

GENERAL UROLOGY GOALS AND OBJECTIVES PGY-2

In addition to the goals listed for PGY-1, the PGY-2 resident will add to his/her knowledge base by participating actively in conferences, presenting at conferences and being called upon as the primary GU consultant to other services at all the training sites. Rotations include University Hospital (2), VA, and Pediatrics. The PGY-2 year includes a major exposure to endoscopic procedures, neurourology/voiding dysfunction, pediatric urology and GU minor open procedures. Some more advanced cases including laparoscopic experience may be available as well.

General Urology Goals

Residents will:

- Build upon the knowledge base from the previous surgery experience.
- Become well read in all areas of the care of surgical patients as initiated in the PGY-1 year.

PGY-2 Year:

- Use the AUA Curriculum to develop an organized approach to reading the core information in Urology.
- Continue to develop good documentation habits.
- Develop a full understanding of the Urology specific history and review of systems.
- Develop the capability of performing and understand the nuances of the Urology specific physical examination.
- Develop an understanding of the cost-effective laboratory evaluation of genitourinary complaints as part of the overall evaluation process.
- Develop an understanding of the types of radiologic evaluations and their limitations in the overall evaluation of genitourinary complaints.
- Develop a more sophisticated understanding of the pathophysiology and time course of common genitourinary problems and design treatment regimens that take the level of seriousness and natural history into account.
- Develop communication skills related to providing consultative services in the hospital and outpatient services.
- Develop liaisons with other members of the Urologic community and begin to establish a reputation as a professional.

Objectives:

Residents must demonstrate **clinical competence** in the following areas:

- Be able to obtain, articulate and document appropriate full genitourinary history.
- Be able to perform, articulate and document appropriate full genitourinary examination
- Be able to select, order and review the results of appropriate laboratory and imaging studies in a timely fashion.
- Integrate clinical information to develop differential diagnosis and most likely diagnosis
- Realization of an appropriate level of concern and urgency for the subsequent testing and treatment of patients.
- Interpretation of the results of laboratory and imaging studies in a timely fashion and within

the overall context of the patient's treatment planning.

- Understanding the indications for endoscopic and urodynamics testing.
- Performance of basic endoscopic procedures including cystoscopy, ureteroscopy and straight-forward percutaneous renal endoscopic procedures.
- Perform and interpret urodynamic procedures.
- Evaluation and treatment of straight forward to moderately complex voiding dysfunction problems.
- Identification and development of mechanisms to overcome barriers to timely and cost-effective patient care strategies.

Residents must demonstrate **academic & professional competence** in the following areas:

- Actively participate in M&M conference and Tumor board.
- Be able to cogently present the details of interesting or challenging cases at Conference
- Prepare Urology grand rounds lectures, case presentations and literature reviews for topics related to the core curriculum.
- Complete self-assessment and individualized learning plan.
- Complete peer, faculty, and program evaluations to help improve the training program.
- Apply for candidate membership in the AUA, South Central Section (AUA) and the Texas Urologic Society
- Begin a quality improvement project.
- Continue work on a clinical or basic science research project.

Mechanism of learning: Reading, mentoring by upper level residents/faculty, conferences, on rotation experience.

Competency: Patient Care, Medical Knowledge, Interpersonal & Communication skills, Systems-based practice & improvement, Professionalism.

Documentation: Global Resident Competency Rating Form, Observed Patient Encounter Rating Form, 360 Degree Rating Form, Patient Evaluations, spot checks of clinic notes, Conference attendance forms.

Urologic Education Specific Goals

Develop a more detailed understanding of the physiology and pathophysiology of the major urogenital systems.

Objectives:

Be able to describe and outline the detailed:

- Development of the human genitourinary system
- Neuromuscular anatomy & function of the genitourinary system with respect to: anatomy and voiding from birth to senility.
- Anatomy and endocrine regulation of the male reproductive system including: testicular function, libido, sexual activity and reproduction.
- Physiology of the kidney & upper urinary tract along with the pathophysiology associated with obstruction, stone disease and general comorbid conditions.
- Physiology of the adrenal gland and pathophysiology of associated tumors.

Be able to describe the physiologic basis underlying the evaluation of these systems including:

- Urodynamics, Video-urodynamics
- Tests for evaluation of adrenal pathology
- Tests in the evaluation of hypogonadism, infertility, erectile dysfunction, and ejaculatory disorders.
- Tests for the evaluation of undescended testes and intersex disorders
- Tests for the metabolic evaluation of stone disease.

Be able to interpret and design treatment plans around these tests.

Mechanism of learning: Reading, mentoring by upper level residents/faculty, conferences, urodynamics clinic

Competency: Medical Knowledge, Professionalism. System-based practice

Documentation: Global Resident Competency Rating Form, In-service examination scores, performance at conferences.

Urology Clinical Competency Specific Goals

Further develop evaluation and management skills for the most common urologic problems. Develop communication skills to accurately inform and educate patients and other healthcare professionals.

Objectives:

Demonstrate confidence in interpretation of history & clinical data and propose initial treatment/evaluation plans for:

- All levels of trauma patients
- Hematuria
- Incontinence
- Priapism
- Peyronie's disease
- Phimosis, Paraphimosis
- Pelvic pain syndromes
- Obstructive voiding symptoms
- Elevated PSA
- Prostatitis syndromes
- BPH
- Uncomplicated nephrolithiasis
- Impotence & ejaculatory disorders
- Adult and pediatric complicated and uncomplicated urinary tract infections
- Undescended testes
- Hypospadias
- Vesicoureteral reflux
- Pediatric urinary obstruction
- Phimosis
- Chordee

Provide appropriate metabolic evaluation of stones, hypogonadism, adrenal masses.
Provide appropriate staging evaluation of newly diagnosed neoplasms.
Be able to discuss findings, diagnoses and treatment plans in lay terms.
Be able to discuss the same with a more sophisticated consultant or attending staff.

Mechanism of learning: Reading, mentoring by upper level residents/faculty, conferences, clinical experience

Competency: Medical Knowledge, Patient Care, Practice-based learning & Improvement, Professionalism

Documentation: Global Resident Competency Rating Form, Observed Patient Encounter Rating Form, 360 Degree Rating Form, and Patient evaluations.

Emergent, Consultation & Inpatient Care Goals

Residents will:

- Continue to provide the highest level of care based upon the previous years' experience.
- Further develop confidence and leadership skills with the hospital team.
- Use the skills learned on the previous general surgery rotations to manage the acute and chronic health issues of the service's patients and consult patients.
- Demonstrate the development of added efficiency of Evaluation & Management skills while seeing patients in the ER or UCC.
- Demonstrate effectiveness in patient care by rounding at least twice daily on all service patients and as needed for in-house consult patients.
- Write efficient, concise progress notes on all urology patients in the intensive care unit or ward with the input from the senior residents and attending staff.
- Demonstrate efficient use of time by being prepared with patient information as it becomes available and integrating the information into the care plan in real time.
- Develop skills to prevent and manage post-operative complications
- Develop teaching skills to assist the more junior residents and students on the service.
- Develop communication skills to accurately communicate with patients, their families and other health care professionals regarding patient care issues and treatment plans.

Objectives:

Residents will demonstrate clinical competence in the following areas:

- Appropriately request and interpret postoperative tests/data on urology inpatients & ICU patients.
- Discuss details of the treatment plan and findings equally well with a highly sophisticated (other staff, attendings, consultants) and less sophisticated (patient, family) group.
- Recommend and provide appropriate postoperative management following major surgical procedures including:
 - Cystectomy
 - Partial and total nephrectomy
 - Radical prostatectomy
 - Transurethral resection of the prostate
 - Transurethral resection of bladder tumor
 - Ureteroscopic and Percutaneous stone procedures

- AUS & penile prosthesis placement
- Laparoscopic and Robotic procedures

Mechanism of learning: Reading, mentoring by upper level residents/faculty, conferences, clinical experience.

Competency: Medical Knowledge, Patient Care, Interpersonal & Communication skills, Professionalism.

Documentation: Global Resident Competency Rating Form, Observation on rounds, Peer & Staff 360 Degree Rating Form, Patient evaluations.

Urology Specific Surgical Skills Goals

Residents will:

- Develop a further understanding of the anatomy related to Urologic surgical procedures.
- Understand the indications for urologic surgical interventions along with an appreciation of the risks & benefits and alternative treatments available for each condition.
- Develop an understanding and familiarity with urologic instrumentation.
- Continue to foster an attitude of patient safety in all surgical care.
- Understand and work to prevent the potential complications and adverse events of the procedures performed.
- Understand the reasons for and become familiar with the management of complications related to urologic procedures.
- Develop an understanding of radiologic techniques commonly used by the urologists in clinic and the OR.
- Develop more refined skills of endoscopy and improve the efficiency and precision of outpatient and minor OR procedures.
- Develop the knowledge base and confidence to take on more complicated endoscopic cases
- Develop the knowledge base and confidence to begin major open and laparoscopic cases.

Objectives:

- Demonstrate the safe use of fluoroscopy equipment in the operating room including the proper use of shielding & radiation monitoring for personnel and patient as appropriate.
- Demonstrate the correct and successful use of ultrasound for delineation of renal anatomy, diagnosis and biopsy of prostate lesions, and bladder anatomy including post-void residual urine measurements.
- Demonstrate an understanding of anatomy, indications, risks & benefits, familiarity with instrumentation and logical operative steps for the following:

Open Surgery - Assistant or primary surgeon for the following:

- Opening and closing abdominal & flank incisions including the midline, subcostal, chevron, thoracoabdominal, Gibson, lumbotomy and flank incisions. Pelvic lymph node dissection
- Urostomy creation & revision Bladder repair (trauma)
- Hypospadias repair (pediatric)
- Circumcision (adult and pediatric)
- Orchidopexy (pediatric)
- UPJ repair, pyeloplasty (adult & pediatric)
- Ureteral reimplant (adult & pediatric)

- Simple and radical orchiectomy
- Hydrocele repair (adult & pediatric)
- Varicocelelectomy/ligation
- Spermatocelectomy
- Orchidopexy for torsion
- Correction of Peyronie's Disease
- Placement of initial penile prosthesis or AUS
- Urologic Laser use
- Bladder neck suspension/Pubovaginal sling
- Bladder neck suspension
- Male and female sling procedures
- Interstim placement
- Cystocele repair
- Rectocele repair
- Enterocele repair

Assist on urologic procedures in high-risk patients

Endoscopic Surgery - Assistant or primary surgeon for the following:

- Cystoscopy (pediatric and adult)
- Resection of valves (pediatric)
- Transurethral resection of papillary bladder tumor
- Incision of urethral stricture
- Transurethral incision of the prostate
- Cystolitholapaxy
- ESWL
- Ureteroscopy (diagnostic and therapeutic)
- Holmium and KTP laser use
- PCNL

[Note: Specifics of the 2 procedures below are provided to demonstrate an example of the detail required in the training of all GU procedures. As the resident does more cases and becomes more facile, emphasis is placed on improving the more complex part of the procedure and more latitude is given to independently performing the steps already mastered.]

Cystoscopy:

Under supervision, be able to perform cystoscopy as a diagnostic procedure including adequate demonstration of the following:

- Pre-cystoscopy evaluation of the underlying issues and appropriate indications.
- Counseling of the patient and adequately documented informed consent.
- Positioning, prepping and local anesthesia administration.
- Facile handling of the flexible or rigid cystoscope.
- Adequate inspection of all surfaces and identification of landmarks.
- Removal of the instrumentation.

- Documentation and coding of the procedure.
- Treatment planning based upon the findings and previous evaluation.

Transrectal ultrasonography (TRUS) with prostate biopsy:

Under supervision, be able to perform the TRUS with instrumentation provided at the rotation site including:

- Pre-TRUS evaluation including DRE findings, PSA levels and urinalysis
- Pre-TRUS orders including assessment for appropriate antibiotic prophylaxis
- Counseling of the patient and adequately documented informed consent.
- Positioning, prepping and local anesthesia administration
- Handling of the ultrasound instrumentation
- Performing the measurements necessary to document the study
- Performance of administration of injectable local anesthesia
- Demonstrate correct interpretation of images and appropriate location for biopsies Perform transrectal needle biopsy of the prostate
- Ensure proper handling of the specimen
- Post-procedure care of the patient
- Provide adequate documentation of the procedure
- Schedule appropriate follow-up for the patient to do treatment planning based on the results of the biopsy.

Minor GU procedures:

It is expected that the resident will participate in the following procedures as surgeon or first assistant as they come up during the rotation. These may be supervised by a more senior resident or directly by the attending staff. The general format for developing competence will again be contingent upon demonstration of adequate pre-op evaluation, appropriate indication, preparation, handling of the instrumentation & fluid completion of the procedure, and post-op care.

- Urodynamics
- Scrotal incisions, excisions
- Intracorporal injection
- Suprapubic tube placement
- Stent removal
- Fluoroscopic Procedures:
 - (Retrograde pyelography, RUG, Antegrade pyelography, VCUG)
- Circumcision/dorsal slit
- Excision of genital skin lesions
- Vasectomy

Mechanism of learning: Reading, mentoring by upper level residents/faculty, conferences, clinical experience. Radiation & Laser safety course.

Competency: Medical Knowledge, Patient Care, Technical Skill.

Documentation: Global Resident Competency Rating Form, Peer & staff 360 Degree Rating Form, Operative Performance Rating Form, Morbidity and Mortality Reports, Patient evaluations.