

UNC Department of Obstetrics and Gynecology

Residency Clinical Curriculum

Benign Gynecology

The PGY-2 (UNC and WakeMed) and PGY-3 Residents (WakeMed) on Benign GYN service will learn to perform clinical evaluations in outpatient management for chronic pelvic pain, abnormal Pap smears, vaginitis, dysfunctional uterine bleeding, ovarian cysts, and psychosexual problems. The Residents will evaluate, provide short-term counseling, and refer for treatment of basic sexual dysfunction issues. The Residents will perform laparoscopic procedures including tubal cauterization, lysis of simple adhesions, treatment of simple endometriosis, removal of ectopic pregnancies, cystectomies, and salpingo-oophorectomy. The Residents will perform hysteroscopic procedures as well as hysterectomies across routes of access from vaginal to laparoscopic to robotic to open abdominal. The Residents will provide complete postoperative care, including management of common post-operative complications and infections, and bleeding complications.

The PGY-4 Resident on the Benign GYN service will perform hysterectomies across all across routes of access from vaginal to laparoscopic to robotic to open abdominal. The PGY-4 Resident will perform more extensive adhesiolysis by either laparotomy or laparoscopy, perform excision of large adnexal masses by either laparotomy or laparoscopy, perform diagnostic and operative hysteroscopy, and perform cystoscopy.

The PGY-4, in addition to gaining confidence in all of the above areas, will gain experience in performing difficult vaginal hysterectomies, difficult myomectomies, pelvic support procedures, and advanced laparoscopic procedures, including lysis of more extensive adhesions and surgical treatment of endometriosis (including endometriomas).

Complex Family Planning

The complex family planning rotation during the PGY2 year exposes residents to the full breadth of reproductive health care. Residents learn not only specific clinical, procedural and surgical skills, but also the importance of a patient-centered approach to care. We recognize that learners come to this care with a wide variety of backgrounds and beliefs and support engaged learning to fit their needs.

Clinical content:

- Full scope contraceptive counseling and management (patient-centered care, postpartum and post-abortion contraception, contraceptive use in medically complex patients)
- Medication abortion
- Patient centered miscarriage management
- Disparities in reproductive health
- Advocacy

Procedural/surgical content:

- Ultrasound skills (pregnancy dating, diagnosis of early pregnancy loss, intraoperative guidance)
- Complex LARC management (implant removal with ultrasound, challenging IUD removals)
- First & second trimester surgical abortion
- Office-based procedures and sedation
- Surgical sterilization

GYN Oncology

During the seven-week rotation on the GYN Oncology service, the Resident team includes a PGY-1, PGY-3 and PGY-4. The PGY-1 is expected to accomplish the work-up of patients with pre-invasive and invasive malignancies of the female reproductive tract. The PGY-1 will be very familiar with the administration of chemotherapy and with toxicities of the standard chemotherapeutic agents. The PGY-1 Resident will understand the management of septic events that occur as a result of chemotherapy, and complications associated with the administration of radiation therapy. The PGY-1 Resident will be familiar with standard operative procedures done on the gynecologic oncology service and should be able to assist with minor operative procedures.

The PGY-3 Resident will accomplish all that is outlined for the PGY-1 Resident and will also be well experienced in the techniques of evaluation of abnormal pap smears to include colposcopy, biopsies, cryosurgery, laser therapy, and LEEP procedures. The PGY-3 Resident will achieve competency with hysterectomies across routes from open abdominal to minimally invasive (laparoscopic and robotic). The PGY-3 Resident will be very familiar with the retroperitoneal space. The PGY-3 Resident will be able to serve as a first assistant for radical procedures such as radical hysterectomy and groin node dissections.

The PGY-4 Resident will accomplish all that is expected of the PGY-1 and PGY3 Residents, will be very familiar with pelvic node dissections, will be able to perform paracentesis and thoracentesis, will be familiar with bowel techniques such as resection and bypass, will be able to accomplish repair of bladder injuries and enterotomies.

Obstetrics and Maternal Fetal Medicine

The PGY-1 and PGY-2 residents on the Obstetrics Rotation at UNC Hospitals and the PGY-1, PGY-2, and PGY-3 Residents at WakeMed are expected to achieve competency in performing an initial history and physical on patients who present with suspected labor. The PGY-1 and PGY-2 residents will be able to detect evidence of preeclampsia, abruptio placentae, and malpresentation of the fetus. She/he should be skilled in formulating a plan and writing appropriate orders for patients with diabetes, hyperemesis gravidium, and hypertensive disorders of pregnancy. The PGY-1 and PGY-2 Residents will become adept in the antepartum and intrapartum management of the normal course of labor and delivery including the

interpretation of electronic fetal heart rate monitoring. In regard to operative procedures, the PGY-1 and PGY-2 Residents will be able to perform third trimester amniocentesis, repair of episiotomies and perineal lacerations, abdominal tubal ligations, circumcisions, and the performance of primary and repeat cesarean sections.

During a separate one-month rotation on obstetrical ultrasound, the PGY-1 is expected to be able to obtain the standard obstetric fetal growth parameters. In addition, she/he should be able to determine placental location, amniotic fluid volume, and fetal lie. Finally, the PGY-1 should become skilled in the basic anatomical survey of the fetus.

The PGY-3 Resident on the OB service will accomplish all objectives expected of the PGY-1 and PGY-2 Residents in addition to being able to supervise the clinical activities of the PGY-1 and PGY-2 Residents. The PGY-3 Resident will be accomplished in the diagnosis of complications of pregnancy such as severe preeclampsia, eclampsia, both pregestational and gestational diabetes, and hematologic problems in pregnancy. She/he will be able to diagnose abruption, amniotic fluid embolism, and fetal distress. In regard to operative procedures, the PGY-3 Resident will be proficient in the performance of repeat cesarean sections, vaginal breech deliveries, and outlet-, low- and mid- forceps deliveries, vacuum extraction deliveries as well as cervical cerclage procedures. The PGY-3 Resident will become experienced with the intensive care of the seriously ill obstetric patient secondary to complications of preeclampsia, diabetes and chronic renal failure.

The PGY-4 Chief Resident is the leader and the team captain for all activities during the Obstetrics rotations. This PGY-4 Resident is responsible for the supervision of all patients being actively managed in the labor and delivery area as well as all inpatients on both the antepartum and postpartum wards. The PGY-4 Resident makes assignments for teaching rounds, schedules all surgeries, performs cesarean deliveries and other complicated obstetrics procedures under the supervision of the attending physician. She/he will be familiar with all complications of pregnancy and be able to formulate effective treatment plans. The PGY-4 Resident will be able to direct the PGY-3, PGY-2 and the PGY-1 Residents in developing a team concept of management for these complications. The PGY-4 Resident will co-manage the PGY-3 Resident in the intensive care of the seriously ill obstetric patient secondary to complications of preeclampsia, diabetes and chronic renal failure. She/he will understand and instruct the PGY-1, PGY-2, and PGY-3 Residents in standard protocols for the management of such obstetrical emergencies as shoulder dystocia, amniotic fluid embolism and postpartum hemorrhage. The PGY-4 Resident will also be proficient in the ultrasonographic recognition of fetal anomalies including, among others, ventral wall defects and neural tube defects.

Reproductive Endocrinology & Infertility

The PGY-1 Resident on REI will gain exposure to the subspecialty field across the 7-week rotation. The PGY-1 Resident will be introduced to reproductive endocrinology, infertility evaluation and treatment, and hysteroscopy and laparoscopy. The PGY-1 Resident on-service will be introduced to vaginal ultrasonography for the follicular assessment and early pregnancy development, as well as hysterosalpingography. hysterosalpingography. By shadowing faculty,

the PGY-1 Resident will participate in the full scope of clinical reproductive endocrinology and infertility care. The PGY-1 Resident will participate in the outpatient surgical cases including hysteroscopy (diagnostic and operative) and laparoscopic (diagnostic and operative) procedures occurring weekly.

The PGY-4 Resident on service will further develop skills with vaginal ultrasonography (follicular and early pregnancy ultrasounds) and hysterosalpingography by conducting these tests under the guidance of faculty. The rotation for the PGY-4 rotation allows further exposure to the full depth and breadth of clinical reproductive endocrinology and infertility practice. As Chief of the service, the PGY-4 Resident will be responsible for assuring care of the complex REI patients. The PGY-4 Resident will continue their training by conducting morning follicle scans, shadowing faculty, actively caring for patients in the outpatient setting, and completing assigned readings and the didactics. The PGY-4 Resident will perform the inpatient surgical cases including complex laparoscopic and hysteroscopic procedures.

Ultrasound

The PGY1 Resident completes a 4-week rotation in Obstetric Ultrasound.

Objectives include:

- The use of and indications for 2d, 3D and 4D grey scale and color doppler as well as transvaginal and transabdominal ultrasound and the limitations of ultrasound.
- The use and indications for ultrasound to diagnose the location and viability of early pregnancies
- Understanding the determination of gestational age through measurement of fetal morphometrics
- Understanding of the limitations of ultrasound in the assignment of gestational age
- Evaluate for abnormal fetal growth using morphometrics and umbilical artery doppler measurements.
- Evaluate fetal well-being through the use of biophysical profile and umbilical artery dopplers.
- Recognize normal fetal anatomy and major malformations on ultrasound:
 - Intracranial: Acrania, anencephaly, hydrocephalus, Dandy walker malformation
 - Cardiac: abnormal situs, arrhythmias
 - Gastrointestinal – omphalocele, gastroschisis, duodenal atresia
 - Genitourinary – renal pelvic dilation, hydronephrosis, renal agenesis, multicystic kidney, polycystic kidney
- The use of ultrasound in risk adjustment for fetal aneuploidy in the first and second/third trimester

The PGY1 Resident also obtains knowledge and skills in Transvaginal Ultrasound during their 7-week Reproductive & Endocrinology Rotation.

All Residents hone their knowledge and skills in ultrasound participating in longitudinal experiences throughout the 4-year curriculum.

Urogynecology/Reconstructive Pelvic Surgery

The PGY-2 and PGY-4 on the Urogynecology and Reconstructive Pelvic Surgery service will develop an excellent understanding of the anatomy, physiology, neurology and pharmacology of pelvic floor function. The PGY-2 and PGY-4 Residents will be able to apply this knowledge to care of patients with pelvic floor disorders both in the ambulatory and operating room settings. The PGY-2 and PGY-4 Residents will understand which diagnostic procedures are appropriate for patients with complaints of pelvic floor dysfunction. She/he will be able to counsel patients on nonsurgical management of urinary incontinence and to perform simple cystometry and cystoscopy. She/he will be able to interpret the basic components of multichannel urodynamic studies and participate as first assistant or primary surgeon on pelvic support surgeries. The PGY-2 and PGY-4 Residents will understand well the indications, contraindications and complications of operative procedures for pelvic organ prolapse and urinary and defecatory dysfunction. The PGY-2 and PGY-4 Residents will be able to perform vaginal hysterectomies with anterior and posterior colporrhaphy, enterocele repairs, vaginal procedures for incontinence and be familiar with retropubic urethropexy procedures. The PGY-2 and PGY-4 Residents will be able to assess patients for lower urinary tract injuries.