

# Clinical Policy: Assistive Reproductive Technology and Infertility

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Coding Implications
Revision Log

See <u>Important Reminder</u> at the end of this policy for important regulatory and legal information. This clinical policy must be read in conjunction with governing state laws and the terms of the member's EOC. Plans may not discriminate in the administration of coverage and benefits on the basis of a member's sex or sexual orientation.

## **Description**

Diagnostic infertility services to determine the cause of infertility and treatment is covered only when specific coverage is provided under the terms of a member's benefit plan. All coverage is subject to the terms and conditions of the plan, including state/federal regulations. The following discussion is applicable only to members whose Plan covers infertility services. Refer to member Evidence of Coverage for specific definition of infertility and other coverage guidance.

• Infertility is defined as the condition of an individual who is unable to conceive or produce conception during a period of 1 year if the female is age 35 or younger or during a period of 6 months if the female is over the age of 35. For purposes of meeting the criteria for infertility in this section, if a person conceives but is unable to carry that pregnancy to live birth, the period of time she attempted to conceive prior to achieving that pregnancy shall be included in the calculation of the 1 year or 6 month period, as applicable.

Assisted Reproductive Technologies (ART) encompass a variety of clinical treatments and laboratory procedures which include the handling of human oocytes, sperm or embryos, with the intent of establishing pregnancy.

The following services are considered medically necessary when performed solely for the treatment of infertility in an individual in whom fertility would naturally be expected and when meeting the accompanying ART criteria in the Policy/Criteria section.

#### Females:

- 1. FDA approved medications (including specialty injectables): clomiphene, aromatase inhibitors, estrogens, corticosteroids, progestins, metformin, and prolactin inhibitors, gonadotropin releasing hormone (GnRH) agonists, gonadotropins, and gonadotropin releasing hormone (GnRH) antagonists.
- 2. Infertility surgery: surgical laparoscopy; ovarian wedge resection or ovarian drilling; removal of myomas, uterine septa, cysts, ovarian tumors, and polyps; open or laparoscopic resection, vaporization, or fulguration of endometriosis implants; adhesiolysis; laparoscopic cystectomy; hysteroscopic adhesiolysis; removal of fallopian tubes; hysteroscopic or fluoroscopic tubal cannulation (fimbrioplasty); selective salpingography plus tubal catheterization, or transcervical balloon tuboplasty, and tubal anastomosis.
- 3. Artificial insemination (AI); intrauterine insemination (IUI) and intracervical insemination.



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- 4. In vitro fertilization with embryo placement (IVF-EP).
- 5. Gamete intrafallopian transfer (GIFT).
- 6. Zygote intrafallopian transfer (ZIFT).
- 7. Intracytoplasmic sperm injection (ICSI) with or without assisted hatching.
- 8. Short duration (up to 1 year) cryopreservation of embryo(s) while individual is under active infertility treatment.

#### Males:

- 1. FDA approved medications, including specialty injectables, Clomiphene, corticosteroids, antiestrogens, prolactin inhibitors, cabergoline, thyroid hormone replacement, androgens, aromatase inhibitors (testolactone), gonadotropin releasing hormone (GnRH), and gonadotropins.
- 2. Infertility surgery: varicocelectomy (spermatic vein ligation), transurethral resection of the ejaculatory ducts (TURED), orchiopexy, surgical reconstruction or repair of the vas or epididymis surgery such as vasovasostomy, epididymovasostomy, epididymectomy.
- 3. Testicular sperm extraction (TESE), micro-TESE, and epididymal sperm extraction (MESA).
- 4. Impotence treatments.

## Policy/Criteria

**I.** It is the policy of Health Net of California that ART is **medically necessary** for the following indications when the basic and treatment-specific criteria in **A** and **B** are met.

Authorized infertility benefits are covered for a maximum of six cycles for any given ART procedure. The six cycle limit per lifetime applies to canceled cycles and previous cycles not covered by the health plan (subject to plan benefits etc as noted).

- **A.** Basic Criteria- meets all of the following:
  - 1. ART for females is performed by a physician board-certified or board eligible in reproductive endocrinology and for males is a board-certified or board eligible urologist;
  - 2. Member is presumably fertile and has documentation of an inability to conceive during a period of 12 menstrual cycles of exposure to sperm, or 6 cycles for women ≥ age 35. Or, for females without male partners, inability to conceive after 12 IUI cycles for women under age 35 or 6 IUI cycles for women ≥ age 35, using normal quality sperm;
  - 3. For female members  $\geq$  35 years, demonstration of adequate ovarian reserve. This is defined as a normal clomiphene citrate challenge test (CCCT) in the past 6 months:
    - a. Cycle days 3 and/or 10 FSH levels < 15 mIU/ml and the day 3 estradiol level < 80pg/mL;
  - 4. Infertility is unrelated to voluntary sterilization or failed reversal of voluntary sterilization of either partner. Evidence of such includes:



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- a. In the case of vasectomy reversal there must be two recent normal semen analyses within the past 3 months (sperm count > 20 million/ml; motility > 50% and normal morphology > 14% normal forms by Krüger classification or > 30% normal forms by WHO criteria);
- b. In the case of previous tubal ligation with reanastamosis, documentation by hysterosalpingogram of unilateral or bilateral tubal patency.

## **B.** Treatment-Specific Criteria:

- 1. Artificial Insemination/IUI- meets all of the following:
  - a. Unilateral or bilateral tubal patency, and one of the following
    - i. Mild male factor infertility;
    - ii. Cervical factors;
    - iii. Unexplained infertility;
    - iv. Sperm antibodies;
    - v. Mild endometriosis:
    - vi. Unable to, or would find it very difficult to, have vaginal intercourse because of a clinically diagnosed physical disability or psychosexual problem who are using partner or donor sperm;
    - vii. Couples in which the male partner is HIV positive and undergoing sperm washing.

#### 2. IVF

- a. Inadequate number of frozen embryos available for transfer: < 3 for women age < 35 years, or < 4 for women age  $\ge$  35 years; and one of the following:
  - i. Barrier to fertilization, one of the following:
    - a) Bilateral fallopian tube absence or obstruction due to prior tubal disease (not voluntary sterilization);
    - b) Severe endometriosis which failed medical and surgical therapy;
    - c) Severe male factor infertility that has failed conservative treatments (TMS <10 million and/or normal morphology of ≤ 1% by Krüger/≤ 5% by WHO criteria); or
  - ii. IUI failure one of the following:
    - a) For women  $\leq$  39 years old, failure of 3 cycles of IUI with gonadotropin stimulation required;
    - b) For women age 40-42, failure of 1-2 cycles of IUI with gonadotropin stimulation.
- 3. Conversion from IUI to IVF- meets both of the following:
  - A. For women < 40 years of age, if a medicated IUI cycle results in an estradiol level of > 1000 pg/ml and the production of at least 3 follicles ≥ 16mm or 4-8 follicles > 14 mm in diameter, conversion of the IUI to IVF is considered medically necessary;



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- B. If converted to an IVF cycle, the member needs to complete the required number of IUI/gonadotropin cycles for her age/lab status before consideration of further IVF.
- 4. Frozen Embryo Transfers (FET)\*- meets both of the following:
  - A. Frozen embryos must be used prior to authorization of additional IVF cycles in one of the following circumstances:
    - i. Women < 35 with at least 3 embryos available for transfer;
    - ii. Women  $\geq$  35 with at least 4 embryos available for transfer;

\*If member continues to qualify for infertility, FET with less than this number of embryos available for transfer is considered medically necessary.

- 5. GIFT/ZIFT- meets all of the following:
  - A. Member has at least one patent fallopian tube;
  - B. Failure of required number of IUI cycles as per IVF criteria;
  - C. Justification that GIFT/ZIFT is preferable to standard IVF must be provided.
- 6. ICSI- meets one of the following:
  - a. Less than 2 million motile spermatozoa per ejaculate;
  - b. Anti-spermatozoan antibodies shown to be contributing to infertility;
  - c. Prior or repeated fertilization failure with standard IVF protocols (< 50% fertilization);
  - d. Washed sperm limited in number and quality;
  - e. Obstruction of the male reproductive tract not amenable to repair necessitating MESA or TESE (does not include obstruction due to voluntary sterilization);
  - f. Abnormal morphology ( $\leq$  1% normal forms by Kruger;  $\leq$  5% normal forms by WHO);
  - g. Specific spermatozoan defects impairing spermatozoa-oocyte interaction.
- 7. Assisted Hatching- meets both of the following:
  - a. Women  $\geq$  38 years old;
  - b.  $\geq 2$  failed IVF cycles with poor quality embryos.
- 8. Donor egg cycle- meets all of the following:
  - A. Has an approved ART cycle and one of the following:
    - i. Congenital or surgical absence of ovaries;
    - ii. Premature ovarian failure (menopause before age 40);
    - iii. Premature diminished ovarian reserve (CCCT day 3 or 10 FSH  $\geq$  15 in women  $\leq$  35);
    - iv. Ovarian failure following chemotherapy or radiation therapy;
    - v. Previously failed IVF in a woman age 40-42;
    - vi. Gonadal dysgenesis including Turner Syndrome;
    - vii. High risk of transmitting genetic disorder from female.



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- 9. TESE, micro-TESE and epididymal sperm extraction applies only if the male partner is a covered member. Meets the following:
  - A. Male with obstructive or non-obstructive azoospermia.

#### 10. Donor sperm:

- A. Has an approved ART cycle and one of the following:
  - i. Bilateral congenital absence of the vas deferens (BCAVD);
  - ii. Obstructive azoospermia;
  - iii. Female without a male partner;
  - iv. High risk of transmitting an infectious disease from male partner (such as HIV);
  - v. High risk of transmitting a genetic disorder in the male partner to the offspring;
  - vi. Non-obstructive azoospermia confirmed through MESA/TESA;
  - vii. Severe rhesus isoimmunization;
  - viii. Previous radiation or chemotherapy resulting in abnormal semen analysis;
  - viii. Two abnormal semen analyses (by Krüger or WHO classification) at least 30 days apart.

## 11. Cryopreservation of sperm:

- A. Short term storage (up to 90 days after sample obtained or 90 days after the last approved infertility treatment) for a male member already in active infertility treatment who:
  - i. Is undergoing medical treatment (like cancer treatment) that will result in infertility, or
  - ii. Has undergone an approved MESA or TESE procedure.

## 12. Cryopreservation of embryos:

- A. Short term storage (up to 90 days after last approved infertility treatment) of embryos if:
  - i. Embryos could not be transferred due to high risk of multiple gestation, or
  - ii. Embryos could not be transferred due to a potential adverse impact on maternal health (i.e., severe hyper-stimulation syndrome, etc.)

#### 13. Cryopreservation of eggs (oocytes):

- A. Short-term storage (up to 90 days after collection or 90 days after the last approved infertility treatment) for a female member already in active infertility treatment who is undergoing medical treatment (like cancer treatment) that will result in infertility.
- **II.** It is the policy Health Net of Californiathat ART is **not medically necessary** for the following indications:



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- A. Any experimental infertility procedure, until the procedure becomes recognized as non-experimental;
- B. Surrogacy;
- C. Reversal of voluntary sterilization;
- D. Commercially available over-the-counter home test kits, including but not limited to ovulation prediction and pregnancy test kits;
- E. Infertility treatment needed as a result of prior voluntary sterilization or unsuccessful sterilization reversal procedure;
- F. A partner's infertility services when a partner in not a member;
- G. A member who is medically infertile due to natural aging (>50 years) or for women who are menopausal;
- H. Gender selection, chromosomal studies of donor sperm or egg.

**III.** It is the policy of Health Net of California that gestational carriers are **medically necessary** when any of the following are met (subject to plan benefits etc):

- A. Women without a uterus
- B. Women with a medical condition that preclude carrying a pregnancy to term
- C. Male homosexual couples

<u>Note</u>: This involves IVF with transfer of the embryos to a gestational carrier who will carry the pregnancy to term. To avoid custody lawsuits, when oocytes are needed, use of a separate oocyte donor, (i.e., an individual who is different from the gestational carrier) is recommended. This is particularly important for male homosexuals or for women who lack functional ovaries or uterus or who have a medical contraindication to pregnancy.

- **IV.** It is the policy of Health Net of California that the following may be considered medically necessary to evaluate female infertility:
  - A. Office visits for complete medical and surgical history, menstrual history and physical examination
  - B. Laboratory studies including:
    - 1. CBC, liver function tests (LFT), RPR, HIV, cultures for chlamydia trachomatis and gonorrhea
    - 2. Anti-sperm antibodies (e.g., immunobead or mixed antiglobulin method)
    - 3. Post-coital testing (PCT) (Simms-Huhner test) of cervical mucus
    - 4. Fasting and 2 hours post 75 gram glucose challenge levels
    - 5. Lipid panel (total cholesterol, HDL cholesterol, triglycerides)
    - 6. Rubella serology
    - 7. Measurement of mid-luteal progesterone level, urinary luteinizing hormone using home prediction kit, and basal body temperature charting to document ovulation
    - 8. Karyotype testing for couples with recurrent pregnancy loss (two or more consecutive spontaneous abortions)
    - 9. Prothrombin gene factor II for couples with recurrent pregnancy loss (two or more consecutive spontaneous abortions)



- 10. Serum hormone levels including:
  - a. Gonadotropins (serum FSH, LH) for women with irregular menstrual cycles or age-related ovulatory dysfunction
  - b. A high FSH level correlates with ovarian failure
  - c. Human chorionic gonadotrophin (hCG) assay
  - d. Prolactin for women with oligo/anovulation, galactorrhea, luteal phase inadequacy or a pituitary tumor
  - e. Progestins (progesterone, 17-hydroxyprogesterone)
  - f. Estrogens (estradiol)
  - g. Urinary luteinizing hormone (LH) for women with irregular menstrual cycles or age-related ovulatory dysfunction
  - h. Thyroid stimulating hormone (TSH) to rule out hypothyroidism
  - i. Adrenocortitropic hormone (ACTH) for ruling out Cushings syndrome or Addison's disease in women who are amenorrheic
  - j. A cycle day 3 serum follicle stimulating hormone (FSH) for determination of menopausal status
  - k. Women older than 35 years also may benefit from ovarian reserve testing of follicle-stimulating hormone and estradiol levels on day 3 of the menstrual cycle, the clomiphene citrate challenge test, or pelvic ultrasonography for antral follicle count to determine treatment options and the likelihood of success
  - 1. Measurement of 17 alpha-hydroxyprogesterone and androgens (total and fractionated testosterone, androstenedione, dehydroepiandrosterone sulfate (DHEA-S) if there is evidence of hyperandrogenism (e.g., hirsuitism, acne, menstrual irregularities, increased libido, clitoromegaly, signs of virilization) or ovulatory dysfunction for diagnosis of late-onset congenital adrenal hyperplasia and androgen-secreting tumors
- C. Transvaginal ultrasonography to assess tubes, uterus, and pelvis for disease
- D. Hysterosalpingography (hysterosalpingogram [HSG] or tubogram) or hysterosalpingocontrast-ultrasonography if tubal dysfunction suspected or evaluation otherwise unrevealing when **any** of the following is met:
  - 1. Woman fails to get pregnant after 1 year of trying
  - 2. Attempting conception with history of condition placing patient at increased risk for tubal disease (history of pelvic inflammatory disease, septic abortion, ruptured appendix, tubal surgery, or ectopic pregnancy)
  - 3. Recurrent miscarriages
  - 4. Donor insemination after 3 to 6 cycles of artificial insemination donor (AID) without pregnancy
  - 5. History of tubal reversal without conception
  - 6. History of uterine surgery (i.e., myomectomy, septum excision), endo-metrial polyps
  - 7. Abnormal uterine bleeding (pregnancy having been ruled out)



- 8. Prior to treatment with Clomiphene Citrate (Clomid) to confirm patent fallopian tubes
- E. Salpingoscopy (falloscopy), hydrotubation if results of hysterosalpingography suggest tubal abnormality
- F. Hysteroscopy if results of hysterosalpingography suggest intrauterine abnormality
- G. Laparoscopy if **any** of the following is met:
  - 1. Pelvic endometriosis or adhesions are suspected
  - 2. Laparoscopy and chromotubation using methylene blue or indigo carmine to assess tubal, and other pelvic or abdominal pathology
- H. CT or MR imaging of sella turcica to rule out pituitary adenoma if prolactin is elevated
- I. Monitoring of ovarian response to ovulatory stimulants such as:
  - Serial ovarian ultrasounds for cycle monitoring
  - Estradiol
  - FSH only if Clomiphene Citrate Challenge Test (CCCT) is done
  - hCG quantitative
  - LH assay
  - Progesterone
- V. It is the policy of Health Net of California that the following may be considered medically necessary to evaluate male infertility:
  - A. Office visits for complete medical and surgical history, and physical examination including:
    - 1. Coital practices
    - 2. Developmental and medical history (e.g., genetic disorders, chronic illness, genital trauma, orchitis)
    - 3. Medications (e.g., sulfasalazine [Azulfidine], methotrexate, colchicine, cimetidine [Tagamet], spironolactone [Aldactone])
    - 4. Potential sexually transmitted disease exposure, symptoms of genital inflammation (e.g., urethral discharge, dysuria)
    - 5. Previous fertility
    - 6. Recent high fever
    - 7. Substance use
    - 8. Surgical history (e.g., previous genitourinary surgery)
    - 9. Toxin exposure
    - 10. Genital infection (e.g., discharge, prostate tenderness)
    - 11. Hernia
    - 12. Presence of vas deferens
    - 13. Signs of androgen deficiency (e.g., increased body fat, decreased muscle mass, decreased facial and body hair, small testes, Tanner stage < 5)
    - 14. Testicular mass
    - 15. Varicocele
- B. Laboratory evaluation including:



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- 1. Complete blood cell count (if infection suspected)
- 2. Renal and liver function studies
- 3. Gonorrhea and chlamydia cultures, urinalysis (if genital infection suspected)
- 4. Semen analysis x 2 and separated by a time period of at least 1 to 4 months. Normal semen analysis values include:

Volume: 1.5 to 5 mlCount: > 20 million/ml

• Total count: > 40 million sperm per ejaculate

• Live/dead 60%

• Motility: > 50% at one hour

• pH: 7.2 - 8.0

• Round Cell Differentiation: WBC < 1 million/ml

• White cell vs. germinal: germinal < 4 million/ml

• Motile sperm per ejaculate: > 20 million

• Microscopy for debris and agglutination: none to minimal

• Viscosity: normal (not thick)

- 5. Transrectal ultrasonography (TRUS) of the prostate, seminal vesicles, and ejaculatory duct when any of the following is met:
  - a. Suspected ejaculatory duct obstruction
  - b. There is a motility of < 30% in the absence of any other explanation with or without a decreased sperm count
  - c. Azoospermic patients with palpable vasa and low ejaculate volumes to determine if ejaculatory duct obstruction exists
  - d. Oligospermic patients with low volume ejaculates < 1.0 ml, palpable vasa and normal testicular size, to determine if ejaculatory duct obstruction is present
  - e. Perineal pain associated with ejaculation
  - f. One of the above plus a physical exam which is suggestive of a cyst of either the seminal vesicle or prostate, or with non-palpable vas deferens or epididymides
- 6. Scrotal ultrasonography is indicated in those patients in whom physical examination of the scrotum is difficult or inadequate or in whom a hydrocele or testicular tumor is suspected
- 7. Post-ejaculatory urinalysis to diagnose possible retrograde ejaculation, lack of emission, ejaculatory duct obstruction, hypogonadism or congenital bilateral absence of the vasa deferentia (CBAVD) in patients with low-volume (< 1.0 ml) or absent ejaculate
- 8. Genetic testing in infertile males with severe oligospermia (less than 5-10 million sperm/ml) or nonobstructive azoospermia (absence of sperm in semen) is medically necessary to rule out congenital or developmental testicular disorder (e.g., Klinefelter syndrome)



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## **Background**

IVF-EP

In vitro fertilization involves fertilization of an egg with sperm in a dish in a laboratory, rather than inside a women's body. The resulting embryo is placed into the uterus later. One cycle of IVF-EP includes:

- Ovulation stimulation and monitoring- the woman starts ovulation drugs to stimulate the ovaries to produce multiple eggs. Ovulation drugs are given over period of 8-14 days. During this time the woman is monitored for follicular development with frequent ultrasounds and blood tests. The eggs are retrieved before ovulation occurs.
- Oocyte (egg) retrieval is usually accomplished by ultrasound guided aspiration performed in the office.
- Sperm preparation and capacitation- sperm are placed together with eggs and stored in an incubator.
- Embryo transfer- including frozen embryo transfer (FET) involves embryo transfer to the uterus any time between one to six days after egg retrieval, or after cryopreservation in FET.

#### **GIFT**

A laparoscope is used to aspirate one or more mature oocytes from the ovaries. Oocytes are then mixed with sperm and transferred to the fallopian tube via a catheter. GIFT, although more invasive than IVF, may be an appropriate choice in patients who, for religious or personal reasons, do not wish to have embryos in the laboratory. It is also appropriate for those who have failed donor insemination or require laparoscopy for other reasons. The success rate is similar to those with IVF.

#### **ZIFT**

This procedure involves placement of fertilized eggs (zygotes) or embryos into the fallopian tube. It is analogous to GIFT in that laparoscopy is needed to place the zygotes in the fallopian tubes. Whereas overall success rates are similar to IVF, ZIFT may offer some advantages to patients with difficult trans-cervical embryo transfer, uterine abnormalities (such as those caused by DES exposure), or recurrent failure with standard IVF.

#### **ICSI**

Intra-cytoplasmic sperm injection involves injecting the sperm into the egg in a dish in the laboratory to fertilize it, rather than letting sperm penetrate the egg naturally. Embryos are then transferred to the uterus as in usual IVF.

ICSI should be available to patients with previously failed fertilization who demonstrate either abnormal or normal semen profiles and to patients with spermatozoa concentration and motility too low to expect any success with conventional IVF. Patients should be counseled carefully regarding the outcomes and potential risks of ICSI. If there is a risk of adverse neonatal outcome associated with ICSI, it appears to be small.

Assisted Hatching:



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"Hatching" is a natural process in which an embryo expands and eventually breaks through the zona pellucida in order to implant on the surface of the endometrium (the lining of the uterus). "Assisted hatching" refers to a laboratory procedure whereby the zona pellucida around the day 3 embryo is mechanically or chemically opened to assist the embryo in hatching from the zona about three days later. The procedure may improve the percentage of embryos that implant in selected cases with poor prognosis (eg, 2 failed IVF cycles and poor embryo quality and older women, but its use is still controversial).

## **Coding Implications**

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Infertility Services Requiring Prior Authorization if a covered benefit

<b>CPT</b> <sup>®</sup>	CPT Code Descriptions
Codes	
58321	Artificial insemination; intra-cervical insemination (ICI)
58322	Artificial insemination; intra-uterine insemination (IUI)
58323	Sperm washing for artificial insemination
58970	Follicle puncture for oocyte retrieval, any method (IVF)
58974	Embryo transfer, intrauterine (IVF-ET)
58976	Gamete, zygote, or embryo intrafallopian tube transfer; any method (GIFT)
89250	Culture of oocyte(s)/embryo(s), less than 4 days;
89251	Culture of oocyte(s)/embryo(s), less than 4 days; with co-culture of oocyte(s)/
	embryo(s)
89253	Assisted embryo hatching, microtechniques (any method)
89254	Oocyte identification from follicular fluid
89255	Preparation of embryo for transfer (any method)
89257	Sperm identification from aspiration (other than seminal fluid)
89258	Cryopreservation; embryo(s)
89259	Cryopreservation; sperm
89260	Sperm isolation; simple prep (eg, sperm wash and swim-up) for insemination or
	diagnosis with semen analysis
89261	Sperm isolation; complex prep (eg, Percoll gradient, albumin gradient for
	insemination or diagnosis with semen analysis
89264	Sperm identification from testis tissue, fresh or cryopreserved
89268	Insemination of oocytes
89272	Extended culture of oocyte(s)/embryo(s), 4-7 days
89280	Assisted oocyte fertilization, microtechnique, less than or equal to 10 oocytes



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<b>CPT</b> <sup>®</sup>	CPT Code Descriptions
Codes	
89281	Assisted oocyte fertilization, microtechiques; greater than 10 oocytes.
89290	Biopsy, oocyte polar body or embryo blastomere, microtechnique (for pre-
	implantation genetic diagnosis); less than or equal to 5 embryos
89291	Biopsy, oocyte polar body or embryo blastomere, microtechnique (for pre-
	implantation genetic diagnosis); greater than 5 embryos
89337	Cryopreservation, mature oocyte(s)
89352	Thawing of cryopreserved; embryo(s)
89353	Thawing of cryopreserved; sperm/semen, each aliquot
89356	Thawing of cryopreserved; oocytes, each aliquot

HCPCS	HCPCS Code Descriptions
Codes	
S4011	In vitro fertilization; including but not limited to identification and incubation of
	mature oocytes, fertilization with sperm, incubation of embryo(s), and
	subsequent visualization for determination
S4013	Complete cycle, gamete intrafallopian transfer (GIFT), case rate
S4014	Complete cycle, zygote intrafallopian transfer (ZIFT), case rate
S4015	Complete in vitro fertilization cycle, not otherwise specified, case rate
S4016	Frozen in vitro fertilization cycle, case rate
S4017	Incomplete cycle, treatment canceled prior to stimulation, case rate
S4018	Frozen embryo transfer procedure canceled before transfer, case rate
S4020	In vitro fertilization procedure canceled before aspiration, case rate
S4021	In vitro fertilization procedure canceled after aspiration, case rate
S4022	Assisted oocyte fertilization, case rate
S4023	Donor egg cycle, incomplete, case rate
S4025	Donor services for in vitro fertilization (sperm or embryo), case rate
S4026	Procurement of donor sperm from sperm bank
S4028	Microsurgical epididymal sperm aspiration (MESA)
S4035	Stimulated intrauterine insemination (IUI), case rate
S4037	Cryopreserved embryo transfer, case rate

ICD-10-CM Diagnosis Codes that Support Coverage Criteria

ICD-10	ICD-10 Code Descriptions
Codes	
B20	Human immunodeficiency virus (HIV) disease
E28.310	Symptomatic premature menopause
E89.40	Asymptomatic postprocedural ovarian failure
E89.41	Symptomatic postprocedural ovarian failure
N46.01	Organic azoospermia
N46.021	Azoospermia due to drug therapy
N46.023	Azoospermia due to infection



N46.024	Azoospermia due to radiation
N46.025	Azoospermia due to systemic disease
N46.029	Azoospermia due to extratesticular causes
N46.11	Organic oligospermia
N46.121	Oligospermia due to drug therapy
N46.122	Oligospermia due to infection
N46.123	Oligospermia due to obstruction of efferent ducts
N46.124	Oligospermia due to radiation
N46.125	Oligospermia due to systemic disease
N46.129	Oligospermia due to extratesticular causes
N80.0-N80.4	Endometriosis (uterus, fallopian tube, pelvic peritoneum, rectovaginal
	septum and vagina)
N97.0	Female infertility associated with anovulation
N97.1	Female infertility of tubal origin
N97.2	Female infertility of uterine origin
N97.8	Female infertility of other origins
Q50.01	Congenital absence of ovary, unilateral
Q50.02	Congenital absence of ovary., bilateral
Q50.6	Other congenital malformations of fallopian tube and broad ligament
Q55.3	Atresia of vas deferens
Q96.0-Q96.8	Turner's syndrome
Z31.0	Encounter for reversal of previous sterilization
Z31.41	Encounter for fertility testing
Z31.430	Encounter of female for testing for genetic disease carrier status for
	procreative management
Z31.440	Encounter of male for testing for genetic disease carrier status for
	procreative management
Z31.441	Encounter for testing of male partner of patient with recurrent pregnancy
	loss
Z31.448	Encounter for other genetic testing of male for procreative management

Reviews, Revisions, and Approvals		Approval Date
Under basic criteria, clarified that men were to be treated by board-certified	03/14	
urologist		
Added IVF, Conversion from IUI to IVF and FET criteria		
Restructured sections to more closely resemble other Centene clinical policy		
Removed Authorization Protocols section		
Added TESE, micro-TESE, and epididymal sperm extraction	04/14	05/14
Added "board eligible" on page 3 under requirements for treatment		
provided by board certified physician		
Clarified criteria language to indicate number of criteria required for each		
procedure		



**Assisted Reproductive Technology** 

Reviews, Revisions, and Approvals	Date	Approval Date
Additional language clarification to aid in conversion to Interqual Custom Content	12/14	
Combined inability to conceive for females with and without partners into one bullet point under I.B	04/15	04/15
Removed FSH requirements from II.B.3 as this is covered in basic criteria  Added clomiphene and aromatase inhibitors to FDA approved medications for female infertility.  IUI- added "unable to have vaginal intercourse" and male partner is HIV positive as indications, per NICE guidelines.  IVF- clarified wording in 2.a.  Donor egg cycle- added indications for ovarian failure post chemo/radiation, gonadal dysgenesis, and high risk of transmitting genetic disorder from female partner.  Donor sperm: added following indications: obstructive azoospermia, high risk of transmitting infectious disease from male partner, female without a male partner, high risk of transmitting genetic disorder from male partner, rhesus isoimmunization and female without male partner. Took out requirement that male partner be a covered member.  Added indication for cryopreservation of oocytes per ASRM guidelines.  Background- added "or after cryopreservation in FET" to the last bullet in the IVF section.  Added CPT codes for oocyte cryopreservation and thawing.  Reviewed by specialist.	04/16	04/16
References reviewed and updated. ICD-10 codes added. No revisions.		
Placed on new template, added section from Health Net policy on infertility work-up	05/17	

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#### **Important Reminder**

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. "Health Plan" means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan's affiliates, as applicable.

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