

**KING FAISAL SPECIALIST HOSPITAL AND RESEARCH CENTRE
NURSING AFFAIRS**

**Scope of Service
CARDIAC SURGICAL INTENSIVE CARE UNIT (CSICU)**

Unit Description	:	Cardiac Surgical Intensive Care Unit (CSICU)
No. of Beds	:	19
Nurse Patient Ratio	:	1:1-2

Scope of Service

The Cardiac Surgical Intensive Care Unit provides nursing care for adult and pediatric patients requiring intensive and acute care for the patient population requiring surgical treatment of cardiac or thoracic problems. This population includes patients requiring or having previously had surgery on the organs of the thoracic cavity, including heart, lungs or the great vessels. Off-service patients requiring ICU, cardiac monitoring or other nursing services are admitted, as beds are available. The most common surgical procedures include:

- Coronary Artery Bypass Surgery
- Valve Repair and/or Replacement
- Thoracic Aortic Aneurysm Repair
- Heart and lung Transplant (annually)
- Congenital Cardiac Defect Repairs

Frequent Procedures/Services/Functions

- Use of nursing process: assessment, planning, interventions, and evaluation.
- Invasive hemodynamic monitoring, e.g., Arterial, CVP, PA and LA.
- Continuous cardiac monitoring with dysrhythmia interpretation.
- Continuous nursing assessment and evaluation of patient's physical and emotional needs and corresponding therapeutic interventions.
- Therapeutic modalities including chest tube maintenance, temporary external pacing, permanent invasive pacing, ventilator support, emergency resuscitation including, defibrillation/cardioversion management of intra-aortic balloon pump, assist with management of LVAD, and ECMO.
- Medication delivery and pharmacological interventions including intravenous vasoactive and antiarrhythmic drugs, anticoagulation, and immunosuppressive therapy.
- Blood and blood products administration.
- Management of artificial airways and mechanically ventilated patient.
- Oxygen therapy and pulse oximetry.
- Maintenance of skin integrity.
- Nutritional support (enteral feedings, TPN and patient weights).
- Psychosocial and emotional support for patient and family
- Infection control and safety management.

Hours of Operation

24 hours a day, 7 days a week

**KING FAISAL SPECIALIST HOSPITAL AND RESEARCH CENTRE
NURSING AFFAIRS**

**Scope of Service
CARDIAC SURGICAL INTENSIVE CARE UNIT (CSICU)**

CRITERIA FOR ADMISSION TO SERVICE

The main criteria for entry into the unit is any patient having cardiac surgery, thoracic aortic aneurysm repair and lung transplant surgery, recovery from such, or follow up care from prior surgery. Any other patient meeting the department criteria for admission to the CSICU, but not requiring specialty services of the other specialized units, is appropriate for admission to the CSICU area as bed availability permits.

STAFFING PLAN

Number and Mix of Staff

Staffing is provided by registered nurses functioning in a total care nursing system. One or two Clinical Nurse Coordinator is for each shift. She/he shall be responsible for supervision and the quality of care delivered by personnel of her/his shift. CNC is not required to take a patient assignment unless there is an emergency situation or low census.

Shift assignments are made each shift by Bed/Unit Coordinator and based on the following criteria:

- Complexity of patient's condition and required nursing care.
- Dynamics of patient's status, including the frequency with which the needs for specific nursing care activities change.
- Complexity of assessment required by the patient.
- Type of technology employed in providing nursing care.
- Degree of supervision required by each nursing staff member based on her/his previously assessed level of competence.
- Availability of supervision appropriate to the assessed and current competence of nursing staff member.
- Relevant infection control and safety issues.
- Ward clerk/translator staff is utilized for every shift.

Method of Adjusting to Staffing Variances

When more staff is needed for the shift than has been scheduled, the head nurse or nursing supervisor is notified of the additional numbers of staff required. Staff are then temporarily reassigned (floated) from other areas or called in from home.

If the unit has an excess number of staff, after consideration of the above items, the head nurse or nursing supervisor is notified. These nurses are then utilized in other areas of similar expertise.

Cardiac Surgical Intensive Care Unit nurses generally float to the following units:

- MSICU, Medical Surgical Intensive Care Unit
- PICU, Pediatric Intensive Care Unit
- NICU, Neonatal Intensive Care Unit
- CCU, Coronary Care Unit

**KING FAISAL SPECIALIST HOSPITAL AND RESEARCH CENTRE
NURSING AFFAIRS**

**Scope of Service
CARDIAC SURGICAL INTENSIVE CARE UNIT (CSICU)**

QUALIFICATIONS OF STAFF

Qualifications/Licenses/Certifications Required of Staff

- Registered Nurse License or registration from country of origin
- BCLS, ACLS, PALS - After hire if not certified previous to employment
- Pediatric Physical Assessment - After hire if not completed previous to employment
- Two years Critical Care Nursing
- One year in CSICU or equivalent

How are inservices/continuing education programs provided to maintain staff competency?

Quarterly and PRN staff inservices are offered provided under the direction of the Clinical Nurse Coordinator or designee. Needs are identified by the CNC with collaboration from Education Committee and Head Nurse. Resources for identifying needs include: annual staff education survey, Performance Improvement issues, trends from Incident Reports/Report of concerns, physicians, ongoing staff input, and changes in policies/practices/protocols/techniques. The nursing staff attends classes to enhance their knowledge and strengthen their clinical base. These classes include Pediatric Survival Skills, Pediatric Cardiac Anomalies and Nursing Management, Basic & Advanced Arrhythmia Recognition and Treatment, Pacemaker, and Intra Aortic Balloon Pump, Ventilator and Hemodynamic Monitoring.

Required Competencies

- Bedside Lab Testing, Glucometer and ACT
- Hemodynamic monitoring
- Recovery and care of the postoperative cardiothoracic surgery patient
- External pacemakers/transcutaneous pacemaker.
- IABP assisting with insertion and management of
- EKG interpretation and dysrhythmia treatment modalities including defibrillation and cardioversion.
- Assisting physicians with specific patient bedside procedures
- Others (as needs are identified)

METHOD OF COMMUNICATION WITH OTHER DEPARTMENTS/PROGRAMS

Internal and External Methods of Communication

Communication within the unit includes direct communication by nursing staff with physicians, health educators, social workers, respiratory therapists, dietitians, pharmacists, and other involved services. Dissemination of information is by posted memos, inservice boards and staff meetings with the head nurse and/or Clinical Nurse Coordinator.

Communication among nursing units is by direct communication when needs arise, cc-mail, telephone and nursing leadership meetings for information sharing and problem resolution.

**KING FAISAL SPECIALIST HOSPITAL AND RESEARCH CENTRE
NURSING AFFAIRS**

**Scope of Service
CARDIAC SURGICAL INTENSIVE CARE UNIT (CSICU)**

Quarterly and PRN meetings and open communications are maintained between the Cardiovascular Department chairman, medical director and head nurse to identify areas of excellence and areas of needed improvement, as well as general sharing of information.

Describe Collaborative Relationships with Other Departments

Nursing representation on various hospital multidisciplinary committees provides communication among departments, and this information is passed on through the previously mentioned methods.

Open communication is maintained between the CSICU Bed Coordinator, Operating Room and Cath Lab staff relating to patient care issues, patient status in the OR or Cath Lab and/or need to return patients to surgery or Cath Lab.

The Cardiovascular service has monthly to quarterly Collaborative Practice Meetings to discuss quality improvement and cost containment while maintaining a rapid recovery program for cardiac surgery. This group is represented by members including CSICU medical director, head nurses (OR, CSICU, CVT, CCU, A-2, A-4), Assistant Chief of Nursing Affairs, CSICU Clinical Nurse Coordinator, supervisor respiratory care, Physiotherapy and Radiology, head of cardiac anesthesia, supervisor of blood bank and laboratory and other areas as needed.

GOALS OF DEPARTMENT

The goals of the service are:

- Apply the most current knowledge and practices to the care of the patient and their families.
- To maintain quality care with improved outcomes, while running a cost-effective service.
- Continue to be a benchmark institution for care of the adult and pediatric cardiothoracic surgical patient.
- Collaborate with other international centers to assist in meeting the needs of the community in the Kingdom of Saudi Arabia.

PLAN TO IMPROVE QUALITY OF SERVICE

Ongoing data collection is combined into the unit performance improvement program in order to continually analyze outcomes and maintain or improve quality. The cardiac surgery multidisciplinary team works to identify areas of improvement or new innovation to improve care and outcomes. Our current performance improvement project is skin integrity and documentation.

The cardiac surgery coordinator does follow ups on all 'no show' patients post valve surgery, all re-admissions on emergency visits to King Faisal Specialist Hospital and Research Center. Pre operative patients, make sure they are cleared dentally. For the valve patient, if on Warfarin, instruct patient to discontinue medicine 48 hours prior to admission.

**KING FAISAL SPECIALIST HOSPITAL AND RESEARCH CENTRE
NURSING AFFAIRS**

**Scope of Service
CARDIAC SURGICAL INTENSIVE CARE UNIT (CSICU)**

The cardiac surgery coordinator will notify all patients scheduled for surgery one week in advance to verify admission readiness. If patient is ill or has been admitted to their local hospital a request is made for the attending physician to update our admitting physician or designee.