# Patient Care

<table>
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<th>PGY-1</th>
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**Compassionate Patient Care:**
- Demonstrates caring and respectful behaviors when interacting with patients and/or their families.
- Incorporates the patient preferences in making decisions about diagnostic and therapeutic interventions.
- Assist in development of patient care plan and discusses with attending.

**Appropriate Patient Care:**
- Gathers essential and accurate information about patients.
- Evaluates patients with complex surgical indications and presents to upper level resident.
- Compare laparoscopic versus open procedures for each case.
- Demonstrates an understanding about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment.
- Demonstrate knowledge of the indications and contraindications for various medications used in the preparation and performance of procedures.

**Effective Treatment and Health Promotion:**
- Participate in all essential medical and invasive procedures with supervision.
- Provides health care services aimed at preventing health problems and maintaining health.
- Works with health care professionals, including those from other disciplines, to provide Patient-focused care.

**Technical Skills in Patient Care:**
- Demonstrates knowledge, psychomotor skills and judgment related to his/her role in the performance of operative surgical procedures.
- Demonstrates manual dexterity appropriate for level of training.
- Arrives in the OR prepared for the cognitive components of his/her role in individual operative surgical procedures.
- Demonstrates the ability to proceed through various steps of operative procedures in a manner that is consistent with the flow of the operation.
- Demonstrates the ability to make appropriate and timely decisions with respect to the operative procedure.
- Demonstrate competence in surgical cases.
- Demonstrates an understanding of the benefits and limitations of operative surgical techniques.
- Assist attending staff with complex surgical procedures.
- Participate in the preparation and handling of multiple organ harvest in the brain dead patient.

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<th>PGY-2 and PGY-3</th>
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**Compassionate Patient Care:**
- Demonstrates caring and respectful behaviors when interacting with patients and/or their families.
- Incorporates the patient preferences in making decisions about diagnostic and therapeutic interventions.
- Develops, discusses with attending, and executes patient care plans.

**Appropriate Patient Care:**
- Gathers essential and accurate information about patients.
- Evaluates patients with complex surgical indications and presents a differential diagnosis.
• Compare laparoscopic versus open procedures for each case.
• Demonstrates an understanding about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment.
• Develops, presents plan to attending, and carries out patient management plans.
• Demonstrate knowledge of the indications and contraindications for various medications used in the preparation and performance of procedures.
• Coordinate with attending the overall care of patients for the team of residents and students.

**Effective Treatment and Health Promotion:**
• Performs all essential medical and invasive procedures with supervision.
• Provides health care services aimed at preventing health problems and maintaining health
• Works with health care professionals, including those from other disciplines, to provide Patient-focused care.

**Technical Skills in Patient Care:**
• Demonstrates knowledge, psychomotor skills and judgment related to his/her role in the performance of operative surgical procedures.
• Demonstrates manual dexterity appropriate for level of training.
• Arrives in the OR prepared for the cognitive components of his/her role in individual operative surgical procedures.
• Demonstrates the ability to proceed through various steps of operative procedures in a manner that is consistent with the flow of the operation.
• Demonstrates the ability to make appropriate and timely decisions with respect to the operative procedure.
• Demonstrate competence in surgical cases
• Participate in the evaluation of patients suspected of organ rejection.
• Demonstrates an understanding of the benefits and limitations of operative surgical techniques.
• Assist attending staff with complex surgical procedures.
• Participate in the preparation and handling of multiple organ harvest in the brain dead patient.
• Manage postoperative surgical complications, including wound infection, anastomotic stenosis and leaks, and lymphocele formation.
• Demonstrate a working knowledge of the history and evolution of clinical transplantation.

Participate in pre and post operative surgical management of patients after vascularized organ transplant.

**Medical Knowledge**

**PGY-1**

• Demonstrate an understanding of the anatomy, physiology, and pathophysiology of general immunological principles and their application to transplant surgery.
• Exhibit knowledge of the principles of care for patients with abnormal immune functions who are undergoing transplant procedures.
• Demonstrate an understanding of the emerging field of molecular biology and the novel immune therapies having potential application to clinical surgery
• Demonstrate familiarity with surgical literature and extensive areas of basic surgical disease.
• Must relate basic medical knowledge to patient care. Residents must critically evaluate and demonstrate knowledge of pertinent scientific information.
• Demonstrate the capacity to integrate surgical continuity of care principles into the total care plan for all transplant patients.
• Understands renal transplant physiology
• Understands immunosuppressive regimen for kidney transplants
• Understands different types of rejection
• Understands different types of arteriovenous shunts
• Understands importance of subclavian stenosis in vascular access w/u for dialysis
- Incorporate the knowledge of ethical, legal, economic, and/or social factors into the activities of the entire surgical team for all components of surgical care.

## PGY-2 and PGY-3

- Demonstrate an understanding of the anatomy, physiology, and pathophysiology of general immunological principles and their application to surgical practice.
- Exhibit knowledge of the principles of care for patients with abnormal immune functions who are undergoing general surgery procedures.
- Describe the anatomic and biologic terms associated with organ transplantation, donor and recipient relationships.
- Define the criteria for organ and tissue donation; apply these criteria to critically ill patients.
- Explain the clinical definition of brain death.
- Analyze and formulate a plan for management of the organ donor.
- Evaluate potential candidates for living-related and cadaveric vascularized organ transplantation.
- Demonstrate ability to formulate and implement a diagnostic and treatment plan for patients who are to be managed by general surgery.
- Demonstrate an understanding of the emerging field of molecular biology and the novel immune therapies having potential application to clinical surgery.
- Demonstrate familiarity with surgical literature and extensive areas of basic surgical disease.
- Must relate basic medical knowledge to patient care. Residents must critically evaluate and demonstrate knowledge of pertinent scientific information.
- Exhibit knowledge base sufficient to teach junior level residents and students on the service.
- Demonstrate surgical competence by the use of significant surgical knowledge and advanced skill to achieve a performance that produces appropriate and anticipated outcomes.
- Demonstrate the capacity to integrate surgical continuity of care principles into the total care plan for all surgical patients.
- Through leadership and teaching, demonstrate understanding of the significance of the natural history of surgical disease, the consequence of surgical care (both positive and negative), and the influence of continuity of care upon surgical outcomes.
- Exhibit the capability to integrate surgical continuity of care principles into the total care plan for transplant patients.
- Incorporate the knowledge of ethical, legal, economic, and/or social factors into the activities of the entire surgical team for all components of surgical care.

## Practice-Based Learning and Improvement

### PGY-1

#### Investigates And Evaluates Patient Care Practices:
- Analyzes practice experience using a systematic methodology.
- Obtains and uses information about their population of patients and the larger population from which patients are drawn.

#### Appraises and Assimilates Scientific Evidence Relevant To Patient Care:
- Locates, appraises, and assimilates evidence from scientific studies related to their Patients’ health problems.
- Understands the basic concepts of the human immune system.
- Applies knowledge of T-cell activation, including the roles of CD4+ and CD8+ cells and the release of involved interleukins.
- Demonstrates an understanding of the resident flora, mechanical barriers, local hormones, and chemicals of the epithelium involved in the body’s defenses against infection.
- Applies knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness.
- Performs practice-based improvement activities using a systematic methodology.
- Uses information technology to manage information, access on-line medical information; and support his/her own education.
- Exhibit and recognize the importance of lifelong learning in surgical practice.

**Improves Patient Care Practices:**
- Demonstrates the ability to analyze personal practice outcomes to improve patient care.
- Performs practice-based improvement activities using a systematic methodology.
- Uses information technology to manage information, access on-line medical information; and support his/her own education.
- Exhibit an understanding of clinical immunology and potential side effects of current immunosuppressive agents.
- Must differentiate between agents used to treat acute transplant rejection.
- Recognize new and investigational immunosuppressive drugs used for nontransplant medical conditions.
- Demonstrate an understanding of gene transplantation and describe clinical applications currently being investigated.

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### PGY-2 and PGY-3

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<td>• Effectively and promptly documents practice activities.</td>
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<td>• Presents all patients and conference material in a concise, organized, chronologic, logical and knowledgeable manner.</td>
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<td>• Utilizes input from all collaborative interactions with all personnel contributing to the surgical patient care.</td>
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<td>• Exhibits surgical management, organization, and team leadership.</td>
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<td>• Evaluates the performance and competence of all members of the surgical residency team.</td>
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<td>• Demonstrates a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.</td>
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- Maintain positive relationships.
- Demonstrate accountability for actions and decisions.

### System-Based Practice

#### PGY-1

**Awareness and Responsiveness to the Health Care System:**
- Understands how patient care and other professional practices affect other health care professionals, the health care organization, and the larger society. Understand how these elements of the system affect their own practice.
- Knows how types of medical practice and delivery systems differ from one another, including methods and controlling health care costs and allocating resources.

**Utilization of System Resources:**
- Practices cost-effective health care and resource allocation that does not compromise quality of care.
- Advocates for quality patient care and assist patients in dealing with system complexities.
- Partner with health care managers and health care provides to assess, coordinate, and improve health care and understands how these activities can affect system performance.

### PGY-2 and PGY-3

**Awareness and Responsiveness to the Health Care System:**
- Understands how patient care and other professional practices affect other health care professionals, the health care organization, and the larger society. Understand how these elements of the system affect their own practice.
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Transplant Surgery
PROCEDURE BENCHMARKS

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<tr>
<td>- Knot tying, basic suturing</td>
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<td>- Begins to perform vascular anastomosis</td>
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<td>- Assist kidney, pancreas and liver transplant.</td>
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<tr>
<td>- Assist/perform kidney, transplantation.</td>
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<tr>
<td>- Assist in liver or pancreas transplant</td>
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<td>- Performance of access procedures for renal dialysis</td>
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<tr>
<td>- Performance of procedure for patients with liver failure (shunts)</td>
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The Transplant Surgery Service requires that all residents refer to Access Surgery [http://www.accesssurgery.com](http://www.accesssurgery.com) for the required chapter readings and videos that must be reviewed while on the rotation. Residents are required to take the Board Review Exam, and score at least 75%, after review of the chapters and videos.

**PGY-1**

Schwartz's Principles of Surgery
- Chapter 10. Transplantation

Current Surgical Diagnosis and Treatment
- Chapter 47. Organ Transplantation

Principles of Critical Care
- Chapter 90. The Transplant Patient

Zollinger’s Atlas of Surgical Operations
- Shunting Procedures for Portal Hypertension
- Portacaval Shunt
- Splenorenal Shunt (Warren)
Residents are required to take the Board Review exam at the end of the chapter and video reviews in Access Surgery. You are required to score at least 75% on the exam.

**BOARD REVIEW**

- Take a test on:
  - Transplantation