2011 - 2012
EDUCATIONAL GOALS & OBJECTIVES BY ROTATION

GENERAL SURGERY

PGY1: SURGICAL INTENSIVE CARE UNIT (SICU)

Goals
1. Develop the ability to rapidly evaluate, diagnose, stabilize, and disposition critically ill patients.
2. Learn respiratory, cardiovascular, renal and neurologic physiology and the pathophysiology of trauma, toxins, shock, sepsis, cardiac failure, and respiratory failure that affect critically ill patients.
3. Learn the principles of medical instrumentation and hemodynamic monitoring and be able to utilize them in the care of critically ill patients.
4. Learn the indications and develop the technical skills needed to perform diagnostic and therapeutic interventions in critically ill patients.
5. Learn the rational use of laboratory, radiographic and other diagnostic tests in the management of critically ill patients.
6. Understand the etiologies and pathophysiology of cardiac arrest.
7. Learn to recognize the dysrhythmias associated with cardiac arrest and their treatment.
8. Learn the AHA and ACS advanced life support recommendations and develop skill in the performance of standard resuscitative procedures.
9. Learn the principles of pharmacotherapy and the routes and dosages of drugs recommended during resuscitations, cardiac arrest and prolonged intensive care.
10. Learn the indications for withholding and terminating resuscitation.
11. This is a 1 month rotation.

Learning Objectives: Core Competencies

Professionalism:
1. Demonstrate an understanding of the ethical and legal principles applicable to the care of critically ill patients.
2. Demonstrate understanding of “Do not resuscitate” orders, advance directives, living wills.
Interpersonal & Communication Skills:
1. Present sign-out of patients in a complete and responsible manner.

Medical Knowledge:
1. Demonstrate appropriate prioritization of diagnostic and therapeutic interventions in critically patients.
2. Demonstrate ability to diagnose and treat shock, sepsis, fluid and electrolyte abnormalities, and cardiac failure.
3. Demonstrate ability to manage the airway during cardiac arrest, including mouth-to-mouth ventilation, bag-valve-mask ventilation, endotracheal intubation, cricothyroidotomy, and recognition of the obstructed airway.
4. Demonstrate ability to perform external closed chest cardiopulmonary resuscitation.

Practice-Based Learning & Improvement:
1. Interact with other hospitals with regard to acceptance or denial of patients for transfer.

Patient Care:
1. Demonstrate ability to rapidly perform history and physical exams in critically ill patients.
2. Demonstrate the ability to perform the following procedures: oral endotracheal intubation, central intravenous placement, and Foley catheterization.
3. Demonstrate the ability to use and interpret data from ECG monitors, arterial blood gases, pulse oximetry, end tidal CO2 monitors and respirators.
4. Describe the indications and contraindications of pharmacologic interventions for shock, cardiac failure, dysrhythmias, sepsis, trauma, toxins, respiratory failure, hepatic failure, renal failure, and neurologic illnesses.
5. Demonstrate the ability to manage a patient on a ventilator.
6. Demonstrate appropriate judgment in the management of critically ill patients.

Systems-Based Practice:
1. Demonstrate an understanding of the appropriate use of consultants in critically ill patients.

PGY1: NEUROSURGERY
Goals
Understand the relationship between the skull base and the brain, and to appreciate neurosurgical emergencies and how to treat them. As many structures in the skull base, such as the sinuses and the temporal bone, are potential parameningeal foci for infections or trauma, the resident will understand the importance of disease processes in the nose, ears and sinuses to the brain. This is a 1 month rotation.

Learning Objectives: Core Competencies
Professionalism:
1. To demonstrate compassion and integrity through respectful patient care, family interactions, and communication with other health care providers.
2. To understand when expert medical advice is necessary.
3. To obtain expert medical, nursing, or other opinions when limits of knowledge, experience, and training are reached.
Interpersonal & Communication Skills:
1. To present clinical information on work rounds clearly and concisely.
2. To write progress notes with sufficient detail so that patients’ condition, status and care plans are clear.
3. To work effectively with attending staff, house staff colleagues in surgery and pediatric services, medical students, nurses, ancillary personnel, pre-hospital personnel.
4. To keep senior residents and attending staff informed, particularly with “problem” cases, unstable patients, and changes in-patient condition and care plan.

Medical Knowledge:
1. To expand fund of knowledge from textbooks, journals, and electronic media, especially regarding neurosurgical emergencies, head trauma, and CSF leaks.

Practice-Based Learning & Improvement:
1. To evaluate patients critically with the goal of coming up with a working diagnosis and treatment plan.
2. To understand the medical, surgical, and scientific bases of a patient’s condition and his or her treatment plan.
3. To obtain consultations and other opinions regarding a patient’s status, work-up, or hospital course when necessary.

Patient Care:
1. To know up-to-present details of all assigned patients.
2. To gather and interpret essential and accurate information about the patient’s health status, including:
   a. Learning to obtain clinical information from children and parents.
   b. Obtaining relevant information from nurses and hospital departments (e.g., radiology, laboratory, and hospital information systems).
   c. Obtaining information from referring pediatricians, hospitals.
3. To learn the principles of pre and postoperative management, including:
   a. Fluid and electrolyte management.
   b. Pharmacological management, including pain and sedation, antibiotic dosing and pharmacology.
   c. Recognition and management of respiratory distress and shock.
   d. Wound care.
   e. Follow-up and outpatient management, including referrals and resources for social work, rehabilitation and physical medicine.
4. To perform basic clinical procedures, including:
   a. Primary closure of incisions.
   b. Management of open and infected wounds.
   c. Lumbar puncture.
   d. Intravenous line placement.

Systems-Based Practice:
1. To effectively transfer care when duty hours are completed.
2. To responsibly accept the on-call care responsibilities of patients who are not on the primary service.
3. To apply standardized care plans, and the rationale behind them, including:
   a. Admission for head trauma.
   b. Management of intracranial pressure.
   c. Clearance of the cervical spine.
4. To participate in care conferences on assigned patients.
5. To write notes with sufficient detail to satisfy the requirements of governmental agencies, health care payer organizations, including:
   a. Admission histories, physical examinations, and care plans.
   b. Daily progress notes, and discharge summaries.

PGY1: GENERAL AND PEDIATRIC SURGERY

Clinical Mission/Goals
The clinical mission of the Division of Pediatric Surgery at the University of North Carolina at Chapel Hill is to provide the highest level of care in infants, children and adolescents with congenital and acquired conditions that require surgery. Our goals include caring for complex congenital malformations, advanced surgical conditions and caring for complicated cases in a multidisciplinary fashion.

Educational Mission
Objectives reflect teamwork; i.e., the skills and responsibilities blend so that they complement contributions from other members of the physician team and recognize the input from nursing and other allied health professionals.

Learning Objectives: Core Competencies

Professionalism:
1. To demonstrate compassion and integrity through respectful patient care, family interactions, and communication with other health care providers.
2. To understand when expert medical advice is necessary.
3. To obtain expert medical, nursing, or other opinions when limits of knowledge, experience, and training are reached.

Interpersonal & Communication Skills:
1. To evaluate patients critically with the goal of coming up with a working diagnosis and treatment plan.
2. To understand the medical, surgical, and scientific bases of a patient’s condition and his or her treatment plan.
3. To obtain consultations and other opinions regarding a patient’s status, work-up, or hospital course when necessary.
4. To participate in teaching the medical students.

Medical Knowledge:
1. To expand the fund of knowledge from textbooks, journals, and electronic media, especially in regards to pediatric surgery conditions, including diaphragmatic hernia, Hirschsprung’s disease, pyloric stenosis and cloacal abnormalities.
2. To critically evaluate the literature based upon methodology and statistical techniques, a survey of related articles, and resident-initiated discussions with attending staff and other experts.

Practice-Based Learning & Improvement:
1. To present clinical information on work rounds clearly and concisely.
2. To write progress notes with sufficient detail so that patients’ condition, status and care plans are clear.
3. To work effectively with attending staff, house staff colleagues in surgery and pediatric services, medical students, nurses, ancillary personnel, pre-hospital personnel.

4. To keep senior residents and attending staff informed, particularly with “problem” cases, unstable patients, and changes in-patient condition and care plan.

5. To foster teamwork and a work environment based upon communication, respect, trust and honesty.

6. To foster a social environment based upon tolerance for other opinions, backgrounds, and cultures.

Patient Care:
1. To know details of all assigned patients.
2. To gather and interpret essential and accurate information about the patient’s health status, including:
   a. Learning to obtain clinical information from children and parents
   b. Obtaining relevant information from nurses and hospital departments (e.g., radiology, laboratory, and hospital information systems)
   c. Obtaining information from referring pediatricians, hospitals.
3. To learn the principles of pre and postoperative management, including:
   a. Fluid and electrolyte management.
   b. Pharmacological management, including pain and sedation, antibiotic dosing and pharmacology.
   c. Recognition and management of respiratory distress and shock.
   d. Wound care.
   e. Follow-up and outpatient management, including referrals and resources for social work, rehabilitation and physical medicine.
4. To perform basic clinical procedures, including:
   a. Primary closure of incisions.
   b. Management of open and infected wounds.
   c. Venipuncture.
   d. Intravenous line placement.
   e. Placement of urinary catheters.

Systems-Based Practice:
1. To effectively transfer care when duty hours are completed.
2. To responsibly accept the on-call care responsibilities of patients who are not on the primary service.
3. To apply standardized care plans, and the rationale behind them, including:
   a. Bowel preparation procedures.
   b. Preoperative antibiotic regimens.
   c. S.B.E. prophylaxis.
   d. Tetanus prophylaxis.
   e. Universal precautions.
   f. Aseptic technique.
   g. Care of central lines.
   h. Care of gastrostomies.
   i. Postoperative feeding regimens (e.g., post-pyloric regimens).
4. To attend care conferences on assigned patients.
5. To write notes with sufficient detail to satisfy the requirements of governmental agencies, health care payer organizations, including:
   a. Admission histories, physical examinations, and care plans.
   b. Daily progress notes.
c. Discharge summaries.

Didactic Curriculum

1. Weekly Division preoperative work conference.
2. Weekly combined prenatal conference (with Neonatology, Perinatal Medicine, and High-risk Obstetrics).
3. Weekly Pulmonary Conference (with Pediatric Pulmonology).
4. Monthly Pediatric Chair rounds (with ward services, Department of Pediatrics).
7. Resident-as-Teacher conference (with Department of Surgery).

Evaluation

Attending staff evaluates resident performance based upon the six core competencies relevant to his or her postgraduate level summarized above. The senior residents assist in the evaluation of junior level residents. End-of-rotation faculty meetings assess in addition the strengths and weaknesses of the residents. Completed evaluation forms summarize these evaluations. Faculty and residents meet, using the evaluation form as a guide for constructive discussion. They make plans to address perceived resident weaknesses. Part of the discussion addresses the quality of the educational experience on the Pediatric Surgery.

PGY1: TRAUMA SURGERY

Otolaryngology PGY1 Residents participate in the Department of General and Trauma Surgery at WakeMed Hospitals. Residents participate in all aspect of the clinical practice including outpatient clinic, initial trauma assessments, intra-operative and post-operative care of trauma patients across the duration of their one (1) month rotation.

Goals

1. To apply the most up-to-date procedures in an appropriate context using solid medical and scientific information.
2. To care for complex thermal and electrical injuries, advanced surgical conditions, and the most complicated cases in a multidisciplinary fashion using the skills and knowledge of our medical and nursing colleagues.
3. To expand the sphere of care to include the community nurses and social care network in the home community in efforts that include education and communication.
4. To respect the patient and his or her family during all phases of care, including efforts to provide care in a comfortable, caring environment.
5. To promote an educational environment where decisions are informed, questions are answered, and patients are treated with kindness.
6. This is a 2 month rotation.

Surgery residents and medical students, as members of the North Carolina Jaycee Burn Center, will support the clinical mission and all goals of the Division.
Learning Objectives – Core Competencies

The emphasis of this rotation is on the acute care of the trauma patient. This includes initial assessment following injury, stabilization and resuscitation, pre-operative evaluation, intra-operative management, postoperative care, and outpatient follow-up.

Professionalism:
1. The PGY1 is expected to participate in OR cases, in clinic, or in ICU management on a day to day basis.
2. By way of example and direct instruction to medical students, to demonstrate compassion and integrity through respectful patient care, family interactions, and communication with other health care providers.

Interpersonal & Communication Skills:
1. The PGY1 should understand that his or her primary role is to gather information for the PGY3 and attendings to make informed decisions about treatment plans, as well as to carry out those treatment plans.
2. The PGY1 is expected to assist in documenting fully the patient's hospital course, including a precise history and physical, comprehensive discharge summary and daily progress notes.
3. To review team orders and progress notes for detail and accuracy.
4. To provide informed opinions during consultations with other services in a thoughtful, respectful manner.
5. To advise patients and family members in the decision making process.
6. To obtain informed consent from patients or family members.

Medical Knowledge:
1. The PGY1 is expected to read a chapter on trauma care in one of the surgical textbooks.
2. To contribute substantively in scheduled conferences.

Practice-Based Learning & Improvement:
1. To contribute to work rounds so that diagnostic and treatment issues are identified and care tasks are initiated and completed in an appropriate and timely manner.
2. To provide information and resources so that the team understands the medical, surgical, and scientific bases of a patient’s condition and his or her treatment plan.

Patient Care:
1. Learn to evaluate patients with minor to multi-system trauma, including assessment for the need for hospitalization, as well as immediate resuscitation needs. The PGY1 should be able to communicate this assessment to the PGY3 (chief resident) or to the attending.
2. The PGY1 is expected to round on a daily basis on hospitalized patients, performing a complete physical examination, acquiring an update on pertinent laboratory and radiological examinations, and compiling this information into a concise presentation to be made on morning rounds.
3. The PGY1 should be able to evaluate the trauma patient for needs related to fluid and electrolyte management, assessment and treatment of pain and anxiety, and appropriate supplementation for nutritional needs.
4. To be able to initiate treatment in the trauma bay and intensive care setting.
5. To provide advanced trauma care and life support.
6. The PGY1 should be able to recognize the need for assessment of the trauma patient for infections, should be able to follow an algorithm for diagnosing the source of infection, and initiating a treatment plan that includes appropriate antibiotics.

7. The PGY1 is expected to become proficient at arterial and venous catheterization in the trauma bay, including the placement of percutaneous femoral venous lines, and placement of peripheral intravenous lines. Under supervision of the PGY3, the PGY1 is also expected to become proficient in placement of subclavian and internal jugular venous lines.

8. The PGY1 will be expected to assess the patient for nutritional status. This will include assessing the extent of the patient’s weight loss, tracking the weekly serum proteins levels, following the dietitian’s notes in the chart, and determining the appropriate timing for metabolic cart studies. The PGY1 will also be expected to understand the rationale for the enteral feedings employed in the support of the burn patient.

9. The PGY1 will be expected to assess the patient initially for need for intubation, either because of smoke inhalation injury, swelling of the upper airway, or carbon monoxide poisoning. During the subsequent hospitalization, the PGY1 will also be expected to learn management of the ventilator, as well as to prepare the patient for weaning and extubation.

11. The PGY1 will be expected to anticipate and identify the patient going into septic shock. Subsequently the PGY1 will be expected to manage the fluid resuscitation of the patient, as well as work with the PGY3 in terms of managing inotropic support.

Systems-Based Practice:
1. To assure that priorities of care and service duties are transferred completely and responsibly on changes in duty hours.
2. To responsibly accept the on-call care responsibilities of patients who are not on the primary service.
3. To supervise the application of standardized care plans.
4. To identify problems and inefficiencies in the provision of patient care, and devise means of assessing and addressing them.

PGY1: NC JAYCEE BURN CENTER
Clinical Mission
The clinical mission of the North Carolina Jaycee Burn Center at the University of North Carolina at Chapel Hill is to provide the highest level of care to patients of all ages with skin trauma or skin diseases.

Goals
1. To apply the most up-to-date procedures in an appropriate context using solid medical and scientific information.
2. To care for complex thermal and electrical injuries, advanced surgical conditions, and the most complicated cases in a multidisciplinary fashion using the skills and knowledge of our medical and nursing colleagues.
3. To expand the sphere of care to include the community nurses and social care network in the home community in efforts that include education and communication.
4. To respect the patient and his or her family during all phases of care, including efforts to provide care in a comfortable, caring environment.
5. To promote an educational environment where decisions are informed, questions are answered, and patients are treated with kindness.
6. This is a 1 month rotation.

Surgery residents and medical students, as members of the North Carolina Jaycee Burn Center, will support the clinical mission and all goals of the Division.

**Learning Objectives – Core Competencies**

The emphasis of this rotation is on the acute care of the burn patient. This includes initial assessment following injury, stabilization and resuscitation, pre-operative evaluation, intra-operative management, postoperative care, and outpatient follow-up.

A primary mission of the North Carolina Jaycee Burn Center is to train general surgeons to provide a high level of burn surgical care appropriate to a community general surgical practice, and to prepare selected trainees for additional specialty training in burn surgery at a burn surgical fellowship.

Objectives reflect teamwork; i.e., the skills and responsibilities blend so that they complement contributions from other members of the physician team and recognize the input from nursing and other allied health professionals. Many objectives are not specific to the North Carolina Jaycee Burn Center, however, and are reinforced in all PGY1 levels rotations.

**Professionalism:**

1. The PGY1 is expected to participate in OR cases, in clinic, or in ICU management on a day to day basis.
2. By way of example and direct instruction to medical students, to demonstrate compassion and integrity through respectful patient care, family interactions, and communication with other health care providers.
3. The PGY1 is expected to be present in the burn center as much as possible, during those periods when he or she is on call.

**Interpersonal & Communication Skills:**

1. The PGY1 should understand that his or her primary role is to gather information for the PGY3 and attendings to make informed decisions about treatment plans, as well as to carry out those treatment plans.
2. The PGY1 is expected to document fully the patient’s hospital course, including a precise history and physical, comprehensive discharge summary and daily progress notes.
3. To instruct medical students on presentation skills so that clinical information is clear and concise.
4. To review team orders and progress notes for detail and accuracy.
5. To provide informed opinions during consultations with other services in a thoughtful, respectful manner.
6. To advise patients and family members in the decision making process.
7. To obtain informed consent from patients or family members.

**Medical Knowledge:**

1. The PGY1 is expected to read a chapter on burn care in one of the surgical textbooks.
2. To contribute substantively in scheduled conferences.

**Practice-Based Learning & Improvement:**

1. To contribute to work rounds so that diagnostic and treatment issues are identified and care tasks are initiated and completed in an appropriate and timely manner.
2. To provide information and resources so that the team understands the medical, surgical, and scientific bases of a patient’s condition and his or her treatment plan.

Patient Care:
1. Learn to evaluate patients with small to moderate sized burns, including assessment for the need for hospitalization, as well as immediate resuscitation needs. The PGY1 should be able to communicate this assessment to the PGY3 (chief resident) or to the attending.
2. The PGY1 is expected to round on a daily basis on all hospitalized patients, performing a complete physical examination, acquiring an update on pertinent laboratory and radiological examinations, and compiling this information into a concise presentation to be made on morning rounds.
3. The PGY1 should be able to evaluate the burn patient for needs related to fluid and electrolyte management, assessment and treatment of pain and anxiety, and appropriate supplementation for nutritional needs.
4. To be able to initiate treatment in the emergency room and intensive care setting.
5. To provide advanced trauma care and life support.
6. The PGY1 is expected to participate in the case, including making and applying burn dressings, harvesting skin for autografting, meshing both auto and homograft, preparing the wound bed for grafting, and applying the skin grafts to the wound bed.
7. The PGY1 should be able to recognize the need for assessment of the burn patient for infections, should be able to follow an algorithm for diagnosing the source of infection, and initiating a treatment plan that includes appropriate antibiotics.
8. The PGY1 is expected to become proficient at arterial and venous catheterization in the burn intensive care unit, including placement of percutaneous arterial lines (including PiCCO catheters), placement of percutaneous femoral venous lines, and placement of peripheral intravenous lines. Under supervision of the PGY3, the PGY1 is also expected to become proficient in placement of subclavian and internal jugular venous lines.
9. The PGY1 will be expected to assess the patient for nutritional status. This will include assessing the extent of the patient’s weight loss, tracking the weekly serum proteins levels, following the dietitian’s notes in the chart, and determining the appropriate timing for metabolic cart studies. The PGY1 will also be expected to understand the rationale for the enteral feedings employed in the support of the burn patient.
10. The PGY1 will be expected to assess the patient initially for need for intubation, either because of smoke inhalation injury, swelling of the upper airway, or carbon monoxide poisoning. During the subsequent hospitalization, the PGY1 will also be expected to learn management of the ventilator, as well as to prepare the patient for weaning and extubation.
11. The PGY1 will be expected to anticipate and identify the patient going into septic shock. Subsequently the PGY1 will be expected to manage the fluid resuscitation of the patient, as well as work with the PGY3 in terms of managing inotropic support.

Systems-Based Practice:
1. To assure that priorities of care and service duties are transferred completely and responsibly on changes in duty hours.
2. To responsibly accept the on-call care responsibilities of patients who are not on the primary service.
3. To supervise the application of standardized care plans.
4. To identify problems and inefficiencies in the provision of patient care, and devise means of assessing and addressing them.
Didactic curriculum

1. Weekly Interdisciplinary Team Conference.
3. Department of Surgery Grand Rounds.
4. Resident topic conference.
5. Life after residency course.
6. Resident as teacher conference.

Evaluation

Residents are evaluated by the faculty. The senior residents participate in the evaluation of the junior residents. End-of-rotation faculty meetings assess the strengths and weaknesses of the residents. Evaluation forms are completed and the residents are encouraged to meet with the faculty at the conclusion of the rotation. Feedback is distributed during the rotation such that residents can address deficiencies. The faculty takes into account patient care, operative techniques, attitude and communication with others. The opinions of paramedical personnel, patients, families and others are considered during the evaluation process. The residents are encouraged to provide feedback to the faculty regarding the strengths and weakness of the surgical experience at the North Carolina Jaycee Burn Center.

PGY1: PLASTIC SURGERY

Goals

Understand the treatment of wound care, skin closure techniques, and wound management in the overall surgical management of the patient. In addition, the resident should appreciate the complexity and interdisciplinary care of the patient with a cleft palate. This is a 1 month rotation.

Learning Objectives – Core Competencies

Professionalism:

1. To demonstrate compassion and integrity through respectful patient care, family interactions, and communication with other health care providers.
2. To understand when expert medical care is necessary.
3. To obtain expert medical, surgical, nursing, or other (allied health, social work, legal) opinions when limits of knowledge, experience, and training are reached.

Interpersonal & Communication Skills:

1. To present clinical information on work rounds clearly and concisely.
2. To write progress notes with sufficient detail so that patient’s condition, status, and care plans are clear.
3. To work effectively with attending staff, housestaff, medical students, nurses, physician’s assistants, ancillary personnel, and other members of the health care team.
4. To keep senior residents and attending staff informed, particularly with complex cases, unstable patients, post-operative patients, and changes with patient condition.
5. To foster teamwork and a work environment based upon communication, respect, trust, honesty, and altruism.
6. To foster a social environment based upon tolerance for other opinions, backgrounds, and cultures, without discrimination based upon gender, race, religion, age, sexual preference, economic status, or body image.
Medical Knowledge:
1. To expand the fund of knowledge in plastic surgery from textbooks, journals, and e-media.
2. To critically evaluate the literature, based upon methodology and statistical techniques, survey of related articles, and resident-initiated discussions with attending staff and other experts.
3. To participate in scheduled conferences.

Practice-Based Learning & Improvement:
1. To evaluate patients critically, with the goal of developing a working diagnosis and treatment plan.
2. To understand the medical and surgical basis of a patient’s condition and treatment plan.
3. To obtain consultations and other opinions regarding a patient’s status, workup, or hospital course, when necessary.

Patient Care:
1. To know up-to-present details of all assigned patients
2. To gather and interpret essential and accurate information about the patient’s health status, including:
   a. Obtaining clinical information from patients.
   b. Obtaining relevant information from nurses, house officers, and hospital departments (e.g. radiology, laboratory, hospital information systems).
   c. Obtaining information from referring physicians and hospitals.
3. To learn the principles of pre- and post-operative management, including:
   a. Fluid and electrolyte management.
   b. Pharmacologic management, including pain and sedation, antibiotic dosing and pharmacology, DVT prophylaxis, anticoagulation for free tissue transfer.
   c. Flap physiology and assessment.
   d. Wound care.
   e. Donor site evaluation.
   f. Management of drains.
   g. Familiarity with subatmospheric sponge dressings (wound VAC), tissue-engineered skin replacements (Integra, AlloDerm, TransCyte), topical antimicrobials (Thermazene, Sulfamylon, silver nitrate, Acticoat), topical growth factors (Panafil, Regranex), and leeches (Hirudo medicinalis).
   h. Follow-up and outpatient management, including referrals to social work, home health nursing, rehabilitation and physical medicine.
4. To perform basic clinical procedures, including:
   a. Management of open and infected wounds, including debridement and dressing care.
   b. Primary closure of incisions.
   c. Venipuncture.
   d. Placement of urinary catheters.
   e. Application of leeches.
   f. Delivery of local anesthetics.

Systems-Based Practice:
1. To effectively transfer care when duty hours are completed.
2. To responsibly accept the on-call care responsibilities of patients who are not on the primary service.
3. To apply standardized care plans and understand their rationale:
   a. Peri-operative antibiotic regimens.
   b. Universal precautions.
c. DVT prophylaxis.
d. Drain care.
e. Pulmonary toilet.
f. Post-operative physical therapy.
g. Care of central lines.
h. Flap monitoring.
i. Anticoagulation for free-tissue transfer.

4. To attend care conferences on assigned patients.
5. To write notes with sufficient detail to satisfy the requirements of consultant physicians, discharge planners, legal representatives, governmental agencies, and health care payer organizations, including:
   a. Admission histories, physical examinations, and care plans.
   b. Daily progress notes.
   c. Discharge summaries.

PGY1: THORACIC SURGERY
Goals/Educational Mission
A mission of the Division is to train general surgeons to provide a high level of surgical care appropriate to a community general surgical practice, to know when to refer patients to a certified thoracic surgeon and to prepare selected trainees for additional specialty training in a certified thoracic surgery residency. Objectives reflect teamwork; i.e., the skills and responsibilities blend so that they complement contributions from other members of the physician team and recognize the input from nursing and other allied health professionals. This is a 1 month rotation.

Clinical Mission
Provide the highest level of care for patients with congenital and acquired conditions of the chest including the heart, lungs, esophagus, chest wall and associated organs and structures.

Overview of the Division
The Division is a clinically busy unit that provides surgical care for patients with all six core competencies put forth by the Accreditation Council of Graduate Medical Education. These include congenital malformations and acquired diseases of the heart, thorax, trachea, esophagus, and lung. This includes the surgical treatment of end-stage disease of the heart and lungs, including heart, lung and heart-lung transplantation and the utilization of mechanical circulatory assist devices both for temporary and permanent treatment. The Division also treats major thoracic trauma, including heart, lung, esophageal and great vessel injuries.

Learning Objectives – Core Competencies
Professionalism:
1. To demonstrate compassion and integrity through respectful patient care, family interactions, and communication with other health care providers.
2. To understand when expert medical advice is necessary.
3. To obtain expert medical, nursing, or other opinions when limits of knowledge, experience, and training are reached.

Interpersonal & Communication Skills:
1. To present clinical information on work rounds clearly and concisely.
2. To write progress notes legibly with sufficient detail so that patients’ condition, status and care plans are clear.
3. To work effectively with attending staff, house staff colleagues, medical students, nurses, ancillary personnel, pre-hospital personnel.
4. To keep thoracic surgery residents and attending staff informed, particularly with “problem” cases, unstable patients, and changes in-patient condition and care plan.
5. To foster teamwork and a work environment based upon respect, trust, and honesty.
6. To foster a social environment based upon tolerance for other opinions, backgrounds, and cultures.

Medical Knowledge:
1. To expand the fund of knowledge in thoracic surgery from textbooks, journals, and electronic media.
2. To critically evaluate the literature based upon methodology and statistical techniques, a survey of related articles, and resident-initiated discussions with attending staff and other experts.
3. To participate in scheduled conferences.
4. To teach medical students.

Practice-Based Learning & Improvement:
1. To evaluate patients critically with the goal of coming up with a working diagnosis and treatment plan.
2. To understand the medical, surgical, and scientific bases of a patient's condition and his or her treatment plan.
3. To obtain consultations and other opinions regarding a patient’s status, work-up, or hospital course when necessary.

Patient Care:
1. To know up-to-present details of all assigned patients.
2. To gather and interpret essential and accurate information about the patient’s health status, including:
   a. Learning to obtain clinical information from patients and family members.
   b. Obtaining relevant information from nurses and hospital departments (e.g., radiology, laboratory, and hospital information systems).
   c. Obtaining information from referring physicians and hospitals.
3. To learn the principles of pre and postoperative management, including:
   a. Fluid and electrolyte management.
   b. Management of pleural air and fluid collections.
   c. Pharmacological management, including pain and sedation, antibiotic dosing and pharmacology.
   d. Recognition and management of respiratory distress and shock.
   e. Wound care.
   f. Follow-up and outpatient management, including referrals and resources for social work, rehabilitation and physical medicine.
4. To perform basic clinical procedures, including:
   a. Primary closure of incisions.
   b. Management of open and infected wounds.
   c. Intravenous line placement.
   d. Placement of urinary catheters.
   e. Performance of thoracentesis.
   f. Placement of chest tubes.
Systems-Based Practice:
1. To effectively transfer care when duty hours are completed.
2. To responsibly accept the on-call care responsibilities of patients who are not on the primary service.
3. To apply standardized care plans, and the rationale behind them, including:
   a. Bowel preparation procedures.
   b. Preoperative antibiotic regimens.
   c. S.B.E. prophylaxis.
   d. Tetanus prophylaxis.
   e. Universal precautions.
   f. Aseptic technique.
   g. Care of central lines.
   h. Care of chest tubes.
   i. Postoperative feeding regimens.
4. To attend care conferences on assigned patients.
5. To write notes with sufficient detail to satisfy the requirements of governmental agencies, health care payer organizations, including:
   a. Admission histories, physical examinations, and care plans.
   b. Daily progress notes.
   c. Discharge summaries.

Didactic Curriculum
1. Weekly Division preoperative conference.
3. Weekly Cardiac Catheterization Conference (with Cardiology).
5. Daily medical student conference as assigned.

Evaluation
Attending staff evaluates resident performance based upon the six core competencies summarized above. The thoracic surgery residents assist in the evaluation of residents.

PGY1: ANESTHESIA:
Goals
The goals for the PGY1 resident rotating on Anesthesia primarily relate to joint care of the airway. The resident should understand the process of administering general, local and regional anesthesia and should appreciate the risks of anesthesia. One goal of this rotation is to establish camaraderie with a close service to our own that will hopefully continue for the remainder of the residency. This is a 1 month rotation.

Learning Objectives – Core Competencies
Pre-Anesthesia Evaluation:
A. The rotator shall acquire an appreciation of the preoperative evaluation of the surgical patient. This is demonstrated by:
1. Conducting several preanesthetic assessments, including:
   a. Taking and recording a pertinent history
   b. Performing an appropriate physical examination, including assessment of:
      i. Airway
      ii. Cardiovascular system
      iii. Respiratory system
   c. Reviewing pertinent laboratory data
   d. Assigning appropriate ASA physical status
2. Discussing how the following factors may influence the patient’s course during the perioperative period:
   a. Age
   b. Nature of surgery, including elective versus emergency
   c. Cardiovascular disorders, including but not limited to:
      i. Angina pectoris
      ii. Recent myocardial infarction
      iii. Congestive heart failure
      iv. Hypertension
      v. Dysrhythmia
   d. Respiratory disorders
      i. Upper and/or lower respiratory infection
      ii. Chronic obstructive pulmonary disease
      iii. Asthma
      iv. Obstructive sleep apnea
      v. PFTs and blood gases
      vi. Known or suspected difficult intubation
   e. Central nervous system disorders
      i. Head trauma
      ii. Seizure disorders
      iii. Strokes
      iv. Quadriplegia or paraplegia
      v. Increased intracranial pressure
   f. Gastrointestinal disorders
      i. Gastroesophageal reflux
      ii. Bowel obstruction
      iii. Other situations associated with a full stomach
      iv. Hepatitis, hepatic insufficiency, portal hypertension
   g. Genitourinary disorders
      i. Renal insufficiency
      ii. Dialysis dependency
   h. Hematological disorders
      i. Anemia
      ii. Sickle cell trait or disease
      iii. Coagulopathies
   i. Personal or family history of unusual response to anesthesia
      i. Malignant hyperthermia
      ii. Abnormal succinylcholine metabolism
iii. Unexplained postoperative fever or jaundice
j. Lifestyle factors
i. Smoking
ii. Obesity
iii. Substance abuse
k. Pregnancy
i. Fetal development, teratogenesis
ii. Hypertensive disorders, pre-eclampsia
iii. Premature labor

3. Medication histories and the influence of chronic and current medications on the perioperative period, including:
   a. Which drugs should be continued or discontinued
   b. The rebound phenomena resulting from abrupt discontinuation of some classes of drugs, notably beta blockers and clonidine
   c. Perioperative glucose control
   d. Perioperative management of patients on anticoagulants

4. Demonstrating understanding of informed consent, including:
   a. Explanation of risk and alternatives
   b. When a patient is capable of giving consent, and when it may be invalid
   c. Dilemmas which may be encountered in the conscientious pursuit of informed consent

Pre-Operative Medication:
A. The rotator shall demonstrate knowledge of the principles of effective pre-anesthesia medication by stating the objectives for use of drugs for:
   1. Narcotics
      a. Fentanyl
      b. Morphine
   2. Sedatives
      a. Benzodiazepines
      b. Barbiturates
      c. Propofol
      d. Alpha agonists: Clonidine, Dexmedetomidine
   3. Anticholinergics
      a. Atropine
      b. Glycopyrrolate
      c. Scopolamine
   4. Drugs used to reduce the incidence of consequences of pulmonary aspiration
      a. H2 antagonists
      b. Metoclopramide
      c. Antacids

The Operating Room:
A. Rotator will prescribe and conduct appropriate intraoperative fluid and electrolyte therapy with the guidance of his instructor:
   1. Explaining the rationales for establishing both central and peripheral venous access
   2. Identifying the common sites for venous access and the contraindications and indications for each
3. Demonstrating skill at establishing venous access by:
   a. Using sterile technique
   b. Successfully inserting several peripheral catheters of various calibers
   c. Protecting the venipuncture site and immobilizing the catheter

4. Prescribing maintenance fluid and electrolytes
   a. Predicting how the various conditions will alter requirements for perioperative maintenance therapy
   b. Discussing intraoperative considerations which alter maintenance fluid and electrolyte therapy including:
      i. Blood loss
      ii. Insensible loss
      iii. “Third space” loss
   c. Correctly interpreting data from the following monitors of volume status:
      i. Examination of the patient
      ii. Vital signs
      iii. Urine output
   d. Discussing indications, risks, and benefits of crystalloid, colloid, and blood product replacement therapies
      i. Regarding the functions of
         - Blood volume
         - Oxygen carrying capacity
         - Coagulation
         - Immunity

B. In order to demonstrate understanding of the principles and practice of routine intraoperative monitoring, the rotator will:
   1. Explain and demonstrate ECG lead placement and selection in optimizing detection of dysrhythmias and ischemia
   2. Compare and contrast the interpretation of data obtained by various non-invasive and invasive methods for monitoring blood pressure
   3. Demonstrate results of arterial blood gas analysis in terms of
      a. Oxyhemoglobin dissociation curve
      b. Shunt fraction
      c. Ventilation-perfusion mismatch
      d. Acid-base status

C. The rotator shall correctly position and pad the patient in order to protect him from injury while he is unconscious

D. The rotator will demonstrate proper airway and ventilatory management by:
   1. Describing the indications, risks and benefits of airway management by mask vs. laryngeal mask airway (LMA) vs. endotracheal intubation (ETT)
   2. Identifying and stating the indications for use of:
      a. Curved and straight blade laryngoscopes
      b. Oral and nasal airways
   3. Describing and identifying basic oropharyngeal and laryngotracheal anatomy
   4. Identifying and overcoming upper airway obstruction with mask ventilation, using:
      a. Proper positioning of the patient
      b. Jaw thrust
c. Nasopharyngeal airway
d. Oropharyngeal airway
5. Successfully intubating several patients and identifying endotracheal vs. esophageal intubation.
6. Recognizing and discussing the need for mechanical ventilation.
7. Comparing and contrasting the various methods of monitoring for adequacy of ventilation
8. Predicting probable need for continued ventilatory support, using:
   a. Blood gas analysis
   b. Respiratory rate and tidal volume
   c. Inspiratory pressure
   d. Vital capacity
   e. Shunt fraction
9. Prescribing appropriate parameters for mechanical ventilation
10. Describing and correctly identifying indications for extubation
E. The rotator will demonstrate knowledge of procedures and practice induction of anesthesia:
1. Discussing the indications, contraindications, risks and benefits of the following induction of anesthesia.
2. Describing and identifying indications for rapid sequence induction and discussing appropriate techniques.
F. The rotator will discuss intraoperative methods of recognizing and treating various cardiovascular problems, including:
   1. Hypertension
   2. Hypotension
   3. Dysrhythmias

PGY1: EMERGENCY MEDICINE:
Goals
Understand the emergency room as part of the larger system of healthcare delivery. Specifically, the emergent presentation of airway disorders, bleeding or cardiac problems should be understood. This is a 1 month rotation.

Learning Objectives – Core Competencies
Professionalism:
1. Develop personal techniques for stress management, physical and mental health, and critical incident stress debriefing that will promote wellness and career longevity.

Interpersonal & Communication Skills:
1. Use consultants in a timely and professional manner for critically ill patients.
2. Develop the ability to effectively use available resources including traditional references, on-line databases, medical literature databases and specialty consultants, in order to identify and institute the most appropriate management for individual patients.

Medical Knowledge:
1. Solidify the following clinical framework to be used in approaching all ED patients:
   a. Identify potential life, limb, and organ threats.
   b. Stabilize such potential life, limb, or organ threats using acquired skill in certain critical procedures.
c. Learn knowledge of airway management of the critical airway.
d. Learn disposition of patients with appropriate regard to patient education, advocacy, risk management and follow-up.

Practice-Based Learning & Improvement:
1. Understand and appropriately follow the EMTALA legislation with regard to Emergency Room Care.

Patient Care:
1. Master recognition and management of life-, limb-, and organ-threatening diseases and injuries in patients of all ages

Systems-Based Practice:
1. Utilize appropriate diagnostic studies in a time- and cost-effective manner.

PGY1: OTOLARYNGOLOGY:
Goals
A structured 3 month Otolaryngology experience occurs during the PGY1 year for each resident. This rotation emphasizes the work-up and peri-operative management of surgical Otolaryngology patients across the entire spectrum of the field. PGY1 residents participate in clinical Otolaryngology rounds, manage floor and ICU patients and take shadow-call with junior residents (PGY2 and 3). They are also introduced to operative Otolaryngology at a preliminary level.

Learning Objectives – Core Competencies
Professionalism:
1. PGY1 residents are anticipated to participate in all aspects of clinical care including the patient notification of diagnoses with the accompanying post-notification consultation. Supervision is provided in such endeavors both by the chief resident of the specific service as well as the associated attending physician.

Interpersonal & Communication Skills:
1. Residents communicate on a daily basis with patients in the pre-operative process as well as interacting with patients on the inpatient Otolaryngology ward. They are also anticipated to communicate in a timely and efficient manner with attending surgeons regarding problems or unanticipated details arising during the pre-operative work-up process.

Medical Knowledge:
1. PGY1 residents participate fully in the departmental curriculum during their time on service. This includes regular topical lectures, journal clubs, grand rounds, visiting professor and anatomy dissections/demonstrations.

Practice-based Learning & Improvement:
1. The PGY1 resident is intended to gain experience and knowledge by performing the pre-operative evaluation and examination of Otolaryngology patients with known diagnoses. Continuous feedback is offered by attending physicians regarding the details of the work-up process. Residents are anticipated to answer patient questions within the limits of their knowledge base regarding specific peri-
operative procedural details. Their knowledge is augmented by sitting in on pre-operative consultations between the attending physician and their patients.

Patient care:
1. PGY1 residents participate in Otolaryngology ward rounds, manage floor and ICU patients and take “shadow-call” with junior residents. During this time residents should provide compassionate, appropriate and effective care for the treatment of health problems encountered both on the inpatient hospital wards, in the Emergency Department, and in the pre-operative clinic setting. PGY1 residents participate both as an assistant to the surgical team on larger head and neck oncology cases and as primary surgeon on supervised (level-appropriate) surgical cases.

Systems-Based Practice:
1. PGY1 residents will learn to operate efficiently within the context of the larger hospital system as the primary liaison between the Otolaryngology service and other associated services including: Nutrition, Social Services, Rehabilitation Services, and the Core laboratory services.

RESEARCH

PGY2: RESEARCH

Goals
A structured research experience (6 months) for each resident occurs during the PGY2 year. This rotation emphasizes an understanding of the basic principles of study design, performance, analysis, and reporting. The research experience may be clinical or basic in nature, and will be under the advice by and planning of a qualified faculty member.

Learning Objectives – Core Competencies

Professionalism:
1. Residents are to attend ethics in research seminars offered by the Translational and Clinical Sciences Institute or the graduate education office as these may be available. Residents are also mentored on the professional presentation of their research results.

Interpersonal & Communication Skills:
1. Residents communicate on a daily or biweekly basis with their faculty mentor to discuss obstacles and solutions encountered during experiments. This represents an effective exchange of information and collaboration with health professionals.

Medical Knowledge:
1. Residents review an Otolaryngology textbook with a faculty member on a weekly basis. This activity helps residents to establish a foundation of biomedical and clinical knowledge, as well as the application of this knowledge to patient care. Residents are also to attend grant writing seminars offered by the Translational and Clinical Sciences Institute.

Practice-Based Learning & Improvement:
1. Residents through their research project begin to critically appraisal and assimilation of scientific evidence for the purposes of grant writing, manuscript preparation, and to ultimately improve in patient
Patient care:
1. During the research block residents cover call duties no more than every fourth night beginning at 5 pm on week nights. During this time residents should provide compassionate, appropriate, and effective care for the treatment of health problems encountered while consulting for the Department of Otolaryngology.

Systems-Based Practice:
1. Research may involve projects that demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

T-32 RESEARCH

T32: RESEARCH

Goals
A structured research experience (2yrs) occurs between the PGY-1 and PGY-2 clinical years. This rotation emphasizes an understanding of more advanced principles of study design, performance, analysis, and reporting. The primary research experience is basic or translational in nature, and will be under the advice by and planning of Dr. Manis. Additional clinical projects are encouraged and are carried out under the guidance of a qualified faculty member.

Learning Objectives – Core Competencies

Professionalism:
1. Residents are to attend ethics in research seminars offered by the Translational and Clinical Sciences Institute or the graduate education office as these may be available. Residents are also mentored on the professional presentation of their research results.

Interpersonal & Communication Skills:
1. Residents communicate on a daily or biweekly basis with their faculty mentor to discuss obstacles and solutions encountered during experiments. This represents an effective exchange of information and collaboration with health professionals.

Medical Knowledge:
1. Residents review an Otolaryngology textbook with a faculty member on a weekly basis. This activity helps residents to establish a foundation of biomedical and clinical knowledge, as well as the application of this knowledge to patient care. Residents are also to attend grant writing seminars offer by the Translational and Clinical Sciences Institute.

Practice-Based Learning & Improvement:
1. Residents through their research project begin to critically appraisal and assimilation of scientific evidence for the purposes of grant writing, manuscript preparation, and to ultimately improve in patient care. Residents are expected to produce 2 manuscripts and present results of research at national meetings.
Patient care:
1. During the research block residents cover call duties no more than every fourth night beginning at 5 pm on week nights. During this time residents should provide compassionate, appropriate, and effective care for the treatment of health problems encountered while consulting for the Department of Otolaryngology.

Systems-Based Practice:
1. Research may involve projects that demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

WAKE MEDICAL CENTER
MICHAEL FERGUSON, MD – ASSOCIATE PROGRAM DIRECTOR, WAKEMED
DRS. BLOEDON, DORFMAN, FERGUSON, MARSHALL

PGY2: INTRODUCTION TO CLINICAL GENERAL OTOLARYNGOLOGY

Goals:
The primary goals for the rotation at WakeMed would be for the PGY2 resident to obtain clinical experience in a busy regional hospital. This is a 6 month rotation.

Learning Objectives – Core Competencies

Professionalism:
1. Dress in appropriate clinic attire with a clean lab coat.
2. Respect gender and culture.
3. Interact with staff and nurses in a courteous manner.

Interpersonal & Communication Skills:
1. Effectively communicate findings and treatment plans with consulting physicians and teams.
2. Develop a positive relationship with referring and consulting physicians.
3. Keep the attending otolaryngology physician informed of all new and ongoing consults.

Medical Knowledge:
1. Read general Otolaryngology text such as KJ Lee or eMedicine.
2. Acquire basic science and clinical knowledge of general otolaryngology.
3. Understand the facial skeleton.
4. Discuss the principles of care in the treatment of facial fractures.
5. Acquire general knowledge to manage common ER and inpatient otolaryngology consults.

Practice-Based Learning & Improvement:
1. Incorporate evaluation and feedback into daily practice.
2. Perform self evaluation to identify areas of weakness and strength.
Patient Care:
1. Clinic/consults:
   a. Demonstrate complete head and neck exam.
   b. Obtain detailed pertinent history.
   c. Present patients succinctly to the attending.
   d. Formulate well-thought out treatment plan.
   e. Bedside evaluation of the airway.
   f. Common ER calls – epistaxis, PTA, soft tissue lacerations etc.
   g. Evaluate and formulate plan for esophageal foreign bodies.
   h. Evaluate common facial trauma – mandible, midface, orbital floor fractures.
2. Surgical skills:
   a. Laryngoscopy.
   b. Nasal endoscopy.
   c. Tonsillectomy and adenoidectomy.
   d. Myringotomy and placement of PE tubes.
   e. Excision of simple skin cysts and lesions.
   f. Excisional biopsy of superficial and deep cervical lymph nodes.
   g. Incision and drainage of deep neck abscess.
   h. Intermaxillary fixation of the facial skeleton.
   i. ORIF of simple facial fractures – mandible and zygoma.
   j. Panendoscopy.
   k. Esophagoscopy with foreign body removal.
   l. Closure of complex facial lacerations.
   m. Nasal endoscopy with cautery.
   n. Removal of nasal and ear foreign bodies.
   o. Fine needle aspiration of head and neck masses.
   p. Incision and drainage of facial and neck abscesses.
   q. Adult tracheostomy.

Systems-Based Practice:
1. Understand how types of medical practice and delivery systems differ from one another.
2. Investigate methods of controlling health care costs.
3. Advocate for quality patient care.

PGY3: GENERAL OTOLARYNGOLOGY WITH CLINICAL FOCUS (RHINOLOGY, FACIAL PLASTICS AND OTOLOGY)

Goals
The primary goals for the PGY3 resident at WakeMed would be to expand their clinical experience at a regional hospital with the specific goals of enhancing the trauma experience, understanding a different system of practice than an academic health center, and furthering their operative experience in a wide range of otolaryngologic procedures. This is a 3 month rotation.

Learning Objectives – Core Competencies
Professionalism:
1. Understand professionalism as the basis for medicine’s contract with society.
2. Wear appropriate clinic attire.
3. Treat other teams with respect.

Interpersonal & Communication Skills:
1. Demonstrate active listening while interviewing new patients.
2. Keep attending informed of all inpatients.
3. Communicate patient treatment plans with nurses and ancillary staff.

Medical Knowledge:
1. Ear and temporal bone anatomy.
2. Auditory and vestibular physiology.
3. Temporal bone CT anatomy.
4. Interpret audiograms, tympanometry, OAE, ABR, reflexes.
5. Master CT of facial fractures.
6. Reconstruction ladder for head and neck cutaneous defects.
7. Sinonasal anatomy on endoscopy.
8. Sinonasal anatomy on CT.
9. Understand allergy testing and results interpretation.
10. Differentiate viral, bacterial, fungal, allergic, structural sinusitis.
11. Understand contribution of GERD, migraine, psychological issues as they relate to sinonasal complaints.

Practice-Based Learning & Improvement:
1. Accept criticism – use to improve.
2. Recognize skill areas that need additional focus.
3. Learn to read literature critically.

Patient care:
1. Clinic/consults:
   a. Chronic sinus patients.
   b. Allergy and nasal obstruction
   c. Chronic ear disease.
   d. Evaluate patients complaining of hearing loss, tinnitus, dizziness, or facial weakness.
   e. Identify a normal tympanic membrane and common pathology including otitis externa, serous otitis media, tympanic membrane perforation and cholesteatoma – use microscopy.
   f. Diagnostic sinonasal endoscopy.
   g. Placement of ear wicks, ear debridement.
   h. Temporal bone trauma.
   i. Bony facial trauma.
   j. Airway emergency.
   k. Management of epistaxis.

2. Surgical Skills:
   a. Tympanoplasty.
   b. Mastoidectomy.
   c. FESS.
   d. Myringotomy and tubes – in an awake adult.
   e. Septoplasty.
   f. SMR turbinates.
g. Midface fractures, orbital floor fractures, ZMC fractures.

h. Introduction to thyroidectomy, parotidectomy.

i. Pediatric neck abscess.

j. Congenital pediatric neck masses.

k. Rhinoplasty.

l. Reconstruction of skin defects – local flaps, skin grafting.

m. Adult tracheostomy - leading a more junior resident.

Systems-Based Practice:
1. Assist patients in dealing with system complexities.

PGY4: SERVICE CHIEF RESIDENT – HEAD & NECK CANCER FOCUS

Goals
The primary goal for the service chief resident at WakeMed is to perform in a leadership role at a busy regional hospital. The service chief, in addition to performing more complex surgeries, has the ultimate responsibility for coordinating schedules, communicating with junior residents and attendings, and representing the service to others in the larger context. This is a 3 month rotation.

Learning Objectives – Core Competencies

Professionalism:
1. Learn to respect and seek out patients own wishes about their care.
2. Act in an altruistic manner with patients and colleagues.

Interpersonal & Communication Skills:
1. Practice appropriate interactions with referring physicians, junior and senior residents and attendings.
2. Understand the importance of direct communication with community physicians.
3. Facilitate an amicable working relationship with the ER physicians.
4. Communicate daily plan with junior residents.

Medical Knowledge:
1. Thorough knowledge of head and neck anatomy.
2. Use modern imaging to investigate and formulate treatment plan for head and neck tumors.
4. Properly stage head and neck tumors.
5. Know list of thyroid neoplasms and best course of treatment for each.
6. Understand common salivary neoplasms and best course of treatment for each.
7. Understand potential complications of cancer surgery – and ways to manage these.
8. Know various reconstructive methods – skin grafts, local flaps, regional flaps, free flaps.

Practice-Based Learning & Improvement:
1. Apply literature and studies to own clinical practices.
2. Read critically.
3. Identify own strengths and weaknesses – as well as operative deficiencies.
4. Set learning and skills goals.
5. Facilitate learning of junior residents.

Patient Care:
1. Clinic/consults:
   a. Head and neck cancer patients.
   b. Thyroid and salivary neoplasms.
   c. Airway emergency.
   d. Neck and facial trauma.
2. Surgical Skills:
   a. Show competency in the operating room.
   b. Panendoscopy.
   c. Wide local excision of aerodigestive tract malignancies.
   d. Split thickness skin graft.
   e. Marginal and segmental mandibulectomy.
   f. Laryngectomy.
   g. Neck dissection.
   h. Thyroidectomy.
   i. Parotidectomy.
   j. Management of difficult airway.
   k. Removal of airway foreign body.
   l. Pan-facial fractures- bicoronal approach.
   m. Leading a junior resident through an adult tracheostomy.

Systems-Based Practice:
1. Understand healthcare costs.
2. Understand how our patient care impacts other healthcare providers.

PEDIATRICS/OTOLOGY
DRS. DRAKE, ROSE, ZDANSKI/DRS. ADUNKA, BUCHMAN, PILLSBURY

PGY3: PEDIATRICS/OTOLOGY (PO)
Goals
The primary goals for the PGY3 resident on this rotation are to appreciate that the care of the infant and child differs from that of an adult, to learn anatomy relevant to the temporal bone, and to learn the judgment involved in practicing specialty otolaryngologic care. This is a 3 month rotation.

Learning Objectives – Core Competencies
Professionalism:
1. Addresses patient and patients’ families with respect to their culture and gender.
2. Learns and practices ethical behavior in the treatment of pediatric patient.
3. Actively observe and participate in the care of the premature infant.
4. Learn to manage all aspects of pediatric sensorineural hearing loss
Interpersonal and Communication Skills:
1. Practice empathetic listening skills.
2. Practice professional interactions with referring physicians, fellow residents, attendings, nursing and operating room staff.
3. Practice appropriate interactions with multispecialty colleagues during on-call times.

Medical Knowledge:
1. Understand indications for common surgical procedures, including pressure-equalization tubes, tonsillectomy and adenoidectomy and their complications, including tympanic membrane perforation, bleeding and velopharyngeal insufficiency.
2. Perioperative care including fluid and electrolyte physiology and pain management.
3. Basic audiology and interpretation of hearing testing.

Practice-Based Learning & Improvement:
1. Participate in cadaver dissections yearly incorporating principles learned from didactic sessions.
2. Examine own operative list and obtain additional training when necessary.
3. Consider the cost-benefit analysis of various diagnostic and treatment strategies.

Patient Care:
1. Endoscopic techniques including laryngoscopy, bronchoscopy and esophagoscopy, using magnification via microscopes, telescopes, bronchoscopes.
   a. Tonsillectomy/adenoidectomy techniques.
   b. Infant/child tracheostomy techniques.
   c. Operative placement of pressure-equalizing tubes.
   d. Surgical procedures to close tympanic membrane perforations.
   e. Mastoidectomy (as a stand alone or access procedure).
   f. Approaches to the middle ear and lateral portion of the temporal bone.

Systems-Based Practice:
1. Learn and participate in the monthly Morbidity and Mortality conference.
2. Participate in coding and billing processes for both the clinic and OR.
3. Understand the issues relating to drug prescriptions, including pediatric dosing and allergies.
4. Learn to manage systems based care of infants and children with tracheostomies and other airway problems.
5. Learn to manage systems based care of infants and children with sensorineural hearing loss.

PGY4: PEDIATRICS/OTOLOGY (PO)
Goals
The goals of the PGY4 rotation are to improve the understanding of the airway and otologic care of patients and to improve surgical skill in these two areas. This is a 3 month rotation.

Learning Objectives – Core Competencies
Professionalism:
1. Address patient and patients’ families with respect to their culture and gender.
2. Learn and practice ethical behavior in the treatment of pediatric patients with communication barriers such as tracheostomies, hearing impaired patients, and pediatric tumor patients.

3. Actively consider and read about care of the premature infant.

**Interpersonal & Communication Skills:**
1. Communicate through an interpreter, especially preoperative counseling for a procedure, with discussion of risks, benefits and alternative procedures.

**Medical Knowledge:**
1. Observe and understand basic laser technology.
2. Understand the work-up and treatment of abnormalities of speech and swallow, including velopharyngeal dysfunction, apraxia of speech and aspiration.

**Practice-Based Learning & Improvement:**
1. Participate in cadaver dissections yearly incorporating principles learned from didactic sessions.
2. Participate in the monthly Morbidity and Mortality conference and use the experience to direct additional reading on timely topics.
3. Examine residents own operative list and obtain additional training where lacking.
4. Consider the cost-benefit analysis of various types of tonsillectomy techniques, including coblation, powered-instrumentation, and cold steel.

**Patient Care:**
1. Participate in tympanoplasty, mastoidectomy and placement of a cochlear implant.
2. Understand the principles and participate in tympanomastoid surgery for chronic otitis media with cholesteatoma.
3. Understand the basic principles of cerebellopontine angle lesion management.
4. Understand the resection of congenital neck masses, vascular malformations, and other pediatric head and neck neoplasms.
5. Understand the medical treatment options for infections of the head and neck, including mastoiditis, neck infections and sinusitis.
6. Observe and understand the medical and audiologic work-up of a pediatric patient for cochlear implantation including a thorough understanding and limitations of electrophysiologic objective audiometric testing such as ABR and OAE’s.

**Systems-Based Practice:**
1. Learn about UNC P&A and its relationship with the University and Health Care System.

**PGY5: PEDIATRICS/OTOLOGY (PO)**

**Goals**
Goals for the chief resident on this rotation include “running” the service, coordinating workforce issues, call and interfacing with the other chiefs on other OTO-HNS services. In addition to the leadership role, the PGY5 has the goal of understanding the care of complex ear and airway pathology and the skill to accomplish the more demanding surgical cases in these specialty areas. This is a 3 month rotation.
Learning Objectives – Core Competencies

Professionalism:
1. Address patient and patients’ families with respect to their culture, gender and disability.
2. Learn and practice ethical behavior in the OR and clinic, with attention paid to the various members of the healthcare team.
3. Counsel a teen about blood-borne or sexually-transmitted illness.

Interpersonal & Communication Skills:
1. Contemplate the parenting of a medically fragile child.
2. Participate in a parent conference regarding the placement of a tracheostomy, ventilator, implant or other medical device.
3. Participate in end of life discussions with care-givers of children with end stage or terminal disease.

Medical Knowledge:
1. Appreciate the manifestations of congenital syndromes involving the head and neck, including branchio-oto-renal, velocardiofacial syndrome, CHARGE association, Treacher-Collins, Pierre Robin sequence.
2. Participate in advanced image interpretation of temporal bone and head and neck CT scans, MRI’s and Brain Lab imaging of the sinuses.
3. Understand the genetics of hearing loss.

Practice-Based Learning & Improvement:
1. Participate in M & M conferences and suggest improvements in health care delivery when appropriate.
2. Recognize the role of the foster family and guardianship of a sick child when it is needed, as well as when to use social services to investigate the needs of a compromised patient.

Patient Care:
1. Advanced approaches in the temporal bone including neurotologic surgeries and procedures of the lateral skull base.
2. Advanced pediatric airway procedures, including laryngotracheal reconstruction and cricotracheal resection.
3. Advanced endoscopic airway approaches, including supraglottoplasty, repair of laryngeal clefts, and ablative techniques for airway obstruction secondary to neoplasm.

Systems-Based Practice:
1. Recognize the role of the CCCDP in management of pediatric sensorineural hearing loss.
2. Participate in the multidisciplinary care of the pediatric tracheostomy and airway patients via the North Carolina Children’s Airway Center.
3. Recognize the interdisciplinary position of the neurotologist in the care of lateral skull base disorders.
**HEAD & NECK/FACIAL PLASTICS**
DRS. HACKMAN, SHORES, WEISSLER/DR. SHOCKLEY

PGY3: HEAD & NECK/FACIAL PLASTICS (HF)

**Goals**
The goals of the PGY3 rotation on this rotation are to begin to understand the diagnosis and multidisciplinary treatment of head and neck tumors. This is a 3 month rotation.

**Learning Objectives – Core Competencies**

**Professionalism:**
1. Complete the introductory material and the first 3 vignettes of “Professionalism in Surgery: Challenges and Choices” DVD.
4. Addresses patient and patients’ families with respect to their culture and gender.
5. Learns and practices ethical behavior in the treatment of head and neck cancer patients incorporating the concepts of beneficence, non-maleficence, patient autonomy into daily practice.
6. Actively consider and read about palliative and end of life care.

**Interpersonal & Communication Skills:**
1. Practice active listening while interviewing new patients.
2. Practice appropriate, professional interactions with referring physicians, junior and senior residents, attendings, nursing and operating room staff.
3. Practice appropriate interactions with multispecialty colleagues in a head and neck tumor board.

**Medical Knowledge:**
1. Head and neck anatomy.
2. Perioperative care including fluid and electrolyte physiology of the surgical patient.
3. Perioperative pain management.

**Practice-Based Learning & Improvement:**
1. Participate in Head and Neck cadaver dissections yearly incorporating principles learned from didactic sessions.
2. Participate in the weekly head and neck tumor board and use the experience to direct additional reading on timely topics.
3. Examine residents own operative list and obtain additional training where lacking.
4. Consider the cost-benefit analysis of various diagnostic and treatment strategies

**Patient Care:**
1. Endoscopy techniques including laryngoscopy, bronchoscopy and esophagoscopy.
2. Basic surgical exposure in the head and neck.
3. Wound closure techniques.
Systems-Based Practice:
1. Learn about UNC P&A and its relationship with the University and Health Care System.
2. Learn proper coding and billing processes for both clinic and OR.
3. Learn to use the various aspects of the WebCIS, the UNC electronic medical record.

PGY4: HEAD & NECK/FACIAL PLASTICS (HF)

Goals
The goals for the PGY4 resident on this rotation are to learn the multidisciplinary care of the head and neck cancer patient in the greater context of healthcare, as well as to become more proficient in the surgeries required to resect such tumors. This is a 3 month rotation.

Learning Objectives – Core Competencies

Professionalism:
1. Complete the 4th through the 15th vignettes of “Professionalism in Surgery: Challenges and Choices” DVD.
2. Listen to the “Ethics and Philosophy Lecture” On Patient Safety CD Program from the American College of Surgeons.
3. Addresses patient and patients’ families with respect to their culture and gender.
4. Learns and practices ethical behavior in the treatment of head and neck cancer patients incorporating the concepts of beneficence, non-maleficence, patient autonomy into daily practice.
5. Actively consider and read about palliative and end of life care.

Interpersonal & Communication Skills:
1. Listen to “Effective Communication: an Essential Competency to Enhance Surgical Care, Promote Safety, and Reduce Liability” On Patient Safety CD Program from the American College of Surgeons.

Medical Knowledge:
1. Oncogenesis.
2. Basic radiation biology.
3. Laser technology.

Practice-Based Learning & Improvement:
1. Participate in Head and Neck cadaver dissections yearly incorporating principles learned from didactic sessions.
2. Participate in the weekly head and neck tumor board and use the experience to direct additional reading on timely topics.
3. Examine residents own operative list and obtain additional training where lacking.
4. Consider the cost-benefit analysis of various diagnostic and treatment strategies.

Patient Care:
1. Submandibular gland resection.
2. Basic transoral approaches to the oral cavity and tonsillar fossa.
3. Locate the facial nerve in parotidectomy surgery.
4. Locate the parathyroid glands and recurrent and external branch of the superior laryngeal nerve in thyroidectomy surgery.
5. Blepharoplasty, rhinoplasty, face-lift.

Systems-Based Practice:
1. Learn about UNC P&A and its relationship with the Health Care System.
2. Learn proper coding and billing processes for both clinic and OR.
3. Learn to use adjuncts to healing, such as products designed to minimize scar, avoidance of sun and exercise to maintain optimal results in cosmetic procedures.

PGY5: HEAD & NECK/FACIAL PLASTICS (HF)

Goals
The goals for the PGY5 resident on this rotation are to become proficient in the extirpation and reconstruction of head and neck cancers, to understand end of life issues, and to become the type of surgeon most capable of delivering expert care. Further goals relate to developing expertise in facial plastic surgery and cosmetic as well as functional surgery on the face. This is a 3 month rotation.

Learning Objectives – Core Competencies
Professionalism:
1. Complete the 16th through the 24th vignettes of “Professionalism in Surgery: Challenges and Choices” DVD.
2. Addresses patient and patients’ families with respect to their culture and gender.
3. Learns and practices ethical behavior in the treatment of head and neck cancer patients incorporating the concepts of beneficence, non-maleficence, patient autonomy into daily practice.
4. Actively consider and read about palliative and end of life care.

Interpersonal and Communication Skills:
1. Listen to “The Disruptive Professional” On Patient Safety CD Program from the American College of Surgeons.

Medical Knowledge:
2. Advanced image interpretation.
3. Pathology of the head and neck.

Practice-Based Learning & Improvement:
1. Listen to: “The Volume and Quality Conundrum: What are the Data” On Patient Safety CD Program from the American College of Surgeons.
2. Listen to: “Practice-Based Learning and Improvement: an Essential Component of MOC” On Patient Safety CD Program from the American College of Surgeons.

Patient Care:
1. Advanced approaches: mandibulotomy; lateral rhinotomy.
2. Partial and total laryngectomy.
3. Thyroidectomy.
4. Parotidectomy.
5. Radical and selective neck dissection.
6. Advanced endoscopic approaches.
7. Advanced rhinoplasty, vascularized flaps.

Systems-Based Practice:
1. Listen to “Accreditation of Surgery Centers to Optimize Patient Care” On Patient Safety CD Program from the American College of Surgeons.
2. Listen to “Improving Patient Safety in the Operating Room” On Patient Safety CD Program from the American College of Surgeons.

CONSULT SERVICE CHIEF

PGY5: CONSULT SERVICE CHIEF RESPONSIBILITIES

Goals
The consult chief runs the consult service and interfaces with the chief residents on the other OTO-HNS services. This is a 3 month rotation.

Learning Objectives – Core Competencies

Professionalism:
1. Present as an agreeable portal for acceptance of consults into the OTO-HNS service.

Interpersonal & Communication Skills:
1. Makes and communicates the service/clinic schedule for the 3 months blocks in coordination with the service chiefs.
2. Responsible for setting up all didactics except Thurs PM service conference
3. Interacts with attending physicians on all other services if conflicts arise in consult care.

Medical Knowledge:
1. Reads journal articles and textbook articles on consult cases which present.

Practice-Based Learning & Improvement:
1. Understand EMTALA, Hospice, discharge planning to institutions and/or home.

Patient Care:
1. Responsible for running rounds every morning.

Systems-Based Practice:
1. Interface with other services to maximize educational opportunities for each resident.

PGY3:

Professionalism:
1. Present in a non-threatening, conservative fashion.
2. Avoid event conflict with other services.
3. Comply with HIPAA.
Interpersonal & Communication Skills:
1. Interact with consulting services by introduction of self and expectation of consult.

Medical Knowledge:
1. Participate in conferences.
2. Need EMTALA.

Patient care:
1. Assess and present all consults to senior resident and/or attending.

Systems-Based Practice:
1. Learn proper completion of consults including completion of electronic medical records (WebCIS).

**RHINOLOGY/LARYNGOLOGY**
DRS. EBERT, SENIOR/DRS. BUCKMIRE, ZANATION

PGY3: RHINOLOGY/LARYNGOLOGY (RL)
This is a 3 month rotation.

**Learning Objectives – Core Competencies**

**Professionalism:**
1. Residents must present in a clean and professional fashion with a clean lab coat.
2. Washes hands in front of patient and between each patient contact.
3. Addresses patient and patients’ families with respect to their culture and gender.

Interpersonal & Communication Skills:
1. Practice active listening while interviewing new patients.
2. Practice appropriate, professional interactions with referring physicians, junior and senior residents and attendings.
3. Practice appropriate, professional interactions with medical students and visiting international physicians.
4. Resident demonstrates proficiency in gathering and assimilating data from other collaborative specialties in the multi-disciplinary voice and swallowing clinic (GI, Speech Pathology, and Neurology). The data is then presented in an organized fashion to the attending physician of senior resident staff on service.

Medical Knowledge (Goals):
1. To understand the anatomy of the nasal cavity, paranasal sinuses and anterior skull base as well as its basic embryology.
2. To understand and describe the expected outcomes of medical and surgical management of chronic rhinosinusitis and chronic rhinitis and methods of assessment.
3. To recognize potential complications of endoscopic sinus surgery and to know their appropriate treatment.
4. To recognize potential complications of allergy testing and allergy serum administration and to know their appropriate treatment.
5. Resident completes the core didactic reading material for the rotation including selected Laryngology articles and book chapters.

To achieve goals:

a. Reads and completes assignments in didactic education course. 
   (i.e. Read and present chapters/articles from Home study and rhinology textbook: Kennedy’s “Diseases of the Sinuses”)


c. Read the medical literature and show an understanding of the relevant recent literature as it applies to management of allergic, inflammatory sinus disease, and skull base neoplasms.

d. Use PubMed, Up to Date and other web-based databases to look up information on current patients.

e. Keep the electronic medical record up to date.

Practice-Based Learning & Improvement:

1. Participate in Sinus dissection course yearly incorporating principles learned from didactic sessions.
2. Examine residents own operative list and obtain additional training where lacking.
3. Consider the cost-benefit analysis of various diagnostic and treatment strategies.

Patient Care (Goals):

1. To understand the proper evaluation of the patient with sinonasal or allergic disease as well as, indications for endoscopic sinus /skull base surgery.
2. To understand the evidence based medical management of the patient with sinonasal disease.
3. To become familiar with basic endoscopic surgical planning and set-up.
4. To understand the administration and interpretation of laboratory tests and to proficiently evaluate radiographic images of the paranasal sinuses.
5. To learn instruments used for endoscopic sinus surgery and routine clinic use.
6. To describe the proper techniques and steps in endoscopic sinus surgery: anterior ethmoidectomy, and middle meatal antrostomy.
7. To describe the proper techniques for in vitro, skin prick, and intradermal allergy testing and mixing of patient specific serum.
8. Resident demonstrates facility in obtaining a sub-specialty (laryngology) focused history and physical, performing office based endoscopy/stroboscopy and communicating a concise presentation of the salient features to the attending physician.

To achieve goals:

a. Actively participate in outpatient clinics and OR’s with attendings and allergy nursing staff.

b. Independently perform comprehensive allergy and rhinologic history, physical examination (including nasal endoscopy with rigid and flexible telescopes) and ordering of appropriate diagnostic testing for the clinical problem.
c. Make a presumptive diagnoses and synthesize a treatment plans for clinic and consult patients. Then, present patients to the attending in an organized and manner for critique.

d. Learn and apply surgical indications for treatment of sinonasal disease by incorporating lab test and radiographic imaging into decision-making process.

e. Follow patients from admission to discharge: determining appropriate time for discharge and follow-up.

Systems-Based Practice:
1. Learn about UNC P&A and its relationship with the University and Health Care System.
2. Discuss actively the building of new health care resources such as the Hillsborough Hospital and its effect on patient care and physician livelihood.
3. Learn proper coding and billing processes for both clinic and OR.

PGY4: RHINOLOGY/LARYNGOLOGY (RL)
This is a 3 month rotation.

Learning Objectives – Core Competencies
Professionalism:
1. Residents must present in a clean and professional fashion with a clean lab coat.
2. Washes hands in front of patient and between each patient contact.
3. Addresses patient and patients’ families with respect to their culture and gender.

Interpersonal & Communication Skills:
1. Practice active listening while interviewing new patients.
2. Practice appropriate, professional interactions with referring physicians, junior and senior residents and attendings.
3. Practice appropriate, professional interactions with medical students and visiting international physicians.
4. Resident is capable of managing hospital-based, sub-specialty (laryngology) consults from other services, including clear communication of the details of the case to the attending physician. Thereafter, the resident manages/arranges both the communication and carrying-out of the plan with the primary team, including additional testing, test interpretation and potentially surgical intervention.

Medical Knowledge (Goals):
1. To understand the anatomy of the nasal cavity, paranasal sinuses and anterior skull base as well as its basic embryology.
2. To understand and describe the expected outcomes of medical and surgical management of chronic rhinosinusitis and chronic rhinitis and methods of assessment.
3. To recognize potential complications of endoscopic sinus surgery and to know their appropriate treatment.
4. To recognize potential complications of allergy testing and allergy serum administration and to know their appropriate treatment.
5. Resident demonstrates proficiency in interpreting FEES swallowing studies, stroboscopic examinations and develops a competent differential diagnosis and treatment plan for presentation to the Attending physician.

To achieve goals:
a. Reads and completes assignments in didactic education course., i.e. Read and present chapters/articles from Home study and rhinology textbook: Kennedy’s "Diseases of the Sinuses".
c. Read the medical literature and show an understanding of the relevant recent literature as it applies to management of allergic, inflammatory sinus disease, and skull base neoplasms.
d. Use PubMed, Up to Date and other web-based databases to look up information on current patients.
e. Keep the electronic medical record up to date.

Practice-Based Learning & Improvement:
1. Participate in Sinus dissection course yearly incorporating principles learned from didactic sessions.
2. Examine residents own operative list and obtain additional training where lacking.
3. Consider the cost-benefit analysis of various diagnostic and treatment strategies.

Patient Care (Goals):
1. To understand the proper evaluation of the patient with sinonasal or allergic disease as well as indications for endoscopic sinus /skull base surgery.
2. To understand the evidence based medical management of the patient with sinonasal disease.
3. To become proficient in basic endoscopic surgical planning and set-up.
4. To understand the administration and interpretation of laboratory tests and to proficiently evaluate radiographic images of the paranasal sinuses.
5. To learn and use instruments used for endoscopic sinus surgery and routine clinic use.
6. To describe and perform the proper techniques and steps in endoscopic sinus surgery: anterior ethmoidectomy, and middle meatal antrostomy, complete sphenoidethmoidectomy, endoscopic and open septoplasty, as well as clinic-based post-op care.
7. To perform the proper techniques for in vitro, skin prick, and intradermal allergy testing and mixing of patient specific serum.
8. Residents is proficient with basic Laryngology operative techniques including suspension laryngoscopy, vocal fold injection, microdirect laryngoscopy with excision as well as having a working knowledge of micro instrumentation, laryngoscope selection and OR room set-up.

To achieve goals:
a. Actively participate in outpatient clinics and OR’s with attendings and allergy nursing staff.
b. Independently perform comprehensive allergy and rhinologic history, physical examination (including nasal endoscopy with rigid and flexible telescopes) and ordering of appropriate diagnostic testing for the clinical problem.
c. Make a presumptive diagnoses and synthesize a treatment plans for clinic and consult patients. Then, present patients to the attending in an organized and manner for critique.
d. Learn and apply surgical indications for treatment of sinonasal disease by incorporating lab test and radiographic imaging into decision-making process.

e. Follow patients from admission to discharge: determining appropriate time for discharge and follow-up.

Systems-Based Practice:
1. Learn about UNC P&A and its relationship with the University and Health Care System.
2. Discuss actively the building of new health care resources such as the Hillsborough Hospital and its effect on patient care and physician livelihood.
3. Learn proper coding and billing processes for both clinic and OR.

PGY5: RHINOLOGY/LARYNGOLOGY (RL)
This is a 3 month rotation.

Learning Objectives – Core Competencies
Professionalism:
1. Residents must present in a clean and professional fashion with a clean lab coat.
2. Washes hands in front of patient and between each patient contact.
3. Addresses patient and patients’ families with respect to their culture and gender.

Interpersonal & Communication Skills:
1. Practice active listening while interviewing new patients.
2. Practice appropriate, professional interactions with referring physicians, junior and senior residents and attendings.
3. Practice appropriate, professional interactions with medical students and visiting international physicians.
4. Resident discusses the details of operative procedure with the patient including risks benefits, expected outcomes, post-operative recommendations and work-related details (i.e. Voice rest, return to work). The resident is capable of interacting with the scheduling personnel and the ancillary services (Speech Pathology) for arranging the procedure and subsequent post-operative care.

Medical Knowledge (Goals):
1. To understand the anatomy of the nasal cavity, paranasal sinuses and anterior skull base as well as its basic embryology.
2. To understand and describe the expected outcomes of medical and surgical management of chronic rhinosinusitis and chronic rhinitis and methods of assessment.
3. To recognize potential complications of endoscopic sinus surgery and to know their appropriate treatment.
4. To recognize potential complications of allergy testing and allergy serum administration and to know their appropriate treatment.
5. Resident demonstrates proficiency in the interpretation of voice and swallowing work-up as well as diagnostic studies, and can plan and articulate an operative plan including risks benefits and alternatives to the standard of care treatments.
To achieve goals:

a. Reads and completes assignments in didactic education course.
   i.e. Read and present chapters/articles from Home study and rhinology textbook: Kennedy’s “Diseases of the Sinuses”.


c. Read the medical literature and show an understanding of the relevant recent literature as it applies to management of allergic, inflammatory sinus disease, and skull base neoplasms.

d. Use PubMed, Up to Date and other web-based databases to look up information on current patients.

e. Keep the electronic medical record up to date.

Practice-Based Learning & Improvement:

1. Participate in Sinus dissection course yearly incorporating principles learned from didactic sessions.
2. Examine residents own operative list and obtain additional training where lacking.
3. Consider the cost-benefit analysis of various diagnostic and treatment strategies.

Patient Care (Goals):

1. To understand the proper evaluation of the patient with sinonasal or allergic disease as well as, indications for endoscopic sinus /skull base surgery.
2. To understand the evidence based medical management of the patient with sinonasal disease.
3. To master basic endoscopic surgical planning and operative set-up.
4. To efficiently administer and interpret laboratory tests and to proficiently evaluate radiographic images of the paranasal sinuses.
5. To proficiently use instruments used for endoscopic sinus surgery and routine clinic use.
6. To describe and perform the proper techniques and steps in endoscopic sinus surgery: anterior ethmoidectomy, middle meatal antrostomy, complete sphenoidectomy, endoscopic and open septoplasty, clinic-based post-op care, frontal recess dissection, revision surgery and for extended applications including tumor removal, CSF leak repair, hypophysectomy, orbital decompression, and optic nerve decompression.
7. To perform the proper techniques for in vitro, skin prick, and intradermal allergy testing and mixing of patient specific serum.
8. Resident demonstrates proficiency is prepping and performing office based, non-sedated procedures including vocal fold injection and transnasal esophagoscopy. The senior resident must be able to appropriately describe the nuances of intraoperative decision making in laryngeal framework surgery.

To achieve goals:

a. Actively participate in outpatient clinics and OR’s with attendings and allergy nursing staff.

b. Independently perform comprehensive allergy and rhinologic history, physical examination (including nasal endoscopy with rigid and flexible telescopes) and ordering of appropriate diagnostic testing for the clinical problem.

c. Make a presumptive diagnoses and synthesize a treatment plans for clinic and consult patients. Then, present patients to the attending in an organized and manner for critique.
d. Learn and apply surgical indications for treatment of sinonasal disease by incorporating lab test and radiographic imaging into decision-making process.

e. Follow patients from admission to discharge: determining appropriate time for discharge and follow-up.

Systems-Based Practice:
1. Learn about UNC P&A and its relationship with the University and Health Care System.
2. Discuss actively the building of new health care resources such as the Hillsborough Hospital and its effect on patient care and physician livelihood.
3. Learn and apply proper coding and billing processes for both clinic and OR.