

Curriculum for Nephrology Fellowship

Consultation: FMLH Service

Description of Rotation or Educational Experience

This part of the fellowship program in Nephrology provides training and experience such that trainees completing this rotation will have the competence of a specialist in Nephrology for in-patient consultative Nephrology.

The needs assessment determines that Nephrology training must include learning and mastering the act of Nephrology consultation for in-patients. This is achieved by this rotation, and occupies 3 to 5 months of the two year Nephrology fellowship.

The goal is to gain *medical knowledge*, skills, and experience in treatment of kidney diseases, acute and chronic, especially those that may complicate the *patient care* of medical or surgical illness.

This place of this rotation is at the Froedtert Memorial Lutheran Hospital (FMLH), a major training site of the MCW Nephrology fellowship program. Its work-day is 8 am to 6 pm, Monday through Friday. The patients are those of the FMLH for whom Nephrology consultation is needed. This includes disorders of fluid and electrolytes, acute and chronic renal failure, and patients needing dialysis or kidney biopsy. A Nephrology fellow makes daily rounds, weekdays, with the assigned Nephrology faculty attending physician. Weekend and after-hour coverage is by the on-call fellow. The fellow sees all patients, and may have the assistance of medical students, medical residents, and paramedical personnel. Procedures learned include urinalysis, kidney biopsies, native and transplant, temporary dialysis catheter placement, and dialysis, acute, continuous, and peritoneal.

Patient Care

Goal

Fellows will provide patient care that is compassionate, appropriate, and effective for the treatment of disease and the promotion of health. First year fellows will act in patient care with faculty supervision. Second year fellows will also act with supervision but will show initiative by independent diagnosis and treatment. By the end of their training, Fellows will:

Competences

Acquire competence in in-patient consultative care at the level of a specialist in Nephrology

Objectives

Fellows will learn the assessment and management of the following:

- a) disorders of mineral metabolism, including nephrolithiasis and renal osteodystrophy;
- b) disorders of fluid, electrolyte, and acid-base regulation;
- c) acute renal failure;
- d) chronic renal failure and its management by conservative methods, including nutritional management of uremia;
- e) end-stage renal disease;
- f) hypertensive disorders;
- g) renal disorders of pregnancy;
- h) urinary tract infections;
- i) tubulointerstitial renal diseases, including inherited diseases of transport, cystic diseases, and other congenital disorders;
- j) glomerular and vascular diseases, including the glomerulonephritides, diabetic nephropathy, and atheroembolic renal disease;
- k) disorders of drug metabolism, pharmacokinetics, and nephrotoxicity;
- l) genetic and inherited renal disorders; and
- m) geriatric aspects of nephrology, including disorders of the aging kidney and urinary tract.

With this rotation, and other in-patient rotations, fellows will achieve competence in:

- a) urinalysis;
- b) percutaneous biopsy of both autologous and transplanted kidneys;
- c) placement of temporary vascular access for hemodialysis and related procedures;
- d) peritoneal dialysis;
- e) acute and chronic hemodialysis; and
- f) continuous renal replacement therapy.

Medical Knowledge

Goal

Fellows will obtain knowledge of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences, as well as the application of this knowledge to patient care. By the end of their training, Fellows will:

Competences

Know the core elements of Nephrology in-patient consultative practice, as in all items (a) through (m), and (a) through (f) above.

Objectives

Fellows will learn the core knowledge of Nephrology in-patient consultative practice, as in items (a) through (m), above, and competently perform the procedures of (a) through (f), above as assessed by the assigned attending Nephrologist and evaluated on the semi-annual evaluations and the CSRs. Second year fellows will enhance their learning by additional experience and also by teaching of more junior trainees.

Practice- Based Learning and Improvement

Goal

Fellows will investigate and evaluate their care of patients, will appraise and assimilate scientific evidence, will continuously improve patient care based on constant self-evaluation and life long learning. First year fellows will show these skills. Second year fellows will develop them as they model them for more junior trainees. By the end of their training, Fellows will develop skills and habits to be able to :

Competences

- Systematically analyze their practice, using quality improvement methods, and implement changes with the goal of practice improvement
- Locate, appraise and assimilate evidence from scientific studies related to their patients' health problems
- Use information technology to optimize learning

Objectives

All Fellows will show their appraisal and assimilation of evidence by their presentations at weekly clinical conference. All Fellows will learn the evidence base of practice in monthly journal clubs. All Fellows will use information technology to enable their evidence-based in-patient consultative practice.

Second year fellows will perform these tasks with greater proficiency than the first year fellows.

Systems Based Practice

Goal

Fellows must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care. First year fellows will show these skills. Second year fellows will develop them as they model them for more junior trainees. Fellows will:

Competences

- Work effectively as a consultant in the in-patient setting.
- Coordinate patient care within the in-patient setting.
- Participate in identifying systems errors

Objectives

All Fellows will prepare and attend the yearly Morbidity and Mortality conference. All Fellows will show their ability to work with multiple caregivers and systems of care. First year fellows will complete these tasks, Second year fellows will perfect them.

Professionalism

Goal

Fellows will show a commitment to carrying out professional responsibilities and an adherence to ethical principles. First year fellows will have this commitment. Second year fellows will show it in their day-to-day activities. Fellows will show:

Competences

- Compassion, integrity, and respect for others
- Responsiveness to patient needs that supersedes self-interest
- Respect for patient privacy and autonomy
- Sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation

Objectives

These competences are directly observed by Nephrology Faculty mentors of the fellow, for this in-patient consultation rotation. Fellow professionalism is also documented by yearly 360 evaluations and by monthly global evaluations.

First year fellows will show a commitment to professionalism, as observed and evaluated for this rotation. Second year fellows must show a consistent professionalism, as observed and evaluated for this rotation.

Interpersonal and Communication Skills

Goal

Fellows must show interpersonal and communication skills that result in the effective exchange of information and teaming with patients, their families, and professional associates. First year fellows will have these skills. Second year fellows will develop them to the level of a specialist physician. Fellows will:

Competences

- Communicate effectively with patients and families across a broad range of socioeconomic and cultural backgrounds
- Communicate effectively with physicians, other health professionals, and health related agencies
- Act in a consultative role to referring physicians and health professionals

Objectives

Fellows will show competence in written and oral communication with referring physicians, as evaluated twice a year using Chart Stimulated Review, and will be evaluated semi-annually, by global evaluation, on their interpersonal communication competence.

First year fellows will learn these skills, especially for interpersonal communication with referring physicians, as measured and evaluated by the CSR exercise and semi-annual clinic rotation evaluations.

Second year fellows will have these skills, and will show them consistently as evaluated and documented for this rotation and at the time of CSR exercises.

Teaching Methods

Teaching is clinical and case-based, and is the daily responsibility of the Nephrology faculty attending physician. It also occurs at the time of teaching rounds and weekly

conferences. Supervision of the fellow is by the Nephrology attending faculty. Supervision and mentoring of the fellow is by the Nephrology attending faculty. We use direct daily one-on-one mentoring, daily case-based teaching, monthly journal clubs, and electronic curriculum teaching, and self-directed learning.

Assessment Method (fellows)

Assessment occurs for each month of this rotation. Nephrology attending faculty assess the fellow's performance for all six competencies. The Nephrology attending faculty provides written and verbal feedback to the fellow monthly or more often. The fellow provides evaluation at the six-monthly review and annually. The 360 evaluations include our in-patient personnel, providing insight into professionalism of fellows. The annual program assessment uses this feedback and that of former fellows for program improvement., twice a year Chart Stimulated Review, and once a year in-service examination.

Graded competence

The fellow's competence increases with each successive month on this rotation. First year fellows will have basic competence at the start of this rotation. Second year fellows will be more efficient and have greater independence. At the end of fellowship, and by this rotation, the Nephrology fellow will be competent in Nephrology consultation to provide independent consultative in-patient care.

Assessment Method (Program Evaluation)
Our program components including the FMLH consultation rotation are evaluated by all faculty, once a year. We also have a once a year program review by selected faculty. We periodically survey past fellows. We record Nephrology Board pass rates by all fellows.
Level of Supervision
Fellows are supervised face-to-face on this rotation with direct observation of their care of patients, medical decision-making, and interpersonal communication.
Educational Resources
These are the computer and paper resources of the Medical College of Wisconsin libraries, and the reading list of the Nephrology fellowship. Fellows also attend the yearly didactic lectures by the American Society of Nephrology.