Contact Person: Dr. Chris Poole

Nephrology Rotation Rules of the Road
Welcome to the Nephrology rotation. I hope that you will enjoy your experience on your service this month. There is a wealth of renal medicine and general internal medicine to be learned during your time on service. You will be working with Dr. Poole, Dr. Stafford, Dr. Holt or Dr. Franklin while on service. Below are some of the expectations of the residents while on service. If you have any questions please do not hesitate to ask.

1. Rounds will typically begin at 9:00 AM in the dialysis unit
2. Try to see most of the patients before we round
3. Our patient list can usually be obtained in the Erlanger computer
4. Renal clinic is the 1st and 3rd Thursday of the month at 1:00 PM in the Whitehall Building
5. Typically my office will call you with new consults or admissions. Make sure all consults go through the office first so they can determine who needs to see the consult.
6. Once you have finished the consult, you can call my office to let them know you are finished.
7. After we have “staffed” the consult, then please dictate the consult with a copy going to my office. Also all H&P’s and Discharge Summaries on patients admitted to our service need to be dictated as well.
8. If you can not make it to work or need to be off please let me know via email or on rounds.
9. The attendings work in a “hospitalist” system, and we typically rotate weekly. Dr.’s Holt and Poole cover each other’s service and Dr.’s Franklin and Stafford cover each other.
10. Ideally you should receive a list of patients from the resident going off service, and you should likewise check out the patients as you exit the rotation.

Important numbers:
Office 423-702-7900
My email address: dr.poole@nephassociates.com

Christopher V. Poole, M.D.


**Educational Purpose**
Renal disorders are commonly evaluated by general internists. Disorders may be primarily renal in origin or systemic diseases that have profound secondary effects on the kidney, such as diabetes, vasculitides and atherosclerosis. General internists must be able to recognize, evaluate and initiate treatment for common renal disorders as well as understand the relationship between systemic processes and the kidney. Prevention of renal disease assumes paramount importance in decreasing the burden of chronic kidney disease. Occupational exposures in the dialysis unit to blood born pathogens such as Hepatitis B and C and HIV are discussed. Caring for chronic renal patients involves occupational risks to the practitioner. The socioeconomic aspect of chronic kidney disease on overall health care spending is important for the resident to understand. Environmental, nosocomial iatrogenic causes of renal disease are considered including the use of contrast dye, drug induced renal disease and medication induced changes in initiating renal hemodynamics and drug disposition. The difficult ethical issues of withholding renal replacement therapy and discontinuing renal replacement therapy are encountered.

**Teaching Methods**
Bedside rounds are conducted on all new admissions, consultations and hospital follow-ups on a daily basis. Independent reading is encouraged as well as assigned by the faculty attending. Didactic sessions are regularly during which articles will be reviewed or topics discussed.

**Disease Mix**
During the one-month nephrology rotation, important topics and disorders reviewed and encountered include:

- A. Glomerulonephritis
- B. Interstitial nephritis
- C. Hereditary and congenital renal diseases-systemic diseases
- D. Systemic diseases such as diabetes, lupus, and vasculitides and their effect on the kidney
- E. Preventive renal dysfunction by optimal treatment of systemic disorders
- F. Acute renal failure
- G. Chronic kidney disease
- H. Kidney stones
- I. Renal transplantation
- J. Electrolyte and body fluid disorders
- K. Acid base disorders
- L. Hypertension and associated renal complications including their prevention
- M. Hematuria
- N. Proteinuria and the nephrotic syndrome
Types of Clinical Encounters
The resident will evaluate inpatients admitted to the renal service as well as those seen in consultation having both acute and chronic disorders, many of which are emergent and part of catastrophic, life threatening illnesses. Patients are also seen in the outpatient setting in the renal clinic as well as in the private nephrologists’ office. Residents are supervised in all locations, both in the hospital and office setting, by faculty nephrologists. The critical role of collaboration by other members of the health care teams such as dieticians, dialytic technicians, and nursing is emphasized. In the outpatient setting, residents have the opportunity to evaluate and participate in the management of patients ranging from those with early stages of renal dysfunction to those with advanced renal insufficiency. The treatment strategies proven to slow the progression of and decrease the complications from chronic kidney disease are emphasized.

Patient Characteristics
Renal disorders are evaluated in a wide range of clinical severity as well as stages of illness. Renal disease can affect patients at all ages of life, although the incidence increases as the patient ages.

Procedures and Services
The resident may assist and/or observe placement of vascular access for dialysis or kidney biopsy. Residents will also receive instruction regarding hemodialysis, peritoneal dialysis and continuous renal replacement therapy.

Reading List
MKSAP (Medical Knowledge Self-Assessment Program 14– Nephrology section including question and answer section.)
Current Literature as assigned by the supervising attending.

Pathological Material
Residents will be expected to review the pathology of those biopsies obtained for patients for whom they have consulted or participated in management.
Method of Evaluation of Resident Performance
Because of the close working relationship between the nephrologist and the resident, the faculty physician constantly reviews the performance of the resident. Residents are required to complete the required readings, attend all assigned clinic sessions, and complete the renal section of the MKSAP 14 including questions and answers. The attending will complete a written evaluation at the conclusion of the rotation, which is reviewed with the resident and entered in the resident’s file.

To complete the nephrology rotation, the resident must:
A. Receive satisfactory end of rotation evaluation by the supervising faculty member.
B. Complete assigned readings.
C. Attend all outpatient clinical activities (excluding scheduled times away, required clinics and emergencies).
D. Complete required case report abstracts and/or posters assigned by the supervising faculty member.
E. Complete the MKSAP 14 nephrology section.

OBJECTIVES
The curriculum is designed to address learning objectives of the following Accreditation Council on Graduate Medical Education core competencies. Reference: http://www.acgme.org/Outcome

“Every competency can be taught with every patient.” B. Joyce, 2006

PATIENT CARE
Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents are expected to:
1. communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families
2. gather essential and accurate information about their patients
3. make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment
4. develop and carry out patient management plans
5. counsel and educate patients and their families
6. use information technology to support patient care decisions and patient education
7. perform competently all medical and invasive procedures considered essential for the area of practice
8. provide health care services aimed at preventing health problems or maintaining health
9. work with health care professionals, including those from other disciplines, to provide patient-focused care
MEDICAL KNOWLEDGE
Residents must demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care. Residents are expected to:
1. demonstrate an investigatory and analytic thinking approach to clinical situations
2. know and apply the basic and clinically supportive sciences which are appropriate to their discipline

PRACTICE-BASED LEARNING AND IMPROVEMENT
Residents must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices. Residents are expected to:
1. analyze practice experience and perform practice-based improvement activities using a systematic methodology
2. locate, appraise, and assimilate evidence from scientific studies related to their patients’ health problems
3. obtain and use information about their own population of patients and the larger population from which their patients are drawn
4. apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness
5. use information technology to manage information, access on-line medical information; and support their own education
6. facilitate the learning of students and other health care professionals

INTERPERSONAL AND COMMUNICATION SKILLS
Residents must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their patients families, and professional associates. Residents are expected to:
1. create and sustain a therapeutic and ethically sound relationship with patients
2. use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills
3. work effectively with others as a member or leader of a health care team or other professional group
PROFESSIONALISM
Residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. Residents are expected to:

1. demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supercedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development
2. demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices
3. demonstrate sensitivity and responsiveness to patients’ culture, age, gender, and disabilities

SYSTEMS-BASED PRACTICE
Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value. Residents are expected to:

1. understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice
2. know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources
3. practice cost-effective health care and resource allocation that does not compromise quality of care
4. advocate for quality patient care and assist patients in dealing with system complexities
5. know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance

Updated: April 2008
## Nephrology Rotation Intern/Resident Check List

**Intern/Resident ____________________________ PGY (circle one) 1, 2, or 3**

**Supervising Faculty_________________________ Month: _____________________**

<table>
<thead>
<tr>
<th>Rotation Check List</th>
<th>Yes</th>
<th>No</th>
<th>Comments</th>
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<tbody>
<tr>
<td>Reviewed the goals and objectives at the beginning of the rotation</td>
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<td>Evaluation and feedback mid month</td>
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<td>Evaluation and feedback at the end of rotation</td>
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<td>Attended all scheduled clinical sessions</td>
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<td>Completed assigned readings to include MKSAP (Medical Knowledge Self-Assessment Program 14- Nephrology)</td>
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<td>Completed required case reports/abstracts/posters</td>
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<tr>
<td>Performed at or above the expected PGY level. Please check one.</td>
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<tr>
<td><strong>PGY 1 Residents are responsible</strong></td>
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<tr>
<td>- for gathering relevant patient data</td>
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<td>- performing and interpreting physical examination findings</td>
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<td>- perform basic procedures and interpret data</td>
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<td>- interpret laboratory tests</td>
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<td>- interpret basic radiographic studies</td>
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<td><strong>PGY-2 will have improved competence and demonstrate</strong></td>
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<td>- improved data gathering and physical examination skills</td>
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<td>- improved knowledge</td>
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<td>- improved decision making</td>
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<td>- enhanced ability to counseling</td>
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<td><strong>PGY-3 will approach mastery and demonstrate the ability to function as consultant</strong></td>
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<tr>
<td>Reviewed and met the core competencies as outlined. Please give at least one additional example.</td>
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<td><strong>A Patient Care</strong></td>
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<tr>
<td>• Residents will obtain and document appropriate history taking, physical exam and laboratory interpretation skills for patients with renal disorders</td>
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<tr>
<td>• Residents will develop appropriate treatment plans for patients with renal disorders.</td>
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<tr>
<td><strong>B. Medical Knowledge</strong></td>
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<td><strong>PGY1:</strong></td>
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<td>• Residents will be able to define, describe and discuss various problems based on the expected disease mix of renal diseases</td>
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<td>• Understand principles of diagnosis and treatment of sodium disorders.</td>
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</table>
- Demonstrated understanding of diagnosis and management of hypokalemia and hyperkalemia.
- Understand the workup, diagnosis, and management of patients with acute renal failure

**PGY2:**
- All PGY1 requirements
- Understand the workup, diagnosis and management of patients with chronic kidney disease

**PGY3:**
- All PGY1 and PGY2 requirements
- Develop an understanding of the diagnostic methods and treatment of glomerular disorders
- Indications, methods, results and complications of peritoneal dialysis
- Indications and technique of

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**C. Practice Based Learning**

**PGY1:**
- Residents will develop and implement treatment plans by utilizing appropriate information systems and resources to help manage acute renal disorders.

**PGY2 and PGY3:**
- All PGY1 requirements
- Apply management strategies of chronic kidney disease to the ambulatory and continuity setting.

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**D. Interpersonal and Communication Skills**

- Residents will communicate diagnosis, treatment plan and follow up care to patients and their families.
- Residents will demonstrate ability to relate to multidisciplinary teams including nephrology faculty, staff, nurses, and pharmacists.

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**E. Professionalism**

- residents will communicate diagnosis, treatment plan and follow up care to patients and their families.
- residents will demonstrate ability to interact with multidisciplinary teams.

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**F. Systems-Based Practice**

**PGY1:**
- residents will be able to develop, implement and evaluate treatment plans for patients that include determining when to obtain consultations from Nephrologists.
- residents will be able to develop, implement and evaluate treatment plans that are cost effective and meet national
quality standards.
  • Residents will be able to demonstrate an understanding of the multidisciplinary health care teams and community resources required in the care of patients with chronic kidney disease.

PGY2 and PGY3:
  • All PGY1 requirements
  • Recognize the new coding guidelines for management of chronic kidney disease.

PGY3:
  • All PGY1 and PGY2 requirements
  • Understand how the local and national organ donor and procurement system operates by reviewing with the local coordinator.

Literature search on assigned topics with attending discussions

Intern/Resident Signature ______________________________ Date ______________

Supervising Faculty ___________________________________ Date ______________

All items must be completed for rotation credit and checklist returned to the Department of Medicine. Updated: April 2008