MEDICAL POLICY

POLICY TITLE	REPRODUCTIVE TECHNIQUES
POLICY NUMBER	MP-7.002

Original Issue Date (Created):	**7/1/2002**	
Most Recent Review Date (Revised):	**8/24/2018**	
Effective Date:	**1/1/2019**	**RETIRED- See policy history**

I. POLICY

The following reproductive techniques are considered **medically necessary:**

- cryopreservation of testicular tissue in adult men with azoospermia as part of an intracytoplasmic sperm injection procedure;
- intracytoplasmic sperm injection for male factor infertility;
- blastocyst transfer

The following reproductive techniques are considered **investigational** there is insufficient evidence to support a conclusion concerning the health outcomes or benefits associated with these procedures;

- assisted hatching;
- co-culture of embryos;
- cryopreservation of ovarian tissue, or oocytes;
- cryopreservation of testicular tissue in prepubertal boys;
- storage and thawing of ovarian tissue, oocytes or testicular tissue
- intracytoplasmic sperm injection in the absence of male factor infertility.

II. PRODUCT VARIATIONS

Top

This policy is applicable to all programs and products administered by Capital BlueCross unless otherwise indicated below.

CHIP (aka Capital Cares 4Kids)*	PPO*	HMO*
POS*	Indemnity*	SpecialCare℠*
FEP PPO*	BlueJourney HMO**	BlueJourney PPO**

* Benefit determinations for assisted fertilization and infertility treatment should be based in all cases on the applicable contract exclusions and limitations. Individual group benefits should be reviewed to determine coverage.

** Refer to Centers for Medicare and Medicaid Services (CMS) Medicare Benefit Policy Manual. Publication 100-02. Chapter 15. Sec.20.1 for treatment for infertility. Reasonable and

necessary services associated with treatment for infertility are covered under Medicare. Any treatment leading to or in connection with assisted fertilization such as, but not limited to, artificial insemination, in vitro fertilization (IVF), gamete intra-fallopian transfer (GIFT), and zygote intra-fallopian transfer (ZIFT) are excluded from coverage.

III. DESCRIPTION/BACKGROUND

Top

The policy addresses a variety of techniques available to establish a viable pregnancy for couples who have been diagnosed with infertility and for whom assisted insemination is insufficient.

Infertility can be due either to female factors (i.e., pelvic adhesions, ovarian dysfunction, endometriosis, prior tubal ligation), male factors (i.e., abnormalities in sperm production, function, or transport or prior vasectomy), a combination of both male and female factors, or unknown causes. Various reproductive techniques are available to establish a viable pregnancy; different techniques are used depending on the reason for infertility.

Assisted reproductive technologies (ART), as defined by the Centers for Disease Control (CDC) and other organizations, refers to fertility treatments in which both the eggs and sperm are handled. Not included in ART is assisted insemination (artificial insemination) using sperm from either a woman's partner or a sperm donor. In most instances ART will involve in vitro fertilization (IVF), a procedure in which oocytes harvested from the female are inseminated in vitro with sperm harvested from the male. Following the fertilization procedure, the zygote is cultured and ultimately transferred back into the female's uterus or fallopian tubes. In some instances, the oocyte and sperm are collected, but no in vitro fertilization takes place, and the gametes are reintroduced into the fallopian tubes. Examples of ART include, but are not limited to, gamete intrafallopian transfer (GIFT), transuterine fallopian transfer (TUFT), natural oocyte retrieval with intravaginal fertilization (NORIF), pronuclear state tubal transfer (PROST), tubal embryo transfer (TET), zygote intrafallopian transfer (ZIFT), gamete and embryo cryopreservation, oocyte and embryo donation, and gestational surrogacy.

The various components of ART and implantation into the uterus can be broadly subdivided into oocyte harvesting procedures, which are performed on the female partner; sperm collection procedures, which are performed on the male partner; and the in vitro component, i.e., the laboratory procedures, which are performed on the collected oocyte and sperm. The final step is the implantation procedure.

Most CPT codes describing the various steps in ART procedures are longstanding techniques. This includes codes for oocyte retrieval, sperm isolation, culture and fertilization of the oocyte, and embryo; zygote; or gamete transfer into the uterus or fallopian tubes. Only the relatively new reproductive techniques (i.e., intracytoplasmic sperm injection, assisted hatching, co-culture of embryos) and cryopreservation of reproductive tissue (i.e., testicular, ovarian, or oocytes) will be considered.

POLICY TITLE	REPRODUCTIVE TECHNIQUES
POLICY NUMBER	MP-7.002

Regulatory Status
There are no medical devices or diagnostic tests related to assisted reproductive techniques that require FDA approval or clearance.

IV. RATIONALE

Top

Summary of Evidence
For individuals who have infertility who receive in vitro fertilization with assisted hatching, the evidence includes randomized controlled trials (RCTs), a systematic review and a large observational study. Relevant outcomes are health status measures, resource utilization, and treatment-related morbidity. RCTs have not shown that assisted hatching improves the live birth rate compared with standard care. Findings on clinical pregnancy rate after assisted hatching were mixed but RCTs generally did not find improvement with assisted hatching versus standard care. A large observational study found that assisted hatching was associated with worse outcomes. The evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals who have infertility who receive in vitro fertilization with co-culture, the evidence includes a RCTs and case series. Relevant outcomes are health status measures, resource utilization, and treatment-related morbidity. Most clinical trials did not find improved implantation or pregnancy rate after co-culture, and studies have not reported the live birth rate. Moreover, co-culture techniques have not been standardized and 1 RCT that found a higher clinical pregnancy rate with co-culture than a standard practice control group used a novel technique that has not been otherwise evaluated. The evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals who have cancer who will undergo treatment that may lead to infertility who receive cryopreservation of ovarian tissue, the evidence includes case series. Relevant outcomes are health status measures, resource utilization, and treatment-related morbidity. The technique has not been standardized and there is a lack of controlled studies on health outcomes following cryopreservation of ovarian tissue. The evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals who have cancer who will undergo treatment that may lead to infertility who receive cryopreservation of oocytes, the evidence includes RCTs and a systematic review on the technique in related populations. Relevant outcomes are health status measures, resource utilization, and treatment-related morbidity. The systematic review found that fertilization rates ranged from 71% to 79%, and the clinical pregnancy rates per transfer ranged from 36% to 61%. The available studies are conducted in highly selected populations and may not be generalizable to the population of interest, women with cancer. The evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals who have infertility who receive in vitro fertilization with blastocyst transfer, the evidence includes RCTs and meta-analyses. Relevant outcomes are health status measures, resource utilization, and treatment-related morbidity. RCTs and meta-analyses have found that blastocyst transfer is associated with higher live birth rates compared with cleavage stage

transfer. One meta-analysis found a significantly higher rate of preterm birth after blastocyst stage versus cleavage stage transfer, but not find increased risks of other outcomes such as low birth rate and perinatal mortality. The evidence is sufficient to determine qualitatively that the technology results in a meaningful improvement in the net health outcome.

For individuals who have male factor infertility who receive ICSI, the evidence includes observational studies and a systematic review. Relevant outcomes are health status measures, resource utilization, and treatment-related morbidity. No RCTs are available. Observational studies, which are subject to limitations e.g. selection bias have found similar rates of clinical pregnancy and live birth after ICSI and standard IVF, and a meta-analysis of observational studies found a higher rate of genitourinary malformations in children born after ICSI but only when lower-quality studies were included in the analysis. RCTs comparing health outcomes after ICSI for male factor infertility and standard IVF are needed. The evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals who have azoospermia who receive cryopreservation of testicular tissue as part of ICSI, the evidence includes no clinical trials. Relevant outcomes are health status measures, resource utilization and treatment-related morbidity. Cryopreservation of testicular tissue in adult men with azoospermia is a well-established component of the ICSI procedure. However, there is a lack of clinical trials. The evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals who have cancer who are prepubertal boys who receive cryopreservation of testicular tissue, the evidence includes no clinical trials. Relevant outcomes are health status measures, resource utilization and treatment-related morbidity. No clinical trials were identified evaluating the safety and efficacy of cryopreservation of testicular tissue in prepubertal boys undergoing cancer therapy. The evidence is insufficient to determine the effects of the technology on health outcomes.

V. DEFINITIONS

Top

ARTIFICIAL INSEMINATION (AI) is the introduction of semen into the vagina or uterus by mechanical or instrumental means rather than by sexual intercourse. The procedure is planned to coincide with the expected time of ovulation so that fertilization can occur.

ASSISTED HATCHING- a procedure involving thinning or making a small hole in the zona pellucida that surrounds the embryo. There is some evidence that assisted hatching may improve implantation rate.

CO-CULTURE OF EMBRYOS – refers to techniques, which involve tissue culture of human embryos in the presence of oviductual, uterine, granulosa or other cells. This purpose of co-culture is to produce a more viable embryo at the blastocyst stage of development for subsequent transfer to the uterus.

CRYOPRESERVATION- Preservation of biological materials, such as tissue, sperm, fluids, blood, or plasma at very low temperatures. This enables the tissue to be used at a later time, as it remains viable after thawing.

INFERTILITY -The medically documented diminished ability to conceive, or to conceive and carry to live birth. A couple is considered infertile if conception does not occur after a one-year period of unprotected coital activity without contraceptives, or there is the inability on more than one occasion to carry to live birth.

INTRACYTOPLASMIC SPERM INJECTION (ICSI) is a laboratory procedure developed to help infertile couples undergoing in vitro fertilization (IVF) due to male factor infertility. ICSI is a form of micromanipulation, involving the injection of a single sperm directly into the cytoplasm of a mature egg (oocyte) using a glass needle (pipette). This process increases the likelihood of fertilization when there are abnormalities in the number, quality, or function of the sperm.

IN VITRO FERTILIZATION (IVF) is a method of fertilizing human ova outside the body by collecting the mature ova and placing them in a dish with a sample of sperm. After an incubation period of forty-eight to seventy-two hours, the fertilized ova are injected into the uterus through the cervix.

GAMETE INTRAFALLOPIAN TRANSFER (GIFT) is a human fertilization technique in which ova and sperm are injected through a laparoscope into the fimbriated ends of the fallopian tube.

ZYGOTE INTRAFALLOPIAN TRANSFER (ZIFT) is the retrieval of oocytes (eggs) from the ovary, followed by their fertilization and culture in the laboratory and placement of the resulting zygotes in the fallopian tubes by laparoscopy twenty-four (24) hours after oocyte retrieval.

VI. BENEFIT VARIATIONS

Top

The existence of this medical policy does not mean that this service is a covered benefit under the member's contract. Benefit determinations should be based in all cases on the applicable contract language. Medical policies do not constitute a description of benefits. A member's individual or group customer benefits govern which services are covered, which are excluded, and which are subject to benefit limits and which require preauthorization. Members and providers should consult the member's benefit information or contact Capital BlueCross for benefit information.

VII. DISCLAIMER

Top

Capital BlueCross's medical policies are developed to assist in administering a member's benefits, do not constitute medical advice and are subject to change. Treating providers are solely responsible for medical advice and treatment of members. Members should discuss any medical policy related to their coverage or condition with their provider and consult their benefit information to determine if the service is covered. If there is a discrepancy

VIII. CODING INFORMATION

Top

Note: This list of codes may not be all-inclusive, and codes are subject to change at any time. The identification of a code in this section does not denote coverage as coverage is determined by the terms of member benefit information. In addition, not all covered services are eligible for separate reimbursement.

Investigational and therefore not covered:

CPT Codes®								
0357T	0058T	89251	89253	89258	89259	89337	89342	89343
89344	89346	89352	89353	89354	89356			

Covered when medically necessary:

CPT Codes ®							
54500	54505	54800	55400	55870	58321	58322	58323
58970	58974	58976	58999	76948	84830	89240	89250
89254	89255	89257	89260	89261	89264	89268	89272
89280	89280	89281	89310	89321	89330	89335	

HCPCS Code	Description
S4011	In vitro fertilization;
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 cancelled prior to stimulation, case rate
S4018	Frozen embryo transfer procedure cancelled before transfer, case rate
S4020	In vitro fertilization procedure cancelled before aspiration, case rate
S4021	In vitro fertilization procedure cancelled 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
S4027	Storage of previously frozen embryos

POLICY TITLE	REPRODUCTIVE TECHNIQUES
POLICY NUMBER	MP-7.002

HCPCS Code	Description
S4028	Microsurgical epididymal sperm aspiration (mesa)
S4030	Sperm procurement and cryopreservation services; initial visit
S4031	Sperm procurement and cryopreservation services; subsequent visit
S4035	Stimulated intrauterine insemination (iui), case rate
S4037	Cryopreserved embryo transfer, case rate
S4040	Monitoring and storage of cryopreserved embryos, per 30 days
S4042	Management of ovulation induction per cycle

ICD-10-CM Diagnosis Codes	Description
N46.01	Organic azoospermia
N46.021	Azoospermia due to drug therapy
N46.022	Azoospermia due to infection
N46.023	Azoospermia due to obstruction of efferent ducts
N46.024	Azoospermia due to radiation
N46.025	Azoospermia due to systemic disease
N73.6	Female pelvic peritoneal adhesions (postinfective)
N80.3	Endometriosis of pelvic peritoneum
N97.0	Female infertility associated with anovulation
Z31.41	Encounter for fertility testing
Z31.7	Encounter for procreative management and counseling for gestational carrier
Z31.81	Encounter for male factor infertility in female patient
Z31.82	Encounter for rh incompatibility status
Z31.83	Encounter for assisted reproductive fertility procedure cycle
Z31.84	Encounter for fertility preservation procedure
Z31.89	Encounter for other procreative management

IX. REFERENCES

Top

1. *Carney SK, Das S, Blake D, et al. Assisted hatching on assisted conception (in vitro fertilisation (IVF) and intracytoplasmic sperm injection (ICSI). Cochrane Database Syst Rev. 2012;12:CD001894. PMID 23235584*
2. *Kissin DM, Kawwass JF, Monsour M, et al. Assisted hatching: trends and pregnancy outcomes, United States, 2000-2010. Fertil Steril. Sep 2014;102(3):795-801. PMID 25044084*
3. *Shi W, Hongwei T, Zhang W, et al. A prospective randomized controlled study of laser-assisted hatching on the outcome of first fresh IVF-ET cycle in advanced age women. Reprod Sci. Apr 12 2016. PMID 27071963*
4. *Kanyo K, Zeke J, Kriston R, et al. The impact of laser-assisted hatching on the outcome of frozen human embryo transfer cycles. Zygote. Mar 9 2016:1-6. PMID 26957232*

5. *Kervancioglu ME, Saridogan E, Atasu T, et al. Human Fallopian tube epithelial cell co-culture increases fertilization rates in male factor infertility but not in tubal or unexplained infertility. Hum Reprod. Jun 1997;12(6):1253-1258. PMID 9222012*
6. *Tucker MJ, Morton PC, Wright G, et al. Enhancement of outcome from intracytoplasmic sperm injection: does co-culture or assisted hatching improve implantation rates? Hum Reprod. Nov 1996;11(11):2434-2437. PMID 8981127*
7. *Veiga A, Torello MJ, Menezo Y, et al. Use of co-culture of human embryos on Vero cells to improve clinical implantation rate. Hum Reprod. Dec 1999;14(Suppl 2):112-120. PMID 10690807*
8. *Wiemer KE, Cohen J, Tucker MJ, et al. The application of co-culture in assisted reproduction: 10 years of experience with human embryos. Hum Reprod. Dec 1998;13(Suppl 4):226-238. PMID 10091073*
9. *Rubio C, Simon C, Mercader A, et al. Clinical experience employing co-culture of human embryos with autologous human endometrial epithelial cells. Hum Reprod. Dec 2000;15(Suppl 6):31-38. PMID 11261481*
10. *Wetzels AM, Bastiaans BA, Hendriks JC, et al. The effects of co-culture with human fibroblasts on human embryo development in vitro and implantation. Hum Reprod. May 1998;13(5):1325-1330. PMID 9647567*
11. *Ohl J, de Mouzon J, Nicollet B, et al. Increased pregnancy rate using standardized coculture on autologous endometrial cells and single blastocyst transfer : a multicentre randomized controlled trial. Cell Mol Biol (Noisy-le-grand). 2015;61(8):79-88. PMID 26718434*
12. *Tryde Schmidt KL, Yding Andersen C, Starup J, et al. Orthotopic autotransplantation of cryopreserved ovarian tissue to a woman cured of cancer - follicular growth, steroid production and oocyte retrieval. Reprod BioMed Online. Apr 2004;8(4):448-453. PMID 15149569*
13. *Oktay K, Buyuk E, Veeck L, et al. Embryo development after heterotopic transplantation of cryopreserved ovarian tissue. Lancet. Mar 13 2004;363(9412):837-840. PMID 15031026*
14. *Meirow D, Levron J, Eldar-Geva T, et al. Pregnancy after transplantation of cryopreserved ovarian tissue in a patient with ovarian failure after chemotherapy. N Engl J Med. Jul 21 2005;353(3):318-321. PMID 15983020*
15. *Siegel-Itzkovich J. Woman gives birth after receiving transplant of her own ovarian tissue. Bmj. Jul 9 2005;331(7508):70. PMID 16002876*
16. *Donnez J, Dolmans MM, Demylle D, et al. Livebirth after orthotopic transplantation of cryopreserved ovarian tissue. Lancet. Oct 16-22 2004;364(9443):1405-1410. PMID 15488215*
17. *Kim SS, Battaglia DE, Soules MR. The future of human ovarian cryopreservation and transplantation: fertility and beyond. Fertil Steril. Jun 2001;75(6):1049-1056. PMID 11384626*
18. *Lobo RA. Potential options for preservation of fertility in women. N Engl J Med. Jul 7 2005;353(1):64-73. PMID 16000356*
19. *Johnson J, Patrizio P. Ovarian cryopreservation strategies and the fine control of ovarian follicle development in vitro. Ann N Y Acad Sci. Mar 2011;1221:40-46. PMID 21401628*

20. *Practice Committees of American Society for Reproductive Medicine and the Society for Assisted Reproductive Technology. Mature oocyte cryopreservation: a guideline. Fertil Steril. Jan 2013;99(1):37-43. PMID 23083924*
21. *Cobo A, Meseguer M, Remohi J, et al. Use of cryo-banked oocytes in an ovum donation programme: a prospective, randomized, controlled, clinical trial. Hum Reprod. Sep 2010;25(9):2239-2246. PMID 20591872*
22. *Levi Setti PE, Albani E, Morenghi E, et al. Comparative analysis of fetal and neonatal outcomes of pregnancies from fresh and cryopreserved/thawed oocytes in the same group of patients. Fertil Steril. Aug 2013;100(2):396-401. PMID 23608156*
23. *Glujovsky D, Blake D, Farquhar C, et al. Cleavage stage versus blastocyst stage embryo transfer in assisted reproductive technology. Cochrane Database Syst Rev. 2012;7:CD002118. PMID 22786480*
24. *Maheshwari A, Kalampokas T, Davidson J, et al. Obstetric and perinatal outcomes in singleton pregnancies resulting from the transfer of blastocyst-stage versus cleavage-stage embryos generated through in vitro fertilization treatment: a systematic review and meta-analysis. Fertil Steril. Dec 2013;100(6):1615-1621 e1611-1610. PMID 24083875*
25. *Kallen B, Finnstrom O, Lindam A, et al. Blastocyst versus cleavage stage transfer in in vitro fertilization: differences in neonatal outcome? Fertil Steril. Oct 2010;94(5):1680-1683. PMID 20137785*
26. *Practice Committee of American Society for Reproductive Medicine, Practice Committee of Society for Assisted Reproductive Technology. Blastocyst culture and transfer in clinical-assisted reproduction. Fertil Steril. Nov 2008;90(5 Suppl):S174-177. PMID 19007621*
27. *Practice Committees of the American Society for Reproductive Medicine, Society for Assisted Reproductive Technology. Intracytoplasmic sperm injection (ICSI) for non-male factor infertility: a committee opinion. Fertil Steril. Dec 2012;98(6):1395-1399. PMID 22981171.*
28. *Van Steirteghem AC, Liu J, Joris H, et al. Higher success rate by intracytoplasmic sperm injection than by subzonal insemination. Report of a second series of 300 consecutive treatment cycles. Hum Reprod. Jul 1993;8(7):1055-1060. PMID 8408486*
29. *Palermo G, Joris H, Devroey P, et al. Pregnancies after intracytoplasmic injection of single spermatozoon into an oocyte. Lancet. Jul 4 1992;340(8810):17-18. PMID 1351601*
30. *Palermo G, Joris H, Derde MP, et al. Sperm characteristics and outcome of human assisted fertilization by subzonal insemination and intracytoplasmic sperm injection. Fertil Steril. Apr 1993;59(4):826-835. PMID 8458504*
31. *Van Steirteghem AC, Nagy Z, Joris H, et al. High fertilization and implantation rates after intracytoplasmic sperm injection. Hum Reprod. Jul 1993;8(7):1061-1066. PMID 8408487*
32. *Fishel S, Timson J, Lisi F, et al. Micro-assisted fertilization in patients who have failed subzonal insemination. Hum Reprod. Mar 1994;9(3):501-505. PMID 8006142*
33. *Boulet SL, Mehta A, Kissin DM, et al. Trends in use of and reproductive outcomes associated with intracytoplasmic sperm injection. JAMA. Jan 20 2015;313(3):255-263. PMID 25602996*
34. *Massaro PA, MacLellan DL, Anderson PA, et al. Does intracytoplasmic sperm injection pose an increased risk of genitourinary congenital malformations in offspring compared to in vitro fertilization? A systematic review and meta-analysis. J Urol. May 2015;193(5 Suppl):1837-1842. PMID 25813561*

35. *Dafopoulos K, Griesinger G, Schultze-Mosgau A, et al. Cumulative pregnancy rate after ICSI with cryopreserved testicular tissue in non-obstructive azoospermia. Reprod BioMed Online. Apr 2005;10(4):461-466. PMID 15901452*
36. *Hovatta O. Cryobiology of ovarian and testicular tissue. Best Pract Res Clin Obstet Gynaecol. Apr 2003;17(2):331-342. PMID 12758103*
37. *Tournaye H, Goossens E, Verheyen G, et al. Preserving the reproductive potential of men and boys with cancer: current concepts and future prospects. Hum Reprod Update. Nov-Dec 2004;10(6):525-532. PMID 15319377*
38. *Farhi A, Reichman B, Boyko V, et al. Congenital malformations in infants conceived following assisted reproductive technology in comparison with spontaneously conceived infants. J Matern Fetal Neonatal Med. Aug 2013;26(12):1171-1179. PMID 23451839*
39. *Hansen M, Kurinczuk JJ, Milne E, et al. Assisted reproductive technology and birth defects: a systematic review and meta-analysis. Hum Reprod Update. Jul-Aug 2013;19(4):330-353. PMID 23449641*
40. *Davies MJ, Moore VM, Willson KJ, et al. Reproductive technologies and the risk of birth defects. N Engl J Med. May 10 2012;366(19):1803-1813. PMID 22559061*
41. *Kettner LO, Henriksen TB, Bay B, et al. Assisted reproductive technology and somatic morbidity in childhood: a systematic review. Fertil Steril. Mar 2015;103(3):707-719. PMID 25624193*
42. *Bay B, Mortensen EL, Hvidtjorn D, et al. Fertility treatment and risk of childhood and adolescent mental disorders: register based cohort study. Bmj. 2013;347:f3978. PMID 23833075*
43. *Practice Committee of the American Society for Reproductive Medicine, Practice Committee of the Society for Assisted Reproductive Technology. Role of assisted hatching in in vitro fertilization: a guideline. Fertil Steril. Aug 2014;102(2):348-351. PMID 24951365*
44. *American College of Obstetricians and Gynecologists (ACOG). Committee opinion no. 584: oocyte cryopreservation. Obstet Gynecol. Jan 2014;123(1):221-222. PMID 24463693*
45. *Loren AW, Mangu PB, Beck LN, et al. Fertility preservation for patients with cancer: American Society of Clinical Oncology clinical practice guideline update. J Clin Oncol. Jul 1 2013;31(19):2500-2510. PMID 23715580*
46. *Myers ER, McCrory DC, Mills AA, et al. Effectiveness of assisted reproductive technology (AHRQ Publication No. 08-E012). Vol 167 Rockville, MD: Agency for Healthcare Research and Quality; May 2008.*
47. *Blue Cross Blue Shield Association Medical Policy Reference Manual. 4.0204, Reproductive Techniques. August 2017.*

Other sources

Centers for Medicare and Medicaid Services (CMS) Medicare Benefit Policy Manual. Publication 100-02. Chapter 15. Sec. 20.1. Physician Expense for Surgery, Childbirth, and Treatment for Infertility. *Effective 10/1/03 [Website]: http://www.cms.hhs.gov/manuals/Downloads/bp102c07.pdf* Accessed August *10, 2016.*

POLICY TITLE	REPRODUCTIVE TECHNIQUES
POLICY NUMBER	MP-7.002

X. POLICY HISTORY

Top

MP 7.002	**CAC 4/29/03**
	CAC 8/31/04
	CAC 8/30/05
	CAC 11/29/05
	CAC 11/28/06
	CAC 11/27/07
	CAC 11/25/08
	CAC 1/26/10 Consensus review
	CAC 4/26/11 Consensus review
	CAC 6/26/12 Adopting BCBSA. Changed title. Previously Assisted Fertilization and Infertility Treatment. Policy statement changed to include blastocyst transfer as medically necessary. See policy for other new specific criteria
	7/25/13 Admin coding review complete
	CAC 9/24/13 Consensus review**.** Minor wording change in the medically necessary policy statement, 'intracytoplasmic sperm injection' changed to 'intracytoplasmic sperm injection for male factor infertility." Rationale section added. References updated.
	CAC 9/30/14 Consensus review. Rationale and references updated. No changes to the policy statements.
	01/2015- New 2015 CPT code added. **2/18/15 -** Admin Coding Correction
	CAC 9/29/15 Minor revision. Intacytoplasmic sperm injection in the absence of male factor infertility added to the investigational statement. Reference and rationale update**.** Coding Reviewed
	CAC 9/27/16 Consensus. No change to policy statements. References and rationale updated. Variation reformatted. Coding updated. New diagnosis codes added effective 10/1/16
	8/24/18 Retired policy. Rationale condensed to the summary of evidence only. Please refer to the member's certificate of coverage for any applicable benefits related to these services. Effective 1/1/19.

Top