# Medical Policy

PARAMOUNT

HMO AND PPO
ELITE (MEDICARE ADVANTAGE)
MARKETPLACE

## Infertility and Reproductive Services

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**GUIDELINES:**

- This policy does not certify benefits or authorization of benefits, which is designated by each individual policyholder terms, conditions, exclusions, and limitations contract. It does not constitute a contract or guarantee regarding coverage or reimbursement/payment. Self-Insured group specific policy will supersede this general policy when group supplementary plan document or individual plan decision directs otherwise.
- Paramount applies coding edits to all medical claims through coding logic software to evaluate the accuracy and adherence to accepted national standards.
- This medical policy is solely for guiding medical necessity and explaining correct procedure reporting used to assist in making coverage decisions and administering benefits.

**SCOPE:**

X Professional
X Facility

**DESCRIPTION:**

"Infertility" is a disease or condition characterized by the incapacity to impregnate another person or to conceive. Infertility is defined as:

- One year of frequent unprotected heterosexual intercourse during which pregnancy has not occurred if the female is age 35 or younger or during a period of 6 months if the female is over the age of 35;

or

- Failure to achieve pregnancy after at least 12 cycles of medically supervised donor insemination for females without a male partner age 35 or younger, or 6 cycles for females without a male partner over the age of 35;

or,

- A person has a medically documented inability to conceive due to at least one of the following:
  - Stage 4 surgically treated endometriosis;
  - Exposure in utero to diethylstilbestrol, commonly known as DES;
  - Blockage or removal of one or both fallopian tubes, not as a result of voluntary sterilization;
  - Untreatable, abnormal male factors contributing to infertility, not as a result of voluntary sterilization (untreatable retrograde ejaculation, untreatable penectomy, refractory erectile dysfunction, abnormalities in sperm production, abnormalities in cervical mucus-sperm interaction, or transport);
  - Cervical factor infertility;
  - Vaginismus preventing intercourse;
  - Anovulatory females who have failed to conceive after a 6-month trial of ovulation induction with timed intercourse under the supervision and monitoring of a physician;
  - Absence or abnormality of uterus that precludes conception with evidence of intact ovarian function;
  - Rarer conditions such as immunologic aberration and infections;

or

- Recurrent pregnancy loss (two or more losses of clinical pregnancies).

There are limited diagnostic medical services related to infertility that are not defined as infertility e.g., semen analysis, transvaginal ultrasound of the uterus and ovaries, hormone levels, hysterosalpingogram or saline infusion sonography (SIS) (for the evaluation of fallopian tube and uterine cavity in women who are not known to have comorbidities such as pelvic inflammatory disease, previous ectopic pregnancy or endometriosis), post-

coital test, endometrial biopsy). These services are designed to screen for basic problems that might cause infertility, because the overlying etiology may be a metabolic disorder, or may be related to other disease process, and not infertility based (e.g., for the treatment of a pelvic mass or pelvic pain, thyroid disease, pituitary lesions, etc.). Other services required for the diagnosis or treatment of infertility, or of any associated disease whose predominant manifestation is infertility, to be presented as infertility treatment. Once the medical condition has been resolved and active infertility treatment begins, the services are then considered covered under the infertility benefit.

**POLICY:**

**Paramount Commercial Insurance Plans and Elite (Medicare Advantage) Plans**
**Infertility and Reproductive Services are a contract-specific benefit issue.**
**Infertility and Reproductive Services do not require prior authorization for In-Network Providers when a member has the reproductive infertility benefit and coverage for the procedure indicated.**
**(See terms of medically indicated coverage below)**
**Unless a benefit plans coverage documentation indicates otherwise, the following services related to infertility are excluded from infertility coverage]**

- If the member has an infertility benefit, select infertility services will be covered under the medically indicated coverage criteria indicated below. These services may be considered medical if performed for medical indications and/or diagnoses. Infertility defined services will be denied if the member does not have any type of infertility benefit.
- Unless a benefit plans coverage documentation indicates otherwise, the following services related to infertility are excluded from infertility coverage: 58321, 58322, 58323, 58974, 58976, 89250, 89251, 89253, 89254, 89255, 89257, 89260, 89261, 89264, 89268, 89272, 89280, 89281, 89290, 89291, 89335, 89344, 89352, 89353, 89354, 89356, 89398, 0253U.

**COVERAGE CRITERIA:**

**Paramount Commercial Insurance Plans and Elite (Medicare Advantage) Plans**

The purpose of this medical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. The medical policy does not constitute a contract or guarantee coverage, reimbursement, or payment results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions, and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements.

Unless a benefit plans coverage documentation indicates otherwise, the following services related to infertility are excluded from infertility coverage (may not be an all-inclusive listing):

- Artificial Insemination (AI)
- Assisted Reproductive Technology – treatments that include the handling of eggs and/or embryos.
- Gamete intrafallopian transfer (GIFT)
- Pronuclear stage tubal transfer (PROST)
- Tubal embryo transfer (TET)
- Zygote intrafallopian transfer (ZIFT)
- Additional services not covered under infertility unless a benefit plan indicated otherwise; services for a surrogate, a partner who is not covered under the member's medical benefits, patient has no medical coverage by this Plan, or if there is a minimal chance for a live birth.

**MEDICALLY INDICATED COVERAGE CRITERIA**

**Medical services/procedures for individuals related to the treatment of infertility include (not an all-inclusive list):**

1. **Drug treatments** related to infertility (most drugs are provided through the member's pharmacy benefit and not medical benefit)( Coverage for prescription drugs, if applicable, is limited to medications

approved by the federal Food and Drug Administration for use in the diagnosis and treatment of infertility.)

- Estrogens (e.g., estrone and conjugated estrogens – Premarin);
- Corticosteroids (e.g., dexamethasone, prednisone);
- Progestins (oral or intramuscular progestins, and progesterone vaginal suppositories, Metformin (Glucophage) combined with clomiphene citrate for anovulatory individuals with polycystic ovary syndrome who have not responded to clomiphene citrate;
- Prolactin inhibitors (bromocriptine – Parlodel), 3zoosperm (Permax) for individuals with ovulatory disorders due to hyperprolactinemia clomiphene (Clomid, Serophene);
- Anti-estrogens (tamoxifen – Nolvadex)) for men with elevated estrogen levels;
- Prolactin inhibitors (bromocriptine – Parlodel), cabergoline (Dostinex) for persons with hyperprolactinemia;
- Thyroid hormone replacement for men with thyroid deficiency;
- Androgens (testosterone) for persons with documented androgen deficiency;
- Aromatase inhibitors.

2. **Surgical interventions, treatments, or procedures** related to infertility.
    - Endometrial biopsy;
    - Hysterosalpingography (HSG), or hysterosalpingo contrast-ultrasonography to screen for tubal occlusion;
    - Laparoscopy and contrast dye to assess tubal and other pelvic pathology, and to follow up on HSG abnormalities;
    - Hysteroscopy, salpingoscopy (falloscopy), hydrotubation where clinically indicated;
    - Ultrasound (e.g., ovarian, trans-vaginal, pelvic);
    - Sonohysterogram;
    - Laparoscopy for treatment of pelvic pathology;
    - Ovarian wedge resection or ovarian drilling for individuals with polycystic ovarian syndrome who have not responded to clomiphene citrate;
    - Removal of myomas, uterine septa, cysts, ovarian tumors, and polyps open or laparoscopic resection, vaporization, or fulguration of endometriosis implants plus adhesiolysis in individuals with endometriosis;
    - Laparoscopic cystectomy for individuals with ovarian endometriosis;
    - Hysteroscopic adhesiolysis for individuals with amenorrhea who are found to have intra-uterine adhesions;
    - Hysteroscopic or fluoroscopic tubal cannulation (salpingostomy, fimbrioplasty), selective salpingography plus tubal catheterization, or transcervical balloon tuboplasty for individuals with proximal tubal obstruction;
    - Surgical tubal reconstruction (unilateral or bilateral tuboplasty) and tubal anastomosis for individuals with mid or distal tubal occlusion and for individuals with proximal tubal disease where tubal cannulation has failed or where severe proximal tubal disease precludes the likelihood of successful cannulation;
    - Scrotal exploration;
    - Testicular biopsy;
    - Scrotal (testicular) ultrasound;
    - Venography;
    - Vasography Transrectal ultrasound;
    - CT or MRI imaging of sella turcica if prolactin is elevated.
3. **Laboratory procedures** related to infertility.
    - Chlamydia trachomatis screening;
    - Hysterosalpingogram (HSG);
    - Fasting and 2 hours post 75-gram glucose challenge levels lipid panel (total cholesterol, HDL cholesterol, triglycerides);
    - Rubella serology;
    - Serum hormone levels;

- Androgens (testosterone, free testosterone, androstenedione, dehydroepiandrosterone sulfate) if there is evidence of hyperandrogenism (e.g., hirsutism, acne, signs of virilization), or ovulatory dysfunction;
- Gonadotropins (serum FSH, LH);
- FSH is the standard of care for determination of menopausal status;
- Prolactin for individuals with an ovulatory disorder, galactorrhea, or a pituitary tumor;
- Prolactin for men with reduced sperm counts, galactorrhea, or pituitary tumors;
- Progestins (progesterone, 17-hydroxyprogesterone);
- Estrogens (e.g., estradiol, estrone);
- Testosterone (total and free);
- Thyroid stimulating hormone (TSH);
- Adrenocortitrophic hormone (ACTH) to rule out Cushing's syndrome or Addison's disease in individuals who are amenorrheic, clomiphene citrate challenge test;
- Anti-sperm antibodies (e.g., immunobead or mixed antiglobulin method);
- Cultures;
- Urine;
- Semen;
- Prostatic secretion;
- Sex hormone binding globulin (SHGB) for men with signs and symptoms of hypogonadism, and low normal testosterone levels.
- Semen analysis is primarily performed for infertility analysis, and considered the primary screening test for the male anatomy factor infertility. The analysis will review volume concentration, motility, pH, fructose, leukocytes, and morphology to make a clinical diagnosis.
    - Procedure codes G0027 and 89310 are covered under the medical benefit when reported specifically with diagnosis code Z30.8 (Encounter for other specified contraceptive management, encounter for postvasectomy sperm count) in the <u>first diagnosis field</u> on the claim form.

**Fertility Preservation –** Paramount considers fertility preservation to be medically necessary and eligible for reimbursement when all of the following criteria are met:

- Anticipated infertility will be unavoidable, permanent, and irreversible; and
- Infertility is iatrogenic in nature (e.g., caused by chemotherapy, radiation treatment, gonadotoxic therapies, and/or bilateral oophorectomy due to malignancy); and
- Fertility preservation services are provided by a physician or under the supervision of a physician; and
- Services include at least one of the following:
    - Oocyte retrieval (58970); or
    - Embryo cryopreservation* (89258); or
    - Oocyte cryopreservation* (89337); or
    - Cryopreservation of sperm* (89259).

***Coverage of cryopreservation storage services (Codes 89342, 89343, 89346) is limited to one year.**

**Cryopreservation and storage of testicular tissue (55899, 89335, 89344, 89398) or ovarian tissue (58999, 89344, 89398) is considered investigational and not eligible for reimbursement.**

**Infertility-Treatment, the following services may be considered medically indicated in the treatment of established infertility:**

1. **Insemination Procedures**
    - Artificial Insemination (AI)
        - Intrauterine insemination (IUI) is a method of artificial insemination, placement of semen into the female reproductive tract, rather than through intercourse

- Medical documentation supporting IUI must be due to at least on the following:
  - Surgically treated endometriosis;
  - Fallopian tube blockage or removal, not as a result of voluntary sterilization, with documentation of patency of one fallopian tube;
  - Untreatable, abnormal male factors contributing to infertility, not as a result of voluntary sterilization (untreatable retrograde ejaculation, untreatable penectomy, refractory erectile dysfunction);
  - Evidence of discordance for sexually transmitted disease carriage (e.g., human immunodeficiency disease carriage, hepatitis B or C);
  - Cervical factor infertility;
  - Vaginismus preventing intercourse;
  - Anovulatory females who have failed to conceive after a 6-month trial of ovulation induction with timed intercourse under the supervision and monitoring of a physician;
  - Unexplained infertility in the member or member's spouse after at least 1 year of regular unprotected vaginal sexual intercourse. (Note: Unexplained infertility is defined as no detected abnormalities identified from standard infertility diagnostic testing).

2. **Assisted Reproductive Technology** – treatments that include the handling of eggs and/or embryos
   - In vitro fertilization (IVF) – In Vitro Fertilization (IVF) is an assisted reproductive technology (ART). IVF is the process of fertilization by extracting eggs, retrieving a sperm sample, and then manually combining an egg and sperm in a laboratory dish. It starts as a single cell before dividing into 2 cells, then 4 cells, 8 cells before becoming a blastocyst. A blastocyst is an embryo that has developed 6 days after fertilization and is ready to be implanted into the uterus. The embryo(s) is then transferred to the uterus.
   - Gamete intrafallopian transfer (GIFT) – uses multiple eggs collected from the ovaries. The eggs are placed into a thin flexible tube (catheter) along with the sperm to be used. The gametes (both eggs and sperm) are then injected into the fallopian tubes.
   - Pronuclear stage tubal transfer (PROST) – similar to ZIFT, uses in-vitro fertilization. However, it transfers the fertilized egg to the fallopian tube before cell division occurs.
   - Tubal embryo transfer (TET) – Tubal embryo transfer is similar to GIFT and ZIFT in that, as the name says, it is based upon the transfer of embryos. However, the embryos are at a more advanced stage of development than with these other procedures. With TET the embryos are transferred back into the woman 2 days after fertilization. This is at the '2 cell or 4 cell' stage.
   - Zygote intrafallopian transfer (ZIFT) – combines IVF and GIFT. Eggs are stimulated and collected using IVF methods. Then the eggs are mixed with sperm in the lab. Fertilized eggs (zygotes) are then laparoscopically returned to the fallopian tubes where they will be carried into the uterus. With ZIFT the embryos are transferred back into the woman the day after fertilization. This is known as the '1 cell' or 'zygote' stage. The goal is for the zygote to implant in the uterus and develop into a fetus.

- Associated services which may include but are not limited to the following:
  - Ovulation induction;
  - Oocyte retrieval;
  - Either culture of oocyte(s), less than 4 days, or extended culture and fertilization of oocyte(s), 4-7 days;
  - Either insemination of oocytes, or assisted oocyte fertilization, microtechnique, either less than or greater than 10 oocytes;
  - Sperm isolation; identification, preparation;
  - Associated laboratory tests;
  - Preparation of embryo for transfer;
  - Ultrasounds;
  - Embryo, zygote, or gamete transfer, intrauterine or intrafallopian.

- Assisted Reproductive Technology (In Vitro Fertilization) may be considered medically indicated provided other less invasive therapies, where appropriate, have failed (e.g., intrauterine insemination):
    - When the member and the member's spouse have a history of unexplained infertility of at least two years duration;
    - OR
    - The member or the member's spouse has infertility associated with one or more of the following medical conditions:
        - Stage 4 surgically treated endometriosis;
        - Exposure in utero to diethylstilbestrol, commonly known as DES;
        - Blockage or removal of one or both fallopian tubes, not as a result of voluntary sterilization
        - Untreatable, abnormal male factors contributing to infertility, not as a result of voluntary sterilization (untreatable retrograde ejaculation, untreatable penectomy, refractory erectile dysfunction, abnormalities in sperm production, abnormalities in cervical mucus-sperm interaction, or transport);
            - In addition, the male partner has been evaluated by a urologist who confirms condition cannot be improved by standard conservative treatment(s) and cannot be addressed via IUI.
        - Cervical factor infertility;
        - Vaginismus preventing intercourse;
        - Anovulatory females who have failed to conceive after a 6-month trial of ovulation induction with timed intercourse under the supervision and monitoring of a physician; or
        - Absence or abnormality of uterus that precludes conception with evidence of intact ovarian function
        - Rarer conditions such as immunologic aberration and infections

Members must meet above medical indicated criteria

- For members < 35 years of age
    - 1st IVF treatment cycle: SET (single embryo transfer) is required
        - If there are no top-quality embryos after thawing, then two or more embryos of any quality may be transferred
    - 2nd and subsequent IVF treatment cycles:
        - SET (single thawed elective embryo transfer; aka, SET/FET- SINGLE EMBRYO TRANSFER- FROZEN EMBRYO TRANSFER) is required if member has one or more embryos frozen
            - If there are no top-quality embryos after thawing, then two embryos of any quality may be transferred
        - Fresh IVF cycle with SET if no frozen embryos available
            - If there are no top-quality embryos after thawing, then two embryos of any quality may be transferred
    - For all treatment cycles, all normal frozen embryos must be used before another fresh cycle may be approved
- For members 35–38 years of age
    - 1st IVF treatment cycle: SET is required
        - If no top-quality embryo is available, then two embryos of any quality may be transferred
    - 2nd and subsequent IVF treatment cycles do not need to be SET
    - For all treatment cycles, all normal frozen embryos must be used before another fresh cycle may be approved

- For members < 38 years of age and had successful IVF treatment cycle (i.e., had a live birth from that IVF treatment)
    - 1st IVF treatment cycle:
        - SET is required if member has one or more embryos frozen
            - If there are no top-quality embryos after thawing, then two embryos of any quality may be transferred
        - Fresh IVF cycle with SET if no frozen embryos available
            - If only no top-quality embryo is available, then two embryos of any quality may be transferred
    - 2nd and subsequent IVF treatment cycles do not need to be SET
    - For all treatment cycles, all normal frozen embryos must be used before another fresh cycle may be approved
- Members 38 years of age and older undergoing IVF treatment do not need to attempt a SET, as their risk of multiple births is low
    - For all treatment cycles, all normal frozen embryos must be used before another fresh cycle may be approved

- Frozen Embryo Transfers (FET)
    - Medically indicated coverage for FET must meet the definition of infertility and expect fertility as a natural state.
    - It is clinically appropriate and cost effective to utilize all appropriate frozen embryos for transfer prior to another fresh ART cycle (fresh oocyte retrievals are not indicated when frozen oocytes or embryos are available and appropriate for transfer)

**Third Party Reproduction:** donor oocytes, donor embryos, gestational carriers

- Gamete donation may be considered medically indicated when any of the following criteria are met:
    - Recipient individual diagnosed with premature ovarian failure.
    - Recipient individual's partner diagnosed with azoospermia.
    - Recipient individual or partner is a carrier of a genetically transmitted disorder.
    - Recipient individual has poor gamete quality in two previous IVF cycles.
- Embryo donation is considered medically indicated when any of the following criteria are met:
    - Recipient individual diagnosed with untreatable infertility.
    - Recipient individual experienced recurrent pregnancy loss thought to be related to embryonic factors.
    - Recipient individual or partner carries a genetically transmitted disorder.
- A gestational carrier is considered medically indicated when any of the following criteria are met:
    - Recipient individual does not have a uterus.
    - Recipient individual diagnosed with uterine anomalies that cannot be repaired.
    - Recipient individual diagnosed with a medical condition for which pregnancy may pose a life-threatening risk.

**Non-Covered Infertility**, but are not limited to the following; (unless otherwise indicated in the member's benefit of coverage)

- Infertility as a result of voluntary sterilization, e.g., vasectomy or tubal ligation
- Infertility resulting from natural age-related hormone reduction (I.e., postmenopausal or 45 years of age or older)
- Any Infertility services or supplies beyond the benefit maximum [dollars or procedure limit(s)]
- Gender selection
- When a surrogate is used for purposes of childbirth
    - The following services related to a Gestational Carrier or Surrogate:
        - All costs related to reproductive techniques including:
            - Assisted Reproductive Technology (ART)
            - Artificial insemination

        - Intrauterine insemination
        - Obtaining and transferring embryo(s)
        - Preimplantation Genetic Testing (PGT) and related services
        - The exclusion for costs related to reproductive techniques does not apply when the Gestational Carrier or Surrogate is a Covered Person for whom Benefits are provided
    - Health care services including:
        - Inpatient or outpatient prenatal care and/or preventive care
        - Screenings and/or diagnostic testing
        - Delivery and post-natal care

      The exclusion for the health care services listed above does not apply when the Gestational Carrier or Surrogate is a Covered Person.
    - All fees including:
        - Screening, hiring and compensation of a Gestational Carrier or Surrogate including surrogacy agency fees
        - Surrogate insurance premiums
        - Travel or transportation fees
- Presence of any one of the following contraindications: active cervical, uterine or pelvic infection; absence of uterus; bilateral fallopian tube obstruction or absence; bilateral absence of ovaries; or other known causes of complete anovulation
- Donor services for donor sperm, ovum or oocytes (eggs), or embryos.
    - Donor eggs – The cost of donor eggs, including medical cost related to donor stimulation and egg retrieval is excluded. Cost for fertilization (in vitro fertilization or intracytoplasmic sperm injection), embryo culture, and embryo transfer may be covered if the member has an Infertility benefit that allows for Assisted Reproductive Technology.
    - Donor sperm – The cost of procurement and storage of donor sperm is excluded. However, the thawing and insemination are covered if the member has an Infertility benefit that allows for artificial donor insemination
- Long-term storage (greater than one year) of reproductive materials such as sperm, eggs, embryos, ovarian tissue and testicular tissue
- In-vitro fertilization that is not an Assisted Reproductive Technology for the treatment of Infertility. This would include, but is not limited to, elective fertility preservation, and embryo accumulation/banking.
- Preimplantation Genetic Testing – Monogenic/Single Gene Defects (PGT-M) and Preimplantation Genetic Testing – Chromosomal Structure Rearrangements (PGT-SR) unless the member has a benefit that includes these services

Any procedure or service performed for reversal of sterilization is also excluded from coverage. This surgery and/or related services (including sterilization by tubal ligation or vasectomy) are excluded services for couples in which either of the partner has had a previous sterilization procedure. These services will be denied for all product lines. The Elite member must have signed an ABN, otherwise the claim may be adjusted to deny to the provider.

The following services are considered **experimental, investigational, and/or unproven** for establishing the diagnosis and/or underlying etiology of infertility, not an all-inclusive listing:

- Anti-sperm antibodies (e.g., immunobead or mixed antiglobulin method);
- Assisted hatching (exception: may be performed in women over the age of 40, or in cases in which prior ART attempts resulted in failed implantation);
- Computer-assisted sperm analysis (CASA);
- Gene expression profiling for endometrial receptivity analysis;
- Hamster testing or Sperm Penetration Assay;
- Hemizona assay (HZA);
- Hyaluronan binding assay (HBA);
- Inhibin B testing;

- Immunological testing (e.g., antiprothrombin antibodies, circulating natural killer cell measurement, antiphospholipid;
- antibodies);
- Post-coital testing (Simms-Huhner test) of cervical mucus;
- Reactive oxygen species (ROS) test;
- Saline-air infused sono-hysterosalpingogram (e.g., FemVue);
- Specialized sperm retrieval techniques including, vasal sperm aspiration, microsurgical epididymal sperm aspiration (MESA), percutaneous epididymal sperm aspiration (PESA), electroejaculation, testicular sperm aspiration (TESA), seminal vesicle sperm aspiration, and sperm recovery from bladder or urine for retrograde ejaculation, are considered not medically necessary;
- Sperm acrosome reaction test;
- Sperm DNA integrity testing (Sperm Chromatin Structure Assay [SCSA], Comet Assay, Sperm DNA
    - fragmentation assay, TUNEL assay);
- Sperm penetration assays;
- Uterine and endometrial receptivity testing (e.g., Endometrial Function Test™ [EFT®]; integrin testing, Beta-3 integrin;
- test, E-tegrity®, endometrial receptivity array [ERA]);
- Vaginal microbiome testing.

The following services are considered experimental, investigational and/or unproven in the treatment of infertility, not an all-inclusive listing:

- Acupuncture;
- Assisted hatching;
- Co-culture of embryos;
    - Culture and fertilization of oocytes less than 4 days; with co-culture of oocytes/embryos. Co-culture techniques involve tissue culture of human embryos in the presence of oviductal, uterine, granulosa, or other cells. The procedure involves the isolation of the substrate cells, culture, plating, and co-culture of these cells with human embryos. The purpose of co-culture is to produce a more viable embryo at the blastocyst stage of development for subsequent transfer to the uterus. Co-culture is not routinely done as part of all IVF procedures; the technique may not be available in all infertility labs
- Cryopreservation and storage of testicular tissue or ovarian tissue;
- Direct intraperitoneal insemination, intrafollicular insemination, fallopian tube sperm transfusion;
- Early Embryo Viability Assessment (Eeva) test;
- EmbryoGlue®;
- Growth hormone for infertility treatment;
- Hyaluronan binding assay (HBA);
- Hyperbaric oxygen treatment;
- Intracytoplasmic sperm injection (ICSI) in the absence of male factor infertility;
- Intravenous immunoglobulins for treatment of infertility;
- Intravenous fat emulsions for treatment of infertility;
- Immune treatments (e.g., leukocyte immunization, intravenous immunoglobulins);
- In vitro maturation (IVM) of oocytes;
- Intravaginal culture of oocytes (e.g., INVOcell);
- Leukocyte immunization (immunizing the female partner with the male partner's leukocytes);
- Parenteral administration of lipids;
- Treatments to improve uterine/endometrial receptivity (e.g., immunotherapy, endometrial scratching, uterine artery vasodilation);
- Uterine transplant;
- Vaginal sildenafil;
- Vasodilators for women undergoing fertility treatment.

When the member's plan does not include benefits for Infertility, the following services are not covered, may not be an all-inclusive listing:

- All health care services and related expenses for infertility treatments, including Assisted Reproductive Technology, regardless of the reason for the treatment.
- In vitro fertilization regardless of the reason for treatment.
- Storage and retrieval of all reproductive materials. Examples include eggs, sperm, testicular tissue and ovarian tissue.

**CODING/BILLING INFORMATION:**
**The appearance of a code in this section does not necessarily indicate coverage. Codes that are covered may have selection criteria that must be met. Payment for supplies may be included in payment for other services rendered.**

| **INFERTILITY SERVICES** | |
|---|---|
| **CODES** | |
| **00840** | Anesthesia for intraperitoneal procedures in lower abdomen including laparoscopy, not otherwise specified |
| **00920** | Anesthesia for procedures on male genitalia (including open urethral procedures); not otherwise specified |
| **00940** | Anesthesia for vaginal procedures (including biopsy of labia, vagina, cervix or endometrium); not otherwise specified |
| **00952** | Anesthesia for vaginal procedures (including biopsy of labia, vagina, cervix or endometrium); hysteroscopy and/or hysterosalpingography |
| **49320** | Laparoscopy, abdomen, peritoneum, and omentum, diagnostic, with or without collection of specimen(s) by brushing or washing (separate procedure) |
| **54500** | Biopsy of testis, needle (separate procedure) |
| **54505** | Biopsy of testis, incisional (separate procedure) |
| **54800** | Biopsy of epididymis, needle |
| **55300** | Vasotomy for vasograms, seminal vesiculograms, or epididymograms, unilateral or bilateral |
| **55400** | Vasovasostomy, vasovasorrhaphy |
| **55530** | Excision of varicocele or ligation of spermatic veins for varicocele; (separate procedure) |
| **55535** | Excision of varicocele or ligation of spermatic veins for varicocele; abdominal approach (separate procedure) |
| **55550** | Laparoscopy, surgical, with ligation of spermatic veins for varicocele |
| **55870** | Electroejaculation |
| **55899** | Unlisted procedure, male genital system |
| **58140** | Myomectomy, excision of fibroid tumor(s) of uterus, 1 to 4 intramural myoma(s) with total weight of 250 g or less and/or removal of surface myomas; abdominal approach |
| **58145** | Myomectomy, excision of fibroid tumor(s) of uterus, 1 to 4 intramural myoma(s) with total weight of 250 g or less and/or removal of surface myomas; vaginal approach |
| **58146** | Myomectomy, excision of fibroid tumor(s) of uterus, 5 or more intramural myomas and/or intramural myomas with total weight greater than 250 g, abdominal approach |
| **58321** | Artificial insemination; intra-cervical [Unless a benefit plans coverage documentation indicates otherwise, the following services related to infertility are excluded from infertility coverage] |
| **58322** | Artificial insemination; intra-uterine [Unless a benefit plans coverage documentation indicates otherwise, the following services related to infertility are excluded from infertility coverage] |
| **58323** | Sperm washing for artificial insemination [Unless a benefit plans coverage documentation indicates otherwise, the following services related to infertility are excluded from infertility coverage] |
| **58340** | Catheterization and introduction of saline or contrast material for saline infusion hysterosonography (SIS) or hysterosalpingography |
| **58345** | Transcervical introduction of fallopian tube catheter for diagnosis and/or re-establishing patency (any method), with or without hysterosalpingography |

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|---|---|
| **58350** | Chromotubation of oviduct, including materials |
| **58545** | Laparoscopy, surgical, myomectomy, excision; 1 to 4 intramural myomas with total weight of 250 g or less and/or removal of surface myomas |
| **58546** | Laparoscopy, surgical, myomectomy, excision; 5 or more intramural myomas and/or intramural myomas with total weight greater than 250 g |
| **58555** | Hysteroscopy, diagnostic (separate procedure) |
| **58558** | Hysteroscopy, surgical; with sampling (biopsy) of endometrium and/or polypectomy, with or without D & C |
| **58559** | Hysteroscopy, surgical; with lysis of intrauterine adhesions (any method) |
| **58660** | Laparoscopy, surgical; with lysis of adhesions (salpingolysis, ovariolysis) (separate procedure) |
| **58662** | Laparoscopy, surgical; with fulguration or excision of lesions of the ovary, pelvic viscera, or peritoneal surface by any method |
| **58670** | Laparoscopy, surgical; with fulguration of oviducts (with or without transection) |
| **58672** | Laparoscopy, surgical; with fimbrioplasty |
| **58673** | Laparoscopy, surgical; with salpingostomy (salpingoneostomy) |
| **58740** | Lysis of adhesions (salpingolysis, ovariolysis) |
| **58750** | Tubotubal anastomosis |
| **58752** | Tubouterine implantation |
| **58760** | Fimbrioplasty |
| **58770** | Salpingostomy (salpingoneostomy) |
| **58800** | Drainage of ovarian cyst(s), unilateral or bilateral (separate procedure); vaginal approach |
| **58805** | Drainage of ovarian cyst(s), unilateral or bilateral (separate procedure); abdominal approach |
| **58970** | Follicle puncture for oocyte retrieval, any method |
| **58974** | Embryo transfer, intrauterine [Unless a benefit plans coverage documentation indicates otherwise, the following services related to infertility are excluded from infertility coverage] |
| **58976** | Gamete, zygote, or embryo intrafallopian transfer, any method [Unless a benefit plans coverage documentation indicates otherwise, the following services related to infertility are excluded from infertility coverage] |
| **58999** | Unlisted procedure, female genital system (nonobstetrical) |
| **74440** | Vasography, vesiculography, or epididymography, radiological supervision and interpretation |
| **74740** | Hysterosalpingography, radiological supervision and interpretation |
| **74742** | Transcervical catheterization of fallopian tube, radiological supervision and interpretation |
| **76830** | Ultrasound, transvaginal |
| **76831** | Saline infusion sonohysterosonography (SIS), including color flow Doppler, when performed |
| **76856** | Ultrasound pelvic (nonobstetric), real time with image documentation; complete |
| **76857** | Ultrasound pelvic (nonobstetric), real time with image documentation; limited or follow-up (eg, for follicles) |
| **76870** | Ultrasound, scrotum and contents |
| **76872** | Ultrasound, transrectal |
| **76948** | Ultrasonic guidance for aspiration of ova, imaging and supervision |
| **80414** | Chorionic gonadotropin stimulation panel; testosterone response |
| **80415** | Chorionic gonadotropin stimulation panel; estradiol response |
| **80426** | Gonadotropin releasing hormone stimulation panel This panel must include the following: Follicle stimulating hormone (FSH) (83001 x 4) Luteinizing hormone (LH) (83002 x 4) |
| **81224** | CFTR (cystic fibrosis transmembrane conductance regulator) (e.g., cystic fibrosis) gene analysis; intron 8 poly-T analysis (e.g., male infertility) |
| **82397** | Chemiluminescent assay |
| **82626** | Dehydroepiandrosterone (DHEA) |
| **82627** | Dehydroepiandrosterone-sulfate (DHEA-S) |
| **82670** | Estradiol |
| **82671** | Estrogens, fractionated |

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| **82672** | Estrogens, total |
| **82679** | Estrone |
| **82757** | Fructose, semen |
| **83001** | Gonadotropin; follicle stimulating hormone (FSH) |
| **83002** | Gonadotropin; luteinizing hormone (LH) |
| **83498** | Hydroxyprogesterone, 17-d |
| **83520** | Immunoassay for analyte other than infectious agent antibody or infectious agent antigen; quantitative, not otherwise specified |
| **84144** | Progesterone |
| **84146** | Prolactin |
| **84402** | Testosterone; free |
| **84403** | Testosterone; total |
| **84443** | Thyroid stimulating hormone (TSH) |
| **84830** | Ovulation tests, by visual color comparison methods for human luteinizing hormone |
| **88182** | Flow cytometry, cell cycle or DNA analysis |
| **88248** | Chromosome analysis for breakage syndromes; baseline breakage, score 50-100 cells, count 20 cells, 2 karyotypes (e.g., for ataxia telangiectasia, Fanconi anemia, fragile X) |
| **88261** | Chromosome analysis; count 5 cells, 1 karyotype, with banding |
| **88262** | Chromosome analysis; count 15-20 cells, 2 karyotypes, with banding |
| **88263** | Chromosome analysis; count 45 cells for mosaicism, 2 karyotypes, with banding |
| **88273** | Molecular cytogenetics; chromosomal in situ hybridization, analyze 10-30 cells (e.g., for microdeletions) |
| **88280** | Chromosome analysis; additional karyotypes, each study |
| **88283** | Chromosome analysis; additional specialized banding technique (e.g., NOR, C-banding |
| **88285** | Chromosome analysis; additional cells counted, each study |
| **89250** | Culture of oocyte(s)/embryo(s), less than 4 days [Unless a benefit plans coverage documentation indicates otherwise, the following services related to infertility are excluded from infertility coverage] |
| **89251** | Culture of oocyte(s)/embryo(s), less than 4 days; with co-culture of oocyte(s)/embryos [Unless a benefit plans coverage documentation indicates otherwise, the following services related to infertility are excluded from infertility coverage] |
| **89253** | Assisted embryo hatching, micro techniques (any method) [Unless a benefit plans coverage documentation indicates otherwise, the following services related to infertility are excluded from infertility coverage] |
| **89254** | Oocyte identification from follicular fluid [Unless a benefit plans coverage documentation indicates otherwise, the following services related to infertility are excluded from infertility coverage] |
| **89255** | Preparation of embryo transfer (any method) [Unless a benefit plans coverage documentation indicates otherwise, the following services related to infertility are excluded from infertility coverage] |
| **89257** | Sperm identification from aspiration (other than seminal fluid) [Unless a benefit plans coverage documentation indicates otherwise, the following services related to infertility are excluded from infertility coverage] |
| **89258** | Cryopreservation; embryo(s) |
| **89259** | Cryopreservation; sperm |
| **89260** | Sperm isolation; simple prep (e.g., sperm wash and swim-up) for insemination or diagnosis with semen analysis [Unless a benefit plans coverage documentation indicates otherwise, the following services related to infertility are excluded from infertility coverage] |
| **89261** | Sperm isolation; complex prep (e.g., Percoll gradient, albumin gradient) for insemination or diagnosis with semen analysis [Unless a benefit plans coverage documentation indicates otherwise, the following services related to infertility are excluded from infertility coverage] |

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| **89264** | Sperm identification from testis tissue, fresh or cryopreserved [Unless a benefit plans coverage documentation indicates otherwise, the following services related to infertility are excluded from infertility coverage] |
| **89268** | Insemination of oocytes [Unless a benefit plans coverage documentation indicates otherwise, the following services related to infertility are excluded from infertility coverage] |
| **89272** | Extended culture of oocyte(s)/embryo(s), 4-7 days [Unless a benefit plans coverage documentation indicates otherwise, the following services related to infertility are excluded from infertility coverage] |
| **89280** | Assisted oocyte fertilization, micro technique; less than or equal to 10 oocytes [Unless a benefit plans coverage documentation indicates otherwise, the following services related to infertility are excluded from infertility coverage] |
| **89281** | Assisted oocyte fertilization, micro technique; greater than 10 oocytes [Unless a benefit plans coverage documentation indicates otherwise, the following services related to infertility are excluded from infertility coverage] |
| **89290** | Biopsy, oocyte polar body or embryo blastomeric, micro technique (for pre-implantation genetic diagnosis); less than or equal to 5 embryos [Unless a benefit plans coverage documentation indicates otherwise, the following services related to infertility are excluded from infertility coverage] |
| **89291** | Biopsy, oocyte polar body or embryo blastomeric, micro technique (for pre-implantation genetic diagnosis); greater than 5 embryos [Unless a benefit plans coverage documentation indicates otherwise, the following services related to infertility are excluded from infertility coverage] |
| **89300** | Semen analysis; presence and/or motility of sperm including Huhner test (post coital) |
| **89310** | Semen analysis; motility and count (not including Huhner test) [Considered under the medical benefit when reported specifically with diagnosis ICD-10 code Z30.8 (Encounter for other specified contraceptive management, encounter for post vasectomy sperm count) in the first diagnosis field on the claim form.] |
| **89320** | Semen analysis; complete (volume, count, motility, and differential) |
| **89321** | Semen analysis, sperm presence and/or motility of sperm, if performed |
| **89322** | Semen analysis; volume, count, motility, and differential using strict morphologic criteria (eg, Kruger) |
| **89325** | Sperm antibodies |
| **89329** | Sperm evaluation; hamster penetration test |
| **89330** | Sperm evaluation; cervical mucus penetration test, with or without spinnbarkeit test |
| **89331** | Sperm evaluation; for retrograde ejaculation, urine (sperm concentration, motility, and morphology, as indicated) |
| **89335** | Cryopreservation, reproductive tissue, testicular [Unless a benefit plans coverage documentation indicates otherwise, the following services related to infertility are excluded from infertility coverage] |
| **89337** | Cryopreservation, mature oocyte(s) |
| **89342** | Storage, (per year); embryo(s) [Limited to one year] |
| **89343** | Storage, (per year); sperm/semen [Limited to one year] |
| **89344** | Storage (per year); reproductive tissue, testicular/ovarian [Unless a benefit plans coverage documentation indicates otherwise, the following services related to infertility are excluded from infertility coverage] |
| **89346** | Storage, (per year); oocyte(s) [Limited to one year] |
| **89352** | Thawing of cryopreserved; embryo(s) [Unless a benefit plans coverage documentation indicates otherwise, the following services related to infertility are excluded from infertility coverage] |
| **89353** | Thawing of cryopreserved; sperm/semen, each aliquot [Unless a benefit plans coverage documentation indicates otherwise, the following services related to infertility are excluded from infertility coverage] |

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| **89354** | Thawing of cryopreserved; reproductive tissue, testicular/ovarian [Unless a benefit plans coverage documentation indicates otherwise, the following services related to infertility are excluded from infertility coverage] |
| **89356** | Thawing of cryopreserved; oocytes, each aliquot [Unless a benefit plans coverage documentation indicates otherwise, the following services related to infertility are excluded from infertility coverage] |
| **89398** | Unlisted reproductive medicine laboratory procedure [Unless a benefit plans coverage documentation indicates otherwise, the following services related to infertility are excluded from infertility coverage] |
| **0253U** | Reproductive medicine (endometrial receptivity analysis), RNA gene expression profile, 238 genes by next-generation sequencing, endometrial tissue, predictive algorithm reported as endometrial window of implantation (eg, pre-receptive, receptive, post-receptive) [Unless a benefit plans coverage documentation indicates otherwise, the following services related to infertility are excluded from infertility coverage] |
| **G0027** | Semen analysis; presence and/or motility of sperm excluding huhner [Considered under the medical benefit when reported specifically with diagnosis ICD-10 code Z30.8 (Encounter for other specified contraceptive management, encounter for post vasectomy sperm count) in the first diagnosis field on the claim form.] |
| **J0725** | Injection, chorionic gonadotropin, per 1,000 USP units |
| **J1950** | Injection, leuprolide acetate (for depot suspension), per 3.75 mg |
| **J3355** | Injection, urofollitropin, 75 IU |
| **Q0115** | Post-coital direct, qualitative examinations of vaginal or cervical mucous |
| **INFERTILITY ICD-10 DIAGNOSIS CODES** | |
| **CODES** | |
| **N4601** | Organic azoospermia |
| **N46021** | Azoospermia due to drug therapy |
| **N46022** | Azoospermia due to infection |
| **N46023** | Azoospermia due to obstruction of efferent ducts |
| **N46024** | Azoospermia due to radiation |
| **N46025** | Azoospermia due to systemic disease |
| **N46029** | Azoospermia due to other extra testicular causes |
| **N4611** | Organic oligospermia |
| **N46121** | Oligospermia due to drug therapy |
| **N46122** | Oligospermia due to infection |
| **N46123** | Oligospermia due to obstruction of efferent ducts |
| **N46124** | Oligospermia due to radiation |
| **N46125** | Oligospermia due to systemic disease |
| **N46129** | Oligospermia due to other extratesticular causes |
| **N468** | Other male infertility |
| **N469** | Male infertility, unspecified |
| **N970** | Female infertility associated with anovulation |
| **N971** | Female infertility of tubal origin |
| **N972** | Female infertility of uterine origin |
| **N978** | Female infertility of other origin |
| **N979** | Female infertility, unspecified |
| **N981** | Hyper stimulation of ovaries |
| **N982** | Complications of attempted introduction of fertilized ovum following in vitro fertilization |
| **N983** | Complications of attempted introduction of embryo in embryo transfer |
| **N988** | Other complications associated with artificial fertilization |
| **N989** | Complication associated with artificial fertilization, unspecified |
| **Z310** | Encounter for reversal of previous sterilization |

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| **Z3142** | Aftercare following sterilization reversal |
| **Z3181** | Encounter for male factor infertility in female patient |
| **Z3183** | Encounter for assisted reproductive fertility procedure cycle |
| **Z3184** | Encounter for fertility preservation procedure |
| **Z3189** | Encounter for other procreative management |
| **Z319** | Encounter for procreative management, unspecified |
| **Z52810** | Egg (Oocyte) donor under age 35, anonymous recipient |
| **Z52811** | Egg (Oocyte) donor under age 35, designated recipient |
| **Z52812** | Egg (Oocyte) donor age 35 and over, anonymous recipient |
| **Z52813** | Egg (Oocyte) donor age 35 and over, designated recipient |
| **Z52819** | Egg (Oocyte) donor, unspecified |

**REVISION HISTORY EXPLANATION: ORIGINAL EFFECTIVE DATE: 01/01/2009**

| Date | Explanation & Changes |
|---|---|
| **05/16/11** | • Per the Medical Policy Steering Committee review/determination, procedure 89322 (semen analysis) will be reimbursed under the medical benefit when billed with diagnosis V25.8 (other specified contraceptive management) |
| **11/04/11** | • Per the Medical Policy Steering Committee review/determination, procedures 89300, 89320, and 89322 will be reimbursed under the infertility benefit (these procedures were previously policy exclusions under the infertility benefit). |
| **12/04/12** | • Per Medical Review, procedure 89321 will be reimbursed under the infertility benefit (this procedure was previously a policy exclusion under the infertility benefit) with the same review logic addressed on 11/04/11 |
| **12/09/14** | • Per the Medical Policy Steering Committee review/determination, procedure 89310 (semen analysis) reimbursed under the medical benefit when billed with diagnosis V25.8 (other specified contraceptive management). ICD-10 codes added from ICD-9 conversion. Policy reviewed and updated to reflect most current clinical evidence |
| **03/18/16** | • Added ICD-10 codes N98.1, N98.2, N98.3, N98.8 and N98.9 to policy |
| **11/23/16** | • Gender verbiage changes completed per Meaningful Access Section 1557 of the Affordable Care Act |
| **02/13/18** | • Removed ICD-9 codes. Added codes 89335, 89337, & 89344 as non-covered. Policy reviewed and updated to reflect most current clinical evidence per Medical Policy Steering Committee |
| **12/14/2020** | • Medical policy placed on the new Paramount Medical policy format |
| **02/01/2022** | • Revised Medical Policy to reflect most current clinical evidence<br>• The medical policy was revised to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. The medical policy does not constitute a contract or guarantee coverage, reimbursement or payment results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements. |
| **02/06/2023** | • Medical Policy updated to reflect Medicaid coverage to Anthem as of 02/01/2023 |
| **11/14/2023** | • Correction made. When placing the documentation r/t to the Anthem coverage for the Medicaid plan, on 02/06/2023, the old medical policy was utilized in error. This is the most up-to-date policy. Error corrected. |
| **02/01/2024** | • Medical Policy placed on the new Paramount Medical Policy format |
| **11/01/2024** | • Medical Policy reviewed and updated to reflect the most current clinical evidence.<br>• Removed S-Codes S0122 S0126 S0128 S0132 S3655 S4011 S4013 S4014 S4015 S4016 S4017 S4018 S4020 S4021 S4022 S4023 S4025 S4026 S4027 S4028 S4030 S4031 S4035 S4037 S4040 S4042, Paramount no longer supports/reimburses S-codes |

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| **01/16/2025** | • Medical Policy reviewed and updated to reflect the most current clinical evidence<br>• Added codes 58970, 89258, 89337, 89259 covered to align with Medical Mutual policy 202302 Fertility Preservation for Iatrogenic Infertility<br>• Added coverage of cryopreservation storage services codes 89342, 89343, 89346 limited to one year |

**Paramount reserves the right to review and revise our policies periodically when necessary. When there is an update, we will publish the most current policy to** https://www.paramounthealthcare.com/providers/medical-policies/policy-library

**REFERENCES/RESOURCES**


Centers for Medicare and Medicaid Services, CMS Manual System and other CMS publications and services https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/Internet-Only-Manuals-IOMs

National Physician Fee Schedule Relative Value File Calendar Year XXXX, Centers for Medicare & Medicaid Services (CMS) https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeeSched/PFS-Relative-Value-Files

NCCI Policy Manual for Medicare Services, current version, Chapter 1, General Correct Coding Policies https://www.cms.gov/files/document/medicare-ncci-policy-manual-2023-chapter-1.pdf

American Medical Association, *Current Procedural Terminology (CPT®)* and associated publications and services https://www.ama-assn.org/amaone/cpt-current-procedural-terminology

Centers for Medicare and Medicaid Services, Healthcare Common Procedure Coding System, HCPCS Release and Code Sets https://www.cms.gov/Medicare/Coding/HCPCSReleaseCodeSets/HCPCS-Quarterly-Update

Centers for Medicare & Medicaid Services (CMS), ICD-10-CM Official Guidelines for Coding and Reporting https://www.cms.gov/medicare/coding/icd10

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Centers for Medicare & Medicaid Services (CMS), National Correct Coding Initiative (NCCI) Policy Manual for Medicare Services https://www.cms.gov/medicare-medicaid-coordination/national-correct-coding-initiative-ncci/ncci-medicare

Center for Medicare and Medicaid Services, Medicare NCCI Medically Unlikely Edits (MUEs) https://www.cms.gov/medicare/coding-billing/national-correct-coding-initiative-ncci-edits/medically-unlikely-edits

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- American Society for Reproductive Medicine. (2019). Fertility preservation in patients undergoing gonadotoxic therapy or gonadectomy: a committee opinion. *Fertil Steril*, *112*(6):1022–1033.
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