

HOSPITAL SKILLS PROGRAM LEVELS

Base Level - Intern

- E Has little or no workplace experience in this discipline.
- CP Has a working knowledge of the general principles of care
- R Undertakes components of clinical management with supervisor either present or nearby for the majority of cases
- PS Level 1-2

Level 1 - CMO Level 1

- E Has limited workplace experience in this discipline.
- CP Reliably recognises familiar situations and key issues. Has a good working knowledge of the management of these. Decision-making is largely rule bound
- R Provides integrated management for all cases; consults prior to disposition or definitive management; and arranges senior review of the patient in numerous instances, especially complex or uncommon cases
- PS Level 2

Level 2 - CMO Level 2

- E Has moderate to large workplace experience in this discipline.
- CP Distinguishes atypical from typical situations, recognises case specific nuances and their relational significance, thus reliably identifies key issues and risks. Decision making is largely intuitive. Fluent in most procedures and management tasks
- R Autonomously manages simple and common presentations and consults prior to disposition or definitive management for more complex cases.
- PS Level 2 - 3

Level 3 - CMO Level 3 (Senior)

- E Has substantial workplace experience in this discipline.
- CP Has an intuitive grasp of a situation as a means of linking his or her understanding of a situation to appropriate action. Able to provide a large repertoire of management options.
- R Works autonomously, consults as required for expert advice and consults admitting team about patients who require admission.
- PS Level 3

- | | | | |
|----|----------------------|----|----------------|
| E | Level of Experience | R | Responsibility |
| CP | Clinical Proficiency | PS | Patient Safety |

REFERENCES

1. Australian Curriculum Framework for Junior Doctors, Version 2.1 Confederation of Postgraduate Medical Education Councils www.cpmec.org.au/curriculum
2. Training and Examination Handbook, Australian College for Emergency Medicine
3. Vocational Preparation Handbook, Australian College of Remote and Rural Medicine
4. Cameron P, Jelinek G, Kelly A-M, Murray L, Heyworth J (eds), Textbook of Adult Emergency Medicine, Churchill Livingstone.
5. Fulde GWO (ed), Australian Emergency Medicine: Principles of Practice 4th Ed. Churchill Livingstone, Sydney 2000
6. Safety and Quality Council (2005) National Patient Safety Education Framework. The Australian Council for Safety and Quality in Healthcare, Commonwealth of Australia. <http://www.patientsafety.org.au/>
7. A Hospital Skills Program for Staff Medical Officers (Non-Specialist Medical Staff) of NSW (Blueprint), IMET NSW Institute of Medical Education and Training

PRINCIPLES OF UNDERTAKING PROCEDURAL CARE

Assessment and informed consent

- Correctly identify patient
- Assess patient for indications, contraindications, risks and individual needs
- Obtain informed consent observing organisational policy and best practice

Preparation

- Provide the patient with practical instructions enabling them to cope
- Assemble and brief support staff
- Establish appropriate patient positioning, monitoring, venous access
- Achieve appropriate asepsis
- Check and layout equipment and drugs and reduce other risks

Procedure

- Provide appropriate analgesia, anaesthesia or sedation
- Monitor and communicate with patient throughout
- Perform technical aspects of tasks appropriately
- Observe universal precautions and occupational health and safety
- Troubleshoot and desist appropriately
- Recognise and manage complications

Post-procedure

- Recover patient safely
- Adjust monitoring and ongoing care according to new needs
- Provide information to patient and teams and document

SEE LIST OF "ED SPECIFIC PROCEDURES"

BACKGROUND

Introduction

The "Hospital Skills Program Curriculum Framework" (HSP-ED) describes the competencies required of doctors with greater than one year of postgraduate experience who are not participating in a specialist vocational training program. The HSP framework has been developed by IMET, on behalf of NSW Health as part of the broader "Hospital Skills Program" for this group of doctors. It aims to guide doctors, their employers and educators regarding training needs, appointment credentials and workplace responsibilities. It is a peer reviewed document which draws on existing work in this area.¹⁻⁶

Principles

The HSP-ED framework is underscored by three principles:

1. The practice of medicine requires doctors to demonstrate fluency across a range of tasks, which are referred to in this document, as categories. These include clinical management, communication, professional behaviour, etc.
2. With increasing experience, doctors are expected to demonstrate progressively greater proficiency in these categories, to accept greater responsibility in the workplace and to work with greater autonomy.
3. There are contextual differences between clinical disciplines especially regarding the characteristics of clinical management tasks and the competencies required to execute these safely and effectively.

Description of the framework

The HSP-ED framework is presented as a set of documents, each of which is individualised to a specific clinical discipline (e.g. doctors working in Emergency Medicine, Aged Care, Mental Health etc). Each document presents the task categories relevant to patient care in that discipline. Each of these, and its associated sub-categories, represent the scope of workplace responsibilities, and hence learning topics, relevant to doctors working in this discipline. It is expected that doctors, with increasing workplace experience and training, demonstrate progressively greater proficiency in each of these categories. Proficiency develops along a continuum however it is represented in the HSP in terms of four "Levels". Each level broadly distinguishes doctors in terms of proficiency, experience, and workplace responsibility.

The HSP-ED framework is cross referenced with the **Australian Curriculum Framework for Junior Doctors (the "Curriculum Framework")**. This document outlines the generic competencies required of prevocational doctors (PGY1, PGY2 and above) in order to work safely in Australian hospitals and other healthcare settings. The "Curriculum Framework" is a peer reviewed document developed by the Postgraduate Medical Education Councils of Australia working in collaboration under the auspices of the Confederation of Postgraduate Medical Education Councils. Logically, it describes the competencies of postgraduate doctors who perform at Base Level according to the HSP framework.

Definitions of practitioners' "levels"

Doctors should work with the degree of autonomy which is consistent with their level of experience (E), clinical proficiency (CP) and responsibility (R) to ensure patients receive care which is appropriate, effective and safe. The levels are cross referenced with levels described for Patient Safety (PS) competencies.⁶

While a doctor may overall be classified into one level or another, in reality, he or she will perform at different levels for different clinical tasks, according to his or her volume and recency of experience, along with other factors.

Autonomous practice (in this document) indicates that given the presenting features of the case, the doctor is likely to carry out the task safely and effectively without on-site support from a senior clinician.

Acknowledging that most clinical tasks are team-based this also means that the doctor:

- has on-site access to relevant clinical experts (e.g anaesthetics)
- supervises (or supports) more junior team-members
- practices as part of a multi-professional team
- is aware of, and observe organisational policies and the expressed views of the admitting team

DRAFT
FEBRUARY 2007

Hospital Skills Program Curriculum Framework

for Doctors Working in
Emergency Departments (HSP-ED)



IMET
NSW Institute of
Medical Education
and Training

GENERAL PRINCIPLES WORKING IN EDs

Risk stratification

- Use organisational or otherwise established guidelines to assess the patient regarding requirements for resuscitation, monitoring and staff protection

Establishing the management team

- Marshall help and resources as needed including number and specialisation of attending staff and other supportive services
- Resuscitation and stabilisation (if relevant) (See separate section)

Focused assessment and monitoring

- Conduct a directed history addressing presenting symptoms, relevant past medical and surgical history, medications, allergies, fasting and social history
- Use laboratory and other diagnostic tests in a cost effective, ethical and evidence-based manner
- Monitor patient appropriately and review at regular intervals

Specific and supportive management

- Implement therapies targeting presenting conditions which reflect best practice and which are appropriately individualised
- Manage other needs associated with the presenting condition including analgesia, anti-emesis, fluid therapy and transfusion, antibiotic prophylaxis, tetanus and other vaccinations
- (See "Integrated management")

Co-morbidities

- Ensure existing health needs are appropriately addressed and modified as required (e.g: continuation or modification of routine medications)

Complications

- Monitor for, treat, report and disclose complications appropriately

Disposition, referral, follow-up and liaison

- Apply organisational policies or otherwise best practice to decisions regarding admission, discharge or transfer
- Provide patients with appropriate discharge advice and support
- Liaise effectively with, general practitioner, outpatient and community health services

Transfer, retrieval and continuity of care

- Upgrade or otherwise modify care appropriately when transferring patients within the hospital
- Apply similar principles to care of patients awaiting retrieval
- Share information and interact appropriately with persons involved in deposition (triage staff, emergency services, GPs), disposition (ward teams, retrieval services) and acute care team (ED team, admitting team, consulting teams)

Consultation

- Consult appropriately with admitting team, other experts and services and teammates* to support decisions and management plans (*includes teams receiving the patient)
- Communicate with patient and family with appropriate provision of information and consultation regarding choice and consent for treatment

Legal, public health and governance

- Comply with legal, department of health and local organisational procedures pertaining to: disease prevention advice; notifiable illnesses; guardianship; infection control; privacy; staff protection

Documentation

- Document management legibly, on required forms, and meeting requirements for use in coronial, medico-legal, judicial and quality and safety matters

SEE LIST OF COMMON "ED" PRESENTATIONS

COMMON ED PRESENTATIONS

This is a non-exhaustive list providing an indication of the range of presentations doctors may encounter. The scope of services may vary between hospitals (e.g trauma, paediatrics).

See "Background" section to guide responsibilities for each presentation.

Non-specific presentations

- Fever, dyspnea and cough, syncope, confusion, rash, chest pain, hypotension, hypertension, weakness

Airway and ventilation

- Airway obstruction (partial and complete), asthma, pneumonia, chronic airflow limitation, pneumothorax, anaphylaxis, pulmonary emboli

Coronary syndromes

- Myocardial ischaemia, acute coronary syndromes, arrhythmias, left ventricular failure, cardiogenic shock

Trauma and burns

- Tension pneumothorax, haemothorax, flail chest, hemorrhage, head and C spine injuries and brain injury; special groups (obstetric, paediatric)

Vascular

- Venous thromboses, ruptured aortic aneurysm, limb ischaemia

Neurological

- Headache, syncope, coma, seizures, neurological deficit, stroke and TIA, intracranial hemorrhage, meningitis, encephalitis

Gastrointestinal

- Vomiting, diarrhoea, acute abdominal pain, upper GI hemorrhage, lower GI hemorrhage, cholecystitis and biliary disorders, acute pancreatitis, hepatitis

Musculoskeletal

- Limp and gait disturbances, joint and musculoskeletal pain, fracture, dislocation, back pain, hand or limb trauma, infection, connective tissue

Urological

- Urinary retention, renal and urinary tract trauma, bleeding, infections, colic

Endocrine and metabolic

- Hypoglycaemia, ketoacidosis, thyrotoxicosis, electrolyte abnormalities

Ear nose and throat and ophthalmic

- Epistaxis, foreign body, otitis media, quinsy, corneal injuries, retinal detachment, visual loss

Accidents and toxicology

- Drowning, electrocution, overdose, poisoning, envenomation, hypothermia, hyperthermia

Aged care

- Falls, acute confusion, deterioration

Obstetrics and Gynaecology

- Rupture ovarian cyst, antepartum hemorrhage, hypertensive disease, problems in early pregnancy (miscarriage and ectopic pregnancy)

Paediatrics

- Upper respiratory tract infections, abdominal pain

Psychiatric, social and crisis response

- Violent patient, depression, acute psychoses, suicide attempt, sexual assault, physical or psychological abuse, deceased patients

Disasters

- Multiple casualties, acts of terrorism

Other headings: Haematology and oncology, infectious diseases, forensic emergencies, dermatological conditions

MANAGEMENT OF KEY CLINICAL PROBLEMS

This is a non-exhaustive list providing an indication of the "level" at which a doctor would be expected to practice to complete the management task autonomously on most occasions. Level is shown beside each task as (Base-3). See "Background" section regarding autonomy and "Levels".

Life support: Advanced Life Support: Teamleader (1);

- Implementing "standing not for resuscitation orders" (1); Cessation of life support (2); Special arrest situations-Paediatric (3), Obstetric (3)

Airway and ventilation support

- Oxygen therapy (Base); Non-invasive ventilation: BiPAP/ CPAP (1); Intubation and manual ventilation to support cardiac arrest (1); Rapid sequence induction (2); Tracheal intubation and establishment of mechanical ventilation in a patient requiring the use of hypnotic drugs and muscle relaxants (2); Special situations (Paediatrics (3); facial trauma (3))

Management of shock

- Transfusion in normovolaemic patient (1); Fluid resuscitation in 10% blood volume loss (1); Pressor therapy (2); Initiation of inotropic therapy (2); Management of massive hemorrhage (including blood products) (3)

Cardiovascular therapies

- Transcutaneous pacing (1); Thrombolytic therapy (2); Emergency synchronised cardioversion in a conscious patient (2)

Acute pain management

- Pharmacotherapy (1); nitrous oxide (1); Infiltration of local anaesthetics (base); Regional nerve blocks (e.g: Femoral, Intercostal (2); Conscious sedation for minor procedures (1-3)

Toxicological and environmental

- Administration of activated charcoal (base); use of a venom detection kit (1); administration of antidotes (1-2)

Monitoring

- CVP (1); Invasive BP (1); Pulse oximetry (base); ventilation parameters for patients on ventilators (1)

Psychiatric and social

- Acute counseling (2); Use of relevant legislation for compulsory admission (1); Rapid control of psychosis or agitation (2); Management of a sexual assault victim (2)

Special communication tasks

- Providing telephone advice (1); managing patients leaving against advice (1); managing complaints (2); debriefing staff (2)

Paediatrics

- Intubation (3)

KEY PROCEDURES UNDERTAKEN IN EDs

This is a non-exhaustive list providing an indication of a doctors "level" which would enable him or her to complete the procedure autonomously on most occasions. Level is shown beside each task as (Base-3). See "Background" section regarding autonomy and "Levels". See "Procedures and skills" (over page) for Base Level. Observe hospital protocol regarding completion of procedures by specialist teams.

Airway and ventilation

- LMA (1); Tracheal intubation by laryngoscopy (2); Tracheal intubation by non-direct technique (2); Needle/surgical cricothyrotomy (2); Needle pleurocentesis (1); Intercostal catheter (2)

Cardiovascular and Vasular

- Alternative venous access (venous cutdown) (2); intraosseous cannulation (1); Central venous access (2); Transcutaneous pacing (1); Transvenous pacing (2); Synchronised cardioversion (2)

Trauma

- Suturing (1); Wound cleaning and debridement (1); Plaster (e.g, short arm backslab) (1); Application of a Thomas splint (1); Escharotomy (2); Reduction of fractures and dislocations (2); Interpretation of CAT scans - Head (2), C spine (3); FAST scans (3)

GI

- Balloon tamponade for upper GI bleeding (3)

Paediatric

- Intravenous access (1); Lumbar puncture (1); Suprapubic aspiration (1); Intraosseous needle insertion (1)

Obstetric

- Interpretation of cardiococograph (3)

RESUSCITATION & STABILISATION

- Team and resources: Marshall help and resources as needed and work effectively as a team
- Structured response: Provide immediate support to stabilise vital signs using universal principles of DR-ABCDE
- Best practice guidelines: Conduct basic and advanced life support as per Australian Resuscitation Council guidelines
- Ongoing care: Upgrade care following successful resuscitation; observe organisational guidelines regarding NFR and cessation of treatment
- Follow up: Communicate with next of kin (breaking bad news); debrief staff; complete required documentation

DRAFT
FEBRUARY 2007

Hospital Skills Program Curriculum Framework

Emergency Department (HSP-ED)