

TRANSPLANT GOALS AND OBJECTIVES (PGY1-5)

GOALS

Through rotation on the transplant service, residents shall attain the following goals:

I. Patient Care

A. Preoperative Care Setting: outpatient clinic and inpatient service (primary and consultation)

Residents will evaluate and develop a plan of care for preoperative patients with kidney failure. The plan shall include any intervention(s) that will successfully prepare a patient for surgery.

- i) The resident will perform complete and detailed history and physical examinations of patients being considered for transplant (PGY 1-5)
- ii) The resident will learn to obtain and interpret laboratory and radiologic tests that are appropriate for the condition being treated and/or the procedure being planned (PGY 1-5).
- iii) The resident will demonstrate an understanding of the principles of preoperative patient selection and optimization (i.e., cardiopulmonary risk assessment; nutritional status; special considerations such as thrombophilia/bleeding disorders, steroid dependent patients, timing of surgery with dialysis or other therapies, multiple comorbidities, etc.) (PGY 2-5).
- iv) The resident will participate in the informed consent process for patients being for surgeries. The informed consent process includes identifying and reviewing with the patient the risks, benefits, and alternatives of the planned intervention (PGY 1-5).

B. Operative Care Setting: 5N and 2W

Prior to arriving in the operating room, the resident should have reviewed the case. This includes reviewing PMH, PMS, allergies, imaging, AND discussing the operative approach with the attending. The following are a list of essential common operations that the resident(s) can be expected to have exposure to by the completion of their transplant rotation:

- Peritoneal dialysis placement/removal (PGY 1,2)
- Kidney transplant (PGY 3-5)

C. Postoperative Care Setting: inpatient floor, outpatient clinic

Residents shall develop and follow through with a plan of care for the post-operative kidney transplant patient. This plan generally focuses on renal function, the role of dialysis, immunosuppression, failure of transplanted kidney, multimodal pain control; fluid and electrolyte management; resuscitation of critically ill patients; the identification and

treatment of common post-operative complications including bleeding, infection, ileus, bowel obstruction (malignant and benign), thromboembolism (among others); identification of discharge appropriate patients and coordination of care as they transition back to home following their surgery/procedure.

1. Inpatient floor

A) The resident team is expected to make morning rounds on the inpatient transplant patient list (including the consult service) prior to the start of the day's activities (OR cases, clinic) (PGY 1-5).

B) After rounds, the chief resident on service is expected to delegate attending updates on all patients, including consults. We expect for straightforward updates that lower-level residents make the call as this is part of their progressive autonomy and learning. Common issues to be discussed should include vital signs (including pain control), Is/Os, physical exam findings, daily labs, medication review, consultant recommendations. The daily plan will generally consist of identifying emergencies, identifying possible discharge appropriate patients, advancement of diet, repletion of electrolyte abnormalities, adjustment of medications, drain and tube management, need for diagnostic tests to be ordered or new consults to be called.

C) The resident team will divide the work for the day in such a manner that it will be performed as efficiently as possible. Priority should be given to obtaining and following up on important studies expeditiously as well as discharges. The goal for all discharges is out the day by noon (PGY 1-5).

D) The intern or junior resident should provide as close to real time updates as possible with changes in patients condition, new consults, results of important tests to the chief resident who can then relay the information to the attending of record. During work hours, this is the most relevant and available specialist. At night/weekends this should be directed to the on call attending. (PGY 1-3).

2. Out-patient clinic

A) When circumstance allows, residents will see patient on whom they performed surgery for their first outpatient post-operative follow up visit. This will provide for continuity of care that will allow the resident to gain an understanding of the anticipated normal recovery from the various essential common and complex operations as well as gain experience in identifying instances in which deviation from the norm is occurring as how such instances are approached/managed (PGY 1-5).

B) Residents will see prospective and follow-up patients who are in longitudinal surveillance of their disease before and after their surgical intervention. This experience will provide the resident with an initial exposure to the ongoing care of cancer patients even after their operation is performed (PGY 1-5)

C) All residents are expected to be in clinic if they are not in the operating room or an emergency. (PGY 1-5).

II. Medical Knowledge

Resident fund of knowledge as it relates to kidney transplant will be expanded through a variety of means, some of which are structured and others of which require independent initiative from the residents who are rotating on the service. These include: 1) Conferences 2) Assigned readings 3) TWIS quizzes.

1. Conferences

A) Residents are expected to attend weekly Wednesday morning morbidity and mortality conference. Complications from the kidney transplant service are to be presented by the resident who participated in the case in front of a group of their peers as well as the surgical faculty at large. This conference will give residents an opportunity to think critically about specific steps in the preoperative workup, operative conduct and/or post-operative care of patients who have experienced a complication and identify opportunities for alternative decisions in similar, future cases that may lead to improved outcomes. Evidenced based practice patterns should be emphasized when applicable (PGY 1-5).

2. Assigned Readings: Residents will cover various kidney transplant surgery topics, among others, as part of their assigned weekly reading curriculum through the program at large. The SCORE curriculum is the chosen curriculum for the general surgery residency. Transplant faculty all participate in leading didactic discussion(s) at Wednesday morning education conference at different points in the year when appropriate topics are the assigned topic for the week. Additionally, residents are encouraged to educate themselves upon the scientific information relating to transplant.

3. TWIS Quizzes: Residents are expected to complete TWIS quizzes that are outlined in the program curriculum. Areas of deficiency as defined by their performance on the TWIS quizzes should serve as the focus for future study plans.

III. Practice-based Learning

Residents are expected to engage in critical self-review as it relates to the cases in which they participate, whether it be in the operating room, on the wards or in the outpatient setting.

1. Morbidity & Mortality Conference – Discussion should center on an evidence-based discussion of quality improvement (PGY 1-5).
2. Residents shall keep logs of their cases and track their operative proficiency as gauged by whether they assisted or were the surgeon junior or senior or teaching assistant (PGY 1-5).

3. Residents shall distribute operative cards or have faculty fill out online performance review to attendings with whom they have performed cases so that they can be filled out and placed into said resident's Clinical Competency Committee (CCC) folder (PGY 1-5).
4. Residents shall familiarize themselves with evidence-based guidelines related to disease prevention, patient safety and quality (SCIP measures, DVT prophylaxis guidelines, screening colonoscopy guidelines, etc.), ERAS guidelines such as bowel preps, limited fluids, removing tubes and drains, as well as hospital specific matters related to safety and quality (NSQIP data, QITI data, pharmacy formularies for hospital acquired infections, isolation precaution measures) (PGY 1-5).

IV. Interpersonal and Communication Skills

The kidney transplant service provides unique opportunities for residents to develop their interpersonal and communication skills, both in the context of physician to patient interactions as well as in interactions as part of the health care delivery team.

- A) Residents will be given the opportunity to observe (PGY 1) and eventually participate in (PGY 4, 5) the process of delivering bad news to patients and their families/friends. These opportunities exist in the outpatient as well as the inpatient setting and arise in the context of discussing pathology reports, diagnostic findings, and prognosis (among others).
- B) Residents will also be called upon to communicate the daily plan and progress of patients admitted to the hospital to patients, their family and the entire healthcare team involved in the care of that particular patient. The healthcare team will include nurses, therapists, social work, nutrition, and other physicians serving as consultants (PGY 1-5).
- C) Residents shall learn to document their practice activities in such a manner that is clear, concise and in accordance with the standards of medicolegal documentation (PGY 1-5).
- D) Residents shall participate in the informed consent process for patients being scheduled for elective and emergent/urgent procedures or surgery (PGY 1-5)
- E) Residents shall learn to give and receive detailed sign-out to facilitate continuity of care during handoffs (PGY 1-5).

V. Professionalism

The kidney transplant surgery rotation offers many opportunities for residents to hone their skills as they relate to professionalism.

- A) Residents will have opportunities to learn how to be honest and sincere with patients. Examples include breaking bad news and explaining surgical complications (PGY 1-5).
- B) Residents shall demonstrate a commitment to the continuity of care of a patient within the confines of the 80-hour duty restrictions (PGY 1-5).

- C) Residents shall learn to maintain patient confidentiality (PGY1-5).
- D) Residents will learn the importance of accurate medical documentation (PGY1-5).
- E) Residents will be expected to adhere to the hospital's code of professional conduct as it relates to appearance and dress (PGY 1-5).
- F) Residents will be expected to be punctual and prepared for all cases, clinics, and conferences that they are participating in on any given day. If they are unable to be on time due to patient emergencies, that should be communicated to the team (PGY 1-5).

VI. Systems-based practice

The kidney transplant surgery rotation provides residents with inpatient and outpatient opportunities to grow within the systems-based practice core competency.

- A) Residents will learn to practice high quality cost effective, evidence-based patient care. This knowledge will be gained through participation in the conferences listed above in the medical knowledge competency and include the M&M and assigned readings (PGY 1-5).
- B) Residents will be educated about and held accountable for compliance with the surgical care improvement project (SCIP) standards as they relate to the perioperative care of transplant patients and include but are not limited to reducing surgical site infection(s) through the appropriate use and choice of perioperative antibiotics; eliminating or reducing catheter associated urinary infections by early removal of indwelling catheters from post-operative patients (PGY 1-5).
- C) Residents will be exposed to protocol driven practices as they related to central line insertion in ICU patients, selection of antibiotics for hospital acquired infections based on institution specific resistance patterns, blood transfusion criteria, and observation of contact precautions for patients with multidrug resistant infections (among others) (PGY 1-5).
- D) Residents will be educated about the National Surgical Quality Improvement Project (NSQIP) measures and outcomes and how they relate to the changing landscape of reimbursement patterns for individual providers and hospital systems at large (PGY 1-5).
- E) Residents will be educated on ERAS pathways for multiple complex operations (PGY 1-5).
- F) Residents will be educated on the multidisciplinary role of transplant care and expected to be able to communicate with those teams to optimize care (PGY 1-5).