualification in Critical Care.*
- ◆ *Will be delivered to meet the Standards of the Framework for Quality Assuring Continuing Professional Development in NHS Trusts in Scotland 'Strength Through Partnership', NBS April 2000.*
- ◆ *Will be facilitated by a designated experienced practitioner.*



How to get started

This workbook is designed to be completed in association with the **NBS Portfolio Route to Enhance Competence (2000)**. It continues to utilise the framework of reflecting on past experience and learning in order to record continuous professional development to enhance clinical competence in critical care. It will help the individual nurse to identify sources of learning and evidence of good practice which relates to providing high quality critical care. It is essential to access the other workbooks within Unit 2 of the NBS portfolio; however, you do not necessarily need to complete these sections before commencing this workbook.

An electronic version of the NBS Portfolio Route to Enhanced Competence is provided within the CD on the back cover of this workbook.

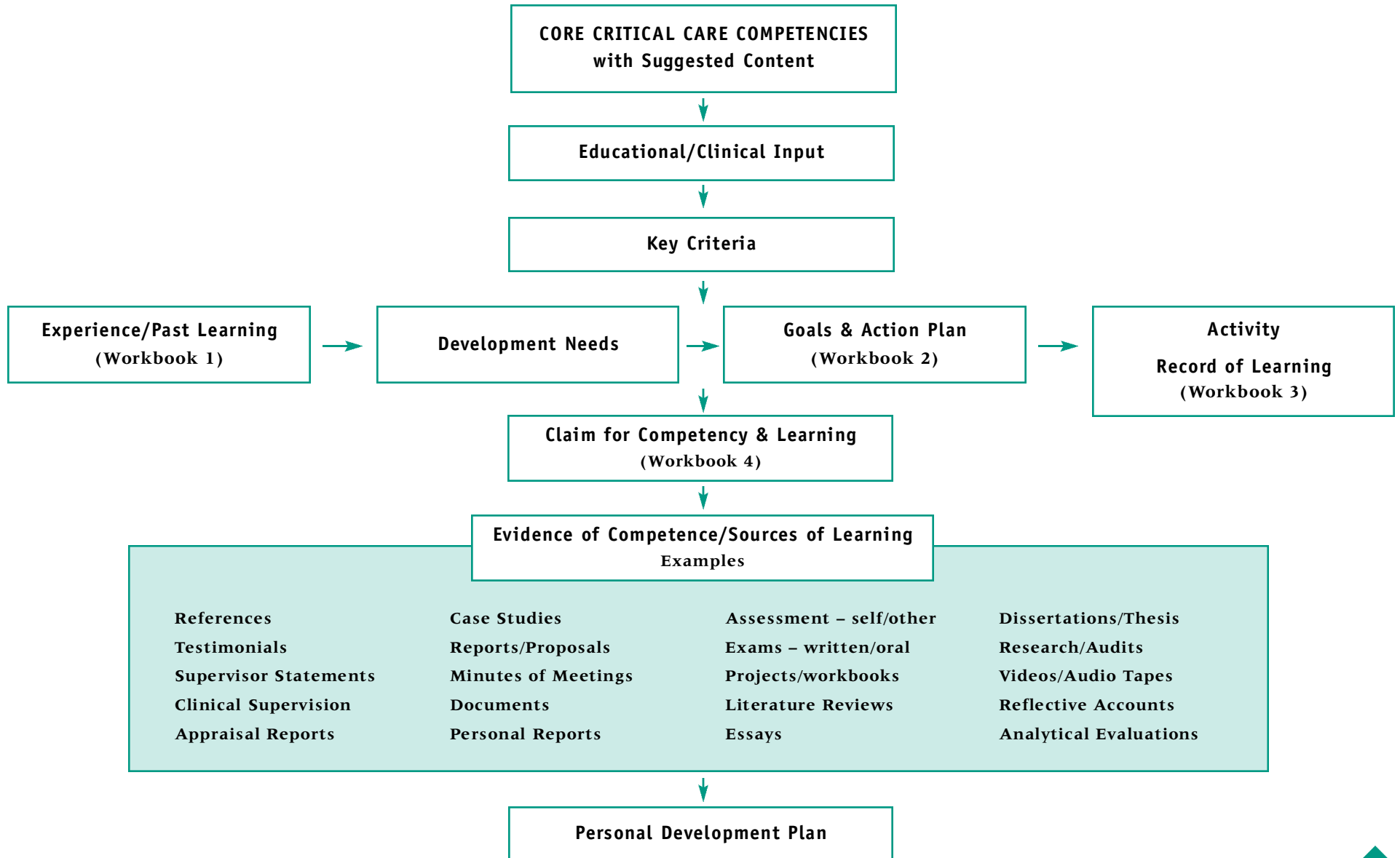


Steps to Building a Portfolio

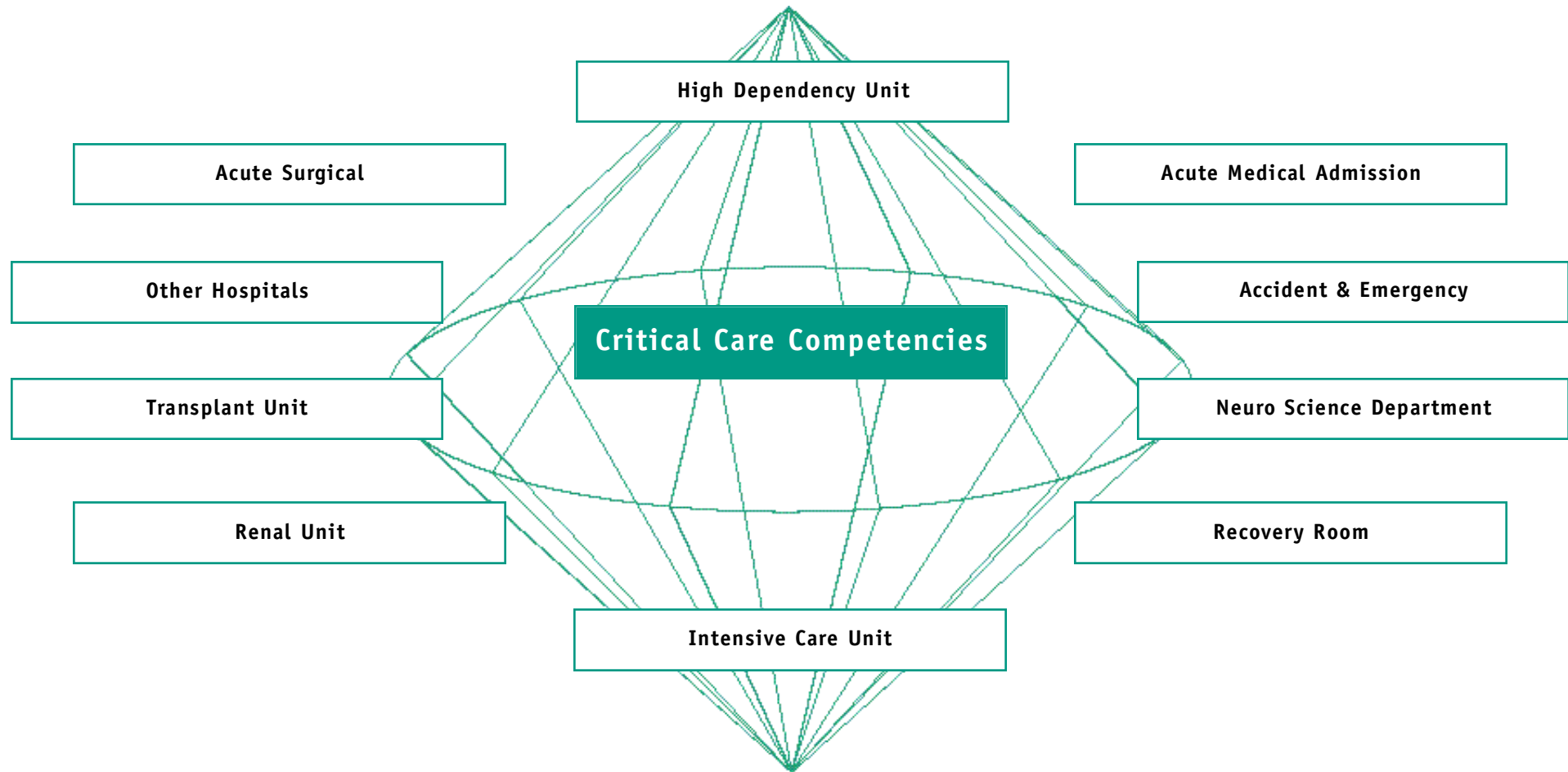
You may already have a personal professional profile which you may wish to incorporate into this NBS portfolio, however, you should continue to use the following steps:

- Step 1 Review your experience and practice to date identifying any core critical care knowledge and skills that you have;*
- Step 2 Appraise your level of competence and identify strengths and any areas that need to be developed;*
- Step 3 Agree with your senior manager, in-house CPD staff and/or Higher Educational Institution a training programme which meets your learning needs;*
- Step 4 Set goals and devise an action plan to achieve the stated core critical care competencies in partnership with your named facilitator;*
- Step 5 Provide evidence of competence through your portfolio.*

Portfolio Route To Achieving Competence In Critical Care Nursing



Potential Areas within which Core Critical Care Competencies may be met through a Staff Nurse Rotation Programme



Core Critical Care Competencies

The competencies are set out against a framework of a patient care pathway, however need not necessarily be met in this sequence.

EPISODE OF CARE PATHWAY	COMPETENCY
Pre Critical Care Episode	Examines the decision making process involved in the pre-admission phase of a critically ill patient.
	Prepares the environment for a critically ill patient.
During the Episode of Critical Care	Participates in the initial assessment of a critically ill patient.
	Demonstrates competence in caring for a patient subject to non-invasive and/or invasive monitoring.
	Correlates, assesses and interprets information obtained from monitoring and reports on a patient's physical and psychological status.
	Demonstrates a systematic approach to the nursing management of a critically ill patient.
	Maintains patient's safety and comfort in relation to fundamental aspects of nursing care.
	Applies nursing knowledge and skills to maximise the impact of prescribed therapeutic interventions/activities.
	Critically appraises the features displayed by a patient with sudden or emerging complications in order to assist in the formulation of a plan of care.
	Applies knowledge of co-existing diseases/conditions in relation to planning care and managing complications.
On Completion of a Critical Care Episode	Contributes to the decision making process and prepares a personalised plan following an episode of critical care.

Competencies and Suggested Content

Examines the decision making process in the pre admission phase of a critically ill patient

Suggested content:

- ◆ *Definition of 'critical care'*
- ◆ *National admission/discharge guidelines*
- ◆ *National perspective on caring for the critically ill patient*
- ◆ *Local policies and procedures on caring for the critically ill patient*
- ◆ *Healthcare and the Law*
 - *ethical/legal issues*
 - *informed consent*
- ◆ *Multidisciplinary team roles in the decision making process*
- ◆ *Communication skills involving:*
 - *patients, significant others, police, media*
 - *multidisciplinary healthcare team (internal and external)*
- ◆ *Risk management*

Prepares the environment for a critically ill patient

Suggested content:

- ◆ *Principles of transferring a critically ill patient*
- ◆ *Local policies and procedures in relation to patient transfer*
- ◆ *Evidence supporting the impact of efficient/effective preparation on patient outcomes*
 - *organisation of the environment to meet the needs of a critically ill patient*
- ◆ *Equipment to support care – eg monitors, infusion devices, defibrillator*
 - *accessing appropriate equipment*
 - *efficiency in setting up and using equipment*
 - *compliance with manufacturers/departmental instructions*
- ◆ *Issues relating to health and safety*
 - *equipment*
 - *staff, patient and visitors*
- ◆ *Communication channels to address the reception episode*
 - *multidisciplinary aspect*
 - *reporting initial information*
- ◆ *Documentation of initial information*
 - *structure and design*
 - *24 hour charting*
- ◆ *Optimum skill mix within a critical care multidisciplinary team*
 - *ratios, roles within team, crossover roles*

Participates in the initial assessment of a critically ill patient

Suggested content:

- ◆ *Revision of physiological mechanisms to ensure normal functioning of vital organs/systems*
- ◆ *Impact of altered physiology on vital organs/systems*
 - *physiological measurement techniques/normal values and variations from the norm*
 - *external factors which may impact on initial assessment, eg co-existing morbidity, toxicology findings*
- ◆ *Psycho/social factors to be considered when assessing a critically ill patient*
- ◆ *Evidence based approaches to communication in addressing the information needs of the critically ill patient and significant others*
- ◆ *Nursing interventions to support a patient experiencing initial assessment*
 - *carer support*
- ◆ *Tools of initial assessment – local and national*
- ◆ *Record/report assessment findings*

Demonstrates competence in caring for a patient subject to non invasive and invasive monitoring

Suggested content:

- ◆ *Revision of gas transport to identify factors which may affect tissue perfusion and oxygenation*
- ◆ *Definitions relating to invasive and non invasive monitoring*
- ◆ *Knowledge of critical care monitoring equipment*
 - *Efficiency in setting up/using invasive and non invasive monitoring equipment*
 - *Compliance with manufacturers/departmental instructions/local policy*
- ◆ *Knowledge of specific monitoring equipment*
- ◆ *Issues relating to Health and Safety for staff, patient and others when using equipment*
- ◆ *Troubleshooting monitoring problems*
- ◆ *Acknowledgement of limitations of competence and knowledge with reference to scope of professional practice*

Demonstrates competence in caring for a patient subject to non invasive and invasive monitoring – cont...

Suggested content:

Non Invasive Monitoring

- ◆ *Types of respiratory monitoring*
 - *visual*
 - *auscultation*
 - *pulse oximetry*
 - *SpO₂*
 - *capnography*
- ◆ *Types of cardiac monitoring*
 - *pulse*
 - *blood pressure*
 - *ECG*
- ◆ *Types of neurological monitoring*
 - *sensory assessment*
 - *Glasgow Coma Scale*
- ◆ *Temperature monitoring*
- ◆ *Normal values and variations in non invasive monitoring*

Invasive Monitoring

- ◆ *Insertion of invasive monitoring equipment – nurse's role*
 - *venous – peripheral and central*
 - *arterial – including pulmonary artery*
 - *bladder – urethral and supra pubic*
 - *spinal/intracranial monitoring*
- ◆ *Measuring and recording invasive monitoring results*
 - *arterial pressure*
 - *central venous pressure*
 - *pulmonary artery/wedge pressure*
 - *cardiac output*
 - *blood gases analysis*
 - *haemodynamic profiles*
 - *urinary output*
 - *intracranial pressure*
 - *temperature monitoring*
- ◆ *Managing the care of a patient requiring invasive monitoring*

Correlates, assesses and interprets information obtained from monitoring systems and reports on a patient's physical and psychological status

Suggested content:

- ◆ *Associated normal/altered physiology*
- ◆ *Impact of therapeutic interventions on monitoring – positive and negative*
- ◆ *Written and verbal skill when communicating a patient's invasive/non invasive monitoring profile*
- ◆ *Acknowledgement of limitations of competence and knowledge with reference to scope of practice*
- ◆ *Evaluation of comprehensive monitoring profiles and trends*

Demonstrates a systematic approach to nursing management of a critically ill patient

Suggested content:

- ◆ *Current theories and approaches to the medical and nursing management of a critically ill patient*
- ◆ *Current research/evidence regarding the nursing management of a critically ill patient*
- ◆ *National reports on delivering critical care*
- ◆ *Developing appropriate frameworks to plan care eg patient care pathways*
- ◆ *Care planning and prioritising needs of a critically ill patient*
- ◆ *Using a systematic approach to deal with crises*
- ◆ *Evaluation systems and the integration of findings in future approaches*
- ◆ *Skill mix and levels of accountability in critical care*
- ◆ *Documentation of patient care needs, expected goals and outcomes*

Maintains patient's safety and comfort in relation to fundamental aspects of care

Suggested content:

- ◆ *Nutrition/hydration*
 - *assessment of needs/use of assessment tools*
 - *problem identification*
 - *swallowing*
 - *enteral/parenteral feeding routes*
 - *fluid intake and output*
 - *role of dietician/stoma care nurse/other multidisciplinary team members*
- ◆ *Skin care*
 - *pressure risk analysis/use of assessment tools*
 - *specialised equipment to relieve pressure*
 - *techniques of moving and handling critically ill patients*
 - *wound management*
 - *role of tissue viability/infection control nurse and other members of the multidisciplinary team*
- ◆ *Respiratory care*
 - *factors influencing respiration*
 - *mouth care of a critically ill patient*
 - *positioning*
- ◆ *Temperature management*
 - *factors influencing temperature control*
 - *techniques for temperature management*
- ◆ *Social/psychological care*
 - *building a patient's biography*
 - *assessing and meeting psychological needs*
 - *assessing and meeting spiritual needs*
 - *assessing and dealing with sensory deprivation/overload*
- ◆ *Assessment of the care needs of a patient with altered conscious level*
- ◆ *Assessment of environmental hazards and risk management*
 - *hospital acquired/opportunist infection*
 - *chemical/electrical/mechanical hazards*
 - *positioning/moving and handling*
 - *systems for recording and reporting incidents in critical care areas*

Applies nursing knowledge and skills to maximise the impact of prescribed therapeutic interventions/activities

Suggested content:

◆ *Airway Management*

- *anatomy and physiology of the respiratory system*
- *pathophysiology of respiratory system*
- *causes of airway occlusion*
- *airway maintenance*
- *special airway management situations eg burns/spinal injury*
- *suction of upper airway*
- *interventions to assist spontaneous breathing*
- *indications, insertion procedure, care and removal of adjuncts eg*
 - Guedel airway*
 - nasal airway*
 - laryngeal mask airway*
 - endotracheal tube*
 - tracheostomy/mini tracheostomy*
- *oxygen therapy*
- *drugs used during the insertion of endotracheal tube*
- *equipment used to insert endotracheal tube*
- *complications of endotracheal insertion*
- *emergency/elective intubation*
- *post extubation management*
- *drugs used in the support of respiratory instability*
- *care of patient with chest drains*

- *administration of respiratory therapies*
- *humidification*

◆ *Ventilation*

- *care and safety aspects*
- *criteria/indications*
- *auscultation, breath/chest sounds*
- *suction techniques*
- *modes of mechanical/invasive ventilation*
- *care during ventilation*
- *complications of mechanical ventilation*
- *sedation and muscle relaxant*
- *weaning*

◆ *Fluid and electrolyte management*

- *anatomy of physiology of renal system*
- *acid base balance*
- *assessment of fluid status*
- *fluid challenge – incremental stages*
- *fluid shifts within the body*
- *uses of different types of IV fluids in fluid and electrolyte maintenance*
- *use of infusion devices and bacterial filters*
- *physical adjuncts to fluid management*
- *documentation of fluid intake and output*

Applies nursing knowledge and skills to maximise the impact of prescribed therapeutic interventions/activities – cont...

- ◆ *Pain management*
 - *theories of pain*
 - *physiological mechanisms of pain*
 - *physiological changes/result of pain in the patient with altered conscious level*
 - *application of pain assessment tools*
 - *pharmacokinetics of analgesic drugs*
 - *administration of analgesics*
 - *physical and psychological effects of analgesic drugs*
 - *psychological aspects of pain and pain control management*
 - *use of non-pharmacological methods of relieving pain in critical care*
- ◆ *Renal replacement therapies*
 - *methods of renal replacement therapy*
 - *renal replacement devices*
 - *effects of acute and chronic renal failure*
 - *principles of care of patients requiring renal replacement therapy*

Critically appraises the features displayed by a patient with sudden or emerging complications in order to assist in the formulation of a plan of care

Suggested content:

Generic

- ◆ *Related pathophysiology to type of complication*
- ◆ *Prioritising of the patient's immediate and ongoing needs*
- ◆ *Identify/aware of individual roles during an emergency situation*
- ◆ *Care of patient/relatives during/post emergency situation*
- ◆ *Safety issues*
- ◆ *Signs of complications*
- ◆ *Use of drug therapies to treat underlying causes of complications*
- ◆ *Communication skills in sudden or emerging complications*

Specific – Types of Complications

- ◆ *Cardiac dysrhythmia*
- ◆ *Arrest*
 - *types cardiac/respiratory*
 - *predisposing causes of arrest*
- ◆ *Shock*
 - *types of shock*
 - *associated signs of shock*
- ◆ *Acute Respiratory Distress Syndrome (ARDS)*
- ◆ *Accidental Extubation*

- ◆ *Acute agitational/behavioural changes*
- ◆ *Loss of skin integrity*
- ◆ *Uncontrolled pain*
- ◆ *Acute renal failure*
- ◆ *Neurological deterioration*

Specific – Therapeutic Interventions

- ◆ *Resuscitation*
 - *basic life support interventions plus elements of Advanced Life Support – equipment, drugs, algorithms, defibrillation, analysis of ECG*
 - *co-ordination of resuscitation – priorities, roles, documentation*
 - *use and maintenance of emergency equipment*
 - *Resuscitation Council (UK) guidelines for cardiac/respiratory arrest*
 - *ethical and legal issues*
- ◆ *Management of acute shock/ARDS*
- ◆ *Emergency tracheostomy/ventilation*
- ◆ *Managing dysrhythmias/pacing*
- ◆ *Emergency transfusion/infusion*
- ◆ *Pharmacological interventions in specific emergencies*

Applies knowledge of co-existing diseases in relation to planning care and managing complications

Suggested content:

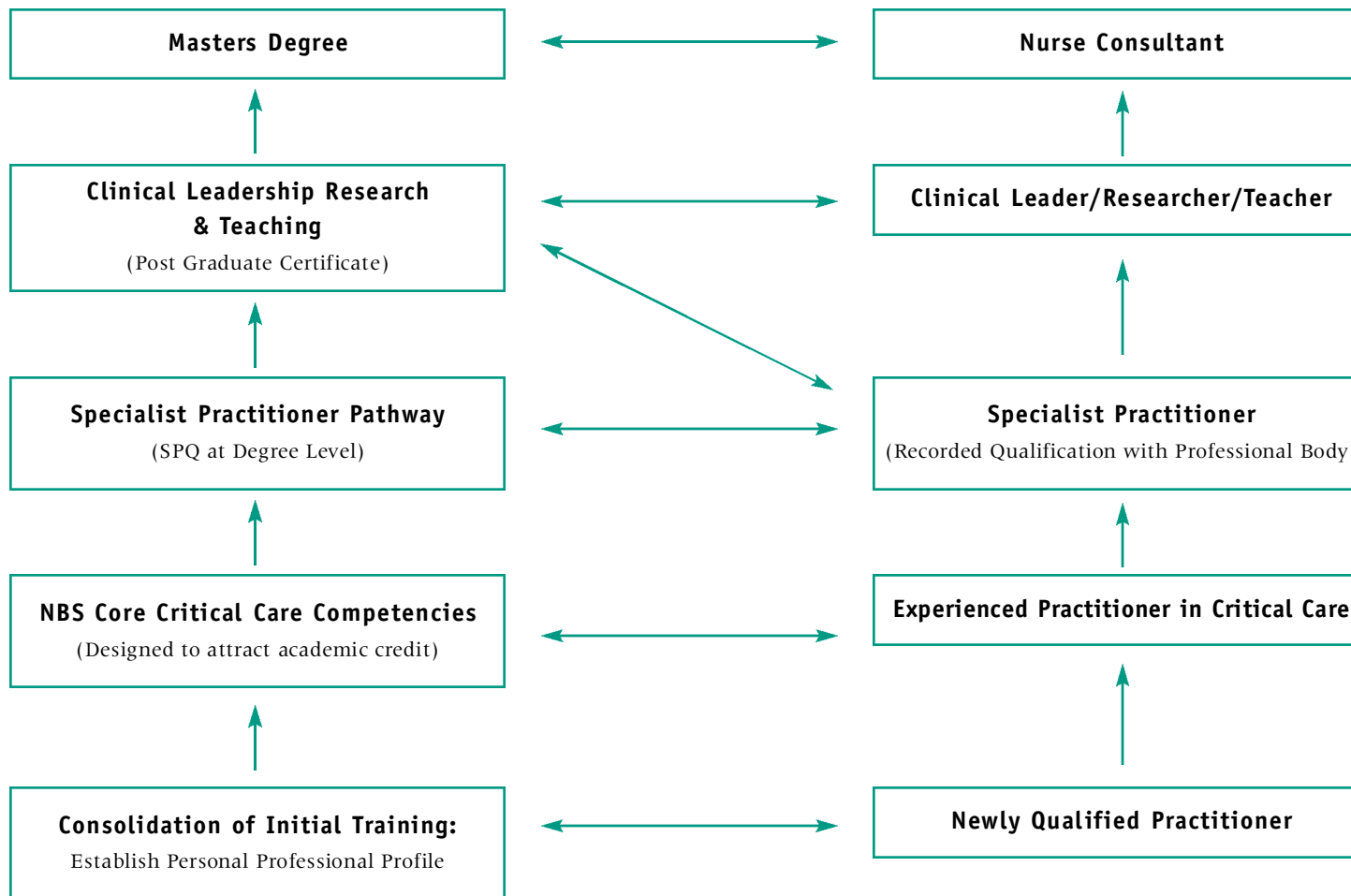
- ◆ *Sourcing patient specific background information*
- ◆ *Types of diseases/co-existing conditions, eg:*
 - *mental health conditions*
 - *respiratory disorders eg COPD, asthma*
 - *cardiac disorders eg CCF, previous myocardial infarction/hypertension*
 - *neurological disorders eg epilepsy*
 - *endocrine disorders eg diabetes*
 - *impaired renal function*
 - *learning disability*
 - *mobility/muscle/skeletal problems*
 - *infection*
 - *nutritional deficits*

Contributes to the decision making process and prepares a personalised plan following an episode of critical care

Suggested content:

- ◆ *Discharge guidelines – national and local*
- ◆ *Assessment and planning for discharge*
- ◆ *Transfer – internal, external*
- ◆ *Death/brain stem death*
- ◆ *Organ retrieval*
- ◆ *Communication channels surrounding discharge*
- ◆ *Discharge follow-up for patients/bereaved*
- ◆ *Staff support*

Potential Career Progression Framework for Critical Care Nurses



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QACPD Portfolio CD

A copy of the NBS Continuing Professional Development Portfolio,

'A Route to Enhanced Competence' and

'A Route to Enhanced Competence in Critical Care Nursing'

documents are supplied on the enclosed CD in Acrobat PDF format,

they may also be printed out for reference.



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