

Maternal-Fetal Medicine Qualifying Exam Blueprint and Topics

The content for the Qualifying Examination will be based on the blueprint for Maternal-Fetal Medicine. The major categories and subcategories are shown below, including the percentages of the categories. The questions will be in a multiple-choice, one best answer format.

Medical Complications of Pregnancy (30%)

- Medical Disorders
 - Evaluate, diagnose, and manage medical disorders
 - Provide preconception, post-delivery counseling (including contraception) for patients with medical disorders
 - Counsel patients about maternal physiology, fetal and neonatal implications of their medical condition(s)
 - Counsel patients on impact of medical disorders on delivery timing
 - Counsel patients with medical disorders regarding drugs and biologics
 - Manage antenatal care for patients with medical disorders
 - Manage intrapartum and postpartum care for patients with medical disorders
- Critical Care
 - Evaluate and diagnose critical care conditions
 - Manage critical care conditions and interpret hemodynamic monitoring
 - Identify critically ill patients and facilitate transfer to higher level of care
 - Manage antenatal care and delivery timing for critically ill patients
 - Manage intrapartum and postpartum care for critically ill patients
 - Counsel critically ill patients regarding drugs and biologics
 - Manage massive obstetric hemorrhage
 - Manage obstetric coagulopathy

Obstetric Complications (30%)

- Preterm Labor and Preterm Premature Rupture of Membranes (PPROM)
 - Identify risk factors for preterm birth
 - Counsel patients on risk-reduction strategies for preterm birth
 - Counsel patients on limits of viability, prognosis, and management
 - Manage PPRM
 - Manage preterm labor and delivery
 - Manage cervical insufficiency
- Hypertensive Disorders
 - Manage hypertensive disease in pregnancy
 - Manage preeclampsia
 - Manage eclampsia
- Multiple Gestation
 - Counsel and manage patients on associated complications and pregnancy outcomes based on chorionicity for twin gestations
 - Counsel and manage high-order multiple gestations

- Counsel patients on indications and risks associated with fetal reduction
- Fetal Demise
 - Provide preconception counseling for recurrent pregnancy loss
 - Evaluate and manage patients with a fetal demise and/or recurrent pregnancy loss
 - Evaluate and manage patient for bereavement and/or postpartum depression
- Procedures Relating to Obstetrical Complications
 - Amniocentesis and amnioreduction for fetal lung maturation
 - External cephalic version
 - Peripartum hysterectomy
 - Cervical cerclage
 - Chorionic villus sampling
 - Cordocentesis and fetal transfusion
- Obstetric Anesthesia
 - Counsel medically complicated patients regarding the different anesthetic options including benefits, risks, and contraindications (e.g. systematic analgesia and sedation, general anesthesia, regional anesthesia); for example, cardiac arrest, respiratory arrest, aspiration pneumonitis, hypotension, high spinal or total spinal, convulsions, neuropathy, headaches, hypothermia
 - Identify, diagnose, and co-manage anesthetic complications (e.g. cardiac arrest, respiratory arrest, aspiration pneumonitis, hypotension, high spinal or total spinal, convulsions, neuropathy, headaches, hypothermia)
- Management of Obstetrical Complications
 - Amniotic fluid embolism (AFE)
 - Acute fatty liver of pregnancy (AFLP)
 - Placental abruption
 - Abnormal placentation (e.g. accreta, increta, percreta, vasa previa, and placenta previa)
 - Gestational trophoblastic disease
 - Ruptured uterus
 - Cholestasis of pregnancy
 - Uterine anomalies
 - Ovarian masses
 - Dermatologic conditions (e.g. PUPPS, herpes gestationis)
 - Fetomaternal hemorrhage
 - Trauma
 - Abnormally implanted pregnancies (abdominal, cervical, and c-section scar)

Fetal Complications and Prenatal Diagnosis (25%)

- Ultrasound
 - Perform and interpret 1st trimester ultrasound for singleton and multiple gestations
 - Perform and interpret 2nd and 3rd trimester ultrasound
 - Recognize normal and abnormal maternal, fetal, and placental anatomy
 - Apply knowledge of the limitations of ultrasound to determine need for additional imaging modalities

- Determine indication for and perform Doppler studies (umbilical artery and MCA, color, m-mode)
- Determine indication for and perform 3D and 4D ultrasound
- Perform and interpret cervical length assessment
- Manage disorders of amniotic fluid volume
- Perform and interpret fetal echocardiography
- Perform ultrasound assessment of chorionicity
- Evaluation, Management, and Diagnosis of Fetal Complications
 - Fetal structural abnormalities
 - Fetal growth restriction
 - Genetic disorders (e.g. chromosomal abnormalities, DiGeorge's, skeletal dysplasia, syndromes)
 - Fetal hydrops
 - Isoimmunization
 - Alloimmune thrombocytopenia
 - Fetal infections

Genetics and Genomics (10%)

- Obtain a genetic history and perform a three-generation pedigree, perform preconception genetic counseling, and counsel patients on Mendelian patterns of inheritance (e.g. autosomal dominant, autosomal recessive, co-dominant, X-linked recessive, X-linked dominant) and non-Mendelian patterns of inheritance (e.g. trinucleotide, germline mosaicism, multifactorial and polygenic inheritance)
- Counsel patients on benefits and limitations of PGS/PGD (preimplantation genetic diagnosis)
- Counsel patients on and perform expanded and ethnicity-based carrier screening
- Counsel patients on different methods of aneuploidy screening and interpret results
- Counsel patients on prenatal testing (e.g. fetal karyotype, chromosomal microarray, biochemical and molecular tests, whole exome sequencing)

Core Competencies and Cross Content (5%)

- Ethics and Professionalism
 - Systematically engage in practice review to identify health disparities
 - When engaged in shared clinical decision making, incorporate patient, family, and cultural considerations in making treatment recommendations
 - When providing care for patients, consider psychological, sexual, and social implications of various treatment options
- Patient Safety
 - Systematically analyze the practice for safety improvements (e.g. root cause analysis)
 - Systematically engage in practice reviews for safety improvements (e.g. root cause analysis)
 - Incorporate the standard use of procedural briefings, "time outs", and debriefings in clinical practice
 - Participate in the review of sentinel events, reportable events, and near misses
 - Implement universal protocols (e.g. bundles, checklists) to help ensure patient safety

- Interpersonal and Communication Skills
 - Communicate to patient and family regarding adverse outcomes and medical errors
 - Demonstrate sensitivity and responsiveness when communicating with a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation
 - Provide comprehensive information when referring patients to other professionals
- Systems-Based Practice
 - Incorporate considerations of cost awareness and risk-benefit analysis in patient care
 - Provide care with multidisciplinary teams to promote patient safety and optimize patient outcomes
- Practice-Based Learning and Improvement
 - Design or participate in practice or hospital quality improvement activities
- Evidence-Based Medicine
 - Incorporate evidence-based practices and national guidelines to improve practice patterns and outcomes
 - Implement evidence-based protocols to enhance recovery after surgery (ERAS)