Nephrology Fellowship Handbook 2009

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Table of Contents

I. GENERAL FELLOWSHIP DESCRIPTION

A. Introduction

The purpose of this manual is to acquaint Nephrology Fellows with the basic mechanics of the Clinical Fellowship Program in Nephrology at the University of Alabama at Birmingham and provide a reference source throughout the course of the Fellowship for policies and procedures of the Division of Nephrology.

The Division Director of Nephrology, **Dr. Anupam Agarwal**, the Nephrology Fellowship Program Director, **Dr. Ashita Tolwani**, and the Associate Nephrology Fellowship Directors, **Dr. Ruth Campbell**, **Dr. Zipporah Krishnasami**, **Dr. Dan Balkovetz, and Dr. Sumant Chugh** hold ultimate responsibility for the Clinical Fellowship Program. They are assisted by the clinical faculty who meet regularly as the Fellowship Committee to discuss Fellowship issues. This committee meets quarterly or more frequently if requested by the director to review the progress of each Fellow, discuss any changes in the program and to update the members on recruitment. The committee also recommends to Dr. Agarwal actions to be taken should an area of concern be identified. **Amelia Gowins** serves as the Nephrology Fellowship Coordinator and is the contact person for all issues related to Fellowship.

At the end of each year, the first year class elects a Chief Fellow who will be responsible for making the rotation schedule, monthly call schedule, and assisting in new Fellow orientation (in conjunction with the Fellowship Director). The Chief Fellow will problem-solve and trouble shoot any issues regarding the Fellowship (in conjunction with the Fellowship Director). The Chief Fellow works closely with the Fellowship Director and is the liaison between the Fellows and the faculty. This years Chief Fellows is **Dr. Shikha Mehta.**

The activities of the Division of Nephrology encompass three major areas: clinical services, research programs and teaching activities. The Division offices and laboratories are located on the University of Alabama at Birmingham Medical Center campus on the sixth floors of the Zeigler Research Building (ZRB), the Lyons-Harrison Research Building (LHRB), the Tinsley Harrison Tower (THT), and the Paula Building (PB).

The Division of Nephrology accepts 7 Fellows a year. Two to three-year Fellowship positions are offered annually. A two-year clinical Fellowship satisfies the requirements for application to ABIM subspecialty certification in Nephrology. A three-year or longer Fellowship is available for persons interested in clinical or bench research and a career in academic medicine. During their clinical rotations, Fellows participate actively in the in-patient and consultative services and in various out-patient clinics of the Division. Research opportunities for Fellows are available in a variety of laboratories throughout the Medical Center. Faculty mentors may be based in Nephrology or other clinical or basic science divisions or departments. Research experiences are supported by NIH training grants.

B. Clinical Services

Inpatient services in the Division of Nephrology include the ***Nephrology Ward Service***, the ***Nephrology Consultation Services***, and the ***Nephrology Transplant Services***.

The ***Nephrology Consultation Services*** are divided into the UAB *Acute Consult Service*, the *UAB Chronic/Access Consult Service*, *UAB Highlands Consult Service*, and the *VA Consult Service*. The *Acute Consult Service* provides consultation and dialysis to patients with acute *renal failure at University Hospital, Spain Rehabilitation Center, Eye Foundation Hospital, Cooper Green Hospital,* and the *Center for Psychiatry* and also to chronic dialysis patients at

Cooper Green Hospital and in the ICU at *University Hospital*. The *Chronic/Access Consult Service* provides routine dialysis to non-ICU ESRD patients on the vascular access service and other non-Nephrology services at *University Hospital, Spain Rehabilitation Center*, and the *Center for Psychiatry*. These services are supported by the Inpatient Dialysis Unit (IDU) located on the eight floor of Spain-Wallace Hospital Building. The *Highlands Consult Service* covers all consults for acute renal failure, chronic dialysis, and renal transplant patients at *UAB Highlands Hospital*. The *VA Consult Service* covers all consults for acute renal failure, chronic dialysis and renal transplant patients at the VA.

The ***Nephrology Transplant Services*** are divided into the *UAB Transplant Consult Service,* the *UAB Transplant Ward Service,* and the *UAB Transplant Evaluation Services.* The *Transplant Consult Service* provides consultation services for renal transplant patients admitted to other services besides the inpatient transplant ward service at *University Hospital*, including transplant patients at *Spain Rehabilitation Center*, *the Center for Psychiatry*, and the *Eye Foundation Hospital*. Patients requiring dialysis on these services are cared for by the transplant dialysis unit on the seventh floor of the Spain-Wallace Hospital Building. Surgical house staff and nurse practitioners, along with a Nephrology Fellow, staff the *Transplant Ward Services*.

Outpatient dialysis services are operated by DaVita Healthcare and include the *Birmingham Central Dialysis Unit*, *Hepatitis B Ag Positive Unit*, the *Home Training Unit* (HTU) (all on campus), and four satellite dialysis units: the *Birmingham East Dialysis Unit*, the *Ensley Dialysis Unit*, the *North Dialysis Unit* (all located within the city limits), and the *Bessemer Dialysis Unit* which is located within the western Jefferson County city of Bessemer.

Nephrology outpatient services include daily Nephrology clinics at **The Kirklin Clinic,** Nephrology New Patient Clinics at **The Kirklin Clinic,** and Nephrology Transplant clinics at **UAB**. There are also weekly Nephrology clinics at Cooper Green Hospital and the Birmingham Veteran Affairs Medical Center.

C. Research Programs

The Division of Nephrology faculty members are involved in a wide variety of research programs. There are basic research laboratories working in the areas of acute kidney injury and tubular pathophysiology, renal transport physiology, glomerular disease and nephritic syndrome, vascular biology and nitric oxide, matrix biology, free radical biology, genetics, immunology, stem cell biology, and hypertension.

The UAB-UCSD O'Brien Core Center for Acute Kidney Injury (AKI) is one of 8 centers funded nationwide and is an interdisciplinary center of excellence in AKI-related research. The main objective of this core center is to provide scientifically rigorous, state-of-the-art methodologies in a cost-effective manner to address experimental questions that will advance our understanding of the pathophysiology of AKI, enhance our diagnostic specificity and expand our therapeutic and preventive approaches for AKI, specifically in the intensive care unit and in the setting of kidney transplantation.

Several clinical trials dealing with various aspects of renal disease including the adequacy of dialysis, the treatment of patients at risk for developing renal disease, renal disease in African-Americans, and the use of new immunosuppressive agents in renal transplantation are ongoing in the Division of Nephrology. The research activities in the Division of Nephrology provide opportunities to Fellows to learn specific research methodologies and play a critical role in the development of an academic portfolio for those Fellows interested in pursuing a career in academic medicine. Further information can be obtained on the UAB Division of Nephrology Website: http://www.nrtc.uab.edu/index.html.

D. Teaching Activities

The teaching activities of the Division are carried out within the framework of the clinical services, block month electives, and regularly scheduled teaching conferences. Fellows are encouraged to actively participate in all conferences and will be responsible for leading discussions and presenting several conferences throughout the year. These conferences are explained in further detail in Sections II and IV below.

II. OVERVIEW OF NEPHROLOGY FELLOWSHIP CURRICULUM

A. Mission Statement

The mission of the Division of Nephrology Fellowship training program is to produce physicians who are clinically competent in the broad field of Nephrology; highly effective in a variety of clinical settings; and possess habits of life-long learning to allow for continued growth in knowledge, skills and other aspects of a professional career in Nephrology.

B. Specific Goals

The specific goals of the training program are derived from the Mission Statement:

1. The training of clinically competent Nephrologists.

Clinical competence is essential for all physicians. Clinical competence in Nephrology is defined as:

a. A basic core understanding of anatomy, histology, physiology, biochemistry, immunology, genetics, pharmacology, epidemiology, statistics, ethics and human behavior relative to the practice of Nephrology.
b. A basic core knowledge of the pathogenesis, histopathology, pathophysiology, clinical manifestations and management of kidney diseases or systemic diseases with renal manifestations.
c. The clinical skill of data collection including history-taking, physical examination and the appropriate use of radiologic and laboratory tests particularly as pertaining to the diagnosis of kidney disease.
d. The ability to formulate appropriate differential diagnoses and therapeutic plans based on an ability to critically analyze the clinical data and integrate this analysis with the basic fund of medical knowledge.
e. The knowledge of the treatment of the common and uncommon diseases found in the practice of Nephrology including an understanding of the principles, indications, contra-indications, risks, costs and expected outcome of the various treatments.
f. The performance and/or interpretation of diagnostic and therapeutic procedures common in the practice of Nephrology including the understanding of the principles, indications, contraindications, risks, costs and expected outcomes of these procedures.
g. The ability to perform competently as either a consultant or a health-care team leader through effective communication with patients, peers and paramedical personnel.
h. The ability to recognize the need and appropriately seek input from colleagues in other specialties through consultation.
i. The development of qualities of professionalism and humanistic skills including integrity, compassion and respect for patients, peers and paramedical personnel.
j. An understanding of current research methods-all Fellows must be capable of demonstrating an understanding of the design, implementation and interpretation of research studies, specifically including research methodology, critical interpretation of data, critical interpretation of published research and the responsible use of informed consent.

2. The training of Nephrologists who are highly effective in a variety of settings.

To function most effectively in a modern healthcare delivery system, a Nephrologist must be able to work well in a variety of different clinical settings as:

a. Primary health care provider in the acute inpatient setting, intensive care unit, ambulatory clinic and emergency department.
b. Consultant to other internists or non-internists in the acute inpatient setting, intensive care unit, ambulatory clinic and emergency department.
c. Leader of a multidisciplinary health care team particularly as it relates to chronic dialysis therapy.

3. The development of skills and habits of professional life-long learning in Nephrology trainees.

Continuous education is an essential component for clinically competent physicians and required for the acquisition, critical analysis, synthesis and reassessment of knowledge, skills and professionalism. The Fellowship program will foster and support this by encouraging:

a. Independent study habits in the acquisition of clinical and research knowledge and skills.
b. Active participation in Department of Medicine and Division of Nephrology educational conferences including regular attendance and presentation of selected topics.
c. Attendance and participation at regional and national professional clinical and/or scientific conferences.

C. Specific Objectives

Upon the completion of the Nephrology Fellowship training, the Fellow should have mastered the following Specific Objectives as they pertain to each of the specific goals of the curriculum:

1. Specific objectives which will foster the training of clinically competent Nephrologists include:

a. Mastering those specific clinical objectives for the majority of diseases seen in the practice of Nephrology, including the uncommon and complicated diseases.
b. Developing proficiency as a primary healthcare provider, consultant and/or leader of a multidisciplinary health care team.
c. Honing communication skills that allow the trainee to perform as a health care team leader with peers and professionals.
d. The development of proficiency in clinical skills to a level at which trainees are not only able to demonstrate their own proficiency, but are capable of teaching these skills to trainees at junior levels.
e. The development of humanistic skills and professionalism to a level that serves as a model for more junior trainees.
f. The development of a familiarity with areas of active Nephrology research such that trainees have an understanding of some of the major research questions in the field and an appreciation of the design, performance, potential strengths and shortcomings of a variety of experimental protocols.

2. Specific objectives to foster the goal of training Nephrologists that are highly effective in a variety of settings include:

a. The development of proficiency as the primary health care provider in the acute inpatient setting, intensive care unit, ambulatory clinic and emergency department.
b. The development of proficiency as a consultant to other internists or non-internists in the acute inpatient setting, intensive care unit, ambulatory clinic and emergency department.

c. The development of proficiency as the leader of a multidisciplinary health care team particularly as it relates to chronic dialysis therapy.

3. Specific objectives to foster the development of skills and habits of professional life-long learning in Nephrology include:

a. Regular attendance at Department of Medicine and Division of Nephrology teaching conferences and participation in the coordination of conference topics and schedules.
b. Demonstration of mastery of teaching skills through interaction with trainees in junior levels of training including supervised teaching interactions with junior-level Fellows, residents and medical students.
c. Involvement in a research project sufficient to enable submission of work as first author for either presentation at national or regional scientific meetings or in peer-reviewed journals.
d. Successful grant application for research funding (for Fellows planning to go on to an academic career).

D. Methodology for Teaching Nephrology

In order to achieve the goals and objectives for the Nephrology Fellowship Training Program, the following teaching experiences have been established:

1. **UAB Nephrology Ward Service**
2. **UAB Acute Consult Service**
3. **UAB Chronic/Access Consult Service**
4. **VA Consult Service**
5. **UAB Highlands Consult Service**
6. **UAB Nephrology Transplant Ward Service**
7. **UAB Nephrology Transplant Consult Service**
8. **UAB Nephrology Transplant Evaluation Service**
9. **Outpatient Dialysis**
10. **Ambulatory Nephrology**

1. UAB Nephrology Ward Service

The Nephrology Ward Service is an inpatient medicine ward designed to care for patients with acute renal failure, end-stage kidney disease (ESRD) and chronic kidney disease (CKD) who require hospitalization for renal and non-renal reasons. The ward service houses patients on the 8th floor of the Spain-Wallace building, and also houses the inpatient dialysis unit. The nursing staff is specifically trained to care for patients with renal disease, including the routine management of peritoneal dialysis. The Nephrology ward team includes the Nephrology Attending, one or two Nephrology Fellows, two upper-level and two intern-level house staff each month. Fourth-year medical students may also be included on the team.

Responsibilities of the renal Fellow on this rotation include, but are not limited to:

(1) Evaluating the need for dialysis in patients on the ward service
(2) Prescribing and adjusting hemodialysis and peritoneal dialysis prescriptions for patients with a wide range of medical problems
(3) Evaluating patients presenting in the emergency room with renal issues and determining appropriateness for admission.
(4) Performing renal biopsies in inpatients when biopsy Fellow is unavailable
(5) Managing specific medical considerations pertaining to the dialysis patient, including nutrition, renal osteodystrophy, anemia, medication dosage, and dialysis access issues.
(6) Teaching the house staff the rudiments of the care of the patient with CKD and ESRD

(7) Supervising the house staff and providing guidance on therapy related to ESRD management.
(8) Coordinating the care of the dialysis patient from the inpatient to the outpatient setting, including arranging for outpatient hemodialysis, administration of antibiotics/other medications to be given on dialysis, and
(9) Determining appropriate medication usage and dosage in patients with renal disease.

Essential in this role is the development and refinement of clinical skills in the evaluation, diagnosis, treatment, and follow-up of patients with renal disease. These skills include developing appropriate differential diagnoses, assessing the need for hospitalization, and implementing diagnostic strategies and treatment plans. Through this experience the Fellow will also develop a comprehensive understanding of the indications, contraindications, techniques, and complications of hemodialysis, peritoneal dialysis, vascular access placement, and renal biopsies. The Fellow will also acquire skill in educating patients about these procedures and in obtaining informed consent.

2. UAB Acute Consult Service

The Acute Consult Service engages in providing the services of renal consultation to UAB (including the Center of Psychiatry and Spain Rehabilitation Center), Cooper Green Hospital, and the Eye Foundation Hospital. The Acute Consult Fellows will be exposed to a wide range of renal pathology in patients admitted to other medical and surgical services. This is a busy service with the average number of patients followed by this service ranging between 25 to 40, and the average number of new consults being 5 per day. UAB has 8 different intensive care units and over 120 ICU beds, providing a broad exposure to acute renal failure in several different clinical settings. Toward this end, UAB has 25 Continuous Renal Replacement Therapy (CRRT) machines (Prisma and Prismaflex) available for use in the ICUs at University Hospital (not Cooper Green Hospital). Fellows on this rotation will gain extensive renal replacement experience in diverse critical care settings, including its use in drug overdose and toxicology. Additionally, the Acute Consult Fellow will have an opportunity to see new presentations of glomerulonephritis, tubulointerstitial diseases, obstructive uropathy, toxic nephropathies, and a diverse array of challenging acid-base and electrolyte problems, as well as assessing the need for and performing renal biopsies. A single Nephrology Attending Physician is assigned to this service for the entire month. Three Fellows, in addition to one or two second and/or third-year internal medicine residents, are assigned to the Acute Consult Service in any given month. During this month, it is customary that the residents and Fellows assigned to the acute consult service also attend the Cooper Green and/or VA Nephrology Clinic. The schedule is designed to ensure that when one Fellow is in clinic there is always another Fellow available to take consults. The Acute Consult Fellow will also be responsible for any biopsies deemed necessary by the consult service. There is a Renal Consult Template to be used for all new consults. A copy is located at the end of this Fellowship manual. The template is available at www.nrtc.uab.edu.

3. UAB Chronic Consult Service

The Chronic Consult Service is designed to provide care for patients with established ESRD on other services in the hospital, with the exception of ESRD patients in an ICU. The service is staffed by a Nephrology Attending Physician and a First year Nephrology Fellow. The First Year Fellow on the Chronic Consult Service provides renal replacement therapy for these patients, makes adjustments in their dialysis prescription as necessary, and learns about the challenges of dialysis access in patients with a wide range of co-morbid conditions. Hemodialysis access responsibilities consist of placement of femoral hemodialysis catheters in the inpatient dialysis unit (IDU) and the removal of tunneled catheters in the Kirklin Clinic on the 4th floor Cardiovascular Suite. The Chronic Fellow is also responsible for any chronic dialysis issues involving outpatient ESRD patients in Interventional Radiology. **Of note, Interventional Radiology does not use IMPACT.** This Fellow will also have ample opportunity to learn the

important art of cooperating with services to achieve the best outcome for the patient. There are no residents on this service.

4. VA Consult Service

The Birmingham Veteran's Hospital provides Nephrology services through an autonomous hemodialysis unit, a weekly Nephrology clinic and a Consultation service. The consult service is covered by Nephrology Fellows in the second year of training. However, some of first-year Fellows will have an opportunity to participate in the weekly Nephrology clinic throughout the year. The service is staffed by a VA Nephrology Attending Physician and typically two Second Year Nephrology Fellows (the assigned VA Fellow and the VA/Highland Fellow). There are no residents on this service. Second year Fellows are on call 7 AM to 5 PM weekdays and from 7AM to 12PM Saturday and Sunday. Their responsibilities include rounding on patients seen by the consult service during the week, rounding in the VA outpatient dialysis unit, and Attending VA outpatient renal clinics. Patients will be discussed with the Acute Consult Attending on call at UAB. The weekend rounding schedule at the VA/Highlands Hospitals will be divided among the Second Year Nephrology Fellows and assigned monthly along with the General Nephrology Call Schedule.

5. UAB Highlands Consult Service

In 2006, UAB Hospitals purchased Healthsouth Hospital and renamed it UAB Highlands. The hospital is designed to admit patients primarily with orthopedic and elective surgeries. A Hospitalist service will care for these patients. The Highland Consult Fellow is a Second Year Fellow who will be responsible for all consults, acute and chronic, at Highlands. All consults will be staffed with the Chronic/Access Attending. The Highlands Consult Fellow is also responsible for Attending VA dialysis rounds, the VA Chronic Kidney Disease Clinic on assigned months, and helping the VA Consult Fellow when he or she is in clinic.

6. UAB Nephrology Transplant Ward Service

UAB boasts one of the largest Nephrology transplantation programs in the country, with over 320 combined living-donor and cadaveric-donor transplants per year. The transplant ward service provides an opportunity to see transplant recipients at all stages of the process, including newly transplanted patients, patients with existing allografts with other medical problems requiring hospitalization, and patients with allograft dysfunction. The relationship between the transplant Nephrologists and surgeons is very good, and Fellows often benefit from the synergy of the interaction, as the Nephrology and surgical teams have made it a habit of rounding together. The transplant service is staffed by a Nephrology Transplant Attending, a Nephrology Fellow, and Nurse Practitioners.

The Fellow on the transplant ward service will have an opportunity to do a number of renal transplant biopsies (15-20/month is not unusual), learn the basics of immunosuppression, see a variety of post-transplant complications (medical and surgical), participate in their management, and if interested, view renal transplants in the operating room. Exposure to current topics in transplantation will be provided through participation in weekly conferences dedicated to discussion of current research articles relating to transplantation. The Transplant Ward Fellow will alternate weekend coverage of the transplant wards with the Transplant Evaluation Fellow.

UAB is one of the few programs in the country that offers a separate Nephrology transplant Fellowship to interested and motivated Nephrology Fellows. Successful completion of the general Nephrology Fellowship, along with completion of the transplant Fellowship is currently sufficient to become board-certified in transplant Nephrology by the American Society of Transplantation.

7. UAB Nephrology Transplant Consult Service

In 2007 the Transplant consult service was established for mostly 2nd year Nephrology Fellows although occasionally some 1st year Nephrology Fellows will rotate through the service. This

rotation will give the 2nd year Fellows continued exposure to Transplant topics. The Fellow will help other teams manage transplant patients not admitted to the medical Transplant floor. Consults will usually consist of transplant patients admitted to ICUs or surgical floors outside of S7s. The Consult Transplant Fellow will also aid in outpatient transplant biopsies performed on S7 in the mornings. This Fellow will also provide coverage for the transplant ward Fellow when he or she is in clinic.

8. UAB Nephrology Transplant Evaluation Service

The Division of Transplant Nephrology is responsible for the pre-operative evaluation of both potential transplant recipients and potential living donors. This service gives Fellows the opportunity to gain experience in the evaluation of patients with end stage renal disease (ESRD) for renal transplantation. The goals of this experience are to learn to evaluate ESRD patients to determine if they are potential and acceptable candidates, to learn the appropriate work-up of ESRD patients for either living donor transplantation or placement on the cadaver list, to learn the appropriate work-up of individuals as potential living related and living non-related donors, and learn the fundamentals of HLA matching and histocompatibility testing. The evaluation service is an outpatient clinic that coordinates a multidisciplinary group of consultants needed for transplant evaluation, including Nephrology, surgery, and social services. The transplant evaluation Fellow will see patients and write an evaluation, coordinating the results of an interview, medical, laboratory and radiologic information into a formal transplant evaluation. The Fellow will be responsible for presenting these patients at a weekly transplant evaluation conference, attended by representatives from transplant Nephrology, transplant surgery, blood bank and tissue typing, and social services. An experienced transplant Nephrology Attending staffs the evaluation clinic. The Transplant Evaluation clinic begins at 1 pm every day.

The Transplant Evaluation Fellow will also be responsible for performing outpatient/inpatient native renal biopsies in the outpatient vascular/heart center on the 6th floor of the North Pavilion. Patients typically arrive at 6:30 AM. The Attending Physician should be contacted when the patient has been evaluated and is ready for biopsy. The biopsy will be performed and closely monitored in recovery in the same area. The Transplant Evaluation Fellow will alternate with the Transplant Ward Fellow in covering the transplant wards on the weekends.

9. The Outpatient Dialysis Experience

All outpatient hemodialysis activities are supervised by the specific outpatient dialysis unit's Medical Director. Each Second-Year Fellow will be assigned to an outpatient dialysis unit and is expected to round on an assigned shift of patients twice a month. Fellow responsibilities include writing and updating hemodialysis orders, evaluation and management of patients' hemodialysis accesses, dry weights, blood pressures and extracellular fluid balances, hemodialysis prescriptions, nutritional status, osteodystrophy status, anemia status; and reviewing monthly and other non-routine labs and cultures. The Fellow will also address and triage patient medical complaints. Rounds will be made with the Medical Director. As a result of these patient evaluations, notes are made on each patient by the Fellow, which address the above issues. The Fellow will also meet with the hemodialysis staff to review the water treatment facilities and the set-up and running of a dialysis machine and attend monthly patient-care conferences. These are multidisciplinary conferences attended by the head nurse, the on-site social worker, and the Medical Director. The purpose of the conference is to review all medical, social, and dietary issues that pertain to a patient on chronic hemodialysis and to address Quality Assurance and Quality Improvement.

Second year Fellows are required to attend UAB's Peritoneal Dialysis Academy (PDA) from the evening of September 13 to noon September 16, 2009. This is a three day all day conference in which Fellows will receive extensive training in peritoneal dialysis. The curriculum for PDA includes peritoneal dialysis lectures by expert guest lecturers, interactive problem sessions, and hands-on workshops. Fellows will be excused from all clinical activities during this time. Fellows from other training programs are invited to attend. Following PDA, Dr. Zipporah Krishnasami,

the Medical Director of the HTU, will assign to each Fellow at least three peritoneal dialysis patients to follow for the rest of the year. Fellows will see and examine these patients in the HTU as needed and report to the patient's Attending Physician. Fellows will be involved in adjusting peritoneal dialysis prescriptions and addressing access issues, dry weights, blood pressure, extracellular fluid balance, nutritional status, dialysis adequacy, osteodystrophy status, and anemia status. The Fellow will also be responsible for reviewing treatment of a patient's peritonitis or exit site infection if applicable.

First Year Fellows will also have a month long opportunity to spend time in one of our outpatient dialysis units and a week in the HTU. This will serve as an introduction to the basics of hemodialysis, dialysis adequacy, calcium/phosphorus management, diet management, and other issues including water management. This rotation will also allow the Fellows to see and examine grafts, fistulas, and permcaths.

10. The Ambulatory Nephrology Experience

All Fellows will be required to maintain the equivalent of a half-day continuity clinic per week at the Kirklin Clinic during each year of Fellowship to see patients with renal diseases and problems related to renal disease. This clinic sees new outpatient consultations and continued follow-up of established patients. This experience will continue with progressive responsibility through the Fellowship and will be appropriately supervised by dedicated Attending faculty members. The goal of this experience will be for the Fellows to gain expertise in the outpatient evaluation and management of kidney problems. The experience provides an opportunity to develop an understanding of the natural history of these conditions over an extended period of time. Each Fellow should, on average, be responsible for four to eight patients during each half day session. After initially evaluating the patient, Fellows will present the patient to the Clinic Attending, discuss the patient, and then evaluate the patient with the Clinic Attending. Fellows are responsible for dictating patient encounters through the UAB phone dictation system. Dictations are electronically transcribed into the UAB CDA system and are available for editing by the Nephrology Attending within 1 to 2 days of dictation. Dictations must be completed within 24 hours. The notes are electronically signed by the Clinic Attending. Of note there are two different dictations systems used by the Clinic Attendings in our division. All Fellows will be responsible for contacting their specific Attending's secretary to find out which system their Attendings use. Each Fellow will be supervised by one Clinic Attending for the entire year. The Fellow will then transfer to another Clinic Attending for the duration of his or her second year.

All Fellows will also have the opportunity to participate in weekly half-day Nephrology clinics at the VA and Cooper Green Hospital.

In addition, Second Year Fellows will spend a half-day clinic per week in Nephrology transplant clinic at the Kirklin Clinic. Through the transplant clinics, Fellows will obtain outpatient longitudinal follow-up renal transplant experience. Fellows will follow no fewer than 20 patients as required by the ACGME. The goals of this experience are to learn about immunosuppressive drugs and regimens used in the management of renal transplants, to learn the side effects, complications and drug interactions of immunosuppressive drugs, to learn to evaluate and treat post-transplant complications including infection, hypertension, malignancy, de novo glomerular disease and recurrent glomerular disease, to learn to recognize and treat acute rejection, to learn to recognize and treat chronic rejection, and finally, to learn the fundamentals of HLA matching and histocompatibility testing.

E. Interdisciplinary Interactions

The Fellow also will be provided with opportunity to pursue experiences in other disciplines whose expertise is required in the care of patients with Nephrology diseases. These disciplines include: 1) intensive care medicine, 2) cardiology, 3) Nephrology transplantation surgery, 4) general and vascular surgery, 5) pediatric Nephrology 6) Nephrology imaging, and 7) urology.

The goal of these experiences is for the Fellow to appreciate the approach to the specific conditions that relate to Nephrology disorders within these subspecialties. These interdisciplinary interactions can occur in the form of a clinical rotation, multidisciplinary conference, etc. Clinical experiences should be under the direction of Attending Physicians in the respective specialty or subspecialty who participate fully in the educational goals of the rotation.

In addition, the Plasmapheresis rotation is a four week elective supervised by Dr. Marisa Marques. The goals of the rotation are for the Fellow to understand the fundamentals of plasmapheresis, including indications, technique, complications, and effectiveness. This rotation is offered to interested Second Year Fellows

Finally, Second Year Fellows can elect to train in Interventional Nephrology with Dr. Ivan Maya. This rotation is typically 2 months of exposure in lieu of their research time, depending on the Fellow's goals. Fellows will be exposed to permcath placement, vascath placement, permcath exchange, fistula and graft thrombectomies and angioplasties, PD catheter insertion, Ligations of grafts and fistulas, and stent placement in Grafts and Fistulas.

F. Didactic Conferences

Conferences will be held on a regularly scheduled basis with attendance required of all Fellows and divisional faculty. These conferences are usually multifaceted and because of the nature of topics under discussion, cover a combination of tasks and topics including but not limited to literature review, discussion of clinical cases, evaluation and presentation of research, and concepts of Nephrology basic science. Weekly conferences include the Nephrology Research and Training Center conference, a research conference; Fellows' Conference, a subspecialty conference given by the Fellows on clinically relevant topics; Fellows' Journal Club, a clinically oriented forum for discussion of current articles in Nephrology and relevant internal medicine literature; and the Nephrology Histopathology (biopsy) conference. These conferences will occasionally include lectures from faculty in divisions outside of Nephrology or outside of the Department of Medicine and guest faculty who are visiting UAB. In addition there is an multidisciplinary dialysis access conference every third Wednesday at 7:30 am in the Tishler Conference Room (N307), 3rd Floor of Jefferson Tower.

G. Research Experience

The immediate goal of the research experience is for the Fellow to learn sound methodology in designing and performing research studies and the correct interpretation and synthesis of research data. During this phase of training, the Fellow will work under close guidance of the research mentor. To provide a meaningful research experience, each Fellow will be provided time during the first year to meet with investigators in the Division of Nephrology and related fields. Through discussions with the faculty advisor, the Fellowship Program Director, Research Director, and Division Director, a plan will be made for each Fellow's research year(s). Specific mentors and projects will be identified for each Fellow. Fellows working on specific research projects will be given adequate protected time during the second and subsequent years to allow for uninterrupted progress in pursuing research goals. The goal of the research experience is to develop a body of work suitable for presentation at national scientific meetings and publication in peer-reviewed journals. For those Fellows who are interested in an academic career, this body of work should lay the foundation for applications for extramural funding. Fellows in the 2 year clinical track will have an average of 4 research months their second year.

H. Continuing Medical Education and Society Memberships

In addition to participating in the organized didactic conferences established within the Fellowship program, all Fellows will become associate members of the American Society of Nephrology as well as the National Kidney Foundation and the Alabama Kidney Foundation. Participation in the continuing medical education activities of these professional organizations will help foster the standards of professionalism and augment the process of lifelong learning. In addition Fellows will receive complimentary nephrology journals, including JASN, AJKD and NephSap through these memberships. Amelia Gowins can provide instruction on obtaining membership in these organizations.

I. Experience In Developing Teaching Skills

All Fellows, but particularly senior Fellows, will be encouraged to educate not only medical students, resident physicians and other allied health personnel, but also patients. These teaching activities will be observed by faculty whenever practical so that feedback can be relayed to the Fellow.

Second year Fellows are also required to participate in the Introduction to Clinical Medicine course for first and second medical students as needed.

J. Methods of Evaluation

An evaluation process, including evaluations of individual Fellows, an evaluation process of the program, and of individual faculty has been designed in order for the Fellowship program to assess its ability to meet its goals and objectives. Faculty evaluations of Fellows are completed monthly at the end of the rotation. We use the E*VALUE electronic evaluation system. In addition, first year Fellows are required to take the ASN National In-Training Examination. The department will provide funding for the first year class for this exam.

III. BASIC POLICIES

A. Nephrology Support Services and Facilities

1. Nephrology Fellow Office Suite

Office space has been made available for each Nephrology Fellow in the Tinsley Harrison Tower, room 629 and the Paula Building. Each office is equipped with a personal computer which is connected to the Division of Nephrology computer network. Access to the network is via the Microsoft Outlook Express software package which allows Fellows to send e-mails to individual Attendings and secretaries in Nephrology. (This is particularly useful for distributing patient information after a busy night on call.) Medline searches can also be performed via computer link to the search programs at the Lister Hill Medical Library on campus.

2. Computer Support

a. *Division of Nephrology*

It is strongly recommended that Fellows make use of The Division of Nephrology computer intranet. An E-MAIL software system called Microsoft Outlook Express is available on each computer in THT 629. Each Fellow will have a unique password that should be used to send and receive messages. **Please keep this and all computer passwords confidential for your own safety.** It is strongly recommended that each Fellow make full use of Outlook Express by checking his/her mail regularly. The division also has a full-time computer programmer available to help with computer software and hardware problems. If you have any computer-related problems, please contact Amelia Gowins.

b. *The UAB electronic order entry system,* **Impact**, can be accessed from terminals on the hospital units. An individual password is required and should be kept confidential. Patient data, including all laboratory reports and many radiology test results are available on **Impact**. Physician orders must also be entered through **IMPACT**. Electronic order sets are available for specific procedures, such as renal biopsies, and will be reviewed in orientation. IMPACT access is available at home. Contact Gretchen Kennamer at gkenname@uabmc.edu.

c. *The UAB Clinical Document Access* is the UAB web-based electronic patient record and can be accessed from all terminals throughout the hospital units. UAB patient data, including laboratory reports, imaging, and all clinic notes and discharge summaries are available. An individual password is required and should be kept confidential. The URL is https://horizon.hs.uab.edu. Contact Gretchen Kennamer at gkenname@uabmc.edu in order to obtain access to this website at home.

d. *DaVita Patient Information System*: DaVita Healthcare maintains a secure website through which patient information such as dialysis flowsheets and laboratory data can be obtained and orders can be entered. Each Fellow will be given an access code and password. The URL is https://duck.davita.com/login.cfm. This site can be accessed from any terminal, including at home.

3. Medical Records

In addition to the medical records kept by the University Hospital, the Kirklin Clinic, the VA Hospital, and Cooper Green Hospital, the Division maintains a set of records on each patient seen by the service. The outpatient clinic charts (hospital summaries, outpatient and consult notes) are housed in the office of each patient's Attending Physician, but are available for reading by Nephrology Fellows and house staff. Pertinent information from the clinic chart can be faxed to the hospital ward by the secretaries. The availability of clinic notes using the Careflow option under CDA (see above) has generally made faxing of clinic notes unnecessary.

4. Copies

An office copier is available to Nephrology Fellows on the 6th floor of the Tinsley Harrison Tower building. Fellows may obtain a code for the copier from the Fellowship Coordinator, Ms. Amelia Gowins.

5. Cellular phones

The Division is not responsible for providing cellular phones for faculty, Fellows, or staff. Should you use your personal cellular phone for any patient-related calls, you will not be reimbursed for any expenses incurred during these calls. If you happen to be called by a patient at night or at any time you are away from the University, the university paging operators (934-3411) can connect you to a long distance number.

6. MIST

UAB's Medical Information Service via Telephone (MIST) system is available for Fellows' use. This system is designed to improve the communication between referring physicians and UAB physicians. The MIST operator can be used by Fellows on business concerning patients cared for at UAB by dialing 4-6478 from any campus phone. Tell the operator the name and city of the physician you are trying to find. Physicians calling into UAB can contact the MIST office by dialing 1-800-822-6478. MIST calls generally involve referral of patients to the Nephrology Service from outside UAB and so are generally handled by the Ward Attending during the day and the Attending Physician on call at night.

7. Secretarial Support

The Fellow's Kirklin Clinic Attending serves as the Clinical Mentor for the Fellow for the duration of Fellowship. Therefore, the Kirklin Clinic Attending's secretary usually provides secretarial support for Fellows (may change due to special circumstances). The secretaries will provide basic support such as ordering supplies, providing tapes for clinic dictations, sending out leave notices, and completing travel requisitions. Support for the Fellowship is proved by Amelia Gowins, the Fellowship Coordinator.

8. Long Distance Calls

The Division is not responsible for personal long distance calls for faculty, Fellows, or staff. If you have a patient-related long distance call, the University paging operator (934-3411) can connect you to a long distance number.

B. Clinic Mentor

The Fellow's Kirklin Clinic Attending serves as the Clinical Mentor and Faculty Advisor for the Fellow for the duration of Fellowship. The Kirklin Clinic Attending evaluates the Fellow's Kirklin Clinic performance quarterly and is available to meet with the Fellow to discuss Fellowship or personal issues.

C. Conference Attendance

Nephrology Conferences
Per ACGME requirements conferences must be attended regularly by Fellows. At a minimum, these must include:

- At least one nephrology clinical conference weekly
- One nephrology literature review conference (journal club) monthly;
- One nephrology research conference monthly
- At least one nephrology core curriculum conference weekly, when averaged over one year

Attendance will be documented through sign-in sheets at each conference. **We require Fellows to attend a minimum of 65% of all conferences each year for graduation.**

Dean's Council Lectures
The Dean's Council for GME has developed a lecture series to assist residents and Fellows in meeting the ACGME Common Program requirements. Lectures will be held approximately 4-5 times per year with all topics completed over a 2 year period. The lecture series will be repeated biannually. Topics will include: sleep deprivation, stress and substance abuse, depression/anxiety/stress, ethics and professionalism, ACGME competencies and compliance. Future topics are still under discussion.

Attendance is mandatory for all residents by either Attending the lecture or, viewing the presentation, or completing the education on a web based application. Each topic will be presented twice (same presentation, but different time of day). For Fellows unable to attend the lecture, the information will be available on HealthStream, an education software package implemented by the Health System as a mechanism for various required educational training. Instructions on accessing HealthStream can be found in the end of the manual.

Vocabulary of Clinical and Translational Science
Research training at UAB is a continuing source of expert clinicians and academic medical faculty for the Southeast and the nation. The Center for Clinical and Translational Science:

Research Education, Training and Career Development Component offers the "Vocabulary of Clinical and Translational Science" for two weeks every Fall. To assist the entire UAB community at all levels of training and to better prepare for their role as leaders in all aspects of medicine, the Deans and Chairs of the School of Medicine have agreed to make attendance a **mandatory** component of all UAB School of Medicine post-doctoral Fellowships for Fellows beginning their Fellowships in July 2009 and for those in their second year of training who did not attend last year's session. The goals of this course are three-fold:

a. To understand clinical and translational science in a way that participants are better prepared to read and interpret the medical literature through their understanding of types of research design, conduct, analysis, and interpretation.
b. To prepare attendees to make informed decisions regarding whether or not to pursue clinical and translational science as part of their career path.
c. To provide a foundation for further clinical training for participants in UAB's Clinical and Translational Science Training Program.

The course offering will include the following topics:

Hypothesis generation and testing
Analytic theory and considerations
Principles and processes of observational and experimental studies
Overview of different types of research
IRB and ethic principles and procedures
Critical review of published literature

The course is mandatory for all School of Medicine Fellows beginning Fellowships in July 2009 who are enrolled in Fellowships of more than one year's duration and have not completed training programs with similar content in the past.

D. Books and Reading Materials

Fellows will receive educational handouts throughout their Fellowship, including a CRRT and PD Primer during orientation.

Textbooks

First year Fellows are provided two textbooks at orientation:

- Daugirdas, J.T., Blake P.G., Ing T.S. (eds). Handbook of Dialysis. Philadelphia, Lippincott Willliams & Wilkins
- Burton David Rose: Clinical Physiology of Acid-base and Electrolyte Disorders

Fellows are also provided a book fund of $199 and can contact Amelia Gowins for purchase of textbooks. Recommended reading sources during Fellowship include the following textbooks:

- Danovitch. Handbook of Renal Transplantation.
- Greenberg, A., Cheung, A.K., Coffmann, T.M., Falk, R.J., Jenette, C. (eds). Primer on Kidney Diseases: National Kidney Foundation. California, Academic Press
- Johnson, R.J., Feehally, J. (eds). Comprehensive Clinical Nephrology. Philadelphia, Elsevier Limited
- Brenner, B.M., Levine, S.A. (eds). Brenner and Rector's the Kidney. W.B. Saunders Company
- Schrier R.W., Gottschalk C.W. (eds). Diseases of the kidney. Little, Brown.
- Sister Martine Graf. Urinalysis

Websites

- Hypertension, Dialysis and Clinical Nephrology (HDCN) www.hdcn.com
- National Kidney Foundation

http://www.kidney.org/professionals/tools/
http://www.kidney.org/professionals/kdoqi/guidelines.cfm
http://www.kidney.org/professionals/kdoqi/otherEvidence.cfm
http://www.kidney.org/professionals/physicians/

- http://www.crrtonline.com/index.php

Journals
The following journals are received by the Nephrology Division and are accessible by the UAB Lister Hill Library website:

- Journal of the American Society of Nephrology (JASN)—Associate Membership with journal subscription is available to all Fellows
- American Journal of Kidney Disease (AJKD)—Associate Membership with journal subscription is available to all Fellows
- Kidney International

E. Duty Hours and On-Call Responsibilities

1. Duty Hours

Duty hours are defined as all clinical and academic activities related to the Fellowship program; i.e., patient care (both inpatient and outpatient), administrative duties relative to patient care, the provision for transfer of patient care, time spent in house during call activities, and scheduled activities such as conferences. Duty hours do not include reading and preparation time spent away from the duty site. Duty hours must be limited to 80 hours per week, averaged over a four-week period, inclusive of all in-house call activities. Fellows are provided with 1 day in 7 free from all educational and clinical responsibilities, averaged over a 4-week period, inclusive of call. One day is defined as 1 continuous 24-hour period free from all clinical, educational, and administrative duties. Adequate time for rest and personal activities are provided and consist of a 10-hour time period from all clinical, educational, and administrative duties**. Fellows do not take in-house call.**

All Fellows must document their duty hours a week at a time on a quarterly basis. Amelia Gowins will inform the Fellows at least a week in advance of the designated month and week for recording duty hours. The duty hours must be entered into the E-Value System. This is an ACGME requirement. **The designated month and week are listed on the yearly master rotations schedule.**

2. On-Call Coverage

Fellows take at-home call. At-home call (or pager call) is defined as a call taken from outside the assigned institution. When Fellows are called into the hospital from home, the hours Fellows spend in house are counted toward the 80-hour limit. Furthermore, Fellows must not spend more than 30 continuous hours in house. In order to comply with this requirement, any Fellow on call who has to remain in house for 4 hours or more **after midnight** must leave the hospital by 2 p.m. the next day. The next morning (post-call morning) the Fellow must inform his or her service Attending, Amelia Gowins, and the Chief Nephrology Fellow so coverage can be arranged. Typically either a Fellow from the Acute Consult service, a Fellow on outpatient HD, or a Fellow on research will be contacted to cover the post-call Fellow's duties from 2 p.m. to 5 p.m.

During the initial three months of Fellowship, the first year Fellows are required to come in to the hospital to assess ALL patients they have been asked to evaluate. Thereafter, the Fellows can use their clinical judgment to decide whether they need to see the patient physically in the hospital prior to discussing the admission or consultation with the Nephrology Attending Physician on call. However, throughout the duration of their Fellowship, Fellows must see all

ICU consults, all consults in need of emergent dialysis, and any patient the on-call Nephrology Attending requests the Fellow to see, including transfers from outside hospitals. Fellows may also be asked to see patients on the Nephrology ward service when the resident requests assistance.

First year Fellows take no more than 4 calls a month. Second year Fellows typically take 0 to 2 calls a month. The Chief Nephrology Fellow is responsible for making the call schedule and submitting it to Barbie Randall on a monthly basis. Barbie Randall distributes the completed schedule to the paging operators, Nephrology Division members, and dialysis units. Call may be switched among the Fellows, but if the switch occurs after the call schedule is made, the Fellow requesting the switch must notify Ms. Barbie Randall at 4-2646, and she in turn will notify the appropriate paging operators. The Fellowship Director is not involved in the details of the Fellows' call schedule and leaves the responsibility of ensuring a fairly distributed call schedule to the Chief Nephrology Fellow and Fellows themselves.

a. Weeknight Call

Weeknight call starts at 5:00 p.m. that night and ends at 7:00 a.m. the next day.
On-call duties include:

- Seeing emergency consults at any of the UAB affiliated hospitals (UAB, CGH, VA, Eye Foundation Hospital, and Highlands)
- Serving as a back up person for questions from the resident covering the Nephrology ward service that night.
- Handling any problems in the outpatient dialysis units during the evening shift.
- Being responsible for any on-going inpatient dialysis during the hours of call with the exception of patients being dialyzed by the Transplant Dialysis Unit personnel.
- Serving as a consultant to the UAB, VA, UAB Highlands, Eye Foundation Hospital, and Cooper Green Hospital Emergency Departments and arranging admissions of any patients to the Nephrology ward service at University Hospital either by direct presence in the ER or by arranging to have the resident covering the Nephrology ward service that night see and admit the patient.
- Discussing all consults and admissions with the responsible on-call Attending. **THERE ARE NO EXCEPTIONS.**
- Discussing all patients requiring emergency dialysis with the responsible on-call Attending before calling the dialysis nurse. Initiation of dialysis at night must not be done until discussed with the Attending on call.
- Notifying the primary Nephrologist the next day by e-mail of any of his or her patients seen on-call.

All MIST calls (calls from physicians outside UAB) should be referred to the Nephrology Ward Attending on call.

b. Weekend Call

Call starts at 12:00 p.m. on Saturday and ends at 7:00 a.m. Sunday morning. Sunday call starts at 7:00 a.m. and ends at 7:00 a.m. on Monday morning.

On Saturday, the Nephrology Ward Fellow covers ER admissions from 7:00 a.m. to noon, and the rounding acute and chronic/access consult Fellows cover new consults from 7:00 a.m. to noon. The VA or Highlands Fellow will cover all VA consults and issues from 7 AM to 12 PM.

On Sunday, the rounding Acute Consult Fellow covers new consults from 7:00 a.m. to noon. Since there is no rounding Nephrology Ward Fellow or Chronic/Access Consult Fellow, on Sunday, the on-call Fellow covers all new admissions and chronic/access consults starting at 7:00 a.m. New VA admissions/consults will be covered by the acute consult Fellow after 12PM

as well. As above, The VA or Highlands Fellow will cover all VA consults and issues from 7AM to 12PM.

The duties of the weekend on-call Fellow are the same as the weeknight on-call Fellow with the following additions:

- The weekend on-call Fellow will report any admissions to the Nephrology Ward Fellow and any consults to the appropriate Consult Fellows by 7:00 a.m. Monday. The Saturday on-call Fellow will report any new consults, including new VA consults and access/chronic consults, and any pertinent patient issues to the rounding Acute Consult Fellow and rounding VA Fellow by 7:00 a.m. Sunday.
- The Saturday on-call Fellow will handle any problems in the outpatient dialysis units on Saturday.
- The Saturday on-call Fellow is responsible for any on-going inpatient dialysis sessions from 12:00 noon Saturday to 7:00 a.m. Sunday.
- The Saturday on-call Fellow is responsible of notifying the Sunday on-call Fellow of any new Nephrology ward admissions or chronic/access consults that require hemodialysis or peritoneal dialysis on Sunday.
- The Sunday on-call Fellow is responsible for entering peritoneal dialysis orders on all peritoneal dialysis patients in the hospital. The Sunday on-call Fellow must obtain ahead of time from the Nephrology Ward and Access/Chronic Consult Fellows a list of inpatients requiring PD orders for Sunday.
- The Sunday on-call Fellow is responsible for entering hemodialysis orders on any Nephrology ward or chronic/access consult patient that requires dialysis.

c. Calls from Outpatient Dialysis Clinics

Pages to the Nephrology Fellow on call after 5:00 p.m. on weeknights and after 7:00 a.m. on Saturdays should be answered promptly. Unstable patients may be referred to the University Emergency Department. The dialysis clinics should not request the Fellow on call to rewrite or phone in routine drug prescriptions. The appropriate Attending Physician should be notified of significant after-hours problems with patients in the dialysis clinics. This is best done by contacting the Attending the next morning either by calling his or her office or sending a message via e-mail.

Occasionally a patient's vascular access is found to be clotted after hours in an outpatient clinic, and the Fellow is notified. If the patient can safely forego dialysis until the following day, the Fellow should leave a message to notify the Access Coordinators Donna Carlton and Erin Estrada at 934-4544 so that the patient can be scheduled for a declot procedure by interventional radiology the following day. The Fellow should also notify the office of the patient's Attending Physician by e-mail or phone. If a patient needs dialysis urgently for volume overload or other reasons, he or she must be brought to the Inpatient Dialysis Unit for admission for vascular access and dialysis. This is discussed in detail in Section IV.

d. After-Hours Patient Calls

In-center and home dialysis patients frequently call for assistance after hours. These calls are usually directed to the Fellow on call. The Fellow should respond promptly and courteously to these calls. Any questions regarding disposition should be addressed by the Fellow with the Attending Physician on call. A DaVita Nurse from the HTU is on call nightly to respond to outpatient calls from HTU patients and is a valuable resource.

If it is necessary that a patient be seen after hours or on weekends, the Fellow should arrange for the patient to be seen in the Emergency Department. All admissions to the Nephrology ward service should be discussed with the Attending Physician on call as well as the appropriate medical house staff.

e. Transplant Call

All Nephrology transplant calls should be referred to the Fellow assigned to the Nephrology transplant ward for that month. The Fellow assigned to the Nephrology transplant ward service takes home call for transplant issues from 5:00 p.m. to 8:00 a.m. if a Nephrology Fellow is not moonlighting for the Transplant service. A moonlighting surgical resident or Nephrology Fellow is present in-house to take call from 6:00 p.m. to 6:00 a.m. on weeknights and from 2:00 p.m. to 6:00 a.m. on weekends. The Nephrology Transplant Fellow is rarely called during those times and usually only for emergent dialysis issues if a surgical resident is moonlighting. All Nephrology transplant calls to the Nephrology Transplant Fellow must be discussed with the Nephrology Transplant Attending Physician on call. The Nephrology Transplant Fellow still takes no more than 4 days of general Nephrology call during the Nephrology Transplant Ward rotation.

F. Moonlighting

Because Fellowship education is a full-time endeavor, the Nephrology Fellowship Director must ensure that moonlighting does not interfere with the ability of the Fellow to achieve the goals and objectives of the educational program. The Nephrology Fellowship Program complies with UAB's written policies and procedures regarding moonlighting, in compliance with the ACGME Institutional Requirements (**see GME policies and procedures**). Any hours a Fellow works for compensation at UAB or any of UAB's primary clinical sites must be considered part of the 80-hour weekly limit on duty hours.

Moonlighting for the first year is strongly discouraged and not allowed during inpatient clinical months. Any moonlighting must be approved by the Nephrology Fellowship Director. All Fellows are required to sign the Nephrology Fellowship Moonlighting Policy and Procedures Form by the end of the first week of orientation. The form can be obtained from Amelia Gowins (**see appendix**).

G. Procedure logs

Fellows will develop a comprehensive understanding of indications, contraindications, limitations, complications, techniques, and interpretation of those diagnostic and therapeutic procedures integral to Nephrology trainees and will acquire knowledge of and skill in educating patients about the technique, rationale, and complications of procedures and in obtaining procedure-specific informed consent. Faculty supervision of procedures performed by each Fellow is required.

Requirements for the American Board of Internal Medicine certification in the subspecialty of Nephrology require demonstration of competence in the following procedures (the minimum requirements per UAB are listed in parentheses next to each procedure):

a. Percutaneous biopsy of autologous kidneys (5)
b. Percutaneous biopsy of transplanted kidneys (5)
c. Placement of temporary vascular access (i.e. vascath) for hemodialysis and related procedures (5)
d. Peritoneal dialysis (20)
e. Acute hemodialysis (20)
f. Maintenance chronic hemodialysis (20)
g. Continuous Nephrology replacement therapy (20)
h. Post-op management of transplanted patients (10)
i. Follow-up with transplanted patients in clinic (20)
j. Removal of tunneled catheters (5).

Each Nephrology Fellow is required to keep a log of the supervised procedures performed during the course of his/her Fellowship. All Fellows will be required to input into an electronic log in the E-value System all clinical procedures performed, identifying the procedure, date, indication, outcome, complication and name of supervising physician. It is imperative that these logs be completed so that there is adequate documentation of Fellows' procedural competency. A copy of completed procedure logs should also be kept by each Nephrology Fellow for his/her records.

The Attending Physician should be notified prior to any procedure being performed. This will allow the Attending to be physically present for supervisory purposes and well as for billing purposes.

H. Coverage of House staff

All subspecialty Fellows are required to provide in-house overnight coverage for the internal medicine residents' annual Fall retreat and Spring party. The Fall retreat, known as Camp Dismukes, is scheduled in the Fall. On that day 3 to 4 Nephrology Fellows are expected to stay in-house and cover a medicine service from 10:00 a.m. that morning to 8:00 a.m. the next day. The Spring party is scheduled in the Spring. On that day 3 to 4 Nephrology Fellows are expected to stay in-house and cover a medicine service from 5:00 p.m. that evening to 8:00 a.m. the next day. The Chief Nephrology Fellow will coordinate the selection of Nephrology Fellows for coverage for these two events.

I. Vacation and Business Leave

First-year Fellows have two weeks of paid personal vacation time in addition to a week off around the Christmas or New Years Holidays. The following rules apply:

- Vacation time must be approved **at least one month in advance** by the Nephrology Fellowship Director.
- Advance notice of vacation dates must be given to the Fellow's Continuity Clinic Attending **at least one month in advance**. This allows the Attending to adjust his/her clinic schedule so no coverage is needed by another Fellow. However, the Nephrology Fellow must find coverage for absences from other clinics, such as the VA and CGH Nephrology clinics, or from clinical rotations.
- Advance notice must also be given to Amelia Gowins, the Fellow's clinical secretary, and the Chief Nephrology Fellow so adjustments can be made to the call schedule and written notices can be sent by the Fellow's clinical secretary to the Nephrology faculty, Fellows, administrative staff, and secretaries.
- Vacation time should be taken during a month in which no coverage is needed or coverage can be easily arranged.

Second-year Fellows also can expect two weeks of personal vacation time, along with a week off either around the Christmas or New Year's holiday.

When you have vacation, if you are on a month with inpatient responsibilities, i.e. CGH or VA clinic, you will need to have coverage at least 1 month in advance for that clinic. Expecting to find coverage the week prior is not fair to your colleagues and causes inconvenience to others. You know your vacation months at the beginning of the academic year, there is no excuse for not finding appropriate coverage.

Business Leave:
Second-year Fellows have the option of Attending a major medical meeting such as the American Society of Nephrology meeting in the Fall or the National Kidney Foundation meeting in the Spring each year. Specifics will obviously need to be handled on a case by case basis by

the Fellowship Director in conjunction with the Division Director. This time off will not be deducted from vacation time. Written notice for official leave must be sent to Nephrology faculty, Fellows and secretaries and proper coverage found.

Other Absences:
Fellows need to arrange their own coverage if they are gone or unavailable during the time they are on active rotations or have clinical responsibilities. Pre-arranged Fellows absences must be cleared with the appropriate Attending for Fellows absent from clinical rotations. Amelia Gowins and the Fellow's clinical secretary must be informed and a memo and e-mail with the dates and covering Fellow must be circulated.

J. Miscellaneous Policies

Policies regarding medical leave, family leave, maternity leave, leave for examinations, educational leave, sexual harassment, physician impairment and disability, jury duty, counseling services, and grievance procedures can be found in the **UAB Graduate Medical Education Policies and Procedures Manual.** This manual is distributed to all new Fellows at orientation. **See appendix for Internal Medicine Residency Parental Leave/Long Term Leave Policy.**

IV. DETAILED DESCRIPTION OF FELLOWSHIP ROTATIONS

A. Nephrology Ward Service

The 8NW ward in the Spain/Wallace hospital building has been designated as the Nephrology inpatient unit. This unit is staffed by personnel who have received training in the specialized care of patients with chronic Nephrology disease. A team approach has been emphasized to most effectively take care of hospitalized Nephrology patients. The Interim Nurse Manager on the unit is Tammy Canter, R.N.

The 8NW ward is uniquely equipped to serve patients with end-stage renal disease (ESRD). The unit consists of 14 inpatient beds in private and semi-private rooms designated for Nephrology patients and a 4-bed acute care room (W834). The acute care room is used primarily for seriously ill patients who require more than the usual level of care or observation but do not warrant admission to an intensive care unit. Located in close proximity to the Nephrology ward is the inpatient dialysis unit (IDU). Acute hemodialysis is generally carried out in the IDU, but can also be carried out in each hospital room when patient isolation is required. All patient rooms also will accommodate automated peritoneal dialysis. Cardiac telemetry is available on each bed on 8NW as well.

Because of the concentration of uniquely trained personnel and specialized equipment, every effort should be made to admit Nephrology patients to 8NW.

Admission Policies

1. All patients admitted to the Nephrology service are patients of the Nephrology Attending on the Nephrology ward service that month.

2. Elective/scheduled admissions will be scheduled through each Attending Physician's office. Each Attending Physician's secretary will be responsible for all information needed to obtain pre-certification for hospital admission.

3. In most instances, emergency admissions and transfers will be arranged by the Attending Physicians.

4. The Nephrology Fellow covering the Nephrology ward service will handle consultation requests for evaluation and/or admission from the Emergency Department during the hours of 7:00 a.m. to 5:00 p.m. on weekdays. The Nephrology Fellow on call will cover the Emergency Department after hours.

- The Nephrology Fellow can admit patients from the emergency department to the Nephrology ward service after discussion with the Attending Physician covering the service or, if after hours, the Attending on call.
- If a patient is seen by the Nephrology Fellow, but not admitted in the Emergency Department, a blue consultation sheet should be completed and stamped with the patient's card plate stamp. The back (white) copy should be retained by the Fellow and given to the clinical care coordinator, Ms. Barbie Randall. A brief e-mail describing the ED evaluation should be sent by the Fellow to the patient's Attending Physician.

NOTE: It is also possible for Emergency Department Attending Physicians to admit directly to the Nephrology ward service.

Guidelines for ED admission to the Nephrology Ward Service

1. Any HD or PD patient with an acute MEDICAL* (non-surgical) illness.
2. Any UNATTACHED patient with acute kidney disease and an acute MEDICAL* (non-surgical) illness.
3. Any patient already under the care of a UAB Nephrologist and an acute MEDICAL*(non-surgical) illness.
4. Any General Medicine overflow admission will be called directly to the Nephrology ward resident, not to the Nephrology Fellow.

*Acute MEDICAL subspecialty consult request will be initiated in the ED For this reason, it is important that Nephrology Fellows quickly respond (within an hour of consult being called) to calls from the Emergency Department to see patients. Emergency Department physicians have carte blanch authority to admit patients to any Department of Medicine service except cardiology. If a Fellow sees a patient and does not think that the patient is appropriate for the Nephrology ward service, he or she should immediately call the Nephrology Ward Attending or Attending on call so that the Attending Physician may intervene and discuss the case directly with the Emergency Department Attending.

5. The Nephrology Fellows and Consult Attending on the University consult services will handle all requests for transfer from other University Hospital services. To transfer a patient to Wallace 8 North from another floor, the Nephrology Fellow should:

- Have the Attending Physician on the consult service discuss the transfer with the Attending on the ward service to determine if this patient will be accepted for transfer. The Fellows should then discuss the patient to ensure all adequate information has been exchanged upon acceptance of the patient to the Nephrology ward service.
- Inform the Wallace 8 North charge nurse or unit clerk.

6. All MIST calls will be referred promptly to the Attending Physician covering the Nephrology ward service. At night, all MIST calls should be referred to the Attending Physician on call.

Under no circumstances should a Fellow assume responsibility for a patient's admission or transfer (or refusal of same) to the Nephrology service from an outside hospital. Such requests should be referred promptly to the Attending Physician on call. ICU transfers are ALWAYS referred to the ICU Fellows on call since they are the only physicians able to accept or deny ICU transfers.

7. ICU Admissions: When the Nephrology Fellow is asked to see a patient in the Emergency Department for admission to the Nephrology ward service and the patient needs an ICU bed, the patient should be admitted to the medical intensive care unit team not to the Nephrology ward service. In that case, the patient would be followed by the acute consult team for dialysis or other renal problems. The ICU team should be consulted in the ED to facilitate admission to that unit.

Supervision of Medicine House staff and Medical Students

While therapeutic decisions are ultimately the responsibility of the Attending Physician, the Fellow has a major role in the evaluation and care of patients on the Nephrology ward Service. The Fellow is encouraged to conceive diagnostic and therapeutic plans independently and to provide guidance in this regard to the medicine house staff and medical students. Such decisions and planned therapy must be discussed with and approved by the Attending Physician before implementation, except in the case of obvious life-threatening emergencies.

A major determinant of the quality of the house staff and student experience on the Nephrology ward service is the Nephrology Fellow. The Fellow is encouraged to initiate teaching activities for the medicine house staff and medical students. One responsibility of the ward Fellow on the Nephrology ward service (or on call Fellow after hours) is directing house staff-provided patient care.

Fellow Chart Documentation Requirements

Admissions: Fellows are not expected to write a note on each patient admitted to the Nephrology ward service. Admission notes are to be written on all patients by the resident(s) and acting intern when they are on service. A note from the Fellow is expected when he or she has seen a patient in the Emergency Department and the Fellow's evaluation has been important in deciding that the patient should be admitted.

Medicare rules stipulate that Fellow trainees are unable to bill for clinical services performed as part of their training. Therefore, Fellows should not place coded notes in patient's charts. Fellows are encouraged to write notes whenever appropriate, however, these notes should not be coded with Medicare billing codes.

Renal Biopsies

All outpatient native percutaneous renal biopsies will be performed by the **Transplant Evaluation Nephrology Fellow** in the Heart/Vascular Interventional Center (HVC) under the direct supervision of the Attending Physician. The Biopsy Fellow will be notified by the access coordinators via email about the biopsy the previous day. Inpatient Renal Ward biopsies will be performed by the Renal Ward Fellow, and Acute Consult biopsies will be performed by the acute consult Fellow. The Transplant Evaluation Fellow is available to perform inpatient biopsies if the inpatient Fellows are too busy.

- In the morning, the Fellow should make sure all labs are drawn by the HVC nurses as soon as the patient arrives. A brief history and physical should be performed.
- Risks and benefits of Nephrology biopsy should be discussed with each patient prior to the procedure by the Attending Physician and/or Fellow doing the procedure. This discussion, including a list of risks and alternative treatments discussed with the patient, should be documented in the medical record. Following this, a consent form should be signed by the patient and witnessed by one of the nursing staff
- Once labs are back, the patient should be taken to room 4 and the biopsy Attending notified.

- All biopsy specimens will need to be placed in the appropriate media and taken to the Pathology department on the 7th floor in the Zeigler Research Building. This specimen should be accompanied by a specimen card. The media and the specimen cards are located in the Pathology lab. There is a refrigerator in the Inpatient Dialysis Unit where extra media and cards are kept by Fellows for convenience.
- After an outpatient native biopsy is performed, the Fellow is responsible for following serial hemoglobins, managing complications, providing cross cover, discharging the patient from the HVC, and dictating a procedure note plus a discharge summary.
- After an inpatient biopsy is performed, the Fellow is responsible for placing post biopsy orders and communicating with the primary team and Nephrology Fellow on call to follow serial hematocrits.

Dietary support

A full-time dietitian is assigned to the Nephrology ward service to counsel patients and to provide dietary supervision and calorie counts in response to physician orders. The dietitians suggest that:

- Diet orders are to be complete. Specify protein, sodium and potassium content and total fluid restriction if any.

- If there are questions regarding a patient's diet, contact the dietitian before writing the order.

- As a rough guideline:

    - Non-dialyzed patients with acute or chronic renal failure most frequently will be on 40-60 grams protein, 40 mEq potassium, and 2 gram sodium per day.
    - Patients on chronic dialysis (hemo or peritoneal) usually are on a diet containing 1 to 1.5 g protein/Kg body weight, 40-60 mEq potassium, and 2 gram sodium per day.

- When patients are placed on dialysis, their diets should be modified appropriately. The dietitians are knowledgeable and eager to be of assistance. They can provide help with a variety of nutritional problems, including tube and parenteral feedings and the use of dietary supplements.

- Many patients admitted to the Nephrology ward service will be chronically ill and malnourished. The "Nephrology diet" may not be appropriate in these circumstances.

Social Services

A full-time social worker, Ms. Sharon, works with Nephrology patients who are hospitalized at University Hospital. She is particularly familiar with the social, economic and psychological problems encountered by patients with chronic Nephrology disease. In general, Social Services will be involved in the evaluation of every new patient considered by Nephrology for hemodialysis and/or transplantation. They will provide help in a broad variety of problems faced by the chronic dialysis patient, including funding, emergency transportation, housing, funds for drugs, etc. Each dialysis unit also has a social worker who is able to assist with similar issues for non-hospitalized patients.

Pharmacy

There is a satellite hospital pharmacy located on 8NW. This area is staffed by pharmacists

familiar with the medication needs of dialysis patients including preparation of TPN and peritoneal dialysis fluid. The 8NW pharmacist will, upon request, provide discharge drug counseling services to patients with chronic renal failure. Additionally, the pharmacy provides a drug information service for physicians at UAB. Ms. Maria Taylor, the pharmacist for the Nephrology ward service, is an excellent resource for drug dosing in dialysis patients.

Hemodialysis of 8 NW Patients

The activities and policies of the dialysis facilities at University Hospital are detailed below. The Nephrology Fellow on the Nephrology Ward Service **is responsible for scheduling hemodialysis for patients on the Nephrology inpatient ward service.**

- In so far as is possible, dialysis treatments for the coming day should be scheduled with the Charge Nurse of the Inpatient Dialysis Unit (IDU). Generally, this should be done on the day prior to the intended dialysis. All patients scheduled for dialysis should be sent to procedures prior to dialysis (unless dialysis is emergently indicated) in order to avoid cancellation of needed tests due to the patient being in the IDU for hours for dialysis. The Fellow needs to be instrumental in coordinating procedures with the timing of the dialysis session.

- When changes must be made in the dialysis schedule, the IDU Charge Nurse should be notified as soon as possible.

- Fellows should discuss which patients are to be dialyzed with the IDU Charge Nurse the evening prior to the dialysis session and written on the dialysis schedule in the IDU.

- Only the Nephrology Fellow or Nephrology Attending Physician can enter orders for dialysis into IMPACT. Medications that need to be given with HD can only be ordered by the Nephrology Fellow or Attending.

- Acute dialysis will not be carried out without a signed consent form. Consent forms for acute or chronic hemodialysis and/or peritoneal dialysis are available on 8NW and in the IDU. It is the responsibility of the Attending Physician and/or Nephrology Fellow to obtain informed consent prior to the initiation of the first dialysis treatment.

- Each inpatient dialysis procedure requires electronic orders in the IMPACT system; dialysis will not be performed without orders.

- Femoral punctures for hemodialysis of stable patients who lack vascular access should be performed by the Nephrology Fellow under the supervision of the Attending Physician. Nephrology Fellows, under the supervision of the Attending Physician, will perform femoral punctures on all patients who require urgent vascular access for dialysis. In general, Fellows should try to avoid having to place femoral catheters by planning in advance to have an IJ access placed by interventional radiology. The Access Coordinators, Ms. Donna Carlton Baker and Ms. Erin Estrada, will facilitate such procedures. IJ catheters may be placed by Nephrology Fellows if the Attending Physician is skilled in the procedure and is available for direct supervision.

- All Nephrology ward service patients on dialysis are to be covered by the Nephrology Fellow for dialysis related problems. All Fellows and available Attending Physicians are expected to respond to Code 10 calls from the IDU. The Attending Physician on the ward service should be paged and made aware of the situation should he/she not respond to a Code 10 call.

- If emergent hemodialysis is necessary, promptly notify the Charge Nurse of the IDU or, after regular hours, the dialysis nurse on call. Fellows are no longer required to remain in house for after-hours dialysis procedures, but should be readily available to answer questions or return to the IDU to manage an unstable patient.

Peritoneal Dialysis

Orders for continuous cycler (automated) peritoneal dialysis (CCPD) should be entered as early in the day as possible.

- All 8NW nurses are capable of initiating and discontinuing CCPD.
- Patient lines and dressings are changed q24h.
- When CCPD is required on another floor, the IDU dialysis nurses are responsible for providing nursing care related to the dialysis. Fellows should contact the IDU should CCPD be needed on patients in other areas of the hospital.
- Clarifying all CCPD orders with the 8NW nurse and pharmacist involved with the patient the first several times you enter these orders will save time and avoid costly mistakes. Ms. Sara Kennedy is also an excellent resource for PD-related problems.

Chronic ambulatory peritoneal dialysis (CAPD) may be performed by individual patients on 8NW if they are able to safely do the exchanges. If not, CCPD is generally done. All patients requiring CCPD need to be in private rooms.

Discharge of 8 NW Patients

Upon discharge from the ward, the patient's outpatient dialysis unit should be contacted. Also if there are any changes to the patient's dialysis orders these should be faxed to the patient's outpatient dialysis unit as well. Additionally, e-mails summarizing the patient's hospitalization should be sent to the Access Coordinators who will forward them to that patient's outpatient Nephrologist and any other involved personnel to inform him/her of patient's discharge. The Access Coordinators should be notified of any patients requiring antibiotics with HD upon discharge so proper follow-up tests can be arranged.

All summaries must be dictated within 24-hours of discharge and should contain the reason for admission, a succinct summary of the admitting history, physical examination and laboratory findings, clinical course, discharge diagnoses, list of discharge medications and major procedures carried out while in the hospital and disposition. Please indicate on the discharge order sheet at the time of dictation that the summary has been dictated (date of dictation and initials of dictator). On the day of discharge an abbreviated handwritten discharge note should be written by the house staff caring for the patient and faxed to the office of the patient's Attending Physician. All dictations are done by the house staff on the Nephrology ward service. **Any patients admitted as bedded outpatients for HD will have discharge summaries dictated by the Nephrology Fellows.**

Miscellaneous 8 NW Policies

Nurses will accompany physicians on morning work rounds when patients to whom they are assigned are being visited.

8NW nurses will, if requested:

- Place, record, and read skin tests
- Insert NG tubes and Foley catheters
- Start IVs and draw stat blood work if they are able.

STAT orders should include verbal notification of the nurse assigned to the patient. Orders of acting interns need to be countersigned by a physician supervising them prior to being honored.

In the event of medical emergency or patient death, the responsible Attending Physician should be notified promptly by the Fellow or medicine house staff.

B. University Consultation Services

General

The Division of Nephrology provides consultative services to all affiliated hospitals on the UAB campus, including University Hospital, Center for Psychiatry, Spain Rehabilitation Hospital, the Eye Foundation Hospital, the Birmingham Veterans Affairs Medical Center (BVAMC), UAB Highlands, and Cooper Green Hospital, 24-hours a day, seven days a week. The Acute Consult Service consists of three Nephrology Fellows, medicine residents and medical students who are responsible ultimately to a Nephrology Attending Physician. The actual number of residents and students on the service varies from month to month. The Chronic/Access Consult Service, which consists of one Attending and one Fellow, sees chronic dialysis patients admitted to non-Nephrology services excluding ICUs. The VA Consult Service, which consists of one Attending and one Fellow, sees acute consults and chronic dialysis patients admitted to the VA. The Transplant Consult Service consist of a 2nd year Fellow and a Transplant Attending. The UAB Highlands consult service consist of a 2nd year Fellow and the Chronic/access Attending.

Consults

- Requesting physicians should be directed to page the Nephrology Fellow or resident on the consult service for consults via the UAB paging operator (4-3411).

- ROUTINE CONSULTATIONS SHOULD BE ANSWERED WITHIN 24-HOURS AFTER RECEIPT. Consultation requests received on Friday should be answered on the chart by Saturday.

- All routine consult patients should be presented to the consult service Attending Physician.

- Attendings should be made aware of all emergency consults immediately after the consult is answered, either during regular hours or after hours.

- Rounds are ordinarily conducted daily Monday through Sunday at a time designated by the Attending Physician.

- Since the Acute Consult Service is an educational rotation, all patients should be seen initially by a resident or medical student assigned to the consult service whenever feasible. The Fellow is to use his/her discretion in this regard in the case of acutely ill patients in need of immediate attention.

- The Division of Nephrology is committed to excellent quality of patient care as well as academic excellence. While all aspects of a patient are of interest, consult notes should always:

    - Answer the specific questions asked
    - Be brief and to the point
    - Be tactful (e.g. do not attempt to teach the cardiovascular surgeons postoperative care).

- For the purpose of records and billing, the resident and/or Nephrology Fellow on the **Acute Consult Service** will complete a consult template form immediately after seeing each patient in consultation. The principal Nephrology diagnosis should be listed first. All pages should be stamped with the patient's key plate. This consult template can be found on the nrtc website at www.nrtc.uab.edu. In the coming months, all consults will be dictated; however, this system is in the preliminary planning stages.
- For the **Chronic/Access Consult Service**, the chronic consult Fellow will complete, print out, and place on the patient's chart an electronic chronic consult template note. This note is available on the chronic consult service laptop located in the IDU. All Fellows will receive a protected password to access the chronic/access database. If at any time this computer system is not working the Chronic/Access Service should use the same template as stated above.
- The **VA consult** Fellow will type in his or her consult notes electronically in the VA electronic patient chart and order-entry system. The **UAB Highlands** consult Fellow will dictate all consultations. The **Transplant consult Fellow** will dictate all consultations.
- The Nephrology Attending Physician and Fellows will document all of their visits to patients with a written note (electronic note at the VA). For billing purposes it is important for Nephrology Attendings to label all progress and consult notes according to the level of complexity. Current Medicare guidelines do not allow Fellows to bill, but an understanding of appropriate billing is an important part of any training program. All procedures should also be followed by a descriptive procedure note.
- Fellows and house staff on the consult service are responsible for Attending teaching conferences.

Nephrology Biopsies on Consult Services

- Percutaneous renal biopsies will be performed by the renal biopsy Fellow /acute consult service Nephrology Fellow (if biopsy Fellow is not available) or the VA Consult Fellow under the direct supervision of the Attending Physician.
- The Fellows on the Acute Consult Service and VA Consult Service are responsible for arranging renal biopsies, including writing pre-biopsy orders, obtaining procedure consent, ascertaining availability of blood for possible transfusion after biopsy, scheduling of treatment room, fluoroscopy, or sonography, and bringing chilled renal biopsy transport media to the biopsy suite.
- All patients scheduled to have biopsies at either the BVAMC or at Cooper Green Hospital must have paperwork approving payment signed by the respective VA or Cooper Green Hospital chief-of-staff prior to the biopsy.
- The Transplant Evaluation Fellow performs all scheduled outpatient biopsies in the Heart/Vascular Interventional Center on the 6th floor of the North Pavilion. The patients will be bedded there and monitored for 8-10 hrs post biopsy. All biopsies will be under the supervision of an Attending. Starting 2009, all inpatient biopsies will be performed by the biopsy Fellow .If the biopsy Fellow is not available then the Fellow responsible for the patients care will perform the biopsy in the Heart/Vascular Interventional Center. Keep in mind that Interventional Radiology does not use IMPACT, therefore all orders must be hand written.

Dialysis of Patients on the Consult Service

- No patient will be dialyzed without the prior knowledge and consent of the consult service Attending Physician, or the Attending Physician on call.
- Whenever possible, dialysis should be scheduled at least 24-hours in advance with the Charge Nurse of the IDU or the VA dialysis unit.

- If emergency dialysis is needed, promptly notify the Charge Nurse or, after regular hours, the dialysis call nurse. The Nephrology Fellow is not expected to be present throughout the course of an after-hours dialysis treatment unless the patient is critically ill or unstable. If a patient on the consult service is or will be on hemodialysis after 5:00 p.m. weekdays or after noon on Saturday, it is the responsibility of the consult service Fellow to inform the Nephrology Fellow on call so that he/she will know to expect phone calls regarding those patients.
- While verbal orders may be given to facilitate preparation of the machine, no dialysis will be initiated until orders are placed in IMPACT or the VA computer system. Dialysis orders must be written on physician order sheets at Cooper Green Hospital.
- Acute hemodialysis or peritoneal dialysis will not be initiated without a signed consent form. Forms are available in the dialysis unit and on each floor at the nursing stations.
- Automated peritoneal dialysis via PD catheter may be provided on any floor of University Hospital provided the patient is in a private room. CCPD will be set up by the ward nursing staff on 8NW or the dialysis nurses if the patient is on any floor other than 8NW. For the intensive care units, acute dialysis (IDU) personnel are responsible for setting up automated peritoneal dialysis. CCPD is available in all of the intensive care units at University Hospital. **Peritoneal dialysis is not available at the VA or Cooper Green Hospital.**
- Whenever possible, night-time and Sunday dialysis should be avoided unless emergently indicated.
- Patients are to be transferred to the dialysis unit for hemodialysis unless contraindicated by the patient's condition.
- Femoral punctures for hemodialysis of stable patients will be performed by a Nephrology Fellow under the supervision of the Attending Physician.
- If consulted on a chronic dialysis patient hospitalized on a non-Nephrology service, the chronic consult service Nephrology Fellow should notify the patient's Attending Physician so that he/she will be aware of the patient's hospitalization. In order to avoid conflicts with other procedures, the Fellow should notify the appropriate nursing unit and the patient's inpatient physician of scheduled dialysis in advance.
- At the time of discharge, if a patient is to be dialyzed as an outpatient, the Fellow is responsible for arranging outpatient dialysis and faxing dialysis orders to the dialysis unit.
- When a newly diagnosed endstage chronic dialysis patient is identified by the acute consult service at UAB, the Nephrology nurse coordinator, Ms. Dianne Thomas, must be notified as soon as possible to facilitate the patient's entrance into an outpatient dialysis unit as well as arrange dialysis education. For VA patients, the VA social worker is responsible for assisting in outpatient dialysis arrangements for new dialysis patients. For CGH patients, the CGH social worker is responsible for assisting in outpatient dialysis arrangements for new dialysis patients. Generally, at CGH, the Attending that serves as the Medical Director for the outpatient dialysis unit that the patient is assigned to will become the patient's nephrologist. Prior to the patient's discharge from CGH the Medical Director should be contacted by the Fellow. New Dialysis patients discharged from University Hospital will be followed by the Attending physician on the rotation for that month.

Dialysis of Outpatients in the IDU

Because the inpatient dialysis unit does not have certificate of need to dialyze outpatients, any UAB outpatient requiring dialysis in the hospital must be officially admitted to University Hospital. A common scenario would be that a patient presents to his outpatient dialysis unit on a Saturday and has a clotted graft. The patient is short of breath and volume overloaded. He or she would then need to come to the IDU for dialysis via a temporary catheter. Patients with such

access issues who need dialysis and then discharge are the responsibility of the chronic/access Fellow during daytime hours. The steps to follow for dialyzing such a patient are as follows:

- Obtain the approval by the covering consult Attending for the patient to dialyze in the IDU. The Attending must be involved since the patient will be admitted under his or her name. On weekends and after 5 PM on week days, the consult Attending on call would be the Attending of record.
- Instruct the outpatient unit to have the patient come to the IDU for admission and dialysis at the time when a dialysis bed is available.
- Ask the IDU staff to have the patient officially admitted for dialysis. Diagnosis may be volume overload, clotted graft, hyperkalemia or whatever the indication for acute dialysis may be.
- Enter admission and dialysis orders into IMPACT.
- Write a brief admission note on yellow progress paper.
- Place a femoral catheter, preferably under the direct supervision of the consult Attending for dialysis.
- Enter discharge orders into IMPACT.
- Dictate a brief discharge summary.
- Give patient instructions regarding appointment plans for declot of the access or other access procedures.

While this process is quite cumbersome, there is no way around it. Outpatients dialyzed in the IDU are highly scrutinized.

Arranging Interventional Radiology Procedures on the Weekends

As stated above, patients often times present to outpatient dialysis units with clotted accesses. If the patient is not short of breath and hyperkalemia is not routinely an issue, the patient can be scheduled to come to the Heart/Vascular Center on Monday for declot and HD afterwards. The dialysis can be performed either at UAB or the patient's outpatient unit. Regardless if the patient comes in on the weekend for HD or waits to the weekday, an intervention to declot the access will need to be arranged by the Fellow. To arrange a declot for a patient who comes in on the weekend, instructions are in the orange folder in the IDU. The orange folder is located in the one the drawers in the middle working area of the IDU. In the orange folder, there will be a declot procedure form that will need to be filled out. This form must be faxed to 934-5826, 975-2455, and 975-7287. You must also call Donna and Erin (the access coordinators) at 934-4544 and leave a message with them, and call IR and leave a message with them at 934-0152. Next, you should call the dialysis unit and inform them of the arrangements you have made for the patient. You must fax the dialysis unit a copy of the instruction sheet (found in the orange folder) given to the patient that informs the patient where and when to go for the IR procedure. Finally, a schedule for IR is located in the IDU. The name of the patient must be written in on that list, along with the procedure to be done.

C. University Hospital Dialysis Facilities

All dialysis centers are now owned and operated by DaVita Healthcare.

Description of Facilities

Birmingham Central: This is the largest of the UAB affiliated DaVita units and is located at 721 Richard Arrington Blvd. The unit operates two nursing and four patient shifts Monday through Saturday. Patients are dialyzed 3 1/2 - 4 hours per treatment, three times a week. Dr. Suzanne Bergman is the Medical Director. Hepatitis B positive patients are dialyzed within a separate area of the Central Unit.

Inpatient Dialysis Unit (IDU): The IDU has nine acute dialysis stations. In addition, four mobile units are available for off-unit hemodialysis. The unit functions as an acute facility for patients with acute renal failure and the primary site of dialysis for all hospitalized chronic dialysis patients. Dr. Michael Allon is the Medical Director, and Lisa Bimbo, R.N. the Center Director.

The Birmingham North Unit: This unit is located at 1929 32nd Avenue North and operates Monday through Saturday. Dr. Thornley-Brown is the Medical Director.

The Home Training Unit (HTU): The Home Training Unit is located across the Paula Building on Richard Arrington Blvd. It provides both home hemodialysis and home peritoneal dialysis training to patients. Patients are instructed to call the HTU with medical issues (except for emergenies) first so that maximum continuity of care can be provided. Dr. Zipporah Krishnasami is the Medical Director of the HTU. Gail Ozbirn, R.N., is the Center Director. An HTU nurse is on call afterhours and weekends for patients.

Bessemer Dialysis Unit (BDU): The BDU is located in Bessemer, AL a suburb to the west of Birmingham, roughly 15-20 miles from the medical center. The BDU has a 12-station unit which provides chronic dialysis treatments for patients living in that area. The unit currently runs three patient shifts, six days/weeks, Monday through Saturday. Dr. Emmy Bell serves as the Medical Director of this unit.

Ensley Dialysis Unit (EDU): The EDU is located in western Birmingham. The EDU has a 20-station unit which provides chronic dialysis treatments for patients living in that area. The unit currently runs four patient shifts, six days/weeks, Monday through Saturday. Dr. Michael Allon serves as the Medical Director of this unit.

Birmingham East (BEU): The BEU is located at 1105 East Park Drive. It is a 20-station unit. The unit currently runs three shifts on M/W/F and two shifts on T/Th/S. Dr. Rizk is the Medical Director.

Equipment

Dialysis Delivery Systems: The types of dialyzers and delivery systems utilized are described in detail in the Dialysis Unit Procedure Manual. In brief, proportioning units are used exclusively. Isolated ultrafiltration can be performed in all units.

Artificial Kidneys: Currently, we are using Cobe machines. Most outpatients are dialyzing with the Revacleer kidney. The dialyzer should not be changed without discussion with the patient's Attending Physician and/or medical director.

Dialysis Baths: The standard bath is a 40 mEq/L bicarbonate solution with 2.0 mEq/L potassium, 2.0 mEq/L calcium, and 1.0 mEq/L magnesium. The potassium and calcium concentration can be altered as ordered. The sodium concentration of 138 mEq/L can be manipulated during dialysis in several ways, using the Na-modeling feature of the machines.

Continuous (Automated) Cycler Peritoneal Dialysis: Automated peritoneal dialysis delivery systems are available for use in University Hospital. Hospitalized peritoneal dialysis patients are dialyzed with the Home Choice Cycler. Order sets for CCPD are available on the computerized order entry system (IMPACT).

Scheduling Policies

See policies for the Nephrology Ward and Consult Services.

- In general, scheduling of outpatients for hemodialysis is accomplished through the charge nurse of the appropriate facility.
- Routine dialysis should be scheduled in advance for hospital patients. If it is necessary after regular working hours or on weekends to change the following day's schedule, notify the IDU nurse on call of the change.
- Dialysis of inpatients will be scheduled by the Nephrology Fellow or Attending Physician responsible for the patient i.e., the Nephrology ward or consult service Fellow.
- Under no circumstances will a patient be dialyzed without the prior knowledge and agreement of a Nephrology Attending Physician.
- The dialysis unit personnel will not initiate either hemodialysis or peritoneal dialysis in new patients unless a signed consent form has been obtained. It is the responsibility of the Nephrology Attending Physician or Fellow to obtain informed consent prior to the initiation of dialysis. Consent forms for acute dialysis (hemodialysis or peritoneal) and chronic dialysis (hemodialysis and peritoneal) are available in the dialysis units and on the 8 NW ward.
- Emergency dialysis is scheduled by direct communication with the dialysis nurse in charge. After regular working hours or on weekends, emergency dialysis is scheduled by notifying the dialysis nurse on call. The nurse can be reached via the paging operator (Ext. 4-3411). A separate VA dialysis nurse is on call for VA patients and must be paged through the VA operator. Emergency dialysis will be performed at any time as required to provide optimum patient care. The following guidelines apply to after-hours dialysis:

    - Avoid unnecessary emergency dialysis whenever possible. Often, this can be done by anticipating the dialysis needs of an acutely ill patient and scheduling extra daytime dialysis.
    - Schedule off-unit dialysis only when the patient's condition requires it.
    - Limit the frequency and hours of hemodialysis procedures to that which is truly in accord with the patient's needs. Daily hemodialysis, for example, will be justified in only a limited number of circumstances such as uremic pericarditis.
    - When several patients require weekend dialysis, the priorities should be established by the involved Nephrology Attending Physician, Fellow, and the dialysis nurse(s) on call. The call nurses should have input regarding the number of patients who can be dialyzed safely at one time.
    - Nephrology Fellows should make every attempt to allow the dialysis unit to start each dialysis as soon as possible. This includes promptly placing temporary vascular access once patients are in the dialysis unit.

Orders

- Dialysis will not be initiated by the dialysis nursing staff until typed orders are in the possession of the responsible nurse.
- Dialysis orders must be entered electronically by the Nephrology Attending Physician or Fellow for each dialysis. This applies to patients with acute renal failure and non-routine dialysis of chronic patients (e.g., all inpatient dialysis of chronic patients).
- When a patient is discharged from the hospital, new maintenance orders should be entered electronically by the Nephrology Fellow caring for the patient in the hospital and written orders faxed and called to the appropriate dialysis unit.
- Maintenance dialysis orders for new outpatients are the responsibility of the Attending Physician unless the patient was started on dialysis during an acute hospitalization, in which case orders are the responsibility of the Fellow who cared for the patient during his/her hospital stay.
- Orders should include the following. Order sets are available in the computerized order entry system (IMPACT).

    - The hospital location of the dialysis session

- Length of dialysis treatment in hours
- Type of dialyzer
- Type of access, i.e., tunneled catheter (permacath), nontunneled catheter (vascath), femoral venous catheter, or AV graft or fistula
- Blood flow rate
- Bath composition (e.g., 2.0 K, zero K, etc.).
- Dialysate flow rate
- Type of heparinization (systemic, controlled systemic (tight) or no heparin)
- Amount of fluid to be removed
- Dry weight or weight to be achieved at end of dialysis
- Acceptable limits for blood pressure or other parameters beyond which the physician is to be notified.
- Therapy for hypotension (hypertonic saline, albumin, blood, etc.)
- Medications - all maintenance drugs and/or specific drugs to be given during or immediately after dialysis (erythropoietin, Vitamin D analog, antibiotics, etc.)
- Blood work other than routine

Femoral Punctures

Femoral punctures for hospitalized patients will be the responsibility of the Nephrology Fellow under the supervision of his/her Attending Physician.

EKG Monitoring, Oxygen, and Suction

EKG monitoring, oxygen, and suction are available for patients in the IDU. Such equipment is available only for emergency use in the outpatient units.

Records

The dialysis records of each patient are part of the official medical record. They are available through the secure DaVita website (https://patinfo.davita.com). Rounding reports, which contain laboratory and dialysis treatment data, are faxed from the outpatient units to the Kirklin Clinic at the time of a patient's clinic appointment. They may also be printed in PDF format from the DaVita website.

Isolated Ultrafiltration (Hemofiltration)

Hemofiltration can be carried out in any of the dialysis units. The heavy dialysis schedule prevents the routine use of this therapy. It should be reserved for those situations in which rapid fluid removal cannot be accomplished through non-dialytic means.

Outpatient Peritoneal Dialysis

Outpatient peritoneal dialysis is available through the HTU. Patients should be referred to the HTU prior to placement of Tenckhoff catheters so that appropriate screening can be performed. After Tenckhoff catheter placement, the HTU should be notified so that proper catheter care can be initiated immediately.

Acute Peritoneal Dialysis

Acute peritoneal dialysis is available on any floor of University Hospital. 8NW nursing personnel perform acute peritoneal dialysis on that hospital floor. The IDU nurse on call will be involved in all acute peritoneal dialysis performed in other areas of the hospital. Rather than acute peritoneal dialysis catheters, Tenckhoff catheters are preferred in patients requiring acute

peritoneal dialysis to reduce the chances of technical problems arising from catheter leaks, etc. This procedure is rarely performed at UAB.

Continuous Renal Replacement Therapy (CRRT)

CRRT is available through the Division of Nephrology for use in the intensive care units. CRRT is set up by dialysis unit staff and monitored by ICU nursing staff. CRRT is only available in the University Hospital ICUs. Order sets for CRRT are available in IMPACT. CRRT is performed with the Prisma or Prismaflex device.

Hemodetoxification/Charcoal Hemoperfusion

Hemodetoxification/Charcoal Hemoperfusion is no longer performed at University Hospital.

Rounding in Chronic Dialysis Units

A Nephrology Attending Physician is assigned as Medical Director of each of the outpatient clinics. As part of the DaVita Outpatient Dialysis Rotation, first year Fellows may be assigned to round with the Medical Director of one or more clinics. In some months Fellows have been assigned to round at one hemodialysis clinic and with Dr. Krishnasami in the Home Training Unit. The purpose of this rotation is to learn the management of chronic dialysis patients, including anemia management, osteodystrophy, nutrition, access complications, etc. Second-year Fellows will be assigned to a specific hemodialysis clinic for the whole year and assume responsibilities for rounding on a shift of patients with the Medical Director or Nurse Practitioner. Second-year Fellows will also be assigned 3 to 4 peritoneal dialysis patients to follow for the duration of their second year. They will be responsible for managing their PD issues (in conjunction with the patient's primary Nephrologist) and rounding in the HTU unit.

D. Vascular and Peritoneal Access Service

The Department of Surgery at UAB has a separate vascular access service, under the direction of Dr. Mark H. Deierhoi. Surgery residents are assigned to this service. The majority of patients needing access surgery are scheduled to be seen in access surgery clinic and/or directly scheduled for outpatient surgery by the Access Coordinators Donna Carlton or Erin Estrada. Fellows should direct any questions about dialysis access to the Access Coordinators and not schedule procedures themselves unless specifically instructed to do so. The following are general guidelines regarding the access service:

- Patients requiring hospitalization for uncomplicated dialysis access surgery will be admitted to the Nephrology access surgical service and cared for by surgical house staff with Nephrology consulting.
- Scheduling of all inpatient and outpatient access procedures is to be done by Ms. Carlton or Ms. Estrada.
- All AV graft declot procedures will be scheduled as a declot procedure and/or revision of the graft if necessary. Therefore, all such procedures are to be scheduled as requiring regional block anesthesia.
- The Nephrology Fellow will communicate to the access surgery resident whether or not a venous dialysis catheter is desired while the patient is in the operating room.
- It is the responsibility of the Nephrology access service to explicitly state when posting the surgery whether the Nephrology Attending Physician wishes immediate placement of a new graft in another site if it is obvious that revision of the old access cannot be done.
- The access surgeon will discuss any unsuccessful procedures or case cancellations with the Nephrology Attending or the Access Coordinator by the end of the same day in order

that surgery may be rescheduled promptly. The timing of rescheduled procedures will depend on factors such as:

- The availability of slots on the upcoming surgery schedule
- The timing of the patient's next hemodialysis treatment

The access coordinators maintain a computer database of all access procedures, including the number and type of access procedures, outcomes, length of stay, etc. If requested, please provide her with all information requested.

When longer term temporary vascular access is needed, the access coordinator should be asked to schedule a non-tunneled or tunneled catheter procedure.

- The majority of these procedures are currently being done on both inpatients and outpatients in Interventional Radiology.
- These catheters can also be combined with another operative procedure and placed in the operating room at special request. These cases are performed by the Vascular Access (Nephrology Transplant) Surgery Service.
- Tunneled catheters may be removed by Nephrology Fellows under the direct supervision of an Attending Physician. For unstable, for example, bacteremic patients, this may be done at the hospital bedside. For stable outpatients, this procedure is electively performed by Nephrology Fellow on the chronic/access consult service under the supervision of an Attending Physician at The Kirklin Clinic.
- Following the successful placement of a catheter, dialysis nursing personnel in the IDU should be notified so that high concentration heparin can be instilled into each port of the catheter. It is because of this unusual concentration of heparin as well as the risk of infection that Nephrology insists that no other service use catheters for non-dialysis therapy except in dire emergencies (i.e. during resuscitations).
- Nephrology Fellows may place internal jugular lines for hemodialysis access only under the direct supervision of an Attending Physician. Subclavian position catheters should not be used due to the high rate of subclavian vein thrombosis and stenosis.
- These procedures should always be performed with the complete knowledge and presence of the responsible Nephrology Attending Physician.
- Following catheter placement and documentation of proper placement with chest X-ray, it is the responsibility of the person placing the line to notify the IDU dialysis nurses to either flush with high concentration heparin or begin the first dialysis treatment.
-

Vascular Access Surgery is provided on an outpatient basis by the Department of Surgery at the Kirklin Clinic and the Department of Radiology. The following procedures can be done as an outpatient either at The Kirklin Clinic or through Interventional Radiology:

1. Placement or removal of non-tunneled catheters
2. Placement or removal of tunneled catheters
3. Thrombolysis of clotted AV grafts
4. Placement or revision of AV fistula
5. Placement or revision or AV graft

Same Day and One Day access surgeries are available through the Department of Surgery. All patients must be evaluated in an outpatient appointment at The Kirklin Clinic before being scheduled for surgery.

Currently utilized vascular and peritoneal dialysis access devices at UAB include:

- Brescia-Cimino Arteriovenous Fistulas: Usually require several weeks to months post-op before they are used for dialysis.

- Gortex Arteriovenous Grafts: These require a full 14-day healing after placement prior to use if all goes well. Newly developed materials claim to allow immediate use of the graft after surgery.

- Permanent Tenckhoff Catheter for Peritoneal Dialysis: These may be used after approximately two weeks after insertion depending upon body habitus. Earlier use has been associated with increased catheter failure due to leakage. The peritoneal dialysis nurse should be notified to begin flush protocol immediately following placement. The Tenckhoff catheter may be used immediately for acute, nonambulatory peritoneal dialysis.

- Popovitch-Moncreif Peritoneal Catheter: This catheter is placed completely internally during initial surgery allowing for complete healing. Several weeks later, the catheter is externalized in an outpatient setting through a small superficial abdominal wall incision.

Nursing personnel on 8NW, 7S and the intensive care units are generally familiar with the care of dialysis access devices. This is not so on other services. In all instances, specific orders should be entered to:

- Spare the access extremity from blood pressure cuffs, tourniquets, and venipuncture.

- Mark pre-existent access devices clearly when a patient is going to surgery for other reasons.

- Elevate arms after placement of either new AV graft or fistula in fully extended position post-operatively.

- Apply local dry heat to internal fistulas post-operatively.

- Begin exercise of fistula arm with a "squeeze ball" several days post-operatively.

All dialysis patients kept NPO for greater than 6 hours require either intravenous D10W (at 30 cc/hr) or, in the case of diabetics, D10W plus 10 units of insulin/liter (at 30 cc/hr) in order to prevent life-threatening hyperkalemia.

E. VA Consult Service

Philosophy of the Birmingham Veterans Affairs Medical Center Nephrology Service

The primary goal is to provide prompt, efficient, courteous, and above all, excellent medical care for all the patients referred to Nephrology at the VA Hospital. To continue to provide meaningful medical care to patients with end-stage renal disease, it must be kept in mind that the fairly small VA dialysis facility serves a large and rather far-flung population of veterans. Care must be taken to husband the resources that may serve veterans in a manner which will make their lives meaningful and productive. For these reasons, an attempt has been made to make the unit

a conduit through which patients pass to a definitive treatment mode, such as dialysis or transplantation. Furthermore, no offer of long-term hemodialysis to patients with severe and irremediable medical and psychiatric problems is made. Despite this philosophy of careful patient selection, flexibility is maintained and all patients are considered individually rather than according to rigid rules.

The dialysis unit is committed to providing medical care which is convenient for the population of the large geographical area which this facility serves. Because so many of the patients live at great distances from the facility, many patients are referred to local Nephrologists when they reach ESRD.

Components of the Nephrology Service at the BVAMC

This program is part of the Division of Nephrology of the University of Alabama at Birmingham Medical Center, and part of the Department of Medicine in that institution. The Nephrology service is the only such service in a Veterans Hospital in the state of Alabama. Therefore, the Birmingham VA Hospital serves as a tertiary referral center for veterans with Nephrology problems throughout Alabama. Other nearby VA Hospitals having dialysis facilities are located in Nashville, Tennessee to the north; Gainesville, Florida to the south and Atlanta, Georgia to the east.

- VA Chronic Dialysis Unit: The ten-station Chronic Dialysis Unit located on the first floor next to the ER in the VA Hospital provides in-center dialysis support for about 20 veterans. The VA dialysis unit also provides acute dialytic support for inpatients throughout the VA Hospital with acute renal failure and other medical conditions requiring dialysis. The VA dialysis unit also serves those veterans with end-stage renal disease admitted to the hospital with other problems. The medical directors of the VA dialysis unit are Dr. Paul Sanders and Dr. Dan Balkovetz. A second year Nephrology Fellow will generally also round in the VA dialysis unit on a regular basis. The small size of the unit allows the Fellow to learn how to manage dialysis patients in the outpatient setting. In addition, the Fellow will develop the necessary skills to manage a dialysis unit.

- VA Hepatitis Positive Unit: The VA Hepatitis Positive Unit has been closed by the institution. Any veteran who has end-stage renal disease and is hepatitis B antigen positive will be referred to another dialysis facility for his/her care.

- The VA Consultation Service: The VA Consultation Service is an important part of the VA Nephrology facility. This service is lead by the Attending VA physician from the Division of Nephrology. It is the responsibility of the Nephrology Fellow on the VA consult service to evaluate and provide prompt and appropriate care for all patients seen on this service.

- The VA Transplant Service: There is no formal transplant service at the VA Hospital. When a Nephrology transplant patient is admitted to the VA, it is anticipated that the admitting medical or surgical team will consult the Nephrology service for help with immunosuppression and other management issues. While the UAB transplant Nephrologists do not round at the VA, they are an excellent resource for transplant-related problems.

All patients entering the End-Stage Renal Disease Program at the Birmingham VA Hospital should be considered as potential transplant recipients and formal consultation with the transplant surgeons should be made before a final disposition regarding therapy is rendered.

Patient Selection

Before any patient is accepted into the dialysis program, a thorough evaluation of the patient's socioeconomic situation and a careful psychological evaluation of the patient and his family will be undertaken by the social worker assigned to the dialysis unit. In many circumstances, there may be insurmountable socioeconomic problems such as transportation, inadequacy of the home, distance from the dialysis unit, etc. which may preclude chronic hemodialysis or which may necessitate the establishment of contract dialysis with a private dialysis unit. All attempts will be made to place patients in appropriate therapeutic modalities.

Final disposition regarding each patient will be made after this formal evaluation has been carried out and after a thorough physical evaluation has also been completed. This is in accordance with the view that patients with irremediable psychological and irremediable non-renal medical diseases which seriously impair longevity will not be acceptable candidates for dialysis. Once this evaluation has been made, a final disposition will be made by the senior staff physicians responsible for the operation of the dialysis unit and the Nephrology program.

Once a patient has been accepted for the dialysis program, the patient will be informed of the hospital's responsibility for continuing the patient's care. The patient will also be informed that acceptance into the dialysis program is not necessarily permanent and that there may be conditions under which dialysis therapy may be terminated. Some of these conditions are:

- Development of irreversible psychotic behavior as documented by psychiatric evaluation and failure to respond to appropriate psychiatric therapy.

- A consistent lack of compliance with therapeutic modalities established by the staff physicians.

- The development of physical disorders which make hemodialysis ineffective, such as severe ischemic heart disease not amenable to surgery or severe cardiomyopathy.

- The desire to stop dialysis. Thorough psychiatric consideration will be made before such a wish is granted. If the wish seems reasonable to the patient's physicians, to the psychiatric consultants, and the patient's family, dialysis will be discontinued.

The dialysis unit at the Birmingham VA Hospital will provide acute hemodialysis care for veterans hospitalized at this facility when it is deemed appropriate by the consulting staff of the Nephrology service and will provide acute dialysis care to any veteran hospitalized elsewhere upon transfer to the Birmingham VA Hospital. Under these circumstances, no consideration of service-connection will be made since these are considered emergencies.

Procedures and Policies of the VA Nephrology Section

VA Chronic Dialysis Unit Nursing/Technician Staff

a. Nurse Manager - Cynthia Frazier
b. Staff Nurses: Barbara Pearson, Willette Dale, Joan Dykes, Linda Parker, Jimmie Prince, Patricia Belle, Vanetta Peoples

Physician Staff

a. Director, Nephrology Section - Paul W. Sanders, M.D.
   The Director of the Nephrology Section is responsible for the coordination of operation of all components of the Nephrology Unit.
b. Staff Physicians - Daniel Balkovetz, M.D.
c. Chief, Dialysis Facility - Dr. Paul Sanders
   The Chief of the Dialysis Facility is responsible for the care of the patients in

the Dialysis Unit.

d. Clinic: Staff Physicians: Daniel Balkovetz, M.D., Paul Sanders, M.D.

The Attending Physician for the VA service is responsible for the day-to-day care of all patients in the VA program. The Nephrology Fellow and/or residents will be expected to act as primary physician in the VA Nephrology program by initiating patient contact and solving problems for all dialysis and clinic patients, and seeing and following patients referred for consultation. They will also participate in the ongoing operation (percutaneous access procedures, writing orders, organizing care plans, etc., for all dialysis procedures) of the program with the available counsel of the Attending Physicians.

VA Dialysis Unit Social Worker

The social worker, Helen Varner, plays an important role in patient management in the dialysis unit. She evaluates all patients being considered for dialysis and transplantation with respect to their home situation, their overall mental health, and their finances. She is instrumental in arranging appropriate VA funding for transportation and plays an important role in arranging VA dialysis contracts with dialysis units outside the VA system. In addition to performing an initial evaluation, the social worker also performs continuing evaluations of the patients in the dialysis unit and keeps the medical staff and the nursing staff informed of important changes.

Dietitian

The dietary needs of the dialysis patient are provided through consultation with all patients in the Dialysis Unit and the various clinics which are the responsibility of the Nephrology Section. The dietitian not only counsels the patients regarding the prescribed diets, but makes follow-up dietary evaluations to be certain that the patients are indeed following their dietary therapy. Further, the dietitian will do anthropometric measurements on the patients to determine the ideal body weight. The dietitian also must serve other units in the hospital and may not always be present in the dialysis unit.

Unit Clerk

The Ward Clerk fulfills responsibilities as unit clerk for all the in-center dialysis patients.

General Considerations

The Hemodialysis Unit is open Monday through Friday for scheduled maintenance hemodialysis. Chronic patients are dialyzed on Monday, Wednesday and Friday. All efforts should be made to avoid dialysis on weekends unless it is an emergency.

Responsibilities of Fellows on the VA Nephrology Dialysis Service

It is the responsibility of Fellows assigned to the Department of Veterans Affairs Hospital Dialysis Service to:

- Round with the dialysis Attending at least weekly on the dialysis patients and to evaluate patient problems.
- Discuss patient problems with the Attending Physician in order to arrive at an appropriate decision.
- Review all outpatient laboratory data and to discuss these data with the Attending Physician when appropriate.

- Enter progress notes at regular intervals or as necessary regarding acute problems to allow assessment of patient progress.

The VA Consultation Service

All consults will be seen as soon as possible. Prompt, courteous consultation, coupled with high visibility, will assure many interesting referrals. Cases will be discussed with the Attending Physician seeing consultations daily. The Fellow or staff Attending may organize the times of consultation rounds according to the needs of the service to allow the greatest flexibility. All chronic dialysis patients admitted to the hospital should be seen by the consult service so that continuity of care can be maintained.

VA Nephrology Clinics

There are two scheduled clinics for the Nephrology Service:

1. *Nephrology Clinic*: meets on Monday afternoons on the 2nd floor. In attendance are Nephrology Fellows and the residents and students on the Acute Consult Service. Dr. Daniel Balkovetz and Dr. Paul Sanders serve as the Attending Physicians for the Nephrology clinic. Lab work should be available at the time each patient is seen. All patients will be seen first by a Fellow or resident, who will then present the patient to the Attending Physician. Because of the volume of the clinic, management is focused on aspects of chronic kidney disease. All patients should have a primary care physician to manage their general medical problems. The VA Nephrology social worker is usually available for immediate consults on patients seen in the VA Nephrology Clinic.

   VA Chronic Kidney Clinic also meets on Monday mornings and Thursday mornings. The VA Highlands Fellow is responsible for Attending one of these clinics. Also one first year Fellow will be assigned one of these clinics as his or her continuity clinic.

2. *Dialysis Clinic:* meets at the dialysis unit on Friday. About two to three patients are seen at each time. Present at this clinic are the Nephrology Fellow on the VA dialysis service rotation and the Attending Physician(s), Dr. Daniel Balkovetz and Dr. Paul Sanders. Patient return visits are scheduled at three (3) month intervals. The Highlands Fellow will also help out in this clinic.

VA Hospital Admissions

All daytime patient admissions should be arranged through Utilization Review (extension 5910). Dialysis patients are usually admitted to and followed on the medical wards although they are occasionally admitted to surgical services.

Should the Fellow on call be called by an outside physician or hospital regarding the transfer of a patient, the patient should be discussed with the consult Attending on call. If the transfer seems appropriate, the medical team on call should coordinate arrangements for transfer.

Acute Hemodialysis at the VA Hospital

Any in-hospital patient deemed to require acute hemodialysis by the Nephrology Fellow must be discussed with the Attending Physician before the dialysis is performed. This includes procedures to be carried out during the daytime, evening, or in the middle of the night.

To schedule an acute hemodialysis during the daytime, the Nurse Manager of the dialysis unit is contacted. She will assign the appropriate personnel. At night, the Fellow should contact the VA operator who will assist in contacting the nurse on call.

All acute hemodialysis on ICU patients will be done in the various intensive care units of the hospital. If acute hemodialysis must be done repetitively, notify the Nurse Manager of the appropriate schedule required. Weekend dialysis should be avoided when feasible. If weekend dialysis is unavoidable, the staff on call on the weekend should be informed on Friday that there may be a Saturday or Sunday dialysis.

Vascular Access and Transplantation in Patients at the VA Hospital

All patients under consideration for chronic dialysis support should be evaluated for transplantation. Patients have the option of being referred for transplant evaluation through the VA system or outside of the VA, e.g. at University Hospital, if the patient has other insurance coverage. Patients must understand that the VA will not be responsible for any costs associated with their transplant if they are transplanted outside of the VA.

Vascular Surgery Attendings and the vascular surgery residents perform access procedures at the VA. The vascular surgical team should be consulted for access related problems. Pre-operative venous mapping is available through the Department of Radiology. Tunneled catheters can be placed by Interventional Radiology.

F. Combined Medical/Surgical Nephrology Transplant Ward

The Transplant Service is a combined medical and surgical service which provides kidney transplants to over 300 patients per year. Each Nephrology Fellow rotates on service for at least one month during the Fellowship.

Facilities

The Transplant Ward is a 52-bed unit on the 7th floor of the Spain-Wallace Hospital Building. A separate transplant dialysis unit with 6 stations and 1 mobile machine is located on 7 South and provides dialysis for transplant patients, immediately before and after transplantation. Tissue typing laboratories are located at W218 Spain Wallace (supporting solid organ transplantation) and M290 WP (supporting primarily bone marrow transplantation). Outpatients are seen Monday through Friday mornings in the Transplant Clinic on the fifth floor of The Kirklin Clinic.

Personnel

1. Transplant surgeons: Dr. Mark H. Deierhoi, Dr. Carlton Young, and Dr. Hanaway.

2. Transplant nephrologists: Dr. John J. Curtis, Dr. Bruce A. Julian, Dr. Robert S. Gaston, Dr. Clifton E. Kew II, Dr. Mary Pendergast, Dr. Vineeta Kumar, Dr. Rosalyn Mannon, and Dr. Hasan Khamash.

3. Director of Tissue Typing: Judy Thomas, PhD

4. Nurse Manager Transplant Dialysis: Debbie Sparks, R.N.

5. Nurse Manager on Transplant Ward: Alice Kicker, R.N. 7-S; Debbie Sparks, R.N. 7-NW

6. Outpatient Coordinators: Alan Mayes, R.N. and Cherie Huey, R.N.

7. Transplant Evaluation Coordinators: Christopher Davis, B.S.N., Gwen Allen, CRNP, Brandi Guthrie, RN and Debbie Brasfield, R.N.

Patient Management

All patients admitted to the transplant service are managed by a surgical-medical team. Each patient has one Attending Physician responsible for that patient's care. Weekday rounds are made at 3:00 p.m or as designated by the Attending Physician. Rounds start at 9:00 a.m. on Saturdays, Sundays, and holidays. Decisions about immunosuppressive therapy and other aspects of patient care are made during these rounds.

The Nephrology Fellow on the Combined Medical Surgical Nephrology Transplant Ward will participate in the care of all ward patients during rounds. The Nephrology Fellow will make daily rounds in the inpatient Transplant Dialysis Unit (TDU) and meet with the nurse practitioners Monday-Friday mornings to address specific patient management problems. These problems will be brought to the attention of the transplant Nephrology Attending Physician. In unusual circumstances when the nurse practitioners are overwhelmed with admissions, the Nephrology Fellow will be expected to provide assistance in the admission process. The Transplant Nephrology Fellow is on call except on the weekends covered by the Nephrology Fellow on the Transplant Evaluation service. The Transplant Ward Fellow and Transplant Evaluation Fellow alternate weekend transplant ward coverage.

Many patients are discharged from University Hospital to the Townhouse Apartments to be followed as outpatients at the Kirklin Clinic. Their care will be supervised by the discharging Attending Physician, and coordinated by Alan Mayes, R.N. and Cherie Huey, R.N.

Special Conference Schedule for Fellow on Combined Medical/Surgical Transplantation Ward Service

Conference	Day	Time	Place
Transplant Journal Club	Tuesday	5:00 p.m.	707 ZRB

G. Nephrology Transplant Evaluation Services

All patients with chronic kidney disease or ESRD who wish to be active candidates for renal transplantation, and individuals desiring to be living renal donors, are scheduled in transplant evaluation clinic daily, which is supervised by the Transplant Attendings. All patients undergo laboratory work and various radiological tests in the morning of the scheduled clinic appointment. This is coordinated by the transplant coordinators. These patients (average around 8-9) are then evaluated by the Transplant Evaluation Fellow (1^{st} year Fellow) under supervision of a Transplant Attending from 1pm – 5 pm. Transplant Evaluation clinic is located near Jefferson tower on the 2^{nd} floor. During clinic, the patient is also evaluated by the social worker, transplant surgeon, and transplant coordinator. At the end of the day, the Nephrology Fellow is responsible for formulating a plan for need of any further investigations and discussing it with his Attending and coordinators. He or she then dictates a complete consultation note. The Nephrology Fellow will present each patient for formal discussion at the Transplant Evaluation conference the next week.

The Nephrology Fellow should also observe one transplantation surgery and several access procedures during the rotation.

H. Nephrology Transplant Consult Service

The Transplant Consult Fellow is responsible to take care of all renal transplant patients admitted at UAB on non renal transplant services, including the intensive care unit (excluding immediate post operative transplant patients admitted to the SICU and transplant patients on the transplant surgical service) under the supervision of transplant faculty. The Nephrology Fellow is also responsible for the outpatient transplant biopsies scheduled from the clinic. He or she also provides coverage to the Transplant Ward Fellow when he or she is in clinic. After 5:00 pm, consults are seen by the moonlighter

Special Conference Schedule for Fellow Transplantation Evaluation Service

Conference	**Day**	**Time**	**Place**
Transplant Journal Club	Thursday	5:00 p.m.	707 ZRB
ESRD Conference	Tuesday	12:00 noon	743 LHRB

Responsibilities of Nephrology Fellows on Nephrology Transplant Services

Responsibility	**Transplant Ward Fellow**	**Transplant eval Fellow**
Inpatient Duties		
Supervise Nurse Practitioners (M-F)	Unless in clinic	On weekends
Transplant Ward Rounds	Every day except for 4 weekend days when off	Covers the 4 weekend days the Tx Ward Fellow is off
TDU Schedule	Yes	No
TDU Dialysis Notes	No	No
TDU Femoral Access	Yes	No
Transplant Admission H & P's	If Nurse Practitioner unable to handle clinical load	No
Transplant Consults (off-service)	Done by Transplant Consult Fellow on weekdays, and by rounding Fellow on weekends	Only on weekends when covering service
Night Call	On call for HD needs when no Nephrology Moonlighter on call	
Transplant Call	Daily except 4 weekend days	4 weekend days
Nephrology Call		
Weekdays	Yes	Yes
Weekends	No	No

Outpatient Clinics
Second year Fellows will rotate through the transplant clinics at the Kirklin Clinic.

H. Conferences

Weekly conferences in the division of Nephrology are scheduled as follows:

Conference	**Day**	**Time**	**Place**
NRTC Research Conference*	Monday	Noon	Frommeyer
Nephrology Biopsy Conference	Tuesday	Noon	North Pavilion

Journal Club* Fellows' Conference*	Thursday Friday	Noon	Frommeyer
Nephrology Transplant Journal Club**	Tuesday	5:00 p.m.	707 ZRB

*During the first few months of the academic year, these conferences will be devoted to didactic lectures given by the faculty. They will all be held in the Frommeyer at noon.

**Fellows on Nephrology Transplantation rotations will attend this teaching conference.

Dr. Krishnasami and the Chief Nephrology Fellow are responsible for the Fellows' Conferences. Dr. Edgar Jaimes is responsible for the Journal Club. For the first three months of each year, the Faculty will provide the Nuts and Bolts lecture series on Monday, Thursday, and Friday at noon. Thereafter the faculty will provide lectures at various times. The goal of these lectures is to cover all Nephrology core concepts but is not limited to acid-base disorders, normal and abnormal basic science related to renal physiology, disorders of salt and water and other electrolytes, acute renal failure, chronic renal failure, hemodialysis, peritoneal dialysis, continuous renal replacement therapies, nephrolithiasis, renal disease of pregnancy, basic transplantation topics, primary and secondary glomerular diseases, renal osteodystrophy, dialysis adequacy, access recirculation, hypertensive disorders, urinary tract infections, tubulointerstitial disorders, disorders of drug metabolism and renal drug toxicity, genetic and inherited disorders, and geriatric aspects of Nephrology. A copy of the lecture schedule for 2006 can be found in the **Schedules Tab**.

NRTC Research Conference

This conference is given each week by researchers and clinicians from UAB and elsewhere with specific research interests in areas pertaining to Nephrology. All Fellows are strongly encouraged to attend.

Nephrology Histopathology Conference

This weekly conference is widely attended by Nephrology Attendings and Fellows, private practicing Nephrologists and renal histopathologists. Recent renal biopsy cases, including renal transplant biopsies, from UAB, Cooper Green Hospital and BVAMC as well as occasional cases from surrounding hospitals are discussed. The Fellows present the case history of patients they biopsied the prior week. The pathologist then presents the slides, pointing out all salient areas and the final diagnosis. The pathology slides include light microscopy, immunoflorescence and electron microscopy.

Journal Club

An article of the Fellow's and preceptor's choice is presented at Journal Club, which occurs once a month at noon. Each Fellow will be responsible for being familiar with the article prior to conference. The Fellow is expected to critically review the article, read background material, and present the article to the group, using handouts, overheads or PowerPoint. The Fellow's presentation is discussed with the Fellow's preceptor (who must be present at the conference) prior to the presentation. As part of the evaluation of an article, the Fellow will focus on the design as well as the interpretation of the data and results including the use of statistical methods, the responsible use of informed consent, and research methodology. Journal club is attended by the Division of Nephrology Faculty, Nephrology Fellows, and House staff.

Fellows' Conference

Fellow's Conference is a weekly conference of a case-based discussion of a case or topic that the Fellow and an Attending find relevant or interesting. Topics concerning clinical Nephrology will be chosen and reviewed by a designated Fellow. The Fellow should find a faculty mentor who will help guide the Fellow in preparing for his presentation. Occasionally guest speakers, invited by the Fellows, the Program Director, or the division director, will give a lecture during this time slot.

I. Research

First year Fellows are given one research month. During this month, the Fellow must meet with Dr. Anupam Agarwal, Division Director and Dr. Sumant Chugh, Director of Research, to find a research mentor and develop a research project that will be completed and submitted as an abstract to one of the national meetings and as a manuscript for publication. The Fellow will then have a minimum of 2 additional months of allotted research time in their second year to complete the project. If an abstract is accepted for oral or poster presentation, the Division of Nephrology will cover expenses for the Fellow to attend that meeting. Second year Fellows are expected to present their research in the Fellows' Conference at the end of the year.

Fellows committed to pursuing a career in Academic Nephrology will receive 75% protected time their second year and are expected to obtain funding.

J. Evaluations

The ACGME had identified six general competencies that require specific education and documentation of completion. The six general competencies are:

1. Patient Care
2. Medical Knowledge
3. Professionalism
4. Systems-based practice
5. Practice-based learning and improvement
6. Interpersonal and communication skills

These competencies are part of the formal evaluation process of Fellows. Descriptions of the competencies can be read in the ACGME General Program Requirements for Fellowship Education in the Subspecialties of Internal Medicine Document (**see Appendix**).

We use the E*VALUE electronic evaluation system. Fellows are allowed to review their evaluations anytime using E*VALUE.

Formal Evaluation of the Fellows

- After each monthly clinical rotation, the supervising Attending Physician will evaluate the Fellow by completing an electronic evaluation in the E-Value System. All faculty must complete the form prior to the completion of the rotation and review their impressions directly with the Fellow.
- TKC clinic evaluations of the Fellow will be completed by the TKC faculty advisor (Clinic Mentor) on a quarterly basis.
- Second year Fellow outpatient dialysis evaluations will be completed by the Medical Director on a quarterly basis
- As part of the "360 degree" evaluation process, Fellows will be evaluated by the Access Coordinators, IDU dialysis nursing staff, Nephrology ward nursing staff, TKC nursing staff, and peers during various rotations throughout their Fellowship.

- During the research phase of training, an electronic evaluation form will be completed by the Fellow's research faculty mentor. These evaluations forms are completed every research month, reviewed with the Fellow by the faculty research mentor, and submitted to the Program Director for placement in the Fellow's permanent file.
- The Program Director is immediately notified by the E-Value System of any evaluations that contain a rating less than satisfactory in any category. The Program Director will immediately meet with the Fellow to identify causes for the poor performance and the means for improving the deficiency.
- All first year Fellows are required to take the ASN In-service Training Exam in Spring. The Fellowship provides funding for the exam. The exam is used to assess the weaknesses and strengths of the Fellows' knowledge base and helps them focus on their areas of weakness during their second year.

Summary Evaluation of the Fellows

- The Program Director will meet quarterly with each individual Fellow to go over his or her evaluations and discuss any issues related to Fellow burnout, stress, or fatigue. This meeting is designed to provide feedback to the Fellow on their performance and to identify areas for professional enhancement. A written summary of this session is placed in the Fellow's permanent file.
- The overall performance of each Fellow is reviewed at least bi-annually by the Nephrology Fellowship Committee. This committee is asked to monitor the performance of the Fellows and assess the level of competence for each Fellow. The Committee's assessment is written and recorded in the program files for future reference purposes.
- Any adverse judgments or evaluations regarding the Fellow's level of performance or competence should first be directed to the Program Director. Serious grievances will be heard by the Fellowship Committee. The Program Director will discuss any grievance with the Fellow in question in a timely manner. If the Fellow feels that the handling of a grievance is not to their satisfaction, then the grievance can be addressed by established Department of Medicine and/or University policy.
- Fellows graduating from the program receive a Final Evaluation that addresses that the Fellow had demonstrated sufficient professional ability to practice competently and independently.

Evaluation of the Faculty and Program

- After each clinical rotation, each Fellow is required to complete an evaluation electronically of the faculty and that specific rotation. The pooled results will be evaluated for specific weak areas by the Program Director and the division director.
- Evaluations of the faculty by the Fellows will be done annually by completing an electronic form based on the standardized ABIM evaluation form. Each Fellow will evaluate each Attending. These forms are reviewed by the Program Director who will prepare a summary statement of each Attending which is distributed to the respective Attending. The goal is to maintain as much anonymity as possible, so that the Fellow feels comfortable and will be frank with the process. Evaluations of the Program Director will be reviewed by the Division Director.
- Fellows are encouraged to maintain a high level of communication with the Program Director and faculty. Periodically, meetings will be held between the Fellows and Program Director in place of the weekly Fellows' Conference. These meetings will be used to disseminate information, receive timely feedback, etc.
- The feedback received during informal meetings, formal meetings and the semi-annual evaluation form will be discussed by the Fellowship Committee and used to make programmatic changes as appropriate.

- The Fellows will evaluate the program yearly through an electronic form based on the standardized ABIM form.
- The Program Director meets with the Chief Fellow and at least one Associate Program Director once a year to review and evaluate the entire program and curriculum in the context of the training itself in addition to specific evaluation of the program's fulfillment of ACGME General and Subspecialty Specific requirements.

Summary Schedule of Fellow 360° Evaluations

QM = monthly, Q3M = quarterly

Fellow Evaluations	**W**	**AC**	**CC**	**VA**	**TW**	**TE**	**TC**	**TKC**	**DR**	**PP**	**PC**	**R**
Faculty	QM	QM	QM	QM	QM	QM	QM	Q3M	Q3M	QM	QM	QM
Fellows		QM										
Access Coordinators			QM									
Dialysis Nurse	QM											
Ward Nurse	QM											
TKC Nurse								Q3M				

W = wards, AC = acute consults, CC = chronic consults VA = VA consults, TW = transplant wards, TE = transplant evaluations, TC = transplant clinics, TKC = Kirklin clinic, DR = dialysis rounds, PP = plasmapheresis, PC = palliative care, R = research

As the interests and ultimate goals of each Fellow will vary, the emphasis of the program will differ in individual instances. Nevertheless, it is deemed essential that each clinical Nephrology Fellow demonstrate excellence in the practice of clinical Nephrology. Each clinical Fellow will undertake and complete an investigative project during the tenure of the Fellowship. The format of the project will be decided on an individual basis, but can include original laboratory investigation or clinical research projects within the Division of Nephrology or, by special arrangement, with UAB faculty outside the Division of Nephrology.

K. Disciplinary Procedures

Please refer to the UAB Graduate Medical Education Policies and Procedures.

DIVISION OF NEPHROLOGY

2009 FELLOWSHIP MANUAL

I have received, read and understand the policies and guidelines in the 2007 Nephrology Fellowship Manual.

_____
Print Name

_____ _____
Signature of Fellow Date

Print This Page | Preview Evaluation Form | Back

University of Alabama at Birmingham
Nephrology Fellowship Program

Subject:
Evaluator:
Site:
Period:
Dates of Activity:
Activity: Access/Chronic/Procedure
Evaluation Type: Fellow

MEDICAL KNOWLEDGE *(Question 1 of 16 - Mandatory)*

MEDICAL KNOWLEDGE: Demonstrates knowledge about established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences. Applies knowledge of basic and clinical sciences to patient care. Shows an investigatory and analytic thinking approach to clinical situations.

0=Insufficient Contact to Assess	1=Unsatisfactory	2=Unsatisfactory	3=Unsatisfactory	4=Marginal	5=Satisfactory	6=Highly Satisfactory	7=Excellent	8=Excellent	9=Outstanding
0	1	2	3	4	5	6	7	8	9

PATIENT CARE - CLINICAL SKILLS *(Question 2 of 16 - Mandatory)*

PATIENT CARE - CLINICAL SKILLS: Performs an appropriate and relevant history and physical examination. Competently performs general internal medicine procedures (abdominal paracentesis, arterial puncture, arthrocentesis of the knee, central venous catheter insertion, nasogastric intubation, lumbar puncture, thoracentesis).

0=Insufficient Contact to Assess	1=Unsatisfactory	2=Unsatisfactory	3=Unsatisfactory	4=Marginal	5=Satisfactory	6=Highly Satisfactory	7=Excellent	8=Excellent	9=Outstanding
0	1	2	3	4	5	6	7	8	9

PATIENT CARE - PATIENT MANAGEMENT SKILLS *(Question 3 of 16 - Mandatory)*

PATIENT CARE - PATIENT MANAGEMENT SKILLS: Makes informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment. Develops and carries out effective patient management plans. Provides health care services aimed at preventing health problems and maintaining health.

0=Insufficient Contact to Assess	1=Unsatisfactory	2=Unsatisfactory	3=Unsatisfactory	4=Marginal	5=Satisfactory	6=Highly Satisfactory	7=Excellent	8=Excellent	9=Outstanding
0	1	2	3	4	5	6	7	8	9

PRACTICE-BASED LEARNING AND IMPROVEMENT *(Question 4 of 16 - Mandatory)*

PRACTICE -BASED LEARNING AND IMPROVEMENT: Analyzes own practice experience and patient population data to perform practice-based improvement activities. Locates, critically appraises, and assimilates evidence from scientific studies and applies to own patients' health problems. Uses information technology to manage information, access on-line medical resources, and support self-education, patient care decisions and patient education. Facilitates learning of students, resident colleagues, and other health care professionals.

0=Insufficient Contact to Assess	1=Unsatisfactory	2=Unsatisfactory	3=Unsatisfactory	4=Marginal	5=Satisfactory	6=Highly Satisfactory	7=Excellent	8=Excellent	9=Outstanding
0	1	2	3	4	5	6	7	8	9

INTERPERSONAL AND COMMUNICATION SKILLS: Relationship with Colleagues and Staff *(Question 5 of 16 - Mandatory)*

INTERPERSONAL AND COMMUNICATION SKILLS: Works effectively with other professional associates and staff, including those from other disciplines, to provide patient-focused care as a member or leader of a health care team. Patient presentations and written records are efficient and well organized.

Examples of Unsatisfactory Performance: Frequently irresponsible, unreliable, and uncooperative. Ineffective communicator. Patient presentations and written records are tardy, superficial, disorganized, careless, inefficient, incomplete. Disruptive, argumentative,

Examples of Superior Performance: Enthusiastic, responsive, reliable, committed, cooperative, respectful. Communicates effectively. Patient presentations and written records are timely, organized, concise, hypothesis-driven, appropriately detailed. Shows respect for opinions and skills of

disrespectful, or disdainful of professional colleagues. Inadequate or inappropriate responses to pages. Does not constructively problem-solve. Late or inadequately prepared for teaching or patient care sessions.

professional colleagues. Prompt and appropriate responses to pages. Committed to and skilled in constructive problem-solving. Is responsive, reliable, punctual, and cooperative. Displays initiative, leadership. Excellent preparation for teaching and patient care sessions.

0=Insufficient Contact to Assess	1=Unsatisfactory	2=Unsatisfactory	3=Unsatisfactory	4=Marginal	5=Satisfactory	6=Highly Satisfactory	7=Excellent	8=Excellent	9=Outstanding
0	1	2	3	4	5	6	7	8	9

TEACHING *(Question 6 of 16 - Mandatory)*

TEACHING: A major role of residents in this program is teaching others (students, interns, fellow residents, and faculty). While teaching style, techniques and content may vary greatly depending on the level, it is expected that each resident strives to teach those around them.

Examples of Unsatisfactory Performance: No significant effort to teach others. Not an effective role model. Has difficulty identifying or pursuing questions, difficulty admitting limitations. Doesn't explain topics or assess understanding. Seems more interested in completing rounds than teaching during rounds.

Examples of Superior Performance: Serves as an excellent role model for the rest of the team. Identifies questions and pursues them, sharing the results with the team. Stimulates those around them to want to learn. May give didactic talks or review articles with members of the team. Makes rounds a learning experience by asking questions or checking understanding of topics.

0=Insufficient Contact to Assess	1=Unsatisfactory	2=Unsatisfactory	3=Unsatisfactory	4=Marginal	5=Satisfactory	6=Highly Satisfactory	7=Excellent	8=Excellent	9=Outstanding
0	1	2	3	4	5	6	7	8	9

PROFESSIONALISM *(Question 7 of 16 - Mandatory)*

PROFESSIONALISM: Demonstrates respect, compassion, and integrity. Responsive and accountable to the needs of patients, society and the profession that supercedes self-interest. Committed to excellence, continuous professional development. Ethical in issues related to provision or withholding of clinical care, patient confidentiality, informed consent, and business practices. Sensitive and responsive to culture, age, gender, and disabilities.

0=Insufficient Contact to Assess	1=Unsatisfactory	2=Unsatisfactory	3=Unsatisfactory	4=Marginal	5=Satisfactory	6=Highly Satisfactory	7=Excellent	8=Excellent	9=Outstanding
0	1	2	3	4	5	6	7	8	9

SYSTEMS-BASED PRACTICE *(Question 8 of 16 - Mandatory)*

SYSTEMS-BASED PRACTICE: Understands types of medical practice and delivery systems and how his/her practices affect and are influenced by other health care professionals, health care organizations, and society. Practices cost-effective health care and resource allocation while advocating for quality. Assists patients in dealing with system complexities. Works with health care managers and providers to assess, coordinate, and improve health care and system performance.

0=Insufficient Contact to Assess	1=Unsatisfactory	2=Unsatisfactory	3=Unsatisfactory	4=Marginal	5=Satisfactory	6=Highly Satisfactory	7=Excellent	8=Excellent	9=Outstanding
0	1	2	3	4	5	6	7	8	9

Competence *(Question 9 of 16 - Mandatory)*

Please rate the resident's overall performance.

0=Insufficient Contact to Assess	1=Unsatisfactory	2=Unsatisfactory	3=Unsatisfactory	4=Marginal	5=Satisfactory	6=Highly Satisfactory	7=Excellent	8=Excellent	9=Outstanding
0	1	2	3	4	5	6	7	8	9

Face to Face Feedback *(Question 10 of 16 - Mandatory)*

I have discussed the ratings and comments contained in this performance evaluation with the resident at or near the end of the rotation.

- [ ] Yes
- [ ] No

General Resident Comments *(Question 11 of 16)*

These comments will go directly to the intern or resident. For comments to be effective as feedback, please be direct, specific and constructive. General

statements such as "good resident" are too nonspecific to be of instructive value. You may also copy and paste selected items from the descriptors that may be above as desired.

Resident Strengths *(Question 12 of 16)*

These comments will go directly to the intern or resident. For comments to be effective as feedback, please be direct, specific and constructive. General statements such as "good resident" are too nonspecific to be of instructive value. You may also copy and paste selected items from the descriptors that may be above as desired.

Suggested Areas for Improvement *(Question 13 of 16)*

These comments will go directly to the intern or resident. For comments to be effective as feedback, please be direct, specific and constructive. General statements such as "bad resident" are too nonspecific to be of instructive value. You may also copy and paste selected items from the descriptors that may be above as desired.

Confidential Comments, Resident *(Question 14 of 16, Confidential)*

This area is for providing positive or negative feedback that you don't feel comfortable giving directly. These comments will NOT go directly to the intern or resident concerned. They will go to the program director and the Department Chair who may contact you for further details. You may also copy and paste selected items from the descriptors that may be above as desired.

Formal evaluation ends here. Please rate and comment on the E*Value evaluation system below.

System Ease of Use *(Question 15 of 16, Confidential)*

E*Value was easy to use.

NA	Strongly Disagree	Disagree	Neutral/Undecided	Agree	Strongly Agree
0	1	2	3	4	5

E*Value Comments: *(Question 16 of 16)*

Comments entered here will be forwarded to E*Value technical support and will not be anonymous.

Print This Page | Preview Evaluation Form | Back

University of Alabama at Birmingham
Nephrology Fellowship Program

Subject:
Evaluator:
Site:
Period:
Dates of Activity:
Activity: Research - Bell
Evaluation Type: Fellow

Identifying a Research Project *(Question 1 of 18 - Mandatory)*

Progress in Identifying a Research Project

Not Applicable	1 - 3 Unsatisfactory			4 - 6 Satisfactory				7 - 9 Superior	
0	1	2	3	4	5	6	7	8	9

Hypothesis Formulation *(Question 2 of 18 - Mandatory)*

Progress in Hypothesis Formulation

Not Applicable	1 - 3 Unsatisfactory			4 - 6 Satisfactory				7 - 9 Superior	
0	1	2	3	4	5	6	7	8	9

Literature Retrieval and Appraisal Skills *(Question 3 of 18 - Mandatory)*

Progress in Literature Retrieval and Appraisal Skills

Not Applicable	1 - 3 Unsatisfactory			4 - 6 Satisfactory				7 - 9 Superior	
0	1	2	3	4	5	6	7	8	9

Expansion of Knowledge in the Research Area *(Question 4 of 18 - Mandatory)*

Progress in Expansion of Knowledge in the Research Area

Not Applicable	1 - 3 Unsatisfactory			4 - 6 Satisfactory				7 - 9 Superior	
0	1	2	3	4	5	6	7	8	9

Research Design *(Question 5 of 18 - Mandatory)*

Progress in Research Design

Not Applicable	1 - 3 Unsatisfactory			4 - 6 Satisfactory				7 - 9 Superior	
0	1	2	3	4	5	6	7	8	9

Data Gathering and Recording *(Question 6 of 18 - Mandatory)*

Progress in Data Gathering and Recording

Not Applicable	1 - 3 Unsatisfactory			4 - 6 Satisfactory				7 - 9 Superior	
0	1	2	3	4	5	6	7	8	9

Data Analysis and Interpretation *(Question 7 of 18 - Mandatory)*

Progress in Data Analysis and Interpretation

Not Applicable		1 - 3 Unsatisfactory			4 - 6 Satisfactory			7 - 9 Superior	
0	1	2	3	4	5	6	7	8	9

Appropriate Use of Statistics *(Question 8 of 18 - Mandatory)*

Progress in Appropriate Use of Statistics

Not Applicable		1 - 3 Unsatisfactory			4 - 6 Satisfactory			7 - 9 Superior	
0	1	2	3	4	5	6	7	8	9

Writing Skills (reports, abstracts, manuscripts, poster materials, slide production) *(Question 9 of 18 - Mandatory)*

Progress in Writing Skills (reports, abstracts, manuscripts, poster materials, slide production)

Not Applicable		1 - 3 Unsatisfactory			4 - 6 Satisfactory			7 - 9 Superior	
0	1	2	3	4	5	6	7	8	9

Presentation Skills *(Question 10 of 18 - Mandatory)*

Progress in Presentation Skills

Not Applicable		1 - 3 Unsatisfactory			4 - 6 Satisfactory			7 - 9 Superior	
0	1	2	3	4	5	6	7	8	9

Professional Attitudes and Behaviors (attendance, effort, ethics, responsibility, teamwork) *(Question 11 of 18 - Mandatory)*

Professional Attitudes and Behaviors (attendance, effort, ethics, responsibility, teamwork)

Not Applicable		1 - 3 Unsatisfactory			4 - 6 Satisfactory			7 - 9 Superior	
0	1	2	3	4	5	6	7	8	9

Competence *(Question 12 of 18 - Mandatory)*

Please rate the resident's overall performance.

	Overall competence is SIGNIFICANTLY BELOW the level of skill expected from the clearly sarisfactory resident at this stage of training.						Overall comptetence is SIGNIFICANTLY ABOVE the level of skill expected from the clearly satisfactory resident at this stage of training.		
0=Insufficient Contact to Assess	1=Unsatisfactory	2=Unsatisfactory	3=Unsatisfactory	4=Marginal	5=Satisfactory	6=Highly Satisfactory	7=Excellent	8=Excellent	9=Outstanding
0	1	2	3	4	5	6	7	8	9

Grant Preparation: *(Question 13 of 18 - Mandatory)*

Not Applicable		1 - 3 Unsatisfactory			4 - 6 Satisfactory			7 - 9 Superior	
0	1	2	3	4	5	6	7	8	9

Research Activity *(Question 14 of 18)*

Please outline trainee's research activity during this rotation:

Face to Face Feedback *(Question 15 of 18 - Mandatory)*

I have discussed the ratings and comments contained in this performance evaluation with the resident at or near the end of the rotation.

- [ ] Yes
- [ ] No

General Resident Comments *(Question 16 of 18 - Mandatory)*

For Comments to be effective as feedback, please be direct, specific and constructive. General statements such as "good resident" are too nonspecific to be of insturctive value.

Resident's Strengths *(Question 17 of 18 - Mandatory)*

For comments to be effective as feedback, please be direct, specific and constructive. General statements such as "good resident" are too nonspecific to be of insturctive value.

Suggested Areas of Imporvement *(Question 18 of 18 - Mandatory)*

For comments to be effective as feedback, please be direct, specific and constructive. General statements such as "bad resident" are too nonspecific to be of insturctive value.

Print This Page | Preview Evaluation Form | Back

University of Alabama at Birmingham
Nephrology Fellowship Program

Subject:
Evaluator:
Site:
Period:
Dates of Activity:
Activity: Acute Consultation
Evaluation Type: Peer (Trainee to Trainee)

DATA GATHERING - History Taking *(Question 1 of 16 - Mandatory)*

Not Applicable		Unsatisfactory			Satisfactory			Superior	
0	1	2	3	4	5	6	7	8	9

DATA GATHERING - Physical Exam *(Question 2 of 16 - Mandatory)*

Not Applicable		Unsatisfactory			Satisfactory			Superior	
0	1	2	3	4	5	6	7	8	9

DATA GATHERING - Diagnostic Studies *(Question 3 of 16 - Mandatory)*

Not Applicable		Unsatisfactory			Satisfactory			Superior	
0	1	2	3	4	5	6	7	8	9

DIAGNOSIS & PROBLEM DEFINITION - Case Presentations *(Question 4 of 16 - Mandatory)*

Not Applicable		Unsatisfactory			Satisfactory			Superior	
0	1	2	3	4	5	6	7	8	9

DIAGNOSIS & PROBLEM DEFINITION - Record Keeping *(Question 5 of 16 - Mandatory)*

Not Applicable		Unsatisfactory			Satisfactory			Superior	
0	1	2	3	4	5	6	7	8	9

MEDICAL CARE - Judgment in diagnosis and treatment *(Question 6 of 16 - Mandatory)*

Judgment in formulating diagnosis and selecting treatment

Not Applicable		Unsatisfactory			Satisfactory			Superior	
0	1	2	3	4	5	6	7	8	9

MEDICAL CARE - Handling patients *(Question 7 of 16 - Mandatory)*

Skill in handling patients and implementing therapy

Not Applicable		Unsatisfactory			Satisfactory			Superior	
0	1	2	3	4	5	6	7	8	9

TEACHING ABILITY *(Question 8 of 16 - Mandatory)*

Not Applicable		Unsatisfactory			Satisfactory			Superior	
0	1	2	3	4	5	6	7	8	9

PROFESSIONALISM - needs of patients *(Question 9 of 16 - Mandatory)*

Places needs of patient above own self-interest

Not Applicable		Unsatisfactory			Satisfactory			Superior	
0	1	2	3	4	5	6	7	8	9

PROFESSIONALISM - Exhibits respect for others *(Question 10 of 16 - Mandatory)*

Not Applicable		Unsatisfactory			Satisfactory			Superior	
0	1	2	3	4	5	6	7	8	9

PROFESSIONALISM - Accepts criticism & takes responsibility for errors *(Question 11 of 16 - Mandatory)*

Not Applicable		Unsatisfactory			Satisfactory			Superior	
0	1	2	3	4	5	6	7	8	9

MEDICAL KNOWLEDGE - Knowledge base *(Question 12 of 16 - Mandatory)*

Not Applicable		Unsatisfactory			Satisfactory			Superior	
0	1	2	3	4	5	6	7	8	9

MEDICAL KNOWLEDGE - Acquisition of new knowledge *(Question 13 of 16 - Mandatory)*

Not Applicable		Unsatisfactory			Satisfactory			Superior	
0	1	2	3	4	5	6	7	8	9

MEDICAL KNOWLEDGE - Conference participation *(Question 14 of 16 - Mandatory)*

Participation in Nephrology clinical conferences

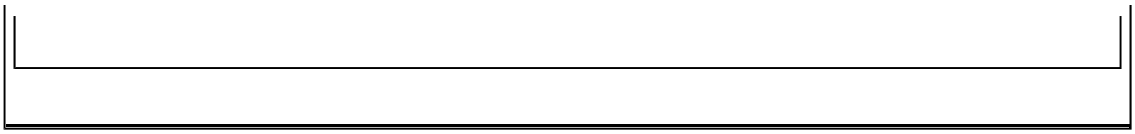
Not Applicable		Unsatisfactory			Satisfactory			Superior	
0	1	2	3	4	5	6	7	8	9

OVERALL CLINICAL COMPETENCE *(Question 15 of 16 - Mandatory)*

Indicate number which best describes overall clinical competence.

Not Applicable		Unsatisfactory			Satisfactory			Superior	
0	1	2	3	4	5	6	7	8	9

COMMENTS *(Question 16 of 16)*



Print This Page | Preview Evaluation Form | Back

University of Alabama at Birmingham
Nephrology Fellowship Program

Subject:
Evaluator:
Site:
Period:
Dates of Activity:
Activity: Evaluation Preview
Evaluation Type: Clinical Educator

Evaluation information entered here will be made available to the evaluated person in anonymous and aggregated form only.

Listened to learners *(Question 1 of 33 - Mandatory)*

During the rotation, my attending generally: listened to learners

NA	Strongly Disagree	Disagree	Neutral/Undecided	Agree	Strongly Agree
0	1	2	3	4	5

Learner participation *(Question 2 of 33 - Mandatory)*

During the rotation, my attending generally encouraged learners to participate actively in the discussion

NA	Strongly Disagree	Disagree	Neutral/Undecided	Agree	Strongly Agree
0	1	2	3	4	5

Learner respect *(Question 3 of 33 - Mandatory)*

During the rotation, my attending generally expressed respect for learners

NA	Strongly Disagree	Disagree	Neutral/Undecided	Agree	Strongly Agree
0	1	2	3	4	5

Learner problems *(Question 4 of 33 - Mandatory)*

During the rotation, my attending generally encouraged learners to bring up problems

NA	Strongly Disagree	Disagree	Neutral/Undecided	Agree	Strongly Agree
0	1	2	3	4	5

Time attention *(Question 5 of 33 - Mandatory)*

During the rotation, my attending generally called attention to time

NA	Strongly Disagree	Disagree	Neutral/Undecided	Agree	Strongly Agree
0	1	2	3	4	5

Digressions *(Question 6 of 33 - Mandatory)*

During the rotation, my attending generally avoided digressions

NA	Strongly Disagree	Disagree	Neutral/Undecided	Agree	Strongly Agree
0	1	2	3	4	5

External interruptions *(Question 7 of 33 - Mandatory)*

During the rotation, my attending generally discouraged external interruptions

NA	Strongly Disagree	Disagree	Neutral/Undecided	Agree	Strongly Agree

0	1	2	3	4	5

Goals *(Question 8 of 33 - Mandatory)*

During the rotation, my attending generally stated goals clearly and concisely

NA	Strongly Disagree	Disagree	Neutral/Undecided	Agree	Strongly Agree
0	1	2	3	4	5

Goal relevance *(Question 9 of 33 - Mandatory)*

During the rotation, my attending generally stated relevance of goals to learners

NA	Strongly Disagree	Disagree	Neutral/Undecided	Agree	Strongly Agree
0	1	2	3	4	5

Goal priority *(Question 10 of 33 - Mandatory)*

During the rotation, my attending generally prioritized goals

NA	Strongly Disagree	Disagree	Neutral/Undecided	Agree	Strongly Agree
0	1	2	3	4	5

Goal repeating *(Question 11 of 33 - Mandatory)*

During the rotation, my attending generally repeated goals periodically

NA	Strongly Disagree	Disagree	Neutral/Undecided	Agree	Strongly Agree
0	1	2	3	4	5

Material *(Question 12 of 33 - Mandatory)*

During the rotation, my attending generally presented well organized material

NA	Strongly Disagree	Disagree	Neutral/Undecided	Agree	Strongly Agree
0	1	2	3	4	5

Material relationship *(Question 13 of 33 - Mandatory)*

During the rotation, my attending generally explained relationships in materials

NA	Strongly Disagree	Disagree	Neutral/Undecided	Agree	Strongly Agree
0	1	2	3	4	5

Visual aids *(Question 14 of 33 - Mandatory)*

During the rotation, my attending generally used blackboard or other visual aids

NA	Strongly Disagree	Disagree	Neutral/Undecided	Agree	Strongly Agree
0	1	2	3	4	5

Knowledge of factual medical information *(Question 15 of 33 - Mandatory)*

During the rotation, my attending generally evaluated learners' knowledge of factual medical information

NA	Strongly Disagree	Disagree	Neutral/Undecided	Agree	Strongly Agree
0	1	2	3	4	5

Analyze or synthesize medical knowledge *(Question 16 of 33 - Mandatory)*

During the rotation, my attending generally evaluated learners' ability to analyze or synthesize medical knowledge

NA	Strongly Disagree	Disagree	Neutral/Undecided	Agree	Strongly Agree
0	1	2	3	4	5

Apply medical knowledge *(Question 17 of 33 - Mandatory)*

During the rotation, my attending generally evaluated learners' ability to apply medical knowledge to specific patients

NA	Strongly Disagree	Disagree	Neutral/Undecided	Agree	Strongly Agree
0	1	2	3	4	5

Medical skills *(Question 18 of 33 - Mandatory)*

During the rotation, my attending generally evaluated learners' medical skills as they apply to specific patients

NA	Strongly Disagree	Disagree	Neutral/Undecided	Agree	Strongly Agree
0	1	2	3	4	5

Negative (corrective) feedback *(Question 19 of 33 - Mandatory)*

During the rotation, my attending generally gave negative (corrective) feedback to learners

NA	Strongly Disagree	Disagree	Neutral/Undecided	Agree	Strongly Agree
0	1	2	3	4	5

Correct or incorrect explanations *(Question 20 of 33 - Mandatory)*

During the rotation, my attending generally explained to learners why he/she was correct or incorrect

NA	Strongly Disagree	Disagree	Neutral/Undecided	Agree	Strongly Agree
0	1	2	3	4	5

Suggestions for improvement *(Question 21 of 33 - Mandatory)*

During the rotation, my attending generally offered learners suggestions for improvement

NA	Strongly Disagree	Disagree	Neutral/Undecided	Agree	Strongly Agree
0	1	2	3	4	5

Feedback frequency *(Question 22 of 33 - Mandatory)*

During the rotation, my attending generally gave feedback frequently

NA	Strongly Disagree	Disagree	Neutral/Undecided	Agree	Strongly Agree
0	1	2	3	4	5

Further learning *(Question 23 of 33 - Mandatory)*

During the rotation, my attending generally explicitly encouraged further learning

NA	Strongly Disagree	Disagree	Neutral/Undecided	Agree	Strongly Agree
0	1	2	3	4	5

Motivation to learn *(Question 24 of 33 - Mandatory)*

During the rotation, my attending generally motivated learners to learn on their own

NA	Strongly Disagree	Disagree	Neutral/Undecided	Agree	Strongly Agree
0	1	2	3	4	5

Outside reading *(Question 25 of 33 - Mandatory)*

During the rotation, my attending generally encouraged learners to do outside reading

NA	Strongly Disagree	Disagree	Neutral/Undecided	Agree	Strongly Agree
0	1	2	3	4	5

Role Model *(Question 26 of 33 - Mandatory)*

Serves as adequate role model for physicians in training

NA	Strongly Disagree	Disagree	Neutral/Undecided	Agree	Strongly Agree
0	1	2	3	4	5

Overall teaching effectiveness *(Question 27 of 33 - Mandatory)*

NA	Strongly Disagree	Disagree	Neutral/Undecided	Agree	Strongly Agree
0	1	2	3	4	5

General Attending Physician Comments *(Question 28 of 33)*

Formal evaluation ends here. Please rate and comment on the E*Value evaluation system below.

System Ease of Use *(Question 29 of 33, Confidential)*

E*Value was easy to use.

NA	Strongly Disagree	Disagree	Neutral/Undecided	Agree	Strongly Agree
0	1	2	3	4	5

E*Value Comments: *(Question 30 of 33)*

Comments entered here will be forwarded to E*Value technical support and will not be anonymous.

Attending Physician Strengths *(Question 31 of 33)*

These comments will be viewed by the attending physician but will be anonymous and aggregated. For comments to be effective feedback, please be direct, specific and constructive. General statements such as 'good attending' are too nonspecific to be of value.

Attending Physician Weaknesses *(Question 32 of 33)*

These comments will be viewed by the attending physician but will be anonymous and aggregated. For comments to be effective feedback, please be direct, specific and constructive. General statements such as 'bad attending' are too nonspecific to be of value.

Confidential Comments, Attending Physician *(Question 33 of 33, Confidential)*

This area is for providing positive or negative feedback that you don't feel comfortable giving directly. These comments will NOT go directly to the attending physician concerned. They will go to the program director(s) who may contact you for further details.

Print This Page | Preview Evaluation Form | Back

University of Alabama at Birmingham
Nephrology Fellowship Program

Subject:
Evaluator:
Site:
Period:
Dates of Activity:
Activity: Annual Conference Evaluation
Evaluation Type: Conference

Activity Objectives *(Question 1 of 12 - Mandatory)*

The activity met its published objectives *(Question 2 of 12 - Mandatory)*

N/A	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
0	1	2	3	4	5

This activity has enhanced my professional effectiveness/patient care *(Question 3 of 12 - Mandatory)*

N/A	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
0	1	2	3	4	5

The instructional quality was good *(Question 4 of 12 - Mandatory)*

N/A	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
0	1	2	3	4	5

A written summary of the speakers' disclosures was provided before the meeting began *(Question 5 of 12 - Mandatory)*

N/A	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
0	1	2	3	4	5

There was no inappropriate commercial bias toward products of any company. (If there was, please describe under "comments" below.) *(Question 6 of 12 - Mandatory)*

N/A	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
0	1	2	3	4	5

The content was objective and balanced *(Question 7 of 12 - Mandatory)*

N/A	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
0	1	2	3	4	5

The content was evidence-based *(Question 8 of 12 - Mandatory)*

N/A	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
0	1	2	3	4	5

The type of evidence was identified *(Question 9 of 12 - Mandatory)*

N/A	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
0	1	2	3	4	5

The source of evidence was identified *(Question 10 of 12 - Mandatory)*

N/A	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
0	1	2	3	4	5

Comments: *(Question 11 of 12 - Mandatory)*

What additional topics would you like discussed in future activities of this kind? *(Question 12 of 12)*

Print This Page | Preview Evaluation Form | Back

University of Alabama at Birmingham
Nephrology Fellowship Program

Subject:
Evaluator:
Site:
Period:
Dates of Activity:
Activity: Annual Program Evaluation
Evaluation Type: Program

TRAINING ENVIRONMENT
Quality and Diversity of Pathology *(Question 1 of 46 - Mandatory)*

(1) Poor **(5) Excellent**

NA					
0	1	2	3	4	5

Learning value of attending rounds *(Question 2 of 46 - Mandatory)*

(1) Poor **(5) Excellent**

NA					
0	1	2	3	4	5

Adequacy of attending supervision *(Question 3 of 46 - Mandatory)*

(1) Poor **(5) Excellent**

NA					
0	1	2	3	4	5

Quality of attending supervision *(Question 4 of 46 - Mandatory)*

(1) Poor **(5) Excellent**

NA					
0	1	2	3	4	5

Quality and timeliness of feedback from attending *(Question 5 of 46 - Mandatory)*

(1) Poor **(5) Excellent**

NA

0	1	2	3	4	5

Opportunity to perform required procedures *(Question 6 of 46 - Mandatory)*

(1) Poor **(5) Excellent**

NA

0	1	2	3	4	5

Opportunity to perform research *(Question 7 of 46 - Mandatory)*

(1) Poor **(5) Excellent**

NA

0	1	2	3	4	5

Quality of research environment *(Question 8 of 46 - Mandatory)*

(1) Poor **(5) Excellent**

NA

0	1	2	3	4	5

Interdisciplinary support

- **Nursing**

(Question 9 of 46 - Mandatory)

(1) Poor **(5) Excellent**

NA

0	1	2	3	4	5

Interdisciplinary support

- **Social Work**

(Question 10 of 46 - Mandatory)

(1) Poor **(5) Excellent**

NA

0	1	2	3	4	5

Interdisciplinary support

- **Dietary**

(Question 11 of 46 - Mandatory)

(1) Poor **(5) Excellent**

NA

0	1	2	3	4	5

Interdisciplinary support

- **Pharmacy**

(Question 12 of 46 - Mandatory)

(1) Poor **(5) Excellent**

NA

0	1	2	3	4	5

Availability of Consultations

- **Internal Medicine**

(Question 13 of 46 - Mandatory)

(1) Poor **(5) Excellent**

NA

0	1	2	3	4	5

Availability of consultations

- **Transplantation**

(Question 14 of 46 - Mandatory)

(1) Poor **(5) Excellent**

NA

0	1	2	3	4	5

Availability of consultations

- **Other Surgical specialties**

(Question 15 of 46 - Mandatory)

(1) Poor **(5) Excellent**

NA

0	1	2	3	4	5

Ancillary Services

- **Laboratory data retrieval**

(Question 16 of 46 - Mandatory)

(1) Poor **(5) Excellent**

NA

0	1	2	3	4	5

Ancillary Servies

- **Radiology data film retrieval**

(Question 17 of 46 - Mandatory)

(1) Poor **(5) Excellent**

NA

0	1	2	3	4	5

Ancillary Services

- **Procedure form report retrieval**

(Question 18 of 46 - Mandatory)

(1) Poor **(5) Excellent**

NA

0	1	2	3	4	5

Ancillary Services

- **Intravenous and phlebotomy services**

(Question 19 of 46 - Mandatory)

(1) Poor **(5) Excellent**

NA

0	1	2	3	4	5

Ancillary Services

- **Messenger/transport services**

(Question 20 of 46 - Mandatory)

(1) Poor **(5) Excellent**

NA					
0	1	2	3	4	5

Ancillary Services

- **Secretarial/clerical services**

(Question 21 of 46 - Mandatory)

(1) Poor **(5) Excellent**

NA					
0	1	2	3	4	5

Appropriateness of workload *(Question 22 of 46 - Mandatory)*

(1) Poor **(5) Excellent**

NA					
0	1	2	3	4	5

Overall quality of rotations *(Question 23 of 46 - Mandatory)*

(1) Poor **(5) Excellent**

NA					
0	1	2	3	4	5

TEACHING CONFERENCES

Please rate the quality of the teaching conferences listed below

- **Clinical conference**

(Question 24 of 46 - Mandatory)

(1) Poor **(5) Excellent**

NA					
0	1	2	3	4	5

Conferences

- **Radiology Conference**

(Question 25 of 46 - Mandatory)

(1) Poor **(5) Excellent**

NA					
0	1	2	3	4	5

Conferences

- **Research/Visiting professor conferences**

(Question 26 of 46 - Mandatory)

(1) Poor **(5) Excellent**

NA					
0	1	2	3	4	5

Conferences

- **Journal Club**

(Question 27 of 46 - Mandatory)

(1) Poor **(5) Excellent**

NA					
0	1	2	3	4	5

Conferences

- **Renal Biopsy Conference**

(Question 28 of 46 - Mandatory)

(1) Poor

NA					
0	1	2	3	4	5

Conferences

- **Lecture series conferences**

(Question 29 of 46 - Mandatory)

(1) Poor **(5) Excellent**

NA

0	1	2	3	4	5

TEACHING FACULTY

- **Availability**

(Question 30 of 46 - Mandatory)

(1) Poor **(5) Excellent**

NA

0	1	2	3	4	5

Teaching Faculty

- **Commitment to teaching**

(Question 31 of 46 - Mandatory)

(1) Poor **(5) Excellent**

NA

0	1	2	3	4	5

Teaching Fauclty

- **Quality**

(Question 32 of 46 - Mandatory)

(1) Poor **(5) Excellent**

NA

0	1	2	3	4	5

Teaching Faculty

- **Promote scientific/discovery literacy**

(Question 33 of 46 - Mandatory)

(1) Poor **(5) Excellent**

NA

0	1	2	3	4	5

OVERALL QUALITY OF TRAINING *(Question 34 of 46 - Mandatory)*

(1) Poor **(5) Excellent**

NA					
0	1	2	3	4	5

GENERAL QUESTIONS

My colleagues (Fellows) behave in a reliable manner *(Question 35 of 46 - Mandatory)*

- [ ] Yes
- [ ] No

My colleagues are reliable *(Question 36 of 46 - Mandatory)*

- [ ] Yes
- [ ] No

In time of conflict or trouble, I turn to my colleagues for support *(Question 37 of 46 - Mandatory)*

- [ ] Yes
- [ ] No

I would have members of my class as partners in my practice *(Question 38 of 46 - Mandatory)*

- [ ] Yes
- [ ] No

My attending physicians behave in an appropriate manner *(Question 39 of 46 - Mandatory)*

- [ ] Yes
- [ ] No

My attending physicians are reliable *(Question 40 of 46 - Mandatory)*

- [ ] Yes
- [ ] No

In time of conflict or trouble, I turn to my attending physician for support *(Question 41 of 46 - Mandatory)*

- [ ] Yes
- [ ] No

The educational atmosphere encourages excellence *(Question 42 of 46 - Mandatory)*

- [ ] Yes
- [ ] No

The educational atmosphere recognizes excellence *(Question 43 of 46 - Mandatory)*

	Yes
	No

I wish someone would have motivated me more to expand and strengthen my knowledge base *(Question 44 of 46 - Mandatory)*

	Yes
	No

The Program Director was supportive and easily accessible *(Question 45 of 46 - Mandatory)*

	Yes
	No

Identify the core strengths and weaknesses of the program *(Question 46 of 46 - Mandatory)*