



## **Flight Nurses Australia Incorporated Standards for Flight Nursing Practice in Australia**

Flight Nurses Australia Incorporated (FNA) was established in 1994 to support and promote the work of Flight Nurses working in the aviation/retrieval/transport settings in Australia.

One of the seven objectives of FNA is to develop national standards of nursing practice for Flight Nurses in the Australian region and to promote the delivery of quality care to our patients in the aviation/transport environment.

### **Background:**

Flight nursing within Australia has a long and proud history. The first flight nurse commenced flying with the Royal Flying Doctor Service (RFDS) in 1945. Since 1938, however, nurses employed by hospitals were seconded to the role. Traditionally, flight nurses have worked full time for fixed winged aeromedical organisations as the sole practitioners for the majority of patients transported by their services. These flight nurses have been responsible for the establishment of operational, clinical and professional standards.

Since the 1980's there has been an increase in the number of nurses practising flight nursing as an extension of their role within hospital based retrieval services, hospital transport services and international repatriation organisations. With this continued growth in the number of flight nurses, and the scope of their practice, it is imperative to have current national Flight Nursing Standards relating to professional qualifications, aeromedical and clinical training, clinical practice, safety and communications.

## **Definition of a Flight Nurse:**

A flight nurse is a registered nurse employed to implement the science and skill of nursing in the aviation transport environment.

## **Scope of practice:**

Flight nurse practice is multidimensional with diverse characteristics that are defined by the operational scope and core business of the organisation by which they are employed.

The variation within aeromedical organisations includes the following:

- Aeromedical services that employ full-time flight nurses whose primary role is the preparation, stabilisation and transport of patients across the lifespan and health specialities, in the aeromedical environment. The retrieval may be either a primary, secondary or tertiary level and for some nurses, may also incorporate provision of primary health services.
- Specialist retrieval services who operate from a tertiary level facility and retrieves patients within their own specialty areas i.e. adult, paediatric, neonatal.
- International retrieval services who co-ordinate the repatriation of patients to and from their country of origin and encompasses the lifespan and health specialities.
- Australian Defence Force Flight Nurses care for patients in a variety of settings within Australia and overseas.

The characteristic most unique to flight nursing is the dynamic environment in which they operate. The type of aircraft varies between fixed and rotary wing, from medically dedicated aircraft, to charter aircraft adapted for the specific mission, to commercial international jets.

The environment dictates that flight nurses operate in an environment influenced by the physiological phenomena of altitude, confined space and the extremes of weather and terrain.

They work in an aviation environment that is governed by aviation standards and regulations and are required to function as a member of the flight crew. Thus the responsibilities of flight nurses that are full time flight crew members incorporates responsibility for monitoring and maintaining a safe environment for patients, self, crew and others.

Flight nurses must recognise the aircraft pilot's responsibility for the safety of aircraft operations.

**The diversity of the roles within flight nursing requires varying levels of autonomy, accountability and independent decision making. The role begins prior to flight with the pre-flight assessment and preparation for transport, extends throughout the phase of transport and ends with the handover of the patient to the nominated facility.**

## **Introduction to Standards:**

The intent of these practice standards is to ensure that all patients in Australia will be transported by expert flight nurses who have the knowledge and skills to provide the highest level of care during transport and at the hospital or scene.

The standards identify those elements that constitute the unique role of the flight nurse.

The implications for the flight nurse in complying with the following standards are that they will be able to:

- Demonstrate the core competencies that are required for all registered nurses.
- Practice at an advanced level in the unique context of flight nurse practice.
- Frequently working in professional isolation.
- Work as a sole practitioner or as a member of a team.
- Provide care across the lifespan of diverse groups.
- Provide health care across a diverse range of health specialities
- Work in consultation with a variety of health professionals.
- As the situation arises work in cross cultural environments and consequently adapt skills, knowledge and attitudes to local customs and traditions.
- Where appropriate adhere to the competencies for relevant nursing specialties

It is important to note that those who refer to these standards, that they represent the philosophy of the Flight Nurses Australia Incorporated (FNA) and as such are presented as recommendations and general guidelines rather than a body of rigid rules. They do not constitute a legal or regulatory document.

## **STANDARDS:**

### **1. PROFESSIONAL STANDARDS**

#### **Minimal Qualifications:**

- Current general registration with the Australian Health Practitioner Regulation Agency.
- The Flight nurse should have relevant or substantial clinical nursing experience in an area of speciality appropriate to their role.
- Regardless of scope of practice, it is imperative that the flight nurse demonstrates competency or currency in Advanced Life Support (ALS) in adult, paediatric and neonatal patients, or as appropriate to their area of speciality.
- The flight nurse practices independently in accordance with the standard protocols of the organisation/service.
- The individual shall meet physical expectations which include the ability to perform tasks and functions specific to the role and function of a flight nurse, which includes:
  - Able to load and unload stretcher from aircraft with patient and equipment
  - Physically able to function and perform job tasks in confined environment
  - Able to tolerate stresses of flight without physical impairment
  - Physically able to fit in crew seat and standard restraint systems
  - Able to operate and utilize emergency exits
  - Able to lift medical equipment and packs without assistance

#### **Additional qualifications**

The knowledge and skills required of a flight nurse to operate within the pre-hospital and in-flight environment as a specialist/generalist nurse with experience in critical care nursing. In addition there may be a requirement by the employing organisation for an appropriate specialist background. Flight nurses should possess appropriate clinical competencies for the cohort of patients they are retrieving.

These may include:

- Intensive Care
- Emergency
- Obstetric
- Coronary Care
- Neonatal Intensive Care
- Paediatrics
- Community Health
- Public Health
- Palliative Care
- Travel medicine
- Diving medicine

## **2. PRACTICE STANDARDS**

**The attributes of the flight nurse include the following:**

- an advanced clinical knowledge and practice
- demonstrates a comprehensive knowledge of Aviation Physiology and integrates this knowledge with clinical management
- Interprets complex situations
- demonstrates a high level of assessment skills and triages appropriately
- recognises the need for case related skill mix
- a sound knowledge of stabilisation and transportation principles
- a holistic approach to patient needs
- demonstrates effective communication skills
- maintains a safe physical environment for all
- adheres to standard infection control precautions
- competent in crew resource management
- works as a team member and also has the ability to work independently as a sole practitioner
- a sound knowledge of operational procedures and medico-legal requirements
- responds to a continually changing environment
- promotes professional development in self and others
- a sound knowledge of operational procedures and medico-legal requirements
- responds to a continually changing environment
- promotes professional development in self and others
- a sound knowledge of occupational health and safety requirements for the workplace environment
- adheres to the relevant code of conduct and ethics
- promotes cross-cultural sensitivity
- competent in the operation of all equipment

### 3. AIRCRAFT SAFETY STANDARDS

The flight nurse shares the responsibility for maintaining a safe environment for all persons in and around the medical transport aircraft.

Performance is dependent on knowledge and understanding of general aircraft safety, Civil Aviation Safety Authority (CASA) rules and regulations pertaining to safety in and around the aircraft, specific features of the aircraft and specific organisational policies and procedures.

#### **Education:**

All flight crew, regardless of their primary responsibilities, should have a comprehensive knowledge and practical experience of aircraft safety procedures, equipment and emergency evacuation procedures relating to the type of aircraft they are flying in prior to commencing independent responsibility (with performance review annually).

#### **Aircraft Safety Standard Course content should cover the following dependent on organisational requirements and geographical location**

- Relevant CASA rules and regulations
- Identification, location and demonstrated usage of safety equipment:
  - Seat belts, patient harnesses and restraints
  - Fire extinguishers
  - Raft (if applicable to organisational and geographical location)
  - Flotation equipment (if applicable to organisational and geographical location)
  - Survival equipment (Emergency locator transmitter)
  - Survival training land and sea (as per organisation and geographical location)
- Emergency procedures
- Emergency egress in water and on ground
- Radio procedures
- Ground operation
- Approaching aircraft
- Safety as related to patient care, procedures and equipment usage and stowage
- Manual handling principles for all aspects of the role
- Safe Loading and unloading from the aircraft
- Loading according to weight and balance regulations
- Depressurisation-rapid/slow
- Use of oxygen
- Safe carriage of portable oxygen cylinders
- Uniform safety requirements
- Ear protection
- Helmets
- Use of mobile telephones
- Dangerous goods training
- Recognition of hazardous personal items
- Pre-flight safety brief to patients, relatives and accompanying medical crew
- Restraint of combative patients
- Crew resource management

#### **4. COMMUNICATIONS STANDARDS**

The practice of flight nursing requires accurate and effective communication skills with individuals, groups and other health professionals to ensure the safe and efficient transportation of patients. Communication is an ongoing process and includes:

- Prioritisation of cases - assessment and triage
- Advice for stabilisation and patient preparation for flight
- Co-ordination of response with appropriate utilisation of resource
- Aircraft communication between crew members
- Radio/telephone usage-familiarity with all communication equipment, protocols and etiquette
- Communication with patient and family
- Medico-legal accountability and documentation
- Co-ordination of ground transport requirements
- Clinical handover of patient to the receiving centre staff
- Respects and maintains patient confidentiality when dealing with media interest

#### **5. OCCUPATIONAL HEALTH AND SAFETY STANDARDS**

- The flight nurse demonstrates a commitment to workplace safety. The Flight Nurse participates within a workplace culture of safety to ensure a safe workplace for all personnel, patients and lay persons in accordance with Federal and State Occupational Health and Safety (OH&S) legislation and organisational policies.
- The flight nurse is encouraged to actively participate in organisational OH&S policies and procedures reviews.
- The flight nurse should report any injuries to self, patients or crew.
- The flight nurse is given training in manual handling and hearing protection in relation to the aeromedical environment.
- The flight nurse adheres to industry Infection control standards, Personal Protective Equipment (PPE) and specific policies of the organisation.
- The flight nurse maintains current immunisation status as per organisational policy.
- The flight nurse is aware of policies regarding prescribed medications, alcohol usage, recreational drugs and compliance with DAMP testing.
- The flight nurse understands the effects of fatigue and fatigue countermeasures to maintain vigilance and alertness in the retrieval environment.

## 6. EDUCATION STANDARDS

Education and staff development is provided and documented for all flight nurses. These shall be specific and appropriate to the mission statement and scope of care of the aeromedical transport organisation.

Incorporating the following areas:

**Orientation:** a supernumerary period of time and include the following topics;

- Aviation physiology component
- Preparation and stabilisation of patients for transport
- Aviation safety and emergency procedures
- Dangerous Goods training
- Organisational policy and procedures

**Continuing education should include:**

- Aviation safety and emergency procedures
- Dangerous goods
- Crew Resource Management
- Update of clinical speciality
- Ongoing clinical experiences specific to the speciality
- Skills maintenance programme reflective of scope of practice
- The flight nurse seeking out educational experiences to enhance professional abilities

**Annual performance reviews:** should include assessment of knowledge and skills in the area of:

- Advanced life support Adult, Paediatric, Neonatal or as appropriate to their area of speciality.
- Altitude physiology and stresses of flight
- Clinical management of patients
- Operational procedures
- Occupational Health and Safety policies and procedures
- Stress recognition and management
- Infection control
- Communication systems
- Equipment knowledge and application

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