

Clinical Policy: PPO In Vitro Fertilization

Reference Number: AR.QC.CP.031

Last Review Date: 07/26

[Coding Implications](#)

[Revision Log](#)

See [Important Reminder](#) at the end of this policy for important regulatory and legal information.

Description

1. If your plan documents coverage of In Vitro Fertilization (IVF), the following criteria must be met:
 - a) The patient is the Certificate Holder or the Certificate Holder's spouse; and
 - b) The member meets the medical criteria below; and
 - c) IVF procedures are performed at a facility licensed by the Arkansas Department of Health as an In vitro fertilization clinic, or if such licensed clinic is unavailable, in a clinic elsewhere which is approved by QualChoice.
2. The lifetime maximum benefits available under this Certificate for all approved In vitro fertilization services, including all drug therapy, and any other service related to infertility shall not exceed one cycle.
 - a) One cycle ends when a diagnosis of pregnancy is made, regardless of the final outcome of that pregnancy.
3. In vitro fertilization benefits are not available to either the husband or the wife, whether covered under this Certificate or not, when either one of the spouses has previously undergone voluntary sterilization.

Policy/Criteria

- I. It is the policy of QualChoice that In vitro is **medically necessary** for the following indications:
 - A. The patient and the patient's spouse have a history of unexplained infertility of at least two (2) years duration: or
 - B. Infertility is associated with one or more of the following medical conditions:
 - i. Endometriosis
 - ii. Exposure in utero to Diethylstilbestrol (DES);
 - iii. Blockage of or removal of one or both fallopian tubes is not a result of voluntary sterilization.
 - iv. Abnormal male factors contributing to such infertility is not a result of voluntary sterilization.
 - v. The patient's oocytes must be fertilized with the sperm of the patient's spouse when any fertilization procedures are performed.
 - vi. In vitro fertilization procedures must be performed at a facility licensed by the Arkansas Department of Health as an In vitro fertilization clinic, or if such licensed clinic is unavailable, in a clinic elsewhere which is approved by QualChoice.
 - C. In vitro fertilization is limited to a lifetime of maximum of one cycle, not to exceed one year.
 - i. The cycle includes but is not limited to all diagnostic testing, medications required for ovarian stimulation or other purposes related to IVF, retrieval of eggs, and embryo transfer.
 - ii. Cryopreservation of oocytes and sperm are covered for the duration of the cycle.
 - iii. The cycle ends with a diagnosis of pregnancy.
 - D. Artificial insemination methods for intrauterine (IUI) and intracervical (ICI) are not covered.

Background

In Vitro Fertilization and Embryo Transfer (IVF-ET) In Vitro fertilization (IVF) involves fertilization of an egg with sperm outside of the body in a laboratory. The resulting embryo is then placed into the uterus at later time. One cycle of IVFET includes:

- Ovulation stimulation and monitoring- the patient starts ovulation drugs to stimulate the ovaries to produce multiple eggs. Ovulation drugs are given over a period of eight to 14 days. During this

time the patient 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.

Gamete Intra-Fallopian Transfer (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 created 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 undergoing IVF.

Zygote Intra-Fallopian Transfer (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 diethylstilbestrol (DES) exposure), or recurrent failure with standard IVF.

Intra-Cytoplasmic Sperm Injection (ICSI) ICSI involves injecting the sperm into the egg in a dish in the laboratory to fertilize it, rather than allowing the sperm to penetrate the egg naturally. Embryos are then transferred to the uterus as in usual ET or cryopreserved in preparation for future FET.

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.

Coding Implications

This clinical policy references Current Procedural Terminology (CPT®). CPT® is a registered trademark of the American Medical Association. All CPT codes and descriptions are copyrighted 2018, American Medical Association. All rights reserved. CPT codes and CPT descriptions are from the current manuals and those included herein are not intended to be all-inclusive and are included for informational purposes only. Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

CPT® Codes	Description
58321	Artificial insemination; intra-cervical
58322	Artificial insemination; intra-uterine
58323	Sperm washing for artificial insemination
58750	Tubotubal Anastomosis
58752	Tubo-Uterine Implant
58760	Fimbrioplasty
58770	Salpingostomy
58970	Follicle Punct oocyte retrieval any method
58974	Embryo transfer, intrauterine
58976	Gamete, zygote, or embryo intrafallopian tube transfer; any method

CPT® Codes	Description
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)
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
89264	Sperm identification from testis tissue, fresh or cryopreserved
89272	Extended culture of oocyte(s)/embryo(s), 4-7 days
89280	Assisted oocyte fertilization, microtechnique, less than or equal to 10 oocytes
89281	Assisted oocyte fertilization, microtechniques; greater than 10 oocytes.
89290	Biopsy, oocyte polar body or embryo blastomere, microtechnique (for preimplantation genetic diagnosis); greater than 5 embryos
89291	Biopsy, oocyte polar body or embryo blastomere, microtechnique (for preimplantation genetic diagnosis); greater than 5 embryos
89337	Cryopreservation, mature oocyte(s)
89352	Thawing of cryopreserved; embryo(s)
89353	Thawing of cryopreserved; sperm/seminal, each aliquot
89356	Thawing of cryopreserved; oocytes, each aliquot

HCPCS Codes	Description
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)
S4037	Cryopreserved embryo transfer, case rate

Reviews, Revisions, and Approvals	Date	Approval Date
Original approval date	4/25	4/25
Annual Review. Codes and reference reviewed with no change	7/15/2026	7/17/2026

References

1. American College of Obstetricians and Gynecologists Committee on Gynecologic Practice and Practice Committee. Female age-related fertility decline. Committee Opinion No. 589. *Fertil Steril*. 2014;101(3):633 to 634. doi:10.1016/j.fertnstert.2013.12.032
2. Practice Committee of the American Society for Reproductive Medicine. Diagnostic evaluation of the infertile male: a committee opinion. *Fertil Steril*. 2015;103(3):e18 to e25. doi:10.1016/j.fertnstert.2014.12.103
3. Practice Committee of the American Society for Reproductive Medicine. Effectiveness and treatment for unexplained infertility. *Fertil Steril*. 2006;86(5 Suppl 1):S111 to S114. doi:10.1016/j.fertnstert.2006.07.1475
4. Practice Committee of the American Society for Reproductive Medicine. Evaluation and treatment of recurrent pregnancy loss: a committee opinion. *Fertil Steril*. 2012;98(5):1103 to 1111. doi:10.1016/j.fertnstert.2012.06.048
5. Practice Committees of the American Society for Reproductive Medicine and the Society for Assisted Reproductive Technology. Electronic address: asrm@asrm.org. Intracytoplasmic sperm injection (ICSI) for non-male factor indications: a committee opinion. *Fertil Steril*. 2020;114(2):239 to 245. doi:10.1016/j.fertnstert.2020.05.032
6. Practice Committee of the American Society for Reproductive Medicine. Electronic address: ASRM@asrm.org; Practice Committee of the American Society for Reproductive Medicine. Removal of myomas in asymptomatic patients to improve fertility and/or reduce miscarriage rate: a guideline. *Fertil Steril*. 2017;108(3):416 to 425. doi:10.1016/j.fertnstert.2017.06.034
7. Practice Committee of the American Society for Reproductive Medicine. Electronic address: asrm@asrm.org; Practice Committee of the American Society for Reproductive Medicine. Testing and interpreting measures of ovarian reserve: a committee opinion. *Fertil Steril*. 2020;114(6):1151 to 1157. doi:10.1016/j.fertnstert.2020.09.134
8. Practice Committee of the American Society for Reproductive Medicine. Electronic address: ASRM@asrm.org. Role of tubal surgery in the era of assisted reproductive technology: a committee opinion. *Fertil Steril*. 2021;115(5):1143 to 1150. doi:10.1016/j.fertnstert.2021.01.051
9. Practice Committee of the American Society for Reproductive Medicine and the Practice Committee for the Society for Assisted Reproductive Technologies. Electronic address: ASRM@asrm.org. Guidance on the limits to the number of embryos to transfer: a committee opinion. *Fertil Steril*. 2021;116(3):651 to 654. doi:10.1016/j.fertnstert.2021.06.050
10. 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*. 2022;117(6):1177 to 1182 doi: 10.1016/j.fertnstert.2022.02.020
11. Basile N, Garcia-Velasco JA. The state of "freeze-for-all" in human ARTs. *J Assist Reprod Genet*. 2016;33(12):1543 to 1550. doi:10.1007/s10815-016-0799-9
12. Backeljauw P. Management of turner syndrome in adults. UpToDate. www.uptodate.com. Published June 30, 2022. Accessed November 02, 2023.
13. Centers for Disease Control and Prevention. 2017 Assisted Reproductive Technology National Summary Report. US Dept of Health and Human Services; 2021.
14. Forti G, Krausz C. Clinical review 100: Evaluation and treatment of the infertile couple. *J Clin Endocrinol Metab*. 1998;83(12):4177 to 4188. doi:10.1210/jcem.83.12.5296
15. Hannoun A, Abu-Musa A. Gamete intrafallopian transfer (GIFT) in the treatment of severe male factor infertility. *Int J Gynaecol Obstet*. 1998;61(3):293 to 295. doi:10.1016/s0020-7292(98)00026-5
16. Hornstein MD, Gibbons WE. Unexplained infertility. UpToDate. www.uptodate.com. Published August 9, 2021. Accessed November 02, 2023.
17. Kuohung W, Hornstein MD. Treatments for female infertility. UpToDate. www.uptodate.com. Published July 22, 2021. Accessed November 02, 2023.
18. Rosen M. Intracytoplasmic sperm injection. UpToDate. www.uptodate.com. Published March 16, 2022. Accessed November 02, 2023.
19. National Collaborating Centre for Women's and Children's Health (UK). Fertility: Assessment and Treatment for People with Fertility Problems. London: Royal College of Obstetricians & Gynaecologists; February 2013.
20. Ho J. In vitro fertilization: Overview of clinical issues and questions. UpToDate. www.uptodate.com. Published October 19, 2022. Accessed November 02, 2023.
21. Salem W. Assisted reproductive technology: Pregnancy and maternal outcomes. UpToDate. www.uptodate.com. Published October 24, 2022. Accessed November 02, 2023.
22. Anawalt BD, Page ST. Treatments for male infertility. UpToDate. www.uptodate.com. Published February 28, 2020. Accessed November 02, 2023.

25. Weiss NS, Nahuis M, Bayram N, Mol BW, Van der Veen F, van Wely M. Gonadotrophins for ovulation induction in women with polycystic ovarian syndrome. *Cochrane Database Syst Rev.* 2015;(9):CD010290. Published 2015 Sep 9. doi:10.1002/14651858.CD010290.pub2
26. Kuohung W, Hornstein MD. Overview of infertility. *UpToDate.* www.uptodate.com. Published July 18, 2022. Accessed November 02, 2023.
27. Anawalt BD, Page ST. Approach to the male with infertility. *UpToDate.* www.uptodate.com. Published October 04, 2022. Accessed November 02, 2023.
28. Morris ME. Evaluation and management of infertility in females of advancing age. *UpToDate.* www.uptodate.com. Published February 18, 2022. Accessed November 02, 2023.
29. Practice Committees of the American Society for Reproductive Medicine and Society for Reproductive Endocrinology and Infertility. Electronic address: asrm@asrm.org. Use of exogenous gonadotropins for ovulation induction in anovulatory women: a committee opinion. *Fertil Steril.* 2020;113(1):66 to 70. doi:10.1016/j.fertnstert.2019.09.020
30. Infertility Workup for the Women's Health Specialist: ACOG Committee Opinion, Number 781. *Obstet Gynecol.* 2019;133(6):e377 to e384. doi:10.1097/AOG.0000000000003271
31. Schlegel PN, Sigman M, Collura B, et al. Diagnosis and Treatment of Infertility in Men: AUA/ASRM Guideline Part I. *J Urol.* 2021;205(1):36 to 43. doi:10.1097/JU.0000000000001521
32. Schlegel PN, Sigman M, Collura B, et al. Diagnosis and treatment of infertility in men: AUA/ASRM guideline part II. *Fertil Steril.* 2021;115(1):62 to 69. doi:10.1016/j.fertnstert.2020.11.016
33. Practice Committee of the American Society for Reproductive Medicine. Electronic address: asrm@asrm.org; Practice Committee of the American Society for Reproductive Medicine. Evidence-based treatments for couples with unexplained infertility: a guideline. *Fertil Steril.* 2020;113(2):305 to 322. doi:10.1016/j.fertnstert.2019.10.014
34. Moseson H, Zazanis N, Goldberg E, et al. The Imperative for Transgender and Gender Nonbinary Inclusion: Beyond Women's Health. *Obstet Gynecol.* 2020;135(5):1059 to 1068. doi:10.1097/AOG.0000000000003816
35. Ethics Committee of American Society for Reproductive Medicine. Access to fertility treatment by gays, lesbians, and unmarried persons: a committee opinion. *Fertil Steril.* 2013;100(6):1524 to 1527. doi:10.1016/j.fertnstert.2013.08.042
36. ACOG Committee Opinion No. 749: Marriage and Family Building Equality for Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, Asexual, and Gender Nonconforming Individuals. *Obstet Gynecol.* 2018;132(2):e82 to e86. doi:10.1097/AOG.0000000000002765
37. Practice Committee of the American Society for Reproductive Medicine. Definitions of infertility and recurrent pregnancy loss: a committee opinion. *Fertil Steril.* 2020;113:533 to 5. 38. Ethics Committee of the American Society for Reproductive Medicine. Oocyte or embryo donation to women of advanced reproductive age: an Ethics Committee opinion. *Fertil Steril.* 2016;106:e3 to 7.

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.

The purpose of this clinical 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. It does not constitute a contract or guarantee regarding payment or 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 and applicable Health Plan-level administrative policies and procedures.

This clinical policy is effective as of the date determined by the Health Plan. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and

regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. The Health Plan retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members. This clinical policy is not intended to recommend treatment for members. Members should consult with their treating physician in connection with diagnosis and treatment decisions.

Providers referred to in this clinical policy are independent contractors who exercise independent judgment and over whom the Health Plan has no control or right of control. Providers are not agents or employees of the Health Plan.

This clinical policy is the property of the Health Plan. Unauthorized copying, use, and distribution of this clinical policy or any information contained herein are strictly prohibited. Providers, members and their representatives are bound to the terms and conditions expressed herein through the terms of their contracts. Where no such contract exists, providers, members and their representatives agree to be bound by such terms and conditions by providing services to members and/or submitting claims for payment for such services.

©2018 Centene Corporation. All rights reserved. All materials are exclusively owned by Centene Corporation and are protected by United States copyright law and international copyright law. No part of this publication may be reproduced, copied, modified, distributed, displayed, stored in a retrieval system, transmitted in any form or by any means, or otherwise published without the prior written permission of Centene Corporation. You may not alter or remove any trademark, copyright or other notice contained herein. Centene[®] and Centene Corporation[®] are registered trademarks exclusively owned by Centene Corporation.