Roles, Responsibilities and Patient Care Activities of Residents

Congenital Cardiac Surgery Residency
University of Washington School of Medicine
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Definitions

Resident: A physician who is engaged in a graduate training program in medicine (which includes all specialties, e.g., internal medicine, surgery, psychiatry, radiology, nuclear medicine, etc.), and who participates in patient care under the direction of attending physicians (or licensed independent practitioners) as approved by each review committee. Note: The term “resident” includes all residents and fellows including individuals in their first year of training (PGY1), often referred to as “interns,” and individuals in approved subspecialty graduate medical education programs who historically have also been referred to as “fellows.”

As part of their training program, residents are given graded and progressive responsibility according to the individual resident's clinical experience, judgment, knowledge, and technical skill. Each resident must know the limits of his/her scope of authority and the circumstances under which he/she is permitted to act with conditional independence. Residents are responsible for asking for help from the supervising physician (or other appropriate licensed practitioner) for the service they are rotating on when they are uncertain of diagnosis, how to perform a diagnostic or therapeutic procedure, or how to implement an appropriate plan of care.

Attending of Record (Attending): An identifiable, appropriately-credentialed and privileged attending physician who is ultimately responsible for the management of the individual patient and for the supervision of residents involved in the care of the patient. The attending delegates portions of care to residents based on the needs of the patient and the skills of the residents.

Supervision
To ensure oversight of resident supervision and graded authority and responsibility, the following levels of supervision are recognized:

1. Direct Supervision – the supervising physician is physically present with the resident and patient.

2. Indirect Supervision:
   a) with direct supervision immediately available – the supervising physician is physically within the hospital or other site of patient care and is immediately available to provide Direct Supervision.
   b) with direct supervision available – the supervising physician is not physically present within the hospital or other site of patient care, but is immediately available by means of telephonic and/or electronic modalities and is available to come to the site of care in order to provide Direct Supervision.
Clinical Responsibilities

The Congenital Cardiac Surgery residency is a one year training program limited to one resident per program per year. Prerequisites to training include completion of ACGME-accredited Thoracic Surgery residency and eligibility for certification by the American Board of Thoracic Surgery. The clinical responsibilities for each resident are, therefore, based on, patient safety, resident education, severity and complexity of patient illness/condition and available support services. The specific role of each resident varies with their clinical rotation, experience, duration of clinical training, the patient’s illness and the clinical demands placed on the team. The following is a guide to the specific patient care responsibilities. Residents must comply with the supervision standards of the service on which they are rotating unless otherwise specified by their program director.

Congenital Cardiac Surgery Resident (Typically PGY 9-10) Congenital Cardiac Surgery residents may be directly or indirectly supervised. They may provide direct patient care, supervisory care or consultative services, with progressive graded responsibilities as merited. They must provide all services ultimately under the supervision of an attending physician. Congenital Cardiac Surgery residents should serve in a supervisory role of medical students, junior and intermediate residents in recognition of their progress towards independence, as appropriate to the needs of each patient and the skills of the senior resident; however, the attending physician is ultimately responsible for the care of the patient.

Attending of Record

In the clinical learning environment, each patient must have an identifiable, appropriately-credentialed and privileged primary attending physician who is ultimately responsible for that patient’s care. The attending physician is responsible for assuring the quality of care provided and for addressing any problems that occur in the care of patients and thus must be available to provide direct supervision when appropriate for optimal care of the patient and/or as indicated by individual program policy. The availability of the attending to the resident is expected to be greater with less experienced residents and with increased acuity of the patient’s illness. The attending must notify the Congenital Cardiac Surgery resident of when he or she should be called regarding a patient’s status. In addition to situations the individual attending would like to be notified of, the attending should include in his or her notification to residents all situations that require attending notification per program or hospital policy. The primary attending physician may at times delegate supervisory responsibility to a consulting attending physician if a procedure is recommended by that consultant. This information should be available to residents, faculty members, and patients.

The attending may specifically delegate portions of care to the Congenital Cardiac Surgery resident based on the needs of the patient and the skills of the residents and in accordance with hospital and/or departmental policies. The attending may also delegate partial responsibility for supervision of junior residents to the Congenital Cardiac Surgery resident, but the attending must assure the competence of the Congenital Cardiac Surgery resident before supervisory responsibility is delegated. Over time, the Congenital Cardiac Surgery resident is expected to assume an increasingly larger role in patient care decision making. The attending remains responsible for assuring that appropriate supervision is occurring and is ultimately responsible for the patient’s care. Residents and attendings should inform patients of their respective roles in each patient’s care.
The attending and supervisory resident are expected to monitor competence of more junior residents through direct observation, formal ward rounds and review of the medical records of patients under their care.

Faculty supervision assignments should be of sufficient duration to assess the knowledge and skills of each resident and delegate to him/her the appropriate level of patient care authority and responsibility.

**Supervision of invasive procedures**

In a training program, as in any clinical practice, it is incumbent upon the physician to be aware of his/her own limitations in managing a given patient and to consult a physician with more expertise when necessary. When a resident requires supervision, this may be provided by a qualified member of the medical staff or by a resident who is authorized to perform the procedure independently. In all cases, the attending physician is ultimately responsible for the provision of care by residents. When there is any doubt about the need for supervision, the attending should be contacted.

The following procedures may be performed with the indicated level of supervision:

**Direct supervision required by a qualified member of the medical staff**

*All procedures not specified below*

**Direct supervision required by a qualified member of the medical staff for the first 2 cases to demonstrate competency as assessed by the medical staff member**

Donor Heart procurement

**Indirect supervision required with direct supervision available by a qualified member of the medical staff**

Peripheral IV placement
Central Venous Line Placement
Arterial Line Placement
Pleural tube/catheter placement

**Oversight required by a qualified member of the medical staff**

*All procedures*

**Emergency Procedures**

It is recognized that in the provision of medical care, unanticipated and life-threatening events may occur. The Congenital Cardiac Surgery resident may attempt any of the procedures normally requiring supervision in a case where death or irreversible loss of function in a patient is imminent, and an appropriate supervisory physician is not immediately available, and to wait for the availability of an appropriate supervisory physician would likely result in death or significant harm. The assistance of more qualified individuals should be requested as soon as practically possible. The appropriate supervising practitioner must be contacted and apprised of the situation as soon as possible. This includes, but is not limited to the following:

1. Median sternotomy and cannulation for cardiopulmonary bypass
2. Mediastinal reexploration for bleeding, cardiac tamponade, or infection
Supervision of Consults

Congenital Cardiac Surgery residents may provide consultation services under the direction of the attending of record. The attending of record is ultimately responsible for the care of the patient and thus must be available to provide direct supervision when appropriate for optimal care and/or as indicated by individual program policy. The availability of the attending should be appropriate to the experience and competence of the consult resident and is expected to be greater with increasing acuity of the patient’s illness. Information regarding the availability of attendings should be available to residents, faculty members, and patients. Residents performing consultations on patients are expected to communicate verbally with their supervising attending within 2 hours of the consultation. Any resident performing a consultation where there is credible concern for patient’s life or limb requiring the need for immediate invasive intervention MUST communicate directly with the supervising attending as soon as possible prior to intervention or discharge from the hospital, clinic or emergency department so long as this does not place the patient at risk. If the communication with the supervising attending is delayed due to ensuring patient safety, the resident will communicate with the supervising attending as soon as possible. Residents performing consultations will communicate the name of their supervising attending to the services requesting consultation. If the supervising physician does not respond in a timely manner, the resident should contact the Program Director.

Supervision of Hand-Offs

Pediatric Cardiology attendings oversee non-ICU postoperative and will directly supervise the daily hand-off between the daytime inpatient services and the night call team. The attending for service and the call attending will be present.

Circumstances in which Supervising Practitioner MUST be Contacted

There are specific circumstances and events in which residents must communicate with appropriate supervising faculty members. The Congenital Cardiac Surgery resident must contact the supervisory attending for the following:

1. Admission of patient to Emergency Room
2. Admission of patient to Inpatient Ward
3. Transfer of patient from Inpatient Ward to CICU
4. Change in patient condition not anticipated or discussed on daily patient rounds
5. Change in management recommended by Cardiology or other consulting service
6. Request for consultation

Resident Competence & Delegated Authority

Non-operative Patient Care

All Congenital Cardiac Surgery residents have successfully completed training in an ACGME-approved Thoracic Surgery Residency program and enter at the PGY-7 level or higher. Since this prior training experience included independent patient care responsibility within the same specialty, Congenital Cardiac Surgery residents can generally advance rapidly with regard to progressive authority, responsibility and conditional independence in patient care. Daily rounds and all clinical decision-making by the resident are supervised directly by faculty members for the first two weeks of training to confirm that the resident is competent to provide safe patient care.
After this, with approval of the faculty, the resident may conduct rounds and manage patient care (directly or via supervision of Nurse Practitioners) with oversight by faculty members.

**Operative Patient Care**

Upon completion of the one year training program, the Congenital Cardiac Surgery resident is expected to attain competence in the technical performance of congenital cardiac surgical procedures including, but not limited to, the index cases specified by the Thoracic Surgery Residency Review Committee. The resident operative experience will progress from simple to complex procedures as the resident demonstrates competency at each level. The complexity and diversity of congenital cardiac surgical procedures precludes specific objective criteria of competency for each operation or level. However, subjective assessment of tissue handling, sequential conduct of operation, and management of cardiopulmonary bypass (as appropriate) will be continuously reviewed by the faculty to guide resident advancement to more complex procedures. The final decision regarding the resident’s role in each individual case will be made by the attending faculty surgeon of record. The attending faculty member will discuss resident expectations and goals prior to each case and review the achievement of these goals with the resident immediately after the case to facilitate advancement of technical skills. The following outlines the general approach to graded increase in operative responsibility, although the specific operations and rate of advancement may vary depending on the initial skill level and rate of improvement of the individual resident:

1. The initial operating experience for all residents will be as first assistant. This allows the faculty members to make an assessment of basic technical skills (gentle tissue handling, needle control) and formulate a remedial plan to improve basic skills as needed. This also allows the resident to become familiarized with the surgical routines and techniques used.
2. Residents will perform standardized parts of the procedures common to all operations including opening, cannulation, and closing.
3. Residents will perform parts of the repair (e.g., placement of Goretx shunt during a Norwood procedure or the left side of an RVOT patch sutureline during TOF repair) as first assistant. These cases will not be counted toward RRC case requirements.
4. Residents will perform low complexity procedures in their entirety as operating surgeon (ASD, VSD, PDA, PAB).
5. Residents will perform intermediate complexity procedures in their entirety as operating surgeon (AVSD, TOF, BDG/Fontan, TAPVR).
6. Residents will perform high complexity procedures in their entirety as operating surgeon (ASO, Norwood, Truncus).

**Faculty Development and Resident Education around Supervision and Progressive Responsibility**

Attendings should adhere to the SUPERB model when providing supervision. They should

1. **Set Expectations**: set expectations on when they should be notified about changes in patient’s status.
2. **Uncertainty is a time to contact**: tell resident to call when they are uncertain of a diagnosis, procedure or plan of care.
3. **Planned Communication**: set a planned time for communication (i.e. each evening, on call nights)
4. **E**asily available: Make explicit your contact information and availability for any questions or concerns.

5. **R**eassure resident not to be afraid to call: Tell the resident to call with questions or uncertainty.

6. **B**alance supervision and autonomy.

Residents should seek attending input using the SAFETY acronym.

1. **S**eek attending input early

2. **A**ctive clinical decisions: Call the attending when you have a patient whose clinical status is changing and a new plan of care should be discussed. Be prepared to present the situation, the background, your assessment and your recommendation.

3. **F**eel uncertain about clinical decisions: Seek input from the supervising physician when you are uncertain about your clinical decisions. Be prepared to present the situation, the background, your assessment and your recommendation.

4. **E**nd-of-life care or family/legal discussions: Always call your attending when a patient may die or there is concern for a medical error or legal issue.

5. **T**ransitions of care: Always call the attending when the patient becomes acutely ill and you are considering transfer to the intensive care unit (or have transferred the patient to the ICU if patient safety does not allow the call to happen prior to the ICU becoming involved).

6. **H**elp with system/hierarchy: Call your supervisor if you are not able to advance the care of a patient because of system problems or unresponsiveness of consultants or other providers.

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