

Urology Educational Goals & Objectives

The Urology rotation will provide the resident with exposure to urological issues commonly seen in primary care. The focus will be on developing skills to diagnose and treat urologic disease. The resident will become familiar with guidelines for the evidence based management of such issues as BPH, sexual dysfunction, interstitial cystitis, and prostate cancer screening to effectively counsel their patients in the primary care setting. Finally, the resident will understand appropriate indications for urology referral.

Faculty will facilitate learning in the 6 core competencies as follows:

Patient Care and Procedural Skills

- I. All residents must be able to provide compassionate, culturally-sensitive care for their patients with urology conditions.
- II. Residents will demonstrate the ability to take a history focused on urologic symptoms.
 - PGY1s should be able to differentiate between stable and emergent symptoms.
 - PGY2s will independently obtain the above information and identify barriers to patient compliance and care.
 - PGY3s should be able to independently obtain the above details for patients with complex medical histories and multiple comorbid conditions.
- III. Residents should be able to perform an appropriately-targeted physical exam.
 - PGY1s should be comfortable with performing and documenting a normal urogenital, rectal, and prostate exam.
 - PGY2s should be able to characterize abnormal exam findings, including genital skin lesions, prostate enlargement or nodules, scrotal masses, etc.
 - PGY3s should be able to independently perform a complete exam and understand the sensitivity and specificity of physical findings.
- IV. Residents will understand the indications, contraindications, and complications for the following procedures:
 - Cystoscopy
 - Circumcision
 - Prostatectomy
 - Urinary calculus removal
 - Vasectomy
- V. Residents will become competent in the appropriate use of the following procedures:
 - Bladder irrigation
 - Bladder scan for residual urine
 - Suprapubic tube placement and change
 - Urethral catheterization
 - Urethral dilation

Medical Knowledge

- I. All residents will become familiar with
 - an initial approach to non-traumatic and traumatic urologic emergencies, including hematuria, priapism, renal colic, torsion, trauma (bladder, renal, testicular, ureteral, urethral, and testicular), and urinary retention
 - the initial management of genitourinary cancers
- II. PGY1s will become skilled in the timely triage of and approach to common presenting concerns, including
 - Change in urinary stream, dribbling, hesitancy, or urgency
 - Dysuria
 - Flank pain
 - Incontinence
 - Male infertility
 - Polyuria
 - Sexual dysfunction – erectile or ejaculatory dysfunction, loss of libido, etc.
 - Urethral discharge
- III. PGY2s will also develop an understanding of the pathophysiology, clinical presentation, natural history, and therapy for the following conditions:
 - Adrenal neoplasm
 - Ambiguous genitalia
 - Balanitis
 - Benign prostatic hyperplasia
 - Chronic indwelling catheter
 - Cryptorchism and undescended testicles
 - Epididymitis, orchitis, prostatitis, urethritis
 - Erectile dysfunction
 - Hydrocele, spermatocele, varicocele
 - Hypogonadism
 - Hypospadias
 - Incontinence – stress, urge, overflow, mixed
 - Interstitial cystitis
 - Nephrolithiasis
 - Neurogenic bladder
 - Pelvic floor prolapse
 - Perineal trauma
 - Peyronie’s disease
 - Phimosis
 - Priapism
 - Sexual dysfunction
 - Sexually transmitted diseases
 - Urethral stenosis
 - Urinary tract infection
 - Urinary tract obstruction

- III. PGY3s will gain a better understanding of the above conditions within the setting of comorbidities.
- IV. Residents will be able to provide counselling for their patients with urologic conditions.
 - PGY1s will be able to sensitively and effectively counsel men with erectile dysfunction, men who have sex with men, and men electing vasectomy.
 - PGY2s need to understand the indications for PSA screening and be able to effectively counsel patients on the indications within the context of the current debate.
 - PGY3s need to understand the scientific basis for guidelines regarding urologic care and be able to discuss them with patients and families.
- V. Residents will understand indications for and interpretation of laboratory and diagnostic studies relevant to the diagnosis and treatment of the above conditions, such as
 - PSA
 - Renal biopsy
 - Renal imaging: Abdominal/pelvic CT, KUB, IVP, renal scan, ultrasound
 - Semen analysis
 - Testosterone level
 - Urinalysis with microscopy
 - 24 hour urine for calcium, oxalate, uric acid
- VI. Residents should become familiar with biostatistics
 - PGY1s should understand basic statistical concepts found in urology literature, such as pretest probability, sensitivity, specificity, and number needed to treat
 - PGY2s should understand how to apply these numbers to their diagnostic workup and treatment.
 - PGY3s should be able to understand the impact of statistics on influencing the population health of patients with urologic issues.

Practice-Based Learning and Improvement

- I. Residents should be able to access current clinical practice guidelines <http://www.aunanet.org/guidelines> and apply evidence-based strategies to the patient care.
- II. PGY2s should develop skills in evaluating studies in published literature, through Journal Club and independent study.
- III. All residents should learn to function as part of a team, including the primary care physician, urologist, and clinic staff to optimize patient care, with PGY3s taking a leadership role.
- IV. All residents should respond with positive changes to feedback from members of the health care team.

Interpersonal and Communication Skills

- I. PGY1s must demonstrate organized and articulate electronic and verbal communication skills that build rapport with patients and families, convey information to other health care professionals, and provide timely documentation in the chart.
- II. PGY2s must also develop interpersonal skills to educate and counsel patients, and where appropriate, promote behavioral change.
- III. PGY3s should demonstrate leadership skills to build consensus and coordinate a multidisciplinary approach to patient care.

Professionalism

- I. All residents must demonstrate strong commitment to carrying out professional responsibilities as reflected in their conduct, ethical behavior, attire, interactions with colleagues and community, and devotion to patient care.
- II. All residents should be able to educate patients and their families in a manner respectful of gender, age, culture, race, religion, disabilities, national origin, socioeconomic status, and sexual orientation on choices regarding their care.
- III. PGY2s should be able to use time efficiently in the clinic to see patients and chart information.
- IV. PGY 3s should be able to provide constructive criticism and feedback to more junior members of the team.

Systems-Based Practice

- I. PGY1s must become aware of the social, economic, and psychological factors that affect patient health and use of resources.
- II. PGY2s should understand the impact of insurance status on patient access to care and be aware of the availability of case workers, counseling services, and other community resources to maximize care.
- III. PGY3s must demonstrate an awareness of and responsiveness to established quality measures, risk management strategies, and cost of care within our system.

Teaching Methods

- I. Supervised patient care in the clinic
 - Residents will initially be directly observed with patients, to facilitate the acquisition of excellent history taking, physical exam, and procedural skills.
 - As residents become more proficient, they will interact more independently with patients and present cases to faculty.
 - For PGY1s, initial emphasis will be on diagnosis and basic management.
 - For more senior residents, focus will be on medical decision-making, and residents will work with supervising physicians to finalize a care plan.
- II. Conferences
 - Specialty-specific didactics
- III. Independent study
 - Journal and textbook reading

- Wein AJ, Kavoussi LR, Partin AW, and Peters CA. Campbell-Walsh Urology. 11th ed. Elsevier; 2015.
- [Prostate-Specific Antigen–Based Screening for Prostate Cancer: A Systematic Evidence Review for the U.S. Preventive Services Task Force](#)
- Additional reading as recommended by Attending physician
- Online educational resources
 - American Family Physician
<http://www.aafp.org/afp/topicModules/viewTopicModule.htm?topicModuleId=30>
 - American Urological Association Guidelines at a Glance (<http://www.auanet.org/guidelines>)
 - Clinical Key
 - Prostate Cancer Risk Calculator <http://www.clevelandclinic.org/lp/prostate-cancer-risk-assessment/>
 - Up To Date
 - U.S. Preventive Services Task Force
 - Screening for prostate cancer
<https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/prostate-cancer-screening1>
 - Screening for testicular cancer
<https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/testicular-cancer-screening>

Evaluation

- I. Case and procedure logs as appropriate
- II. Attending written evaluation of resident at the end of the month, based on observations and chart review.
- III. Mini-CEX bedside evaluation tool

Rotation Structure

- I. Residents should contact the attending physician the day prior to confirm start time and location.
- II. Residents should be in clinic during their scheduled times. Residents should notify the attending physician promptly if they cannot be in clinic at their assigned time.
 - Residents will be involved in discussion of patient presentation, generation of a differential diagnosis, development of a treatment plan, and plan for patient follow up. In addition, residents will be involved in in-office procedures as is appropriate.
 - Case-based learning is most effective. Nightly reading/study should be based on patients seen during the day.
 - When seeing outpatient consults referred from another provider, the resident should understand the question asked and provide a concise answer.

Residents may be asked to do focused literature searches or presentations during the course of the rotation.

- At the end of the rotation, residents will be asked to present a case study at morning report in the usual fashion, concluding with a 10 minute presentation on that topic.

Call and weekend responsibilities TBD by the attending physician.

- Hours worked must be consistent with ACGME requirements and are subject to approval by the Program Director.

V. Residents have specialty-specific didactics and should be excused in a timely fashion to attend.