Medical Coverage Policy

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Genetic Testing for Reproductive Carrier Screening and Prenatal Diagnosis

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INSTRUCTIONS FOR USE

The following Coverage Policy applies to health benefit plans administered by Cigna Companies. Certain Cigna Companies and/or lines of business only provide utilization review services to clients and do not make coverage determinations. References to standard benefit plan language and coverage determinations do not apply to those clients. Coverage Policies are intended to provide guidance in interpreting certain standard benefit plans administered by Cigna Companies. Please note, the terms of a customer's particular benefit plan document [Group Service Agreement, Evidence of Coverage, Certificate of Coverage, Summary Plan Description (SPD) or similar plan document] may differ significantly from the standard benefit plans upon which these Coverage Policies are based. For example, a customer's benefit plan document may contain a specific exclusion related to a topic addressed in a Coverage Policy. In the event of a conflict, a customer's benefit plan document always supersedes the information in the Coverage Policies. In the absence of a controlling federal or state coverage mandate, benefits are ultimately determined by the terms of the applicable benefit plan document. Coverage determinations in each specific instance require consideration of 1) the terms of the applicable benefit plan document in effect on the date of service; 2) any applicable laws/regulations; 3) any relevant collateral source materials including Coverage Policies and; 4) the specific facts of the particular situation. Each coverage request should be reviewed on its own merits. Medical directors are expected to exercise clinical judgment where appropriate and have discretion in making individual coverage determinations. Where coverage for care or services does not depend on specific circumstances, reimbursement will only be provided if a requested service(s) is submitted in accordance with the relevant criteria outlined in the applicable Coverage Policy, including covered diagnosis and/or procedure code(s). Reimbursement is not allowed for services when billed for conditions or diagnoses that are not covered under this Coverage Policy (see "Coding Information" below). When billing, providers must use the most appropriate codes as of the effective date of the submission. Claims submitted

for services that are not accompanied by covered code(s) under the applicable Coverage Policy will be denied as not covered. Coverage Policies relate exclusively to the administration of health benefit plans. Coverage Policies are not recommendations for treatment and should never be used as treatment guidelines. In certain markets, delegated vendor guidelines may be used to support medical necessity and other coverage determinations.

Overview

This Coverage Policy addresses genetic testing for reproductive carrier screening and prenatal diagnosis. Reproductive carrier screening and prenatal diagnosis refer to testing for the presence of certain germline gene variants that are associated with disease or a risk of disease in an individual's offspring and descendants, before or after pregnancy has occurred. This type of testing allows for reproductive planning.

Coverage Policy

Coverage for genetic testing varies across plans. Refer to the customer's benefit plan document for coverage details.

Reproductive Carrier Screening Panels

Preconception or prenatal carrier screening panels are considered medically necessary when ALL of the following criteria are met:

- The panel assesses carrier status for **ALL** of the following conditions:
  - cystic fibrosis (CF)
  - hemoglobinopathies (i.e., beta thalassemia, alpha thalassemia, sickle cell disease)
  - spinal muscular atrophy (SMA)
  - any condition for which the individual is at elevated risk (e.g., family history of a condition; individual's reproductive partner is a carrier of a condition; individual's ethnicity/country of origin increases their risk of being a carrier of a condition)
- The panel utilizes the recommended methodology to maximize the detection of carriers for all conditions in the panel (e.g., dosage analysis for SMA).
- The individual must not have had previous testing of any genes on the panel (exceptions may be made on a case-by-case basis if CF and/or SMA were previously performed).
- The individual is of reproductive age and has capacity and intention to reproduce.

Preconception or prenatal Ashkenazi Jewish carrier screening using a targeted panel (CPT® code 81412) is considered medically necessary when BOTH of the following criteria are met:

- The individual is planning a pregnancy or is currently pregnant.
- At least one reproductive partner of a couple is of Ashkenazi Jewish descent. (Note: If only one partner of a couple is of Ashkenazi Jewish descent, testing should start in that individual when possible.)

Reproductive carrier screening for nonmedical traits (e.g., eye color, hair color) is considered not medically necessary.

Prenatal Cell-Free DNA Screening

Prenatal cell-free DNA screening for fetal aneuploidy (i.e., trisomy 13, 18 and 21) (CPT codes 81420, 81507, 0327U) is considered medically necessary in a viable single or twin gestation pregnancy when testing has not already been performed.

Prenatal cell-free DNA screening for any other indication, including but not limited to the following, is not covered or reimbursable:

- higher order multiple gestations (e.g. triplets and higher)
- vanishing twin syndrome
- twin zygosity
- screening for trisomy 7, 9, 16, 22 or other rare autosomal trisomies (RATs)
- screening for microdeletions
- single-gene disorders
- when used to determine genetic cause of miscarriage (e.g., missed abortion, incomplete abortion)
- screening for nonmedical traits

In-network coverage of prenatal cell-free DNA screening for fetal trisomy 13, 18 and 21 performed in an out of network laboratory is considered not medically necessary since these tests are available at an in-network laboratory.

Molecular analysis of intact fetal cells (i.e., fetal trophoblast[s] in a maternal sample) is not covered or reimbursable.

Genome sequencing used for prenatal diagnosis or pregnancy loss is not covered or reimbursable.

Coding Information

Notes:

1. This list of codes may not be all-inclusive since the American Medical Association (AMA) and Centers for Medicare and Medicaid Services (CMS) code updates may occur more frequently than policy updates
2. Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement.

Reproductive Carrier Screening Panels

Considered Medically Necessary when criteria in the applicable policy statements listed above are met:

CPT®* Codes	Description
81412	Ashkenazi Jewish associated disorders (eg, Bloom syndrome, Canavan disease, cystic fibrosis, familial dysautonomia, Fanconi anemia group C, Gaucher disease, Tay-Sachs disease), genomic sequence analysis panel, must include sequencing of at least 9 genes, including ASPA, BLM, CFTR, FANCC, GBA, HEXA, IKBKAP, MCOLN1, and SMPD1
81443	Genetic testing for severe inherited conditions (eg, cystic fibrosis, Ashkenazi Jewish-associated disorders [eg, Bloom syndrome, Canavan disease, Fanconi anemia type C, mucolipidosis type VI, Gaucher disease, Tay-Sachs disease], beta hemoglobinopathies, phenylketonuria, galactosemia), genomic sequence analysis

CPT®* Codes	Description
	panel, must include sequencing of at least 15 genes (eg, ACADM, ARSA, ASPA, ATP7B, BCKDHA, BCKDHB, BLM, CFTR, DHCR7, FANCC, G6PC, GAA, GALT, GBA, GBE1, HBB, HEXA, IKBKAP, MCOLN1, PAH)
0400U	Obstetrics (expanded carrier screening), 145 genes by next-generation sequencing, fragment analysis and multiplex ligation-dependent probe amplification, DNA, reported as carrier positive or negative

ICD-10-CM Diagnosis Codes	Description
N46.8	Other male infertility
N46.9	Male infertility, unspecified
N96	Recurrent pregnancy loss
N97.0-N97.9	Female infertility
O00.00-O00.91	Ectopic pregnancy
O01.0-O01.9	Hydatidiform mole
O02.0-O02.9	Other abnormal products of conception
O03.0-O03.9	Spontaneous abortion
O04.5-O04.89	Complications following (induced) termination of pregnancy
O07.0-O07.4	Failed attempted termination of pregnancy
O08.0-O08.9	Complications following ectopic and molar pregnancy
O09.00-O09.A3	Supervision of high risk pregnancy
O10.011-O10.93	Pre-existing hypertension complicating pregnancy, childbirth and the puerperium
O11.1-O11.9	Pre-existing hypertension with pre-eclampsia
O12.00-O12.25	Gestational [pregnancy-induced] edema and proteinuria without hypertension
O13.1-O13.9	Gestational [pregnancy-induced] hypertension without significant proteinuria
O14.00-O14.95	Pre-eclampsia
O15.00-O15.9	Eclampsia
O16.1-O16.9	Unspecified maternal hypertension
O20.0-O20.9	Hemorrhage in early pregnancy
O21.0-O21.9	Excessive vomiting in pregnancy
O22.00-O22.93	Venous complications and hemorrhoids in pregnancy

ICD-10-CM Diagnosis Codes	Description
O23.00-O23.93	Infections of genitourinary tract in pregnancy
O24.011-O24.93	Diabetes mellitus in pregnancy, childbirth and the puerperium
O25.10-O25.3	Malnutrition in pregnancy, childbirth and the puerperium
O26.00-O26.93	Maternal care for other conditions predominately related to pregnancy
O28.0-O28.9	Abnormal findings on antenatal screening of mother
O29.011-O29.93	Complications of anesthesia during pregnancy
O30.001-O30.93	Multiple gestation
O31.00X0-O31.8X99	Complications specific to multiple gestation
O32.0XX0-O32.9XX9	Maternal care for malpresentation of fetus
O33.0-O33.9	Maternal care for disproportion
O34.00-O34.93	Maternal care for abnormality of pelvic organs
O35.00X0-O35.HXX9	Maternal care for known or suspected fetal abnormality and damage
O36.0110-O36.93X9	Maternal care for other fetal problems
O40.1XX0-O40.9XX9	Polyhydramnios
O41.00X0-O41.93X9	Other disorders of amniotic fluid and membranes
O42.00-O42.92	Premature rupture of membranes
O43.011-O43.93	Placental disorders
O44.00-O44.53	Placenta previa
O45.001-O45.93	Premature separation of placenta [abruptio placentae]
O46.001-O46.93	Antepartum hemorrhage, not elsewhere classified
O47.00-O47.9	False labor
O48.0-O48.1	Late pregnancy
O60.00-O60.14X9	Preterm labor
O71.00-O71.03	Rupture of uterus (spontaneous) before onset of labor

ICD-10-CM Diagnosis Codes	Description
O88.011-O88.019	Obstetric air embolism in pregnancy
O88.111-O88.119	Amniotic fluid embolism in pregnancy
O88.211-O88.219	Thromboembolism in pregnancy
O88.311-O88.319	Pyemic and septic embolism in pregnancy
O88.811-O88.819	Other embolism in pregnancy
O91.011-O91.019	Infection of nipple associated with pregnancy
O91.111-O91.119	Abscess of breast associated with pregnancy
O91.211-O91.219	Nonpurulent mastitis associated with pregnancy
O92.011-O92.019	Retracted nipple associated with pregnancy
O92.111-O92.119	Cracked nipple associated with pregnancy
O98.011-O98.019	Tuberculosis complicating pregnancy
O98.111-O98.119	Syphilis complicating pregnancy
O98.211-O98.219	Gonorrhea complicating pregnancy
O98.311-O98.319	Other infections with a predominantly sexual mode of transmission complicating pregnancy
O98.411-O98.419	Viral hepatitis complicating pregnancy
O98.511-O98.519	Other viral diseases complicating pregnancy
O98.611-O98.619	Protozoal diseases complicating pregnancy
O98.711-O98.719	Human immunodeficiency virus [HIV] disease complicating pregnancy
O98.811-O98.819	Other maternal infectious and parasitic diseases complicating pregnancy
O98.911-O98.919	Unspecified maternal infectious and parasitic disease complicating pregnancy
O99.011-O99.019	Anemia complicating pregnancy
O99.111-O99.119	Other diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism complicating pregnancy
O99.210-O99.213	Obesity complicating pregnancy
O99.280-O99.283	Other endocrine, nutritional and metabolic diseases complicating pregnancy

ICD-10-CM Diagnosis Codes	Description
O99.310-O99.313	Alcohol use complicating pregnancy
O99.320-O99.323	Drug use complicating pregnancy
O99.330-O99.333	Tobacco use complicating pregnancy
O99.340-O99.343	Other mental disorders complicating pregnancy
O99.350-O99.353	Diseases of the nervous system complicating pregnancy
O99.411-O99.419	Diseases of the circulatory system complicating pregnancy
O99.511-O99.519	Diseases of the respiratory system complicating pregnancy
O99.611-O99.619	Diseases of the digestive system complicating pregnancy
O99.711-O99.719	Diseases of the skin and subcutaneous tissue complicating pregnancy
O99.840-O99.843	Bariatric surgery status complicating pregnancy
O99.891	Other specified diseases and conditions complicating pregnancy
O9A.111-O9A.119	Malignant neoplasm complicating pregnancy
O9A.211-O9A.219	Injury, poisoning and certain other consequences of external causes complicating pregnancy
O9A.311-O9A.319	Physical abuse complicating pregnancy
O9A.411-O9A.419	Sexual abuse complicating pregnancy
O9A.511-O9A.519	Psychological abuse complicating pregnancy
Z13.220-Z13.228	Encounter for screening for metabolic disorder
Z13.79	Encounter for other screening for genetic and chromosomal anomalies
Z13.89	Encounter for screening for other disorder
Z13.9	Encounter for screening, unspecified
Z14.1	Cystic fibrosis carrier
Z14.8	Genetic carrier of other disease
Z15.89	Genetic susceptibility to other disease
Z31.41	Encounter for fertility testing
Z31.430-Z31.438	Encounter for genetic testing of female for procreative management
Z31.440-Z34.448	Encounter for genetic testing of male for procreative management
Z31.49	Encounter for other procreative investigation and testing
Z31.5	Encounter for procreative genetic counseling
Z31.61-Z31.69	Encounter for general counseling and advice on procreation

ICD-10-CM Diagnosis Codes	Description
Z31.81-Z31.89	Encounter for other procreative management
Z31.9	Encounter for procreative management, unspecified
Z32.00-Z32.02	Encounter for pregnancy test
Z33.1	Pregnant state, incidental
Z34.00-Z34.93	Encounter for supervision of normal pregnancy
Z36.0-Z36.9	Encounter for antenatal screening of mother
Z3A.00-Z3A.49	Weeks of gestation

Not Covered or Reimbursable:

ICD-10-CM Diagnosis Codes	Description
	All other diagnosis codes

Prenatal Cell-Free DNA Screening

Considered Medically Necessary when criteria in the applicable policy statements listed above are met except when used to report not covered or reimbursable microdeletion testing:

CPT®* Codes	Description
81420	Fetal chromosomal aneuploidy (eg, trisomy 21, monosomy X) genomic sequence analysis panel, circulating cell-free fetal DNA in maternal blood, must include analysis of chromosomes 13, 18, and 21
81507	Fetal aneuploidy (trisomy 21, 18, and 13) DNA sequence analysis of selected regions using maternal plasma, algorithm reported as a risk score for each trisomy
0327U	Fetal aneuploidy (trisomy 13, 18, and 21), DNA sequence analysis of selected regions using maternal plasma, algorithm reported as a risk score for each trisomy, includes sex reporting, if performed

ICD-10-CM Diagnosis Codes	Description
O09.00-O09.03	Supervision of pregnancy with history of infertility
O09.10-O09.13	Supervision of pregnancy with history of ectopic pregnancy,
O09.A0-O09.A3	Supervision of pregnancy with history of molar pregnancy
O09.211-O09.219	Supervision of pregnancy with history of pre-term labor

ICD-10-CM Diagnosis Codes	Description
O09.291-O09.299	Supervision of pregnancy with other poor reproductive or obstetric history
O09.30-O09.33	Supervision of pregnancy with insufficient antenatal care
O09.40-O09.43	Supervision of pregnancy with grand multiparity
O09.511-O09.519	Supervision of elderly primigravida
O09.521-O09.529	Supervision of elderly multigravida
O09.611-O09.619	Supervision of young primigravida
O09.621-O09.629	Supervision of young multigravida
O09.70-O09.73	Supervision of high risk pregnancy due to social problems
O09.811-O09.819	Supervision of pregnancy resulting from assisted reproductive technology
O09.821-O09.829	Supervision of pregnancy with history of in utero procedure during previous pregnancy
O09.891-O09.899	Supervision of other high risk pregnancies
O09.90-O09.93	Supervision of high risk pregnancy, unspecified
O10.011-O10.019	Pre-existing essential hypertension complicating pregnancy
O10.111-O10.119	Pre-existing hypertensive heart disease complicating pregnancy
O10.211-O10.219	Pre-existing hypertensive chronic kidney disease complicating pregnancy
O10.311-O10.319	Pre-existing hypertensive heart and chronic kidney disease complicating pregnancy
O10.411-O10.419	Pre-existing secondary hypertension complicating pregnancy
O10.911-O10.919	Unspecified pre-existing hypertension complicating pregnancy
O11.1-O11.9	Pre-existing hypertension with pre-eclampsia
O12.00-O12.03	Gestational edema
O12.10-O12.13	Gestational proteinuria
O12.20-O12.23	Gestational edema with proteinuria
O13.1-O13.9	Gestational [pregnancy-induced] hypertension without significant proteinuria
O14.00	Mild to moderate pre-eclampsia, unspecified trimester
O14.02	Mild to moderate pre-eclampsia, second trimester
O14.03	Mild to moderate pre-eclampsia, third trimester

ICD-10-CM Diagnosis Codes	Description
O14.10	Mild to moderate pre-eclampsia, unspecified trimester
O14.12	Severe pre-eclampsia, second trimester
O14.13	Severe pre-eclampsia, third trimester
O14.20	HELLP syndrome (HELLP), unspecified trimester
O14.22	HELLP syndrome (HELLP), second trimester
O14.23	HELLP syndrome (HELLP), third trimester
O14.90	Unspecified pre-eclampsia, unspecified trimester
O14.92	Unspecified pre-eclampsia, second trimester
O14.93	Unspecified pre-eclampsia, third trimester
O15.00	Eclampsia complicating pregnancy, unspecified trimester
O15.02	Eclampsia complicating pregnancy, second trimester
O15.03	Eclampsia complicating pregnancy, third trimester
O16.1	Unspecified maternal hypertension, first trimester
O16.2	Unspecified maternal hypertension, second trimester
O16.3	Unspecified maternal hypertension, third trimester
O16.9	Unspecified maternal hypertension, unspecified trimester
O21.0-O21.9	Excessive vomiting in pregnancy
O22.00-O22.03	Varicose veins of lower extremity in pregnancy
O22.10-O22.13	Genital varices in pregnancy
O22.20-O22.23	Superficial thrombophlebitis in pregnancy
O22.30-O22.33	Deep phlebothrombosis in pregnancy
O22.40-O22.43	Hemorrhoids in pregnancy
O22.50-O22.53	Cerebral venous thrombosis in pregnancy
O22.8X1-O22.8X9	Other venous complications in pregnancy
O22.90-O22.93	Venous complication in pregnancy, unspecified
O23.00-O23.03	Infections of kidney in pregnancy
O23.10-O23.13	Infections of bladder in pregnancy
O23.20-O23.23	Infections of urethra in pregnancy
O23.30-O23.33	Infections of other parts of urinary tract in pregnancy
O23.40-O23.43	Unspecified infection of urinary tract in pregnancy
O23.511-O23.519	Infections of cervix in pregnancy
O23.521-O23.529	Salpingo-oophoritis in pregnancy

ICD-10-CM Diagnosis Codes	Description
O23.591-O23.599	Infection of other part of genital tract in pregnancy
O23.90-O23.93	Unspecified genitourinary tract infection in pregnancy
O24.011-O24.019	Pre-existing diabetes mellitus, type 1, in pregnancy
O24.111-O24.119	Pre-existing diabetes mellitus, type 2, in pregnancy
O24.311-O24.319	Unspecified pre-existing diabetes mellitus in pregnancy
O24.410-O24.419	Gestational diabetes mellitus in pregnancy
O24.811-O24.819	Other pre-existing diabetes mellitus in pregnancy
O24.911-O24.919	Unspecified diabetes mellitus in pregnancy
O25.10-O25.13	Malnutrition in pregnancy
O26.00-O26.03	Excessive weight gain in pregnancy
O26.10-O26.13	Low weight gain in pregnancy
O26.20-O26.23	Pregnancy care for patient with recurrent pregnancy loss
O26.30-O26.33	Retained intrauterine contraceptive device in pregnancy
O26.40-O26.43	Herpes gestationis
O26.50-O26.53	Maternal hypotension syndrome
O26.611-O26.619	Liver and biliary tract disorders in pregnancy
O26.711-O26.719	Subluxation of symphysis (pubis) in pregnancy
O26.821-O26.829	Pregnancy related peripheral neuritis
O26.831-O26.839	Pregnancy related renal disease
O26.841-O26.849	Uterine size-date discrepancy
O26.851-O26.859	Spotting complicating pregnancy
O26.891-O26.899	Other specified pregnancy related conditions
O26.90-O26.93	Pregnancy related conditions, unspecified
O28.0-O28.9	Abnormal findings on antenatal screening of mother

ICD-10-CM Diagnosis Codes	Description
O30.001-O30.009	Twin pregnancy, unspecified number of placenta and unspecified number of amniotic sacs
O30.011-O30.019	Twin pregnancy, monochorionic/monoamniotic
O30.021-O30.029	Conjoined twin pregnancy
O30.031-O30.039	Twin pregnancy, monochorionic/diamniotic
O30.041-O30.049	Twin pregnancy, dichorionic/diamniotic
O30.091-O30.099	Twin pregnancy, unable to determine number of placenta and number of amniotic sacs
O30.90-O30.93	Multiple gestation, unspecified
O31.00X0	Papyraceous fetus, unspecified trimester, not applicable or unspecified
O31.00X1	Papyraceous fetus, unspecified trimester, fetus 1
O31.00X2	Papyraceous fetus, unspecified trimester, fetus 2
O31.01X0	Papyraceous fetus, first trimester, not applicable or unspecified
O31.01X1	Papyraceous fetus, first trimester, fetus 1
O31.01X2	Papyraceous fetus, first trimester, fetus 2
O31.02X0	Papyraceous fetus, second trimester, not applicable or unspecified
O31.02X1	Papyraceous fetus, second trimester, fetus 1
O31.02X2	Papyraceous fetus, second trimester, fetus 2
O31.03X0	Papyraceous fetus, third trimester, not applicable or unspecified
O31.03X1	Papyraceous fetus, third trimester, fetus 1
O31.03X2	Papyraceous fetus, third trimester, fetus 2
O31.8X10	Other complications specific to multiple gestation, first trimester, not applicable or unspecified
O31.8X11	Other complications specific to multiple gestation, first trimester, fetus 1
O31.8X12	Other complications specific to multiple gestation, first trimester, fetus 2
O31.8X20	Other complications specific to multiple gestation, second trimester, not applicable or unspecified
O31.8X21	Other complications specific to multiple gestation, second trimester, fetus 1
O31.8X22	Other complications specific to multiple gestation, second trimester, fetus 2
O31.8X30	Other complications specific to multiple gestation, third trimester, not applicable or unspecified
O31.8X31	Other complications specific to multiple gestation, third trimester, fetus 1
O31.8X32	Other complications specific to multiple gestation, third trimester, fetus 2
O31.8X90	Other complications specific to multiple gestation, unspecified trimester, not applicable or unspecified
O31.8X91	Other complications specific to multiple gestation, unspecified trimester, fetus 1
O31.8X92	Other complications specific to multiple gestation, unspecified trimester, fetus 2
O34.00-O34.03	Maternal care for unspecified congenital malformation of uterus
O34.10-O34.13	Maternal care for benign tumor of corpus uteri
O34.211-O34.29	Maternal care due to uterine scar from previous cesarean delivery

ICD-10-CM Diagnosis Codes	Description
O34.30-O34.33	Maternal care for cervical incompetence
O34.40-O34.43	Maternal care for other abnormalities of cervix
O34.511-O34.519	Maternal care for incarceration of gravid uterus
O34.521-O34.529	Maternal care for prolapse of gravid uterus
O34.531-O34.539	Maternal care for retroversion of gravid uterus
O34.591-O34.599	Maternal care for other abnormalities of gravid uterus
O34.60-O34.63	Maternal care for abnormality of vagina
O34.70-O34.73	Maternal care for abnormality of vulva and perineum
O34.80-O34.83	Maternal care for other abnormalities of pelvic organs
O34.90-O34.93	Maternal care for abnormality of pelvic organ, unspecified
O35.00X0	Maternal care for (suspected) central nervous system malformation or damage in fetus, unspecified, not applicable or unspecified
O35.00X1	Maternal care for (suspected) central nervous system malformation or damage in fetus, unspecified, fetus 1
O35.00X2	Maternal care for (suspected) central nervous system malformation or damage in fetus, unspecified, fetus 2
O35.01X0	Maternal care for (suspected) central nervous system malformation or damage in fetus, agenesis of the corpus callosum, not applicable or unspecified
O35.01X1	Maternal care for (suspected) central nervous system malformation or damage in fetus, agenesis of the corpus callosum, fetus 1
O35.01X2	Maternal care for (suspected) central nervous system malformation or damage in fetus, agenesis of the corpus callosum, fetus 2
O35.02X0	Maternal care for (suspected) central nervous system malformation or damage in fetus, anencephaly, not applicable or unspecified
O35.02X1	Maternal care for (suspected) central nervous system malformation or damage in fetus, anencephaly, fetus 1
O35.02X2	Maternal care for (suspected) central nervous system malformation or damage in fetus, anencephaly, fetus 2
O35.03X0	Maternal care for (suspected) central nervous system malformation or damage in fetus, choroid plexus cysts, not applicable or unspecified
O35.03X1	Maternal care for (suspected) central nervous system malformation or damage in fetus, choroid plexus cysts, fetus 1
O35.03X2	Maternal care for (suspected) central nervous system malformation or damage in fetus, choroid plexus cysts, fetus 2
O35.04X0	Maternal care for (suspected) central nervous system malformation or damage in fetus, encephalocele, not applicable or unspecified
O35.04X1	Maternal care for (suspected) central nervous system malformation or damage in fetus, encephalocele, fetus 1

ICD-10-CM Diagnosis Codes	Description
O35.04X2	Maternal care for (suspected) central nervous system malformation or damage in fetus, encephalocele, fetus 2
O35.05X0	Maternal care for (suspected) central nervous system malformation or damage in fetus, holoprosencephaly, not applicable or unspecified
O35.05X1	Maternal care for (suspected) central nervous system malformation or damage in fetus, holoprosencephaly, fetus 1
O35.05X2	Maternal care for (suspected) central nervous system malformation or damage in fetus, holoprosencephaly, fetus 2
O35.06X0	Maternal care for (suspected) central nervous system malformation or damage in fetus, hydrocephaly, not applicable or unspecified
O35.06X1	Maternal care for (suspected) central nervous system malformation or damage in fetus, hydrocephaly, fetus 1
O35.06X2	Maternal care for (suspected) central nervous system malformation or damage in fetus, hydrocephaly, fetus 2
O35.07X0	Maternal care for (suspected) central nervous system malformation or damage in fetus, microcephaly, not applicable or unspecified
O35.07X1	Maternal care for (suspected) central nervous system malformation or damage in fetus, microcephaly, fetus 1
O35.07X2	Maternal care for (suspected) central nervous system malformation or damage in fetus, microcephaly, fetus 2
O35.08X0	Maternal care for (suspected) central nervous system malformation or damage in fetus, spina bifida, not applicable or unspecified
O35.08X1	Maternal care for (suspected) central nervous system malformation or damage in fetus, spina bifida, fetus 1
O35.08X2	Maternal care for (suspected) central nervous system malformation or damage in fetus, spina bifida, fetus 2
O35.09X0	Maternal care for (suspected) other central nervous system malformation or damage in fetus, not applicable or unspecified
O35.09X1	Maternal care for (suspected) other central nervous system malformation or damage in fetus, fetus 1
O35.09X2	Maternal care for (suspected) other central nervous system malformation or damage in fetus, fetus 2
O35.10X0	Maternal care for (suspected) chromosomal abnormality in fetus, unspecified, not applicable or unspecified
O35.10X1	Maternal care for (suspected) chromosomal abnormality in fetus, unspecified, fetus 1
O35.10X2	Maternal care for (suspected) chromosomal abnormality in fetus, unspecified, fetus 2
O35.11X0	Maternal care for (suspected) chromosomal abnormality in fetus, Trisomy 13, not applicable or unspecified
O35.11X1	Maternal care for (suspected) chromosomal abnormality in fetus, Trisomy 13, fetus 1
O35.11X2	Maternal care for (suspected) chromosomal abnormality in fetus, Trisomy 13, fetus 2
O35.12X0	Maternal care for (suspected) chromosomal abnormality in fetus, Trisomy 18, not applicable or unspecified
O35.12X1	Maternal care for (suspected) chromosomal abnormality in fetus, Trisomy 18, fetus 1

ICD-10-CM Diagnosis Codes	Description
O35.12X2	Maternal care for (suspected) chromosomal abnormality in fetus, Trisomy 18, fetus 2
O35.13X0	Maternal care for (suspected) chromosomal abnormality in fetus, Trisomy 21, not applicable or unspecified
O35.13X1	Maternal care for (suspected) chromosomal abnormality in fetus, Trisomy 21, fetus 1
O35.13X2	Maternal care for (suspected) chromosomal abnormality in fetus, Trisomy 21, fetus 2
O35.14X0	Maternal care for (suspected) chromosomal abnormality in fetus, Turner Syndrome, not applicable or unspecified
O35.14X1	Maternal care for (suspected) chromosomal abnormality in fetus, Turner Syndrome, fetus 1
O35.14X2	Maternal care for (suspected) chromosomal abnormality in fetus, Turner Syndrome, fetus 2
O35.15X0	Maternal care for (suspected) chromosomal abnormality in fetus, sex chromosome abnormality, not applicable or unspecified
O35.15X1	Maternal care for (suspected) chromosomal abnormality in fetus, sex chromosome abnormality, fetus 1
O35.15X2	Maternal care for (suspected) chromosomal abnormality in fetus, sex chromosome abnormality, fetus 2
O35.19X0	Maternal care for (suspected) chromosomal abnormality in fetus, other chromosomal abnormality, not applicable or unspecified
O35.19X1	Maternal care for (suspected) chromosomal abnormality in fetus, other chromosomal abnormality, fetus 1
O35.19X2	Maternal care for (suspected) chromosomal abnormality in fetus, other chromosomal abnormality, fetus 2
O35.AXX0	Maternal care for other (suspected) fetal abnormality and damage, fetal facial anomalies, not applicable or unspecified
O35.AXX1	Maternal care for other (suspected) fetal abnormality and damage, fetal facial anomalies, fetus 1
O35.AXX2	Maternal care for other (suspected) fetal abnormality and damage, fetal facial anomalies, fetus 2
O35.BXX0	Maternal care for other (suspected) fetal abnormality and damage, fetal cardiac anomalies, not applicable or unspecified
O35.BXX1	Maternal care for other (suspected) fetal abnormality and damage, fetal cardiac anomalies, fetus 1
O35.BXX2	Maternal care for other (suspected) fetal abnormality and damage, fetal cardiac anomalies, fetus 2
O35.CXX0	Maternal care for other (suspected) fetal abnormality and damage, fetal pulmonary anomalies, not applicable or unspecified
O35.CXX1	Maternal care for other (suspected) fetal abnormality and damage, fetal pulmonary anomalies, fetus 1
O35.CXX2	Maternal care for other (suspected) fetal abnormality and damage, fetal pulmonary anomalies, fetus 2
O35.DXX0	Maternal care for other (suspected) fetal abnormality and damage, fetal gastrointestinal anomalies, not applicable or unspecified
O35.DXX1	Maternal care for other (suspected) fetal abnormality and damage, fetal gastrointestinal anomalies, fetus 1

ICD-10-CM Diagnosis Codes	Description
O35.DXX2	Maternal care for other (suspected) fetal abnormality and damage, fetal gastrointestinal anomalies, fetus 2
O35.EXX0	Maternal care for other (suspected) fetal abnormality and damage, fetal genitourinary anomalies, not applicable or unspecified
O35.EXX1	Maternal care for other (suspected) fetal abnormality and damage, fetal genitourinary anomalies, fetus 1
O35.EXX2	Maternal care for other (suspected) fetal abnormality and damage, fetal genitourinary anomalies, fetus 2
O35.FXX0	Maternal care for other (suspected) fetal abnormality and damage, fetal musculoskeletal anomalies of trunk, not applicable or unspecified
O35.FXX1	Maternal care for other (suspected) fetal abnormality and damage, fetal musculoskeletal anomalies of trunk, fetus 1
O35.FXX2	Maternal care for other (suspected) fetal abnormality and damage, fetal musculoskeletal anomalies of trunk, fetus 2
O35.GXX0	Maternal care for other (suspected) fetal abnormality and damage, fetal upper extremities anomalies, not applicable or unspecified
O35.GXX1	Maternal care for other (suspected) fetal abnormality and damage, fetal upper extremities anomalies, fetus 1
O35.GXX2	Maternal care for other (suspected) fetal abnormality and damage, fetal upper extremities anomalies, fetus 2
O35.HXX0	Maternal care for other (suspected) fetal abnormality and damage, fetal lower extremities anomalies, not applicable or unspecified
O35.HXX1	Maternal care for other (suspected) fetal abnormality and damage, fetal lower extremities anomalies, fetus 1
O35.HXX2	Maternal care for other (suspected) fetal abnormality and damage, fetal lower extremities anomalies, fetus 2
O35.2XX0	Maternal care for (suspected) hereditary disease in fetus, not applicable or unspecified
O35.2XX1	Maternal care for (suspected) hereditary disease in fetus, fetus 1
O35.2XX2	Maternal care for (suspected) hereditary disease in fetus, fetus 2
O35.3XX0	Maternal care for (suspected) damage to fetus from viral disease in mother, not applicable or unspecified
O35.3XX1	Maternal care for (suspected) damage to fetus from viral disease in mother, fetus 1
O35.3XX2	Maternal care for (suspected) damage to fetus from viral disease in mother, fetus 2
O35.4XX0	Maternal care for (suspected) damage to fetus from alcohol, not applicable or unspecified
O35.4XX1	Maternal care for (suspected) damage to fetus from alcohol, fetus 1
O35.4XX2	Maternal care for (suspected) damage to fetus from alcohol, fetus 2
O35.5XX0	Maternal care for (suspected) damage to fetus by drugs, not applicable or unspecified
O35.5XX1	Maternal care for (suspected) damage to fetus by drugs, fetus 1
O35.5XX2	Maternal care for (suspected) damage to fetus by drugs, fetus 2
O35.6XX0	Maternal care for (suspected) damage to fetus by radiation, not applicable or unspecified
O35.6XX1	Maternal care for (suspected) damage to fetus by radiation, fetus 1
O35.6XX2	Maternal care for (suspected) damage to fetus by radiation, fetus 2

ICD-10-CM Diagnosis Codes	Description
O35.7XX0	Maternal care for (suspected) damage to fetus by other medical procedures, not applicable or unspecified
O35.7XX1	Maternal care for (suspected) damage to fetus by other medical procedures, fetus 1
O35.7XX2	Maternal care for (suspected) damage to fetus by other medical procedures, fetus 2
O35.8XX0	Maternal care for other (suspected) fetal abnormality and damage, not applicable or unspecified
O35.8XX1	Maternal care for other (suspected) fetal abnormality and damage, fetus 1
O35.8XX2	Maternal care for other (suspected) fetal abnormality and damage, fetus 2
O35.9XX0	Maternal care for (suspected) fetal abnormality and damage, unspecified, not applicable or unspecified
O35.9XX1	Maternal care for (suspected) fetal abnormality and damage, unspecified, fetus 1
O35.9XX2	Maternal care for (suspected) fetal abnormality and damage, unspecified, fetus 2
O36.20X0	Maternal care for hydrops fetalis, unspecified trimester, not applicable or unspecified
O36.20X1	Maternal care for hydrops fetalis, unspecified trimester, fetus 1
O36.20X2	Maternal care for hydrops fetalis, unspecified trimester, fetus 2
O36.21X0	Maternal care for hydrops fetalis, first trimester, not applicable or unspecified
O36.21X1	Maternal care for hydrops fetalis, first trimester, fetus 1
O36.21X2	Maternal care for hydrops fetalis, first trimester, fetus 2
O36.22X0	Maternal care for hydrops fetalis, second trimester, not applicable or unspecified
O36.22X1	Maternal care for hydrops fetalis, second trimester, fetus 1
O36.22X2	Maternal care for hydrops fetalis, second trimester, fetus 2
O36.23X0	Maternal care for hydrops fetalis, third trimester, not applicable or unspecified
O36.23X1	Maternal care for hydrops fetalis, third trimester, fetus 1
O36.23X2	Maternal care for hydrops fetalis, third trimester, fetus 2
O36.5110	Maternal care for known or suspected placental insufficiency, first trimester, not applicable or unspecified
O36.5111	Maternal care for known or suspected placental insufficiency, first trimester, fetus 1
O36.5112	Maternal care for known or suspected placental insufficiency, first trimester, fetus 2
O36.5120	Maternal care for known or suspected placental insufficiency, second trimester, not applicable or unspecified
O36.5121	Maternal care for known or suspected placental insufficiency, second trimester, fetus 1
O36.5122	Maternal care for known or suspected placental insufficiency, second trimester, fetus 2
O36.5130	Maternal care for known or suspected placental insufficiency, third trimester, not applicable or unspecified
O36.5131	Maternal care for known or suspected placental insufficiency, third trimester, fetus 1
O36.5132	Maternal care for known or suspected placental insufficiency, third trimester, fetus 2
O36.5190	Maternal care for known or suspected placental insufficiency, unspecified trimester, not applicable or unspecified

ICD-10-CM Diagnosis Codes	Description
O36.5191	Maternal care for known or suspected placental insufficiency, unspecified trimester, fetus 1
O36.5192	Maternal care for known or suspected placental insufficiency, unspecified trimester, fetus 2
O36.5910	Maternal care for other known or suspected poor fetal growth, first trimester, not applicable or unspecified
O36.5911	Maternal care for other known or suspected poor fetal growth, first trimester, fetus 1
O36.5912	Maternal care for other known or suspected poor fetal growth, first trimester, fetus 2
O36.5920	Maternal care for other known or suspected poor fetal growth, second trimester, not applicable or unspecified
O36.5921	Maternal care for other known or suspected poor fetal growth, second trimester, fetus 1
O36.5922	Maternal care for other known or suspected poor fetal growth, second trimester, fetus 2
O36.5930	Maternal care for other known or suspected poor fetal growth, third trimester, not applicable or unspecified
O36.5931	Maternal care for other known or suspected poor fetal growth, third trimester, fetus 1
O36.5932	Maternal care for other known or suspected poor fetal growth, third trimester, fetus 2
O36.5990	Maternal care for other known or suspected poor fetal growth, unspecified trimester, not applicable or unspecified
O36.5991	Maternal care for other known or suspected poor fetal growth, unspecified trimester, fetus 1
O36.5992	Maternal care for other known or suspected poor fetal growth, unspecified trimester, fetus 2
O36.60X0	Maternal care for excessive fetal growth, unspecified trimester, not applicable or unspecified
O36.60X1	Maternal care for excessive fetal growth, unspecified trimester, fetus 1
O36.60X2	Maternal care for excessive fetal growth, unspecified trimester, fetus 2
O36.61X0	Maternal care for excessive fetal growth, first trimester, not applicable or unspecified
O36.61X1	Maternal care for excessive fetal growth, first trimester, fetus 1
O36.61X2	Maternal care for excessive fetal growth, first trimester, fetus 2
O36.62X0	Maternal care for excessive fetal growth, second trimester, not applicable or unspecified
O36.62X1	Maternal care for excessive fetal growth, second trimester, fetus 1
O36.62X2	Maternal care for excessive fetal growth, second trimester, fetus 2
O36.63X0	Maternal care for excessive fetal growth, third trimester, not applicable or unspecified
O36.63X1	Maternal care for excessive fetal growth, third trimester, fetus 1
O36.63X2	Maternal care for excessive fetal growth, third trimester, fetus 2
O36.70X0	Maternal care for viable fetus in abdominal pregnancy, unspecified trimester, not applicable or unspecified
O36.70X1	Maternal care for viable fetus in abdominal pregnancy, unspecified trimester, fetus 1

ICD-10-CM Diagnosis Codes	Description
O36.70X2	Maternal care for viable fetus in abdominal pregnancy, unspecified trimester, fetus 2
O36.71X0	Maternal care for viable fetus in abdominal pregnancy, first trimester, not applicable or unspecified
O36.71X1	Maternal care for viable fetus in abdominal pregnancy, first trimester, fetus 1
O36.71X2	Maternal care for viable fetus in abdominal pregnancy, first trimester, fetus 2
O36.72X0	Maternal care for viable fetus in abdominal pregnancy, second trimester, not applicable or unspecified
O36.72X1	Maternal care for viable fetus in abdominal pregnancy, second trimester, fetus 1
O36.72X2	Maternal care for viable fetus in abdominal pregnancy, second trimester, fetus 2
O36.73X0	Maternal care for viable fetus in abdominal pregnancy, third trimester, not applicable or unspecified
O36.73X1	Maternal care for viable fetus in abdominal pregnancy, third trimester, fetus 1
O36.73X2	Maternal care for viable fetus in abdominal pregnancy, third trimester, fetus 2
O36.8120	Decreased fetal movements, second trimester, not applicable or unspecified
O36.8121	Decreased fetal movements, second trimester, fetus 1
O36.8122	Decreased fetal movements, second trimester, fetus 2
O36.8130	Decreased fetal movements, third trimester, not applicable or unspecified
O36.8131	Decreased fetal movements, third trimester, fetus 1
O36.8132	Decreased fetal movements, third trimester, fetus 2
O36.8190	Decreased fetal movements, unspecified trimester, not applicable or unspecified
O36.8191	Decreased fetal movements, unspecified trimester, fetus 1
O36.8192	Decreased fetal movements, unspecified trimester, fetus 2
O36.8310	Maternal care for abnormalities of the fetal heart rate or rhythm, first trimester, not applicable or unspecified
O36.8311	Maternal care for abnormalities of the fetal heart rate or rhythm, first trimester, fetus 1
O36.8312	Maternal care for abnormalities of the fetal heart rate or rhythm, first trimester, fetus 2
O36.8320	Maternal care for abnormalities of the fetal heart rate or rhythm, second trimester, not applicable or unspecified
O36.8321	Maternal care for abnormalities of the fetal heart rate or rhythm, second trimester, fetus 1
O36.8322	Maternal care for abnormalities of the fetal heart rate or rhythm, second trimester, fetus 2
O36.8330	Maternal care for abnormalities of the fetal heart rate or rhythm, third trimester, not applicable or unspecified
O36.8331	Maternal care for abnormalities of the fetal heart rate or rhythm, third trimester, fetus 1
O36.8332	Maternal care for abnormalities of the fetal heart rate or rhythm, third trimester, fetus 2
O36.8390	Maternal care for abnormalities of the fetal heart rate or rhythm, unspecified trimester, not applicable or unspecified
O36.8391	Maternal care for abnormalities of the fetal heart rate or rhythm, unspecified trimester, fetus 1
O36.8392	Maternal care for abnormalities of the fetal heart rate or rhythm, unspecified trimester, fetus 2

ICD-10-CM Diagnosis Codes	Description
O36.8910	Maternal care for other specified fetal problems, first trimester, not applicable or unspecified
O36.8911	Maternal care for other specified fetal problems, first trimester, fetus 1
O36.8912	Maternal care for other specified fetal problems, first trimester, fetus 2
O36.8920	Maternal care for other specified fetal problems, second trimester, not applicable or unspecified
O36.8921	Maternal care for other specified fetal problems, second trimester, fetus 1
O36.8922	Maternal care for other specified fetal problems, second trimester, fetus 2
O36.8930	Maternal care for other specified fetal problems, third trimester, not applicable or unspecified
O36.8931	Maternal care for other specified fetal problems, third trimester, fetus 1
O36.8932	Maternal care for other specified fetal problems, third trimester, fetus 2
O36.8990	Maternal care for other specified fetal problems, unspecified trimester, not applicable or unspecified
O36.8991	Maternal care for other specified fetal problems, unspecified trimester, fetus 1
O36.8992	Maternal care for other specified fetal problems, unspecified trimester, fetus 2
O36.90X0	Maternal care for fetal problem, unspecified, unspecified trimester, not applicable or unspecified
O36.90X1	Maternal care for fetal problem, unspecified, unspecified trimester, fetus 1
O36.90X2	Maternal care for fetal problem, unspecified, unspecified trimester, fetus 2
O36.91X0	Maternal care for fetal problem, unspecified, first trimester, not applicable or unspecified
O36.91X1	Maternal care for fetal problem, unspecified, first trimester, fetus 1
O36.91X2	Maternal care for fetal problem, unspecified, first trimester, fetus 2
O36.92X0	Maternal care for fetal problem, unspecified, second trimester, not applicable or unspecified
O36.92X1	Maternal care for fetal problem, unspecified, second trimester, fetus 1
O36.92X2	Maternal care for fetal problem, unspecified, second trimester, fetus 2
O36.93X0	Maternal care for fetal problem, unspecified, third trimester, not applicable or unspecified
O36.93X1	Maternal care for fetal problem, unspecified, third trimester, fetus 1
O36.93X2	Maternal care for fetal problem, unspecified, third trimester, fetus 2
O40.1XX0	Polyhydramnios, first trimester, not applicable or unspecified
O40.1XX1	Polyhydramnios, first trimester, fetus 1
O40.1XX2	Polyhydramnios, first trimester, fetus 2
O40.2XX0	Polyhydramnios, second trimester, not applicable or unspecified
O40.2XX1	Polyhydramnios, second trimester, fetus 1
O40.2XX2	Polyhydramnios, second trimester, fetus 2
O40.3XX0	Polyhydramnios, third trimester, not applicable or unspecified
O40.3XX1	Polyhydramnios, third trimester, fetus 1
O40.3XX2	Polyhydramnios, third trimester, fetus 2
O40.9XX0	Polyhydramnios, unspecified trimester, not applicable or unspecified
O40.9XX1	Polyhydramnios, unspecified trimester, fetus 1
O40.9XX2	Polyhydramnios, unspecified trimester, fetus 2
O41.00X0	Oligohydramnios, unspecified trimester, not applicable or unspecified
O41.00X1	Oligohydramnios, unspecified trimester, fetus 1
O41.00X2	Oligohydramnios, unspecified trimester, fetus 2
O41.01X0	Oligohydramnios, first trimester, not applicable or unspecified

ICD-10-CM Diagnosis Codes	Description
O41.01X1	Oligohydramnios, first trimester, fetus 1
O41.01X2	Oligohydramnios, first trimester, fetus 2
O41.02X0	Oligohydramnios, second trimester, not applicable or unspecified
O41.02X1	Oligohydramnios, second trimester, fetus 1
O41.02X2	Oligohydramnios, second trimester, fetus 2
O41.03X0	Oligohydramnios, third trimester, not applicable or unspecified
O41.03X1	Oligohydramnios, third trimester, fetus 1
O41.03X2	Oligohydramnios, third trimester, fetus 2
O41.1010	Infection of amniotic sac and membranes, unspecified, first trimester, not applicable or unspecified
O41.1011	Infection of amniotic sac and membranes, unspecified, first trimester, fetus 1
O41.1012	Infection of amniotic sac and membranes, unspecified, first trimester, fetus 2
O41.1020	Infection of amniotic sac and membranes, unspecified, second trimester, not applicable or unspecified
O41.1021	Infection of amniotic sac and membranes, unspecified, second trimester, fetus 1
O41.1022	Infection of amniotic sac and membranes, unspecified, second trimester, fetus 2
O41.1030	Infection of amniotic sac and membranes, unspecified, third trimester, not applicable or unspecified
O41.1031	Infection of amniotic sac and membranes, unspecified, third trimester, fetus 1
O41.1032	Infection of amniotic sac and membranes, unspecified, third trimester, fetus 2
O41.1090	Infection of amniotic sac and membranes, unspecified, unspecified trimester, not applicable or unspecified
O41.1091	Infection of amniotic sac and membranes, unspecified, unspecified trimester, fetus 1
O41.1092	Infection of amniotic sac and membranes, unspecified, unspecified trimester, fetus 2
O41.1210	Chorioamnionitis, first trimester, not applicable or unspecified
O41.1211	Chorioamnionitis, first trimester, fetus 1
O41.1212	Chorioamnionitis, first trimester, fetus 2
O41.1220	Chorioamnionitis, second trimester, not applicable or unspecified
O41.1221	Chorioamnionitis, second trimester, fetus 1
O41.1222	Chorioamnionitis, second trimester, fetus 2
O41.1230	Chorioamnionitis, third trimester, not applicable or unspecified
O41.1231	Chorioamnionitis, third trimester, fetus 1
O41.1232	Chorioamnionitis, third trimester, fetus 2
O41.1290	Chorioamnionitis, unspecified trimester, not applicable or unspecified
O41.1291	Chorioamnionitis, unspecified trimester, fetus 1
O41.1292	Chorioamnionitis, unspecified trimester, fetus 2
O41.1410	Placentitis, first trimester, not applicable or unspecified
O41.1411	Placentitis, first trimester, fetus 1
O41.1412	Placentitis, first trimester, fetus 2
O41.1420	Placentitis, second trimester, not applicable or unspecified
O41.1421	Placentitis, second trimester, fetus 1
O41.1422	Placentitis, second trimester, fetus 2
O41.1430	Placentitis, third trimester, not applicable or unspecified
O41.1431	Placentitis, third trimester, fetus 1
O41.1432	Placentitis, third trimester, fetus 2
O41.1490	Placentitis, unspecified trimester, not applicable or unspecified

ICD-10-CM Diagnosis Codes	Description
O41.1491	Placentitis, unspecified trimester, fetus 1
O41.1492	Placentitis, unspecified trimester, fetus 2
O41.8X10	Other specified disorders of amniotic fluid and membranes, first trimester, not applicable or unspecified
O41.8X11	Other specified disorders of amniotic fluid and membranes, first trimester, fetus 1
O41.8X12	Other specified disorders of amniotic fluid and membranes, first trimester, fetus 2
O41.8X20	Other specified disorders of amniotic fluid and membranes, second trimester, not applicable or unspecified
O41.8X21	Other specified disorders of amniotic fluid and membranes, second trimester, fetus 1
O41.8X22	Other specified disorders of amniotic fluid and membranes, second trimester, fetus 2
O41.8X30	Other specified disorders of amniotic fluid and membranes, third trimester, not applicable or unspecified
O41.8X31	Other specified disorders of amniotic fluid and membranes, third trimester, fetus 1
O41.8X32	Other specified disorders of amniotic fluid and membranes, third trimester, fetus 2
O41.8X90	Other specified disorders of amniotic fluid and membranes, unspecified trimester, not applicable or unspecified
O41.8X91	Other specified disorders of amniotic fluid and membranes, unspecified trimester, fetus 1
O41.8X92	Other specified disorders of amniotic fluid and membranes, unspecified trimester, fetus 2
O41.90X0	Disorder of amniotic fluid and membranes, unspecified, unspecified trimester, not applicable or unspecified
O41.90X1	Disorder of amniotic fluid and membranes, unspecified, unspecified trimester, fetus 1
O41.90X2	Disorder of amniotic fluid and membranes, unspecified, unspecified trimester, fetus 2
O41.91X0	Disorder of amniotic fluid and membranes, unspecified, first trimester, not applicable or unspecified
O41.91X1	Disorder of amniotic fluid and membranes, unspecified, first trimester, fetus 1
O41.91X2	Disorder of amniotic fluid and membranes, unspecified, first trimester, fetus 2
O41.92X0	Disorder of amniotic fluid and membranes, unspecified, second trimester, not applicable or unspecified
O41.92X1	Disorder of amniotic fluid and membranes, unspecified, second trimester, fetus 1
O41.92X2	Disorder of amniotic fluid and membranes, unspecified, second trimester, fetus 2
O41.93X0	Disorder of amniotic fluid and membranes, unspecified, third trimester, not applicable or unspecified
O41.93X1	Disorder of amniotic fluid and membranes, unspecified, third trimester, fetus 1
O41.93X2	Disorder of amniotic fluid and membranes, unspecified, third trimester, fetus 2
O43.011-O43.019	Fetomaternal placental transfusion syndrome
O43.101-O43.109	Malformation of placenta, unspecified

ICD-10-CM Diagnosis Codes	Description
O43.111-O43.119	Circumvallate placenta
O43.121-O43.129	Velamentous insertion of umbilical cord
O43.191-O43.199	Other malformation of placenta
O43.211-O43.219	Placenta accreta
O43.221-O43.229	Placenta increta
O43.231-O43.239	Placenta percreta
O43.811-O43.819	Placental infarction
O43.891-O43.899	Other placental disorders
O43.90-O43.93	Unspecified placental disorder
O44.00-O44.03	Complete placenta previa NOS or without hemorrhage
O44.10-O44.13	Complete placenta previa with hemorrhage
O44.20-O44.23	Partial placenta previa NOS or without hemorrhage
O44.30-O44.33	Partial placenta previa with hemorrhage
O44.40-O44.43	Low lying placenta NOS or without hemorrhage
O44.50-O44.53	Low lying placenta with hemorrhage
O45.001-O45.009	Premature separation of placenta with coagulation defect
O45.011-O45.019	Premature separation of placenta with afibrinogenemia
O45.021-O45.029	Premature separation of placenta with disseminated intravascular coagulation
O45.091-O45.099	Premature separation of placenta with other coagulation defect
O45.8X1-O45.8X9	Other premature separation of placenta
O45.90-O45.93	Premature separation of placenta, unspecified
O46.001-O46.009	Antepartum hemorrhage with coagulation defect, unspecified
O46.011-O46.019	Antepartum hemorrhage with afibrinogenemia
O46.021-O46.029	Antepartum hemorrhage with disseminated intravascular coagulation

ICD-10-CM Diagnosis Codes	Description
O46.091-O46.099	Antepartum hemorrhage with other coagulation defect
O46.8X1-O46.8X9	Other antepartum hemorrhage
O46.90-O46.93	Antepartum hemorrhage, unspecified
O47.00	False labor before 37 completed weeks of gestation, unspecified trimester
O47.02	False labor before 37 completed weeks of gestation, second trimester
O47.03	False labor before 37 completed weeks of gestation, third trimester
O47.1	False labor at or after 37 completed weeks of gestation
O47.9	False labor, unspecified
O48.0	Post-term pregnancy
O48.1	Prolonged pregnancy
O60.00	Preterm labor without delivery, unspecified trimester
O60.02	Preterm labor without delivery, second trimester
O60.03	Preterm labor without delivery, third trimester
O98.011-O98.019	Tuberculosis complicating pregnancy
O98.111-O98.119	Syphilis complicating pregnancy
O98.211-O98.219	Gonorrhea complicating pregnancy
O98.311-O98.319	Other infections with a predominantly sexual mode of transmission complicating pregnancy
O98.411-O98.419	Viral hepatitis complicating pregnancy
O98.511-O98.519	Other viral diseases complicating pregnancy
O98.611-O98.619	Protozoal diseases complicating pregnancy
O98.711-O98.719	Human immunodeficiency virus [HIV] disease complicating pregnancy
O98.811-O98.819	Other maternal infectious and parasitic diseases complicating pregnancy
O98.911-O98.919	Unspecified maternal infectious and parasitic disease complicating pregnancy
O99.011-O99.019	Anemia complicating pregnancy
O99.111-O99.119	Other diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism complicating pregnancy
O99.210-O99.213	Obesity complicating pregnancy
O99.280-O99.283	Endocrine, nutritional and metabolic diseases complicating pregnancy
O99.310-O99.313	Alcohol use complicating pregnancy
O99.320-O99.323	Drug use complicating pregnancy

ICD-10-CM Diagnosis Codes	Description
O99.330-O99.333	Smoking (tobacco) complicating pregnancy
O99.340-O99.343	Other mental disorders complicating pregnancy
O99.350-O99.353	Diseases of the nervous system complicating pregnancy
O99.411-O99.419	Diseases of the circulatory system complicating pregnancy
O99.511-O99.519	Diseases of the respiratory system complicating pregnancy
O99.611-O99.619	Diseases of the digestive system complicating pregnancy
O99.711-O99.719	Diseases of the skin and subcutaneous tissue complicating pregnancy
O99.810	Abnormal glucose complicating pregnancy
O99.820	Streptococcus B carrier state complicating pregnancy
O99.830	Other infection carrier state complicating pregnancy
O99.840-O99.843	Bariatric surgery status complicating pregnancy
O99.891	Other specified diseases and conditions complicating pregnancy
O9A.111-O9A.119	Malignant neoplasm complicating pregnancy
O9A.211-O9A.219	Injury, poisoning and certain other consequences of external causes complicating pregnancy
O9A.311-O9A.319	Physical abuse complicating pregnancy
O9A.411-O9A.419	Sexual abuse complicating pregnancy
O9A.511-O9A.519	Psychological abuse complicating pregnancy
Z01.89	Encounter for other specified special examinations
Z13.71-Z13.79	Encounter for screening for genetic and chromosomal anomalies
Z31.430-Z31.438	Encounter for genetic testing of female for procreative management
Z31.5	Encounter for procreative genetic counseling
Z32.01	Encounter for pregnancy test, result positive
Z33.1	Pregnant state, incidental
Z34.00-Z34.03	Encounter for supervision of normal first pregnancy
Z34.80-Z34.83	Encounter for supervision of other normal pregnancy
Z34.90-Z34.93	Encounter for supervision of normal pregnancy, unspecified
Z36.0-Z36.4	Encounter for antenatal screening of mother
Z36.81-Z36.9	Encounter for other antenatal screening

ICD-10-CM Diagnosis Codes	Description
Z3A.00-Z3A.49	Weeks of gestation

Not Covered or Reimbursable:

ICD-10-CM Diagnosis Codes	Description
	All other diagnosis codes

Not Covered or Reimbursable:

CPT®* Codes	Description
81422	Fetal chromosomal microdeletion(s) genomic sequence analysis (eg, DiGeorge syndrome, Cri-du-chat syndrome), circulating cell-free fetal DNA in maternal blood
0341U	Fetal aneuploidy DNA sequencing comparative analysis, fetal DNA from products of conception, reported as normal (euploidy), monosomy, trisomy, or partial deletion/duplication, mosaicism, and segmental aneuploid
0489U	Obstetrics (single-gene noninvasive prenatal test), cellfree DNA sequence analysis of 1 or more targets (eg, CFTR, SMN1, HBB, HBA1, HBA2) to identify paternally inherited pathogenic variants, and relative mutation-dosage analysis based on molecular counts to determine fetal inheritance of maternal mutation, algorithm reported as a fetal risk score for the condition (eg, cystic fibrosis, spinal muscular atrophy, beta hemoglobinopathies [including sickle cell disease], alpha thalassemia)

Genome Sequencing

Not Covered or Reimbursable:

CPT®* Codes	Description
0335U	Rare diseases (constitutional/heritable disorders), whole genome sequence analysis, including small sequence changes, copy number variants, deletions, duplications, mobile element insertions, uniparental disomy (UPD), inversions, aneuploidy, mitochondrial genome sequence analysis with heteroplasmy and large deletions, short tandem repeat (STR) gene expansions, fetal sample, identification and categorization of genetic variants
0336U	Rare diseases (constitutional/heritable disorders), whole genome sequence analysis, including small sequence changes, copy number variants, deletions, duplications, mobile element insertions, uniparental disomy (UPD), inversions, aneuploidy, mitochondrial genome sequence analysis with heteroplasmy and large deletions, short tandem repeat (STR) gene expansions, blood or saliva, identification and categorization of genetic variants, each comparator genome (eg, parent)

General Background

Genetic testing involves analyzing deoxyribonucleic acid (DNA), ribonucleic acid (RNA), chromosomes, proteins, or metabolites to identify pathogenic or likely pathogenic variants linked to inherited disorders. Genetic testing may be used for reproductive carrier screening and prenatal diagnosis to support informed reproductive planning. Clinical scenarios where testing may be appropriate include familial disease, ethnic screening, preimplantation diagnostics, prenatal testing, infertility, and recurrent pregnancy loss.

A stepwise approach is generally recommended for carrier testing unless gestational timing limits reproductive options. Guidelines from the American College of Medical Genetics and Genomics (ACMG) and the American College of Obstetricians and Gynecologists (ACOG) support various testing methods, such as targeted mutation analysis and gene sequencing, to improve outcomes for individuals at risk.

Preconception and Prenatal Carrier Testing

Preconception and prenatal carrier screening for conditions with a high prevalence in specific racial or ethnic groups (e.g., Tay-Sachs disease in Ashkenazi Jewish populations; sickle cell disease in Black individuals) has been performed for decades. Over time, testing recommendations expanded to include panethnic screening for cystic fibrosis and spinal muscular atrophy. Today, carrier screening via targeted and larger panels may include autosomal recessive and X-linked conditions, and are broadly supported by several professional societies.

Specific disorders for which targeted or broader preconception carrier testing may be appropriate include, but are not limited to, the following:

- 21-hydroxylase deficiency
- Alpha and beta thalassemia
- Canavan disease
- Cystic fibrosis
- Fragile X syndrome
- Gaucher disease
- Muscular dystrophies (DMB, BMD, EDMD, DM1, DM2, SM)
- Niemann-Pick disease
- Nuclear mitochondrial genes
- PTEN-related disorders
- Retinoblastoma
- Rett syndrome
- Sickle cell disease
- Spinal muscular atrophy (SMA)
- Tay-Sachs disease
- Von Hippel-Lindau disease

Consensus support for screening for all heritable conditions in the general population is lacking. According to the ACMG, the approach to genetic counseling and testing for different phenotypes has not yet been addressed on a population screening level (Murray, et al, 2021). Except where identified as clinically useful in this Coverage Policy, carrier screening in the general population in the absence of definitive clinical features does not impact clinical decision-making or improve health outcomes. Therefore, clinical utility for this indication has not been established. Similarly,

genetic testing for non-medical traits such as hair and eye color does not result in improved health outcomes and such testing is not considered to have clinical utility for these indications.

Professional Societies/Organizations: The American College of Medical Genetics and Genomics (ACMG) published a practice resource for screening of autosomal recessive and X-linked conditions during pregnancy and preconception (Gregg, et al., 2021). The ACMG recommended that carrier screening paradigms should be ethnic- and population-neutral, and more inclusive of diverse populations to promote equity and inclusion. Their recommended approach to this involves a tiered system based on carrier frequency:

- Tier 1 includes the recommendations previously adopted by ACMG and the American College of Obstetricians and Gynecologists (ACOG), implementing an ethnic- and population-neutral approach when screening for cystic fibrosis and spinal muscular atrophy.
    - It also includes additional carrier screening determined after risk assessment (i.e., personal medical history, family history, labs, and imaging).
- Tier 2 is based on an ACOG recommendation for conditions that have a severe or moderate phenotype and a carrier frequency ≥ 1/100.
- Tier 3 is carrier screening for conditions with a carrier frequency ≥ 1/200.
- Tier 4 includes less common genes with no lower limit carrier screening frequency.

The ACMG recommended all pregnant individuals and those planning a pregnancy should be offered Tier 3 carrier screening and not solely Tier 1 and/or Tier 2, as these do not provide equitable evaluation of all racial/ethnic groups.

The American College of Obstetricians and Gynecologists (ACOG) Committee Opinion on carrier screening for genetic conditions included the following recommendations (ACOG, 2025):

- General recommendations:
    - Information about genetic carrier screening is recommended to be provided to every pregnant woman, with the option to decline any or all screening after counseling.
    - Carrier screening and counseling are ideally performed before pregnancy.
    - When an individual is identified as a carrier for a specific condition, testing of the reproductive partner is suggested to enable informed genetic counseling.
    - Genetic counseling is advised when both partners are found to be carriers of a genetic condition, with discussion of prenatal diagnosis and reproductive technologies.
    - Family history, including ethnic background and consanguinity, is recommended to be obtained from the patient and, if possible, her partner, as a screening tool.
    - Carrier screening for specific conditions is suggested for individuals with a positive family history, and may benefit from genetic counseling.
    - Carrier screening for a particular condition is generally performed only once in a lifetime and documented; repeat screening is recommended only with guidance from a genetics professional.
    - Carrier screening for a requested condition with available testing is recommended to be offered after counseling, regardless of ethnicity or family history.
    - Consideration of the cost of individual condition screening versus expanded panels is advised when selecting a screening approach.
    - Expanded carrier screening panels may be considered, with limitations and residual risks discussed.
- Recommendations for specific conditions:
    - Screening for spinal muscular atrophy is recommended for all women considering pregnancy or currently pregnant.

- Carrier screening for cystic fibrosis is recommended for all women considering pregnancy or currently pregnant; repeat screening is not advised if previously performed, unless guided by a genetics professional.
- Complete blood count with red blood cell indices is recommended for all pregnant women to assess risk for hemoglobinopathies; hemoglobin electrophoresis is suggested if indicated by ethnicity or laboratory results.
- Fragile X premutation carrier screening is recommended for women with a family history of fragile X-related disorders or intellectual disability, and for women with unexplained ovarian insufficiency or elevated FSH before age 40.
- Screening for specific genetic conditions is recommended for individuals of Ashkenazi Jewish descent (e.g., Tay–Sachs disease, cystic fibrosis, Canavan disease, familial dysautonomia); screening is suggested for the high-risk partner first, followed by the other partner if the first is identified as a carrier.
    - If Tay–Sachs disease screening is performed as part of panethnic expanded carrier screening, it is important to recognize the limitations of the mutations screened in detecting carriers in the general population. In the presence of a family history of Tay–Sachs disease, expanded carrier screening panels are not the best approach to screening unless the familial mutation is included on the panel.

The ACOG Committee Opinion on carrier screening in the age of genomic medicine further recommended (ACOG, 2025):

- "Ethnic-specific, panethnic, and expanded carrier screening are acceptable strategies for prepregnancy and prenatal carrier screening."
- "All patients who are considering pregnancy or are already pregnant, regardless of screening strategy and ethnicity, should be offered carrier screening for cystic fibrosis and spinal muscular atrophy, as well as a complete blood count and screening for thalassemias and hemoglobinopathies.
- Fragile X premutation carrier screening is recommended for women with a family history of fragile X-related disorders or intellectual disability suggestive of fragile X syndrome, or women with a personal history of ovarian insufficiency.
    - Additional screening also may be indicated based on family history or specific ethnicity."
- "If a woman is found to be a carrier for a specific condition, her reproductive partner should be offered screening to provide accurate genetic counseling for the couple with regard to the risk of having an affected child."
- "Individuals with a family history of a genetic disorder may benefit from the identification of the specific familial mutation or mutations rather than carrier screening."
- "Given the multitude of conditions that can be included in expanded carrier screening panels, the disorders selected for inclusion should meet several of the following consensus-determined criteria: have a carrier frequency of 1 in 100 or greater, have a well-defined phenotype, have a detrimental effect on quality of life, cause cognitive or physical impairment, require surgical or medical intervention, or have an onset early in life.
- Screened conditions should be able to be diagnosed prenatally and may afford opportunities for antenatal intervention to improve perinatal outcomes, changes to delivery management to optimize newborn and infant outcomes, and education of the parents about special care needs after birth.
- Carrier screening panels should not include conditions primarily associated with a disease of adult onset."

The ACOG practice advisory on hemoglobinopathies in pregnancy (2025) states, "Previous recommendations for hemoglobinopathy testing have used a race/ethnicity-based strategy.

However, race and self-identified ethnicity are poor proxies for genetics since self-identification with a specific race/ethnicity may be incompatible with genetic ancestry. Given that approximately 1 in 66 people in the United States have a hemoglobinopathy trait, ACOG recommends offering universal hemoglobinopathy testing to persons planning pregnancy or at the initial prenatal visit if no prior testing results are available for interpretation. This helps ensure that at-risk individuals receive counseling about genetic risks; learn their reproductive options, which include preimplantation genetic testing and prenatal diagnosis; and make informed decisions. Hemoglobinopathy testing may be performed using hemoglobin electrophoresis or molecular genetic testing (eg, expanded carrier screening that includes sickle cell disease [SCD] and other hemoglobinopathies). The use of noninvasive prenatal diagnosis for SCD with cell-free fetal DNA is still experimental and currently not recommended."

In a practice guideline on expanded carrier screening (ECS) for reproductive risk assessment, the National Society of Genetic Counselors (NSGC) recommended (Sagaser, et al., 2023):

- ECS should be offered to all who are currently pregnant, considering pregnancy, or might otherwise biologically contribute to pregnancy.
- "Informed consent for ECS should emphasize the universal nature of AR and [X-linked] XL disease carrier status, and that the ultimate determinant of risk for [autosomal recessive] AR disease is the shared carrier status of both individuals in the reproductive pair. Patients should be counseled that individual "abnormal" or "positive" results from ECS are expected and will usually not have an impact on one's own health status. Informed consent should also note that ECS may uncover incidental findings, such as a possible diagnosis and/or health risks."

Prenatal Cell-Free DNA Screening

Prenatal cell-free DNA screening, also called sequencing-based non-invasive prenatal testing or screening, is performed on a maternal plasma (blood) sample and usually collected at or after nine weeks' gestation. Prenatal cell-free DNA screening has been proposed for use as an advanced screening test to assess whether a pregnant woman is at increased risk of having a fetus affected by a genetic disorder (e.g., fetal aneuploidy [trisomy 13, 18, and 21]). One benefit of such screening is the potential decrease in the number of invasive procedures, and therefore, the decrease in the potential for miscarriage as a complication of invasive testing. As a screening test for genetic disorders, prenatal cell-free DNA screening may also allow for reproductive options. Testing relies on the presence of circulating fetal or cell-free deoxyribonucleic acid (DNA) in the maternal plasma during pregnancy.

Trisomies 13, 18, 21

The clinical utility of prenatal cell-free DNA screening has been established as a means to detect fetal trisomy 13, 18 and 21 in the published, peer-reviewed scientific literature for a woman with a viable singleton or twin pregnancy. The sensitivity and specificity of cell-free DNA screening in a singleton gestation have been reported to be uniformly high, ranging from 99.1%-100% and 99.7%-100%, respectively, primarily for trisomy 21. Negative predictive values have been reported to be near, or at 100%, with positive predictive values of 83% and 55% for high- and average-risk populations, respectively. Laboratories variably report screening results as positive, negative or 'no call', a category to describe indeterminate or uninterpretable results. No-call results comprise approximately 4–8% of screened pregnancies and may occur secondary to assay failure, high assay variance or low fetal fraction. Low fetal fraction, defined as below 4%, confers significantly higher risk for fetal aneuploidy. Counseling before screening should include the possibility of results in this category (Dasche, 2016). Confirmatory CVS or amniocentesis is still needed in pregnancies with a positive result.

Cell-free DNA screening may be performed in twin gestations. Sensitivity for trisomy 21 using cell-free DNA for twin pregnancy is similar to singleton pregnancy, although test failure may be higher. Because each fetus contributes different amounts of cell-free DNA into the maternal circulation, it is possible that an aneuploidy fetus would contribute less fetal DNA, masking the aneuploid test result. Nonetheless, prenatal cell-free DNA screening is considered an appropriate screening option.

Literature Review: The role of prenatal cell-free DNA screening to detect trisomy 13, 18 and 21 in singleton and twin pregnancies has been investigated in a number of prospective clinical trials, systematic reviews, and technology assessments to determine if there are improved clinical outcomes as a result of such testing (Rose, et al., 2022; Gil, et al., 2015; Norton, et al., 2015; Zhang, et al., 2015; Norton, et al., 2012; Verweij, et al., 2012; Chiu, et al., 2011). There is sufficient evidence in the published literature to establish the clinical validity of prenatal cell-free DNA as a method to screen for these indications. Further, such testing is supported by published professional society consensus guidelines.

In a systematic review on behalf of the American College of Medical Genetics and Genomics (ACMG), Rose et al. (2022) evaluated 87 studies to assess the performance of noninvasive prenatal screening (NIPS) using cell-free DNA in general-risk pregnancies. The primary intervention was NIPS for trisomy 21, trisomy 18, trisomy 13, sex chromosome aneuploidies, rare autosomal trisomies, copy number variants, and maternal conditions. Reported outcomes demonstrated high sensitivity, specificity, negative predictive value, and accuracy for trisomies 21, 18, and 13 in singleton and twin gestations, with statistically significant diagnostic odds ratios ($p<0.0001$). Positive predictive value varied by condition, being highest for trisomy 21 and lower for trisomy 13. The clinical utility for sex chromosome aneuploidies, rare autosomal trisomies, and copy number variants (including microdeletions) was less certain.

Prenatal Cell-free DNA Screening for Other Conditions
Prenatal cell-free DNA screening has also been proposed for other clinical scenarios and fetal genetic disorders including: in higher order multiple gestations (e.g. triplets and higher); trisomy 7, 9, 16, 22 or other rare autosomal trisomies (RATs); vanishing twin syndrome; twin zygosity; microdeletions; single-gene disorders; and genetic cause of miscarriage. However, data are limited in the published, peer-reviewed scientific literature regarding the predictive value of any of these tests to detect these additional fetal abnormalities, and whether maternal outcomes are improved if further invasive testing is required is unknown (Acreman, et al., 2022). Professional society support for these indications in the form of published consensus guidelines is also lacking.

Microdeletions: Several laboratory methods allow for detection of microdeletions; however, data are lacking regarding the predictive value of prenatal cell-free DNA screening for this indication, and the impact on pregnancy outcomes has not been established (Dungan, et al., 2022; Rose, et al., 2022; Srinivasan, et al., 2013).

Clinical validation studies evaluating the use of prenatal cell-free DNA screening tests to detect microdeletion syndromes are limited in the published, peer-reviewed scientific literature. Wapner et al. (2015) reported on a test with a primary purpose of estimating the performance of a single-nucleotide polymorphism (SNP)-based noninvasive prenatal test for five microdeletion syndromes in 469 samples (358 plasma samples from pregnant women, 111 artificial plasma mixtures). These were amplified with the use of a massively multiplexed polymerase chain reaction, sequenced, and analyzed for the presence or absence of deletions of 22q11.2, 1p36, distal 5p, and the Prader-Willi/Angelman region. Detection rates were 97.8% for a 22q11.2 deletion, 100% for Prader-Willi, Angelman, 1p36 deletion, and cri-du-chat syndromes (24/24). False-positive rates were 0.76% for 22q11.2 deletion syndrome (i.e., DiGeorge syndrome) and 0.24% for cri-du-chat syndrome. No false positives occurred for Prader-Willi, Angelman or 1p36 deletion syndromes.

SNP-based noninvasive prenatal microdeletion screening was accurate in this single study; however, additional validation studies are needed before such testing is useful in routine clinical practice.

Single-Gene (Monogenic) Disorders: There are limited data in the published peer-reviewed scientific literature regarding the use of prenatal cell-free DNA screening to identify single gene (monogenic) disorders, and the clinical utility of such testing is not established (Dan, et al., 2016; Chitty, et al., 2015). Unanswered questions about mosaicism and false positives raise concerns for harm and whether such testing requires confirmatory testing by invasive methods is not yet known (Jenkins, et al., 2017).

Vanishing Twin: Vanishing twin syndrome (VTS) describes the spontaneous loss of one of two twins or multiples in utero. The phenomenon occurs most typically in the first trimester, and affects approximately 36% of twin pregnancies, and 50% of pregnancies with three or more gestational sacs (Zamani and Parekh, 2023). There is a high risk of inaccurate results (e.g., false positives) when prenatal cell-free DNA screening is performed in the setting of VTS (van Eekhout, et al., 2023; Curnow, et al., 2015). Due to the high incidence of aneuploidy in early embryonic demise, VTS may affect the correct interpretation of the status of the viable twin in the continuing pregnancy (Dungan, et al., 2023). At present, there is insufficient evidence in the published medical literature to support the use of cell-free DNA screening in vanishing twin syndrome.

Other Prenatal Tests

Genome Sequencing for Prenatal Diagnosis: Whole genome sequencing has been proposed for use in prenatal diagnosis. One such test, the IriSight Comprehensive Analysis – Prenatal trio-based test, has been proposed to identify genetic variants correlating with symptoms present in a fetus or pregnancy, or which cause severe, early-onset genetic disorders. The test uses a whole genome platform, and has been proposed for prenatal analysis primarily when amniocentesis or chorionic villus sampling (CVS) has been determined to be medically appropriate due to ultrasound abnormalities, or for pregnancy loss. Specimen types for prenatal analysis include noninvasive and invasive sampling (e.g., amniotic fluid, maternal blood, CVS). There is insufficient evidence in the published, peer-reviewed scientific literature to support genome sequencing for prenatal diagnosis or in the setting of pregnancy loss, and professional society support is lacking.

Molecular Analysis of Intact Fetal Cells (i.e., Fetal Trophoblast[s] in Maternal Sample): The Luna Prenatal Test is an example of a cell-based prenatal genetic test which isolates pure fetal DNA from rare fetal trophoblast cells circulating in maternal blood. This test is noninvasive, only requires a maternal blood sample and can be performed early in pregnancy, from 8 to 22 weeks of gestation. Currently, there is insufficient evidence in published, peer-reviewed scientific literature to support this testing method, and professional society support is lacking.

Professional Societies/Organizations: The American College of Medical Genetics and Genomics (ACMG) published an updated clinical guideline on the use of noninvasive prenatal screening (now "prenatal cell-free DNA screening") for fetal chromosome abnormalities in a general risk population (Dungan, et al., 2022). The guideline provided the following recommendations:

- The use of prenatal cell-free DNA screening is recommended over traditional screening methods for all pregnant patients with singleton gestation for fetal trisomies 21, 18, and 13 (Strong recommendation, based on high certainty of evidence)
- The use of prenatal cell-free DNA screening is recommended over traditional methods for trisomy screening in twin gestations (Strong recommendation, based on high certainty of evidence)

- Prenatal cell-free DNA screening is recommended to be offered to individuals with a singleton gestation to screen for fetal sex chromosome aneuploidy (SCA) (Strong recommendation, based on high certainty of evidence)
- It is suggested that prenatal cell-free DNA screening for 22q11.2 deletion syndrome be offered to all individuals (Conditional recommendation, based on moderate certainty of the evidence)
- There is insufficient evidence to recommend routine screening for copy number variants (CNVs) other than 22q11.2 deletions (No recommendation, owing to lack of clinically relevant evidence and validation)
- There is insufficient evidence to recommend or not recommend prenatal cell-free DNA screening for the identification of rare autosomal trisomies (RATs) (No recommendation, owing to lack of clinically relevant evidence)

In committee opinion on the use of microarrays and next-generation sequencing in obstetrics and gynecology, the American College of Obstetrics and Gynecologists (ACOG) and the Society for Maternal-Fetal Medicine (SMFM) (2025) stated:

- The routine use of whole-genome or whole-exome sequencing for prenatal diagnosis is not recommended outside of the context of clinical trials until sufficient peer-reviewed data and validation studies are published.
- Routine screening for genome-wide gains or losses with cell-free DNA is not recommended.

A practice advisory from ACOG (2024) on the use of cell-free DNA screening for single-gene disorders stated that, due to insufficient data regarding the accuracy and positive and negative predictive value in the general population, single-gene cell-free DNA screening is not recommended in pregnancy.

A practice bulletin from ACOG/SMFM (2020) included the following guidance regarding screening for fetal chromosomal abnormalities:

- Screening and diagnostic testing for chromosomal abnormalities should be offered to all patients early in pregnancy regardless of maternal age or risk for chromosomal abnormality
- Cell-free DNA is the most sensitive and specific screening test for the common fetal aneuploidies (trisomies 21, 13 and 18) and can be performed any time after 9-10 weeks gestation.
- If a patient chooses screening for aneuploidy only one screening approach should be used.
- Cell-free DNA screening can be performed in twin gestations.
- Sensitivity for trisomy 21 using cell-free DNA for twin pregnancy is similar to singleton pregnancy although test failure may be higher.
- In individuals with both a vanishing twin and a viable intrauterine pregnancy, cell-free DNA screening is not advised due to the high risk for aneuploidy in the nonviable sac or embryo, which can lead to false-positive results.

In 2025, the Society for Maternal-Fetal Medicine (SMFM) published updated guidance on the use of cell-free DNA (cfDNA) screening for aneuploidies; the guidance was endorsed by ACOG. The guidance included the following (SMFM, 2025):

- Grade 1B recommendations (Strong recommendation, moderate-quality evidence):
  - Recommend that cfDNA screening for common aneuploidies (trisomies 21, 18, and 13) be made routinely available to all obstetrical patients

    - Recommend cfDNA as the most sensitive and specific screening test for common fetal aneuploidies (trisomies 21, 18, and 13) in any patient population. After pretest counseling, every patient has the right to pursue or decline prenatal genetic screening and diagnostic testing
    - Recommend cell-free DNA as a first-line screening option for trisomy 21 detection in twin gestations
    - Although the numbers of affected pregnancies are limited, the detection rates associated with trisomy 18 and 13 appear to be consistently high in twin gestations, and cfDNA screening for these conditions is recommended
- Grade 1C recommendations (Strong recommendation, low-quality evidence):
    - Recommend that screening for sex chromosome aneuploidies be made available to obstetrical patients as an "opt-in" consideration with appropriate pretest counseling
    - Do not recommend routine general population screening for any microdeletion condition. Patients who choose to undergo cfDNA screening for 22q11.2 deletion specifically should do so only after appropriate pretest counseling. Pregnant people who are interested in obtaining information regarding the risk for fetal copy number variants should be offered diagnostic testing as opposed to cfDNA screening for microdeletion syndromes
    - Due to a lack of data, cfDNA screening for sex chromosome aneuploidy in twin gestations and cfDNA screening for higher-order multiples are not recommended
    - Do not recommend the routine use of cfDNA testing for large genome-wide copy number deletions or duplications

Health Equity Considerations

Health equity is the highest level of health for all people; health inequity is the avoidable difference in health status or distribution of health resources due to the social conditions in which people are born, grow, live, work, and age.

Social determinants of health are the conditions in the environment that affect a wide range of health, functioning, and quality of life outcomes and risks. Examples include safe housing, transportation and neighborhoods; racism, discrimination and violence; education, job opportunities and income; access to nutritious foods and physical activity opportunities; access to clean air and water; and language and literacy skills.

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Revision Details

Type of Revision	Summary of Changes	Date
Focused Review	• No clinical policy statement changes.	5/15/2026
Annual Review	• Removed policy statements for germline carrier testing for familial disease; Fragile X; spinal muscular atrophy; cystic fibrosis; hemoglobinopathies; carrier screening panels ≥ 15 genes; carrier screening based on general population risk; preimplantation testing of an embryo; invasive prenatal testing of a fetus; genetic testing for recurrent pregnancy loss; and genetic testing for infertility. • Added policy statements for preconception/prenatal carrier screening panels, and genome sequencing for prenatal diagnosis or pregnancy loss. • Revised policy statements for preconception/prenatal Ashkenazi Jewish carrier screening, and noninvasive prenatal testing.	4/10/2026
Annual Review	• Removed policy statements for genetic counseling; preimplantation genetic testing for aneuploidy; and in vitro fertilization services associated with preimplantation genetic diagnosis. • Revised policy statements for germline carrier testing for inherited conditions; Fragile X	11/1/2024

Type of Revision	Summary of Changes	Date
	testing; testing in individuals of Ashkenazi Jewish descent; preimplantation genetic testing; and fetal testing.	
Focused Review	• No clinical policy statement changes.	12/15/2023