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DEPARTMENT OF HEALTH

DOH STANDARD FOR CENTER OF EXCELLENCE IN ADULT CARDIAC SURGERY

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Note: Read this Standard in conjunction with related UAE Laws, DOH Policies, Standards and Manuals including but not limited to:

- DOH Clinical Privileging Framework Standard
- DOH Data Standards and Procedures
- DOH Standard on Human Subjects Research

1. Purpose

1.1. This Standard defines the service specifications and minimum requirements for healthcare providers designated by DOH as Adult Cardiac Surgery Center of Excellence (COE) in the Emirate of Abu Dhabi.

1.2. The Standard defines the Eligibility criteria for all Adult Cardiac Surgery services in line with DOH Standard for Centers of Excellence - DOH/SD/COE/0.9, evidence base and international guidance.

2. Definitions

2.1. **Centers of Excellence (COE)**: Specialized and distinguished programs within DOH licensed Healthcare facilities, which can provide an exceptionally high level of expertise and multidisciplinary resources centered on particular service lines and/or services and delivered in a comprehensive, interdisciplinary fashion to achieve the best patient outcomes possible.

3. Scope

3.1. This Standard applies to all healthcare providers, public and private, licensed by DOH who seek to qualify as a "Center of Excellence" in Adult Cardiac Surgery services.

4. Implementation Arrangements

DOH shall:

4.1. Ensure that the requirements set out in this Standard are met through its regulatory powers and where necessary, set out further regulatory measures to address the current and future health system needs for developing Cardiac Surgery COE.
4.2. Ensure that the COE comply with Federal Law and DOH regulations.
4.3. Develop Jawda key performance indicators (KPI's) as part of its Jawda Quality Metrics to monitor the Cardiac Surgery COE's performance annually.

Healthcare Providers shall:
4.4. Meet the requirements as set out by DOH in this standard along with the DOH Standard for Centers of Excellence - DOH/SD/COE/0.9 to qualify as a "Center of Excellence" in Adult Cardiac Surgery services.
4.5. Have in place their own operational guidelines, policies and procedures.
4.6. Contribute to eliminating International Patient Care (IPC) transfers related to Adult Cardiac Surgery services.

5. Duties for Healthcare Providers

The COE in Adult Cardiac Surgery has to ensure equal access to all patients based on medical needs. The designated COE in Adult Cardiac Surgery must:

5.1. Ensure and provide evidence that their practices reflect updated international best practices.
5.2. Document and monitor quality and safety of clinical care and outcomes of surgical and non-surgical intervention performed on patients, and make these available to DOH for auditing, as and when requested to do so.
5.3. Provide records of Adult Cardiac Surgery related Jawda - Quality Metrics to DOH inspectors.
5.4. Maintain Accreditation by a recognized International Accreditation body aligned with DOH and COE and report the findings to DOH.
5.5. Follow the clinical and regulatory requirements of this Standard irrespective of provision of COE services to patients who opt not to use health insurance coverage (pre-authorization for coverage and health insurance does not apply in this case).

6. Adult Cardiac Surgery COE Service Specifications:

6.1. Facilities

Healthcare facilities seeking the COE designation in Adult Cardiac Surgery should ensure the availability of the following:

6.1.1. Dedicated Cardiac Surgery ICU facilities and Cardiac Operating Rooms (OR) team on-call.
6.1.2. With support from cardiology related core services:
- 6.1.2.1. Clinical cardiovascular medicine,
- 6.1.2.2. Interventional cardiology,
- 6.1.2.3. Electrophysiology, and
- 6.1.2.4. Structural heart program.
- 6.1.2.5. State of the art multidisciplinary transcatheter valvular therapeutics capability.

6.1.3. Additionally support from 24/7 support from neurology, diagnostic imaging, vascular surgery, general surgery and any other specialty required.

6.1.4. All heart surgery is undertaken in fully equipped and staffed operating theaters. For a sustainable Adult Cardiac Surgery COE program, the staffing minimum should be as follows:
- 6.1.4.1. 3 Consultant surgeons
- 6.1.4.2. 5 Specialist surgeons
- 6.1.4.3. 4 Perfusionists
- 6.1.4.4. Nurses to support two shifts per 24 hours
- 6.1.4.5. 4 Consultant anesthetists
- 6.1.4.6. 4 Specialist anesthetists

6.2. Healthcare Professionals

Healthcare facilities seeking the COE designation in Adult Cardiac Surgery must fulfil the following requirements related to healthcare professionals:

6.2.1. COE Surgical staff must hold an equivalent of American Board of Thoracic Surgery, or FRCS (Canada).

6.2.2. Intensive care unit medical staff must have accredited fellowship level training in the Cardiac Surgery ICU.

6.2.3. Anesthesia medical staff must have accredited fellowship level training in Cardiac Surgery.

6.2.4. Exceptions to the above may be made for individuals having demonstrated superior skill and contribution to the profession by way of professional accomplishment and academic performance.

6.3. Clinical Services

COE services provided in authorized Healthcare Facilities must fulfill the following requirements:

6.3.1. Provide a range of integrated Cardiac surgery and structural heart disease interventions and such services surgical and non-surgical to support the safe and effective care of COE patients seeking treatment in accordance with the COE. These include but are not limited to:
- 6.3.1.1. All coronary surgery,
- 6.3.1.2. All Valve surgery, including repair and or replacement,
- 6.3.1.3. All operations of the Ascending Aorta and Transverse Arch,
- 6.3.1.4. Temporary mechanical assistance,
- 6.3.1.5. Mechanical complications of myocardial infarction and pericardial diseases,
- 6.3.1.6. All operations for cardiac tumors, foreign bodies, and reconstruction of the cardiac chambers including surgical ablation of arrhythmias.
- 6.3.1.7. Optional Expertise for Adult Congenital Surgery, Transplant and Long Term Mechanical Assistance.

6.3.2. Have available and maintain all equipment, support, intervention needs and supplies necessary for treatment and patient care, according to DOH regulatory requirements and standards and as per updated international best practices.

6.3.3. The provider must deliver culturally and socially relevant patient education and information regarding the treatment and care (pre and post operation in accordance with updated international best practices, consistent with the DOH Patient Charter and relevant DOH policies.

7. Performance Management

Healthcare Providers' including those providing pharmacological, surgical, and non-surgical intervention will be required to ensure the following from their services and management systems:

7.1. Are capable of Tracking Performance, including trends in Clinical Quality/Outcomes for patients by documenting the related Jawda - Quality Metrics (https://www.doh.gov.ae/resources/jawda-abu-dhabi-healthcare-quality-index).

7.2. Provide seamless care in partnership with other providers, including primary care and hospitals, as required for holistic patient care.

7.3. A COE in Cardiac Surgery shall be required to maintain volumes of greater than or equal to 300 open cardiac cases per year and over 50 structural heart disease interventions annually. For the Surgeon, volume of greater than or equal to 80 cardiac cases per year. (3)

7.4. A COE shall be able to provide all emergency services need to provide comprehensive medical, ICU, and non-cardiac surgical care to patients having undergone open cardiac surgery or structural heart disease interventions without service availability gaps.

7.5. A COE shall accept all referred patients within the Emirate of Abu Dhabi that are deemed candidature of a Cardiac surgical or structural heart disease intervention, including all International Patient Care (IPC) referrals for Cardiac Surgery.

7.6. A COE shall have uninterrupted capacity to provide advanced mechanical circulatory support to all patients that are deemed candidates.

7.7. Cardio thoracic Transplantations services shall only be provided in a COE.

7.8. Implanted mechanical assistance devices shall only be implanted at an authorized COE center.

8. Clinical Research and Education

8.1. COE must demonstrate a commitment to education, research and training focusing on cardiac-related sciences.

9. Data Management

9.1. Data Collection- Clinical Programs shall submit clinical outcomes and specified registry data elements to a national or international database in alignment with related DOH standard.

9.2. The Clinical Program shall define staff responsible for collecting data maintaining the database.

9.3. Defined data management staff should participate in continuing education annually.

10. Payment Mechanism

10.1. The appropriate compensation model will be adjusted with additional cost associated with Clinical leadership, Research, Education and Technology.

11. Enforcement and Sanctions

11.1. DOH may impose sanctions in relation to any breach of requirements under this Standard in accordance with Chapter on Complaints, Investigations, Regulatory Action, and Sanctions, the DOH Healthcare Regulator Manual.

References

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