

**UT Southwestern/Parkland Hospital
Physician Assistant Residency Program in Trauma and Burns
Curriculum Outline**

Didactic Content

Monday

1200-1300: (If on elective Surgical Oncology): GI Malignancy Conference

Tuesday

0715-0815: (If on elective Breast Surgery Rotation or Surgical Oncology): Multi-Disciplinary Breast Conference

Wednesday

0645-0800: (If on elective Vascular Rotation): Vascular Surgery Conference

0700-0800: Morbidity & Mortality Conference, Parkland General Surgery Service (do not attend if on Trauma rotation)

0800-0900: Chief's Conference

0900-1000: Surgery Grand Rounds

1000-1200: Third Conference – Two times/month – Surgical Core Curriculum, other 2X/month PAs spend with Program Director/ PA Department for rotation feedback discussions, PA competencies & professionalism, lectures and curriculum content development for entry-level PA students.

1200-1300: (If on elective Surgical Oncology Rotation): Clinical and Educational Conference

Thursday

0800-1000: (If on Trauma Surgery Rotation): Trauma Morbidity & Mortality Conference

Friday

No conferences scheduled

Clinical Rotations – rotation schedule subject to availability

Trauma Surgery (4 months)
Emergency General Surgery (2 months)
Burn Unit (4 months)
Elective (2 months)

Elective Rotations

Intensive Care Unit (SICU)
Vascular Surgery, Parkland
General Surgery
Breast Surgery/Surgical Oncology
Plastic Surgery
Cardiothoracic Surgery
Minimally-invasive/bariatric Surgery
Transplant Surgery

Monthly Assessment Activities

Faculty-completed online evaluation and competencies assessment
PA Resident-completed evaluation of faculty
360 Evaluations to be completed at particular times of the year

Semi-Annual Assessment Activities

Meeting with Program Director to assess didactic and clinical performance, professionalism, review rotation evaluations, and achievement of competencies

Required Textbooks

Atluri, P, Karakousis, Porrett, PM, and Kaiser, LR (2005). *The Surgical Review: An Integrated Basic and Clinical Science Study Guide*, 2nd Ed., Lippincott Williams Wilkens: Philadelphia.

Supplemental Textbooks

ACS Surgery On-line text
Library e-books available online
Brunnicardi, FC, Billiar, TR, Anderson, DK, *Schwartz's Principles of Surgery: A Modern Approach*, 8th Edition, McGraw-Hill: New York
Townsend, CM, Beauchamp, RD, Evers, BM, and Mattox, KL, *Sabiston Textbook of Surgery*, 18th Ed., Elsevier Saunders: Philadelphia.
Merli, G and Weitz, HH (2008). *Medical Management of the Surgical Patient*, 3rd Ed., Saunders: Philadelphia
Lawrence, PF, *Essentials of General Surgery*, 4th Ed., Lippincott Williams, Wilkens: Philadelphia
Pryor, JP, Todd, B, and Dryer, M, *Clinician's Guide to Surgical Care*, McGraw-Hill: New York
Gilbert, DN, et al . *The Sanford Guide to Antimicrobial Therapy*, 38th Edition. Antimicrobial Therapy, Inc: Hyde Park, VT
Pagana, KD & Pagana, TJ, *Mosby's Manual of Diagnostic and Laboratory Tests*, 3rd Edition. Mosby: St. Louis.
Mulholland, MW et al. *Greenfield's Surgery: Scientific Principles and Practice*, 4th Ed. Lippincott Williams Wilkens: Philadelphia.

Educational Goals for PA Residents Trauma Services (Trauma 1, Trauma 2, Trauma 3)

A. Medical Knowledge

1. The PA resident should understand the principles of ATLS.
2. The PA resident should be able to identify different forms of shock associated with the injured patient. *Examples include hemorrhagic, neurogenic, cardiogenic and septic shock.*
3. The PA resident should understand the indications for, and different types of agents used in prophylactic and therapeutic antibiotic use.
4. The PA resident should understand appropriate fluid and electrolyte resuscitation.
5. The PA resident should understand the costs, risks and expected information obtained from routine laboratory testing.
6. The PA resident should understand the basic principles in the diagnostic evaluation of single organ system injury.
7. The PA resident should understand his or her role in the trauma resuscitation team, and be able to perform the appropriate tasks of that role. The resident must be familiar with trauma protocols.
8. The PA resident should be able to discuss the costs, risks and expected information obtained from non-invasive diagnostic tests to evaluate the injured patient. *Examples include plain films, ultrasonography and CT scanning.*
9. The PA resident should understand the costs, risks and expected information obtained from invasive diagnostic tests to evaluate the injured patient. *Examples include wound exploration, DPL and arteriography.*

B. Patient Care

1. The PA resident must be aware of his or her limitations and know when to ask for help.
2. The PA resident must attend daily check out rounds for his or her service.
3. The PA resident should assist with resuscitation in trauma patients presenting to the emergency department.
4. The PA resident should assume responsibility for care of all patients on the hospital ward, including initial assessment, creating a therapeutic plan, evaluation of daily progress, and initial assessment of new problems.
5. The PA resident should be able to assess patients on the ward when called for cross-coverage. *Example include evaluation of patients with fever, oliguria,*

hypotension, respiratory insufficiency, and intractable pain.

6. The PA resident should assume responsibility for discharging patients, including dictating the discharge summary, writing prescriptions, and ensuring appropriate follow-up.

C. Interpersonal and Communications Skills

See general goals and objectives

D. Practice-Based Learning and Improvement

1. The PA resident must successfully complete ATLS.

2. The PA resident must attend all service-specific conferences, including scheduled daily lectures from attending faculty.

3. The PA resident must attend all service-specific clinics.

A. Systems-Based Practice

The PA resident should be able to use appropriate consult services in the hospital to improve the care of his or her patients.

F. Professionalism

See general goals and objectives

Educational Goals for PA Residents Burn Service

A. Medical Knowledge

1. The PA resident should learn in-depth the fundamentals of basic science as applied to care of patients with burns. *Examples include physiology of thermal and chemical injury, wound healing, scar formation, healing of skin grafts, shock, surgical microbiology, respiratory physiology, cardiovascular physiology, surgical endocrinology as complications of critical illness, surgical nutrition, fluid and electrolyte balance, and oncology as applied to burns.*
2. The PA resident should learn in depth the indications, complications, and side effects of topical antimicrobial agents commonly applied to burns in the hospital setting.
3. The PA resident should be able to discuss the indications for admitting a burn patient to the hospital versus treatment in the outpatient setting.
4. The PA resident should recognize and diagnose common surgical problems and surgical emergencies in burn patients. *Examples include failure of resuscitation, respiratory insufficiency, cardiovascular insufficiency, surgical infection, gastrointestinal bleeding, peripheral vascular insufficiency, intraabdominal complications of critical illness.*
5. The PA resident should correctly interpret and utilize diagnostic laboratory procedures. *Examples include serum chemistries, coagulation profiles, liver and pancreatic function tests, arterial blood gas analysis and hematologic profiles.*
6. The PA resident should correctly interpret and utilize diagnostic radiologic procedures, understand the cost effectiveness of diagnostic tests and managing surgical problems. *Examples include chest x-rays, the role of computed tomography in the burn/trauma patient, and the use of radionuclide scintigraphy.*
7. The PA resident should know indications for and complications associated with invasive monitoring to diagnose and treat cardiopulmonary disorders, interpret and correctly utilize data from invasive monitoring devices. *Examples include evaluation of data from arterial lines – complications of peripheral vascular insufficiency and infection, central venous lines – vascular thrombus, deep venous pulmonary embolisms, suppurative thrombophlebitis, pulmonary artery catheter – endocarditis, central thrombosis, complications of j-wire insertions and the usefulness of indirect cardiovascular measurements.*
8. The PA resident should learn comprehensive preoperative assessment of co-morbid conditions in patients undergoing surgical procedures, recognizing current problems, discovering in the preoperative period to reduce perioperative complications.
9. The PA resident should recognize and treat common postoperative complications

in the burn patient (bleeding, infection, respiratory insufficiency).

10. The PA resident should acquire an understanding of the principles of care of the burn patient including prevention, treatment of co-morbid conditions, associated polytrauma, the social/milieu of the injured patient and both the acute, chronic wound care and rehabilitation needs of the patient.

B. Patient Care

1. The PA resident should assume responsibility for new admissions, including detailed history and physical examination, estimation of burn extent, calculation of fluid requirements, institution of resuscitation, and admission orders.

2. The PA resident should assume responsibility for the care of assigned patients on the burn service, including patients in the burn ICU. This will include daily assessment, evaluation of new problems, and preoperative preparation.

3. The PA resident should assume responsibility for initial evaluation of consults in the emergency department and on other hospital services.

4. The PA resident should assume responsibility for discharging patients, including dictating the discharge summary, writing prescriptions, and ensuring appropriate follow-up.

C. Interpersonal and Communication Skills

See general goals and objectives.

D. Practice-Based Learning and Improvement

1. The PA resident should use textbooks, journal articles, internet access, and other tools available to learn about treatment of surgical problems in burn patients.

2. The PA resident must attend all service-specific conferences, including scheduled daily lectures from attending faculty.

3. The PA resident must attend all service-specific clinics.

E. Systems-Based Practice

1. The PA resident should understand the function of a regional burn institute as a referral center for patients with burns of all sizes and etiologies.

2. The PA resident should be able to communicate with referring physicians, consultants, burn nurses, and allied health care personnel regarding the care of burn patients.

3. The PA resident should take responsibility for posting cases in the operating room.

F. Professionalism

See general goals and objectives.

**Educational Goals for PA Residents
Parkland Health and Hospital Systems
Emergency General Surgery Services (EGS 1, EGS 2, EGS 3)**

A. Medical Knowledge

1. The PA resident should learn in-depth the fundamentals of basic science as they apply to patients with acute surgical problems. *Examples include the pathophysiology of peritonitis, etiology of abscess formation, management of fluid and electrolyte balance in the emergency patient, and surgical anatomy and surgical pathology of the intra-abdominal organs and anal canal.*
2. The PA resident should be able to demonstrate preoperative assessment of patients with acute surgical diseases. *Examples include rapid assessment of comorbid conditions, assessment of operative risk, knowledge of anesthetic options for emergency procedures, and principles of stabilization.*
3. The PA resident should understand the appropriate use of antibiotics. *Examples include appropriate agents, timing, and duration of perioperative antibiotics.*
4. The PA resident should understand the pathophysiology of sepsis.
5. The PA resident should understand the pathophysiology of acute obstructive GI disorders, to include appendicitis, cholecystitis, gastric outlet obstruction, and small bowel obstruction.

B. Patient Care

1. The PA resident should perform appropriate resuscitation under direct physician supervision in patients with acute surgical problems.
2. The PA resident should perform advanced history and physical examination in the patient with acute surgical problems, including such conditions as the acute surgical abdomen, upper and lower gastrointestinal bleeding, and jaundice.
3. The PA resident should assume responsibility (in consultation with the supervising resident physician) for care of all patients on the hospital ward, including initial assessment, evaluation of daily progress, and implementing discharge plans.
4. Under appropriate supervision, perform basic surgical procedures appropriate to level of training.

C. Interpersonal and Communications Skills

See general goals and objectives

D. Practice-Based Learning and Improvement

1. The PA resident should use books, journal articles, internet access, and other tools available to learn about diseases and treatment of patients with acute surgical illness.

2. The PA resident must attend all service-specific conferences, including scheduled daily lectures from attending faculty.

3. The PA resident must attend all service-specific clinics.

E. Systems-Based Practice

The PA resident should be able to use appropriate consult services in the hospital to improve the care of his or her patients.

F. Professionalism

See general goals and objectives

Educational Goals for Elective Rotations

Educational Goals for PA Residents Parkland Health and Hospital Systems Surgery A and C Services

A. Medical Knowledge

1. The PA resident should learn in-depth the fundamentals of basic science as they apply to the clinical practice of general surgery and, more specifically, to the practice of hernia surgery, open gastrointestinal surgery, and laparoscopic surgery.

Examples include anatomy, physiology, pathophysiology, and presentation of diseases of the abdominal cavity and pelvis; elements of wound healing; epidemiology of benign and malignant diseases, surgical nutrition, and management of fluid and electrolyte balance. In addition, PA residents should understand the physiological effects of pneumoperitoneum created for laparoscopic surgery.

2. Specific to Surgery A: The PA resident should learn in-depth fundamentals of basic science as they apply to the clinical practice of endocrine surgery. *Examples include normal and pathological endocrine function, surgical anatomy and surgical pathology of the thyroid, parathyroid, adrenal, pancreas, and pituitary glands; evaluation and management of the surgical causes of hypertension.*

3. Specific to Surgery C: The PA resident should learn in-depth fundamentals of basic science as they apply to the clinical practice of colorectal surgery. *Examples include in depth knowledge of anorectal anatomy, normal colonic function, risk factors for colorectal cancer, tumor markers, patterns of metastatic spread, etiology of perirectal abscess, and pathology of inflammatory bowel disease.*

4. The PA resident should be able to efficiently utilize and interpret diagnostic laboratory testing. *Examples of appropriate tests include tumor markers, serum chemistries, liver function tests, endocrine studies, arterial blood gas analysis, hematological profiles and coagulation tests.*

5. The PA resident should be able to efficiently utilize and interpret diagnostic radiological tests. *Examples of the types of studies include computed tomography, radionuclide scintigraphy, ultrasonography, arteriography and gastrointestinal studies*

B. Patient Care

1. The PA resident should assume responsibility for all elective admissions to the service, including performing an accurate history and physical examination, writing admission orders, and reviewing appropriate diagnostic tests.

2. Under appropriate supervision, perform (or first assist as indicated) basic surgical procedures such as:

Placement of peripheral venous access devices (after achieving and demonstrating procedural competence)

Rigid proctoscopy (after achieving and demonstrating procedural competence)

Anoscopy (after achieving and demonstrating procedural competence)
Removal of cutaneous lesions (after achieving and demonstrating procedural competence)
Outpatient anorectal procedures (first assist)
Routine wound closure
Basic wound and drain care
Wound debridement (after achieving and demonstrating procedural competence)
Incision and drainage of wounds

3. The PA resident should assume responsibility for discharging patients, including dictating the discharge summary, writing prescriptions, and ensuring appropriate follow-up.

4. The PA resident must attend and participate in the ambulatory surgery clinics held each week for their service. *Activities will include examination and evaluation of new patients, perioperative and postoperative care of established patients, and surgical consultations under the supervision of attending surgeons.*

C. Interpersonal and Communications Skills

See general goals and objectives

D. Practice-Based Learning and Improvement

1. The PA resident should use books, journal articles, internet access, and other tools available to learn about diseases and treatment of patients with endocrine diseases (Surgery A) and colorectal pathology (Surgery C).

2. The PA resident must attend all service-specific conferences, including scheduled daily lectures from attending faculty.

3. The PA resident must attend all service-specific clinics.

E. Systems-Based Practice

The PA resident should be able to appropriately utilize consultations from other surgical and medical specialties in a timely and cost efficient manner to facilitate and enhance patient care.

F. Professionalism

See general goals and objectives

Educational Goals for PA Residents Surgical Intensive Care Unit Service

A. Medical Knowledge

1. The PA resident should learn in depth the fundamentals of basic science as they apply to patients in the intensive care unit. Examples include anatomy, physiology and pathophysiology of the cardiovascular, respiratory, genitourinary, gastrointestinal, musculoskeletal, hematologic, and endocrine systems.
2. The PA resident should understand the rationale for admission and discharge criteria in the ICU.
3. The PA resident should understand factors associated with assessment of preoperative surgical risk. *Examples include evaluation of the high risk cardiac patient undergoing non-cardiac surgery.*
4. The PA resident should understand fluid compositions and the effect of the losses of such fluids as gastric, pancreatic and biliary from fistulas at various levels.
5. The PA resident should understand the indications for, and complications of blood component therapy.
6. The PA resident should be able to discuss the pathophysiology of respiratory failure.
7. The PA resident should be able to demonstrate an understanding of acid-base disorders, including diagnosis, etiology, and instituting appropriate treatment.
8. The PA resident should be able to discuss the pathophysiology, indications, and complications associated with various modes of mechanical ventilation. *Examples include ventilator management of ALI, ARDS and thoracic trauma, as well as weaning from ventilatory support.*
9. The PA resident should understand the role of hormones and cytokines in the graded metabolic response to injury, surgery and infection.
10. The PA resident should understand the indications, routes and complications of administration of parenteral and enteral forms of nutrition.
11. The PA resident should understand the risk factors and common pathogens that are associated with nosocomial infections.
12. The PA resident should understand the factors associated with altered mental status. *Examples include traumatic, septic, metabolic and pharmacologic causes.*
13. The PA resident should understand the risk factors associated with stress gastritis.
14. The PA resident should understand the causes and treatment regimens for

gastrointestinal bleeding. *Examples include bleeding from upper and lower GI sources.*

15. The PA resident should be able to discuss end of life ethical issues. *Examples include organ donation and withdrawal of support.*

B. Patient Care. Under appropriate supervision, the resident should be able to:

1. Perform the following aspects of ventilatory management:

Set up initial and advanced ventilator settings (after achieving and demonstrating procedural competence).

Treat common complications of mechanical ventilation including tube thoracostomy (first assist).

Wean patients from ventilatory support (after achieving and demonstrating procedural competence).

2. Correctly utilize prophylaxis for stress gastritis in high risk ICU patients.

3. Initiate appropriate nutritional support through the most optimal route.

4. Manage complications of nutritional support. *Examples include hyperglycemia.*

5. Assist in managing patients with intracranial hypertension and neurovascular disease.

C. Interpersonal and Communications Skills

See general goals and objectives

D. Practice-Based Learning and Improvement

1. The PA resident must view the ICU Core Curriculum. This is a series of 16 Power Point slide lectures available 24 hours per day on dedicated computers in the SICU at Parkland Hospital and formally presented three times per week.

2. The PA resident must prepare for and attend daily ICU attending rounds.

3. The PA resident must attend all service-specific conferences, including scheduled daily lectures from attending faculty.

4. The PA resident must attend all service-specific clinics.

E. Systems-Based Practice

1. The PA resident should be able to communicate with patients, families, nurses, and allied health care personnel.

2. The PA resident should be able to use appropriate consult services to improve care of patients in the intensive care unit.

F. Professionalism

See general goals and objectives

Educational Goals for PA Residents PMH Surgical Oncology Service

A. Medical Knowledge

1. The PA resident should learn in depth the fundamentals of basic science as applied to surgical oncology. *Examples include: epidemiology of common tumors, biology of preneoplasia, mechanisms of inherited cancer syndromes, mechanisms of recurrence and metastasis, nutritional support during chronic illness, mode of action of the common chemotherapy drugs, rationale for the use of preoperative induction vs. post-operative adjuvant chemotherapy, fundamentals of radiation therapy.*
2. The PA resident should be able to recognize and diagnose common cancer-related problems: *Examples include inadequate control of chronic pain, local/regional recurrence, metastases, bleeding, obstruction, mass effect, organ failure.*
3. The PA resident should be able to interpret and correctly utilize diagnostic laboratory procedures. *Examples include blood tests to diagnose or monitor disease status such as CBC, Calcium, gastrin, LFT's, plasma metanephrines, 5-HIAA, CEA, CA125, CA19.9, CA27.29, and AFP. Additional examples include the genetic predisposition tests.*
4. The PA resident should be able to interpret and correctly utilize diagnostic radiological procedures. Know cost effectiveness of diagnostic tests managing and following cancer patients. *Examples include the use of radiological procedures for initial staging, as well as operative management (e.g. lymphoscintigraphy) and follow-up after cancer treatment. Specific tests to understand will include, chest x-ray, liver sonogram, bone scan, and CT.*
5. The PA resident should learn comprehensive preoperative assessment of disease status (i.e. staging) and co-morbid conditions, both cancer related (such as malnutrition) and cancer independent (such as coronary artery disease). Recognize and correct problems which might contribute to post-operative morbidity and mortality.
6. The PA resident should be able to recognize and treat post-operative complications more common in the surgical oncology patient *such as tissue necrosis, seroma, lymphedema, DVT.*

B. Patient Care

1. Under adequate supervision, the PA resident should assume responsibility for the care of all patients admitted to the service, including admission history and physical examination, evaluation of daily progress, alerting the chief resident to any new problems, and discharge summary.
2. The PA resident should be able to perform pre- and post-operative history and physical exam with particular focus on patterns of cancer recurrence and metastasis

unique to each individual tumor type (*e.g. detection of supraclavicular lymphadenopathy, recognition of pleural effusion, etc.*).

3. The PA resident should assume responsibility for ensuring that all discharge plans are in place for every patient, including scheduling follow-up appointments in medical oncology and surgical oncology clinics, radiation therapy, and any other appropriate outpatient treatment center.

C. Interpersonal and Communications Skills

See general goals and objectives

D. Practice-Based Learning and Improvement

1. The PA resident should use books, journal articles, internet access, and other tools available to learn about neoplastic diseases and treatment of patients with cancer.

2. The PA resident must attend all service-specific conferences, including scheduled daily lectures from attending faculty.

3. The PA resident must attend all service-specific clinics.

E. Systems-Based Practice

1. The PA resident should be able to communicate with patients, families, nurses, and allied health care personnel.

2. The PA resident should be able to use appropriate consult services to improve care of patients on the service.

F. Professionalism

See general goals and objectives.

Educational Goals for PA Residents University Hospitals (St. Paul and Zale Services)

A. Medical Knowledge

1. The PA resident should learn in-depth the fundamentals of basic science as they apply to the clinical practice of general surgery and, more specifically, to the practice of endocrine surgery, surgical oncology, hernia surgery, open and laparoscopic gastrointestinal surgery. *Examples include elements of wound healing, epidemiology of benign and malignant diseases, physiological principles of endocrinology, surgical nutrition, management of the obese patient, management of fluid and electrolyte balance, and surgical anatomy and surgical pathology of the thyroid, parathyroid, breast and intra-abdominal organs. In addition, residents should understand the physiological effects of pneumoperitoneum created for laparoscopic surgery.*
2. The PA resident should be able to demonstrate knowledge of the principles and rationale for ambulatory management of surgical patients, including preoperative assessment, perioperative management and postoperative care of patients. *Examples include assessment of patient risk, selection of patients for outpatient versus inpatient surgery, understanding of social and economic issues associated with ambulatory surgery, knowledge of anesthetic options for ambulatory procedures, and principles of postoperative pain management and wound care.*
3. The PA resident should be able to efficiently utilize and interpret diagnostic laboratory testing. *Examples of appropriate tests include serum chemistries, endocrine studies, liver function tests, arterial blood gas analysis, hematological profiles and coagulation tests.*
4. The PA resident should be able to efficiently utilize and interpret diagnostic radiological tests. *Examples of the types of studies include chest x-ray, mammography, computed tomography, radionuclide scintigraphy, ultrasonography, arteriography and gastrointestinal studies.*
5. The PA resident should be able to demonstrate an understanding of minimal access surgery, including the applications, risks, and technical and physiologic principles.

B. Patient Care

1. The PA resident should assume responsibility for assigned elective admissions to the service, including performing a history and physical examination, writing admission orders, and reviewing appropriate diagnostic tests.
2. The PA resident should assume responsibility for care of assigned patients on the hospital ward, including evaluation of daily progress, implementation of treatment plans, daily notification of the senior resident about patient progress,

and immediate notification of the senior resident about new problems.

3. The PA resident should assume responsibility for discharging assigned patients, including dictating the discharge summary, writing prescriptions, and ensuring appropriate follow-up.

4. Under appropriate supervision, perform basic surgical procedures such as:

Placement of peripheral venous access devices and arterial lines (after achieving and demonstrating procedural competence)

Rigid proctoscopy (after achieving and demonstrating procedural competence)

Anoscopy (after achieving and demonstrating procedural competence)

Outpatient anorectal procedures

Routine wound closure

Bedside wound debridement (after achieving and demonstrating procedural competence)

C. Interpersonal and Communications Skills

See general goals and objectives

D. Practice-Based Learning and Improvement

1. The PA resident should use books, journal articles, internet access, and other tools available to learn about treatment of surgical problems commonly seen in the community hospital setting.

2. The PA resident must attend all service-specific conferences, including scheduled daily lectures from attending faculty.

3. The PA resident must attend all service-specific clinics.

E. Systems-Based Practice

1. The PA resident should learn about appropriate follow-up correspondence with referring physicians that are compliant with privacy regulations

2. The PA resident should be able to communicate with the surgery attending, the attending's office personnel, and hospital personnel regarding care of patients.

F. Professionalism

See general goals and objectives

Educational Goals for PA Residents

Vascular Surgery (PMH Surgery D, VA III, St. Paul Vascular)

A. Medical Knowledge

1. The PA resident should be able to recognize and diagnose common vascular problems and vascular emergencies. *Examples include intermittent claudication, transient cerebral ischemic attacks, non-disabling stroke, amaurosis fugax, acute extremity arterial insufficiency, acute mesenteric ischemia, ruptured abdominal aortic aneurysm, and proximal venous thrombosis.*
2. The PA resident should be able to interpret and correctly utilize vascular noninvasive tests including ABI and toe pressures, carotid duplex ultrasonography, and venous duplex ultrasonography.
3. The PA resident should demonstrate knowledge regarding indications for treatment of common vascular problems, including both open surgical and endovascular techniques.

B. Patient Care

1. The PA resident should demonstrate performance of an advanced vascular physical examination including the use of Doppler ultrasound to calculate ankle brachial indices.
2. The PA resident should assume responsibility for the care of all patients on the hospital ward, including admission history and physical examination, daily progress notes, and discharge summaries.
3. PA residents rotating on Surgery D at PMH and St. Paul will attend and participate in the weekly Vascular Surgery Clinic on Monday mornings at Parkland Memorial Hospital. PA Residents will also participate in at least one day half day equivalent office session with attendings. Activities will include examination and evaluation of new patients, perioperative and postoperative care of established patients, and surgical consultations under the supervision of attending surgeons.
4. PA residents should be available to second assist in the operating room on assigned patients.

C. Interpersonal and Communications Skills

See general goals and objectives

D. Practice-Based Learning and Improvement

1. The PA resident should utilize textbooks and journal articles to learn the principles of vascular surgery during the rotation.
2. The PA resident must attend all service-specific conferences, including scheduled daily lectures from attending faculty.

3. The PA resident must attend all service-specific clinics.

E. Systems-Based Practice

1. The PA resident should be able to arrange for appropriate consults for vascular patients.

2. The PA resident should be able to arrange for appropriate support services commonly utilized by vascular patients such as social services, discharge planning, and Physical Medicine and Rehabilitation.

F. Professionalism

See general goals and objectives

Educational Goals for PA Surgery Residents Transplantation

A. Medical Knowledge

1. The PA resident should learn the basic science of immunology as it applies to solid organ transplantation, including the mechanisms of rejection and tolerance.
2. The PA resident should learn the pharmacology of the wide range of immunosuppressive agents used in transplantation. This includes the common side effects of each agent, manipulation of dosages/blood levels based on different clinical scenario, and transplant outcomes related to various combinations.
3. The PA resident should be able to discuss the indications and contraindications to renal and/or pancreas transplantation.
4. The PA resident should be able to demonstrate a thorough understanding of perioperative management of a renal/pancreas transplant patient including preoperative evaluation, immunologic typing, management of fluid and electrolytes, institution and maintenance of immunosuppression, and infection prophylaxis /treatment.
5. The PA resident should be able to recognize the cause of graft dysfunction in the acute peritransplant and chronic settings.
6. The PA resident should learn the options for permanent hemodialysis and peritoneal dialysis access and have a thorough understanding of the National Kidney Foundation DOQI (Disease Outcomes Quality Initiative) criteria.
7. The PA resident should be able to diagnose and treat complications of dialysis access. *Examples include infection, failing access graft, steal syndrome, venous hypertension, graft pseudoaneurysm, and graft exposure.*

B. Patient Care

1. The PA resident should assume responsibility for evaluating assigned new patients admitted to the hospital for transplantation. This includes a detailed history and physical examination, assessment of comorbid conditions, and review of the immunologic data including tissue typing and cross-match tests.
2. The PA resident should assume responsibility for evaluating assigned transplant donors, as above.
3. The PA resident should assume responsibility for evaluation of assigned patients scheduled for hemodialysis access.
4. The PA resident should assume responsibility for evaluating assigned transplant and hemodialysis access patients in the postoperative period, including evaluating daily progress, detecting signs of graft dysfunction, and detecting new complications.
5. The PA resident will accompany the transplant attending on organ harvests.
6. The PA resident should be available to second assist in the operating room on assigned patients.

C. Interpersonal and Communication Skills

See general goals and objectives

D. Practice-Based Learning and Improvement

1. The PA resident should use textbooks, journal articles, Internet access, and other available tools to learn about immunology and clinical management of renal and pancreas transplantation.
2. The PA resident must attend all service-specific conferences, including scheduled daily lectures from attending faculty.
3. The resident must attend all service-specific clinics.

D. Systems-Based Practice

1. The PA resident should understand how patients are prioritized to receive transplants.
2. The PA resident should be familiar with the complex, interconnected medical system for managing transplant patients, including the thorough pretransplant evaluation, the mechanisms for urgently contacting patients who are candidates for transplant, the steps to determine suitability of a cadaveric graft for a potential recipient, and the detailed follow-up of transplant recipients.

F. Professionalism

See general goals and objectives.