Fertility Preservation: Clinical & Coverage Concerns

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Disclosures

None

Disclaimer

The codes given in this presentation are codes for fertility preservation and laboratory procedures compiled by the ASRM Coding Committee. The CPT codes listed are standard for ART procedures. While we have listed codes relevant to fertility preservation, this list is not exhaustive of all procedures.

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Gender Transition and Fertility

Everyone should understand fertility preservation options before beginning medical transition to consider how to protect fertility.

WPATH and the Endocrine Society both recommend that all transgender patients be counseled regarding the options for fertility preservation prior to transition.

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Fertility in Trans Communities

- Not enough research and data on fertility preservation in transgender communities
- Many transgender persons desire children
  - 62% of transmen (Wierckx et al, '12)
- Cross-hormone therapy and gender-affirming surgery (eg. gonadectomy) may result in loss of fertility; may be reversible or irreversible
- The majority of transgender persons are of reproductive age at the time of transition and have relationships after transition

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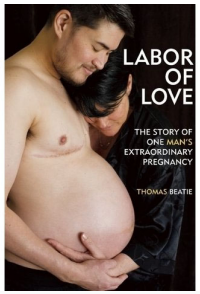
Imagining Parenthood

Public attention regarding transgender pregnancy and parenting surged in 2009 with Thomas Beatie's story

Became pregnant via donor insemination while married to a woman

Has 3 children



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Health Considerations

Factors in successful fertility preservation and reproduction:

Age
Diet and nutrition/weight
Smoking
Alcohol and drug use
History of STI's
Previous reproductive problems

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Timing and Decision-Making

Fertility preservation and reproduction can look different before initiation of medical transition then after transition

Talking with a mental health or medical professional, or peer support to determine impact of fertility preservation or reproductive treatments on gender dysphoria is recommended

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Transfeminine Fertility Preservation Options

- Sperm cryopreservation
- Testicular sperm extraction (TESE)
- Testicular tissue preservation
  - experimental in prepubertal boys

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Transmasculine Fertility Preservation Options

- Oocyte and/or embryo cryopreservation
  - using partner or donor sperm
  - success rate is age-dependent and freeze method-dependent e.g., vitrification vs. slow freeze
- Ovarian tissue cryopreservation
  - No longer "experimental"
  - several live births worldwide
- In-vitro oocyte maturation (experimental)

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Reproductive Options for Transgender Persons

- Usually requires discontinuation of exogenous hormones (unless using cryopreserved gametes in a partner) (how long?)
- Time to return to fertility is variable; may be irreversible
- Impact of a history of long-term exogenous hormone exposure on gametes and/or resulting offspring is unknown

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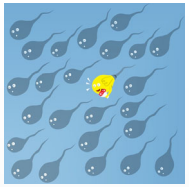
Trans Masculine Reproductive Options

- IUI (using partner or donor sperm)
- IVF (using own or partner's eggs; using own or partner's uterus or GC)



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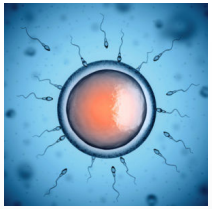
Trans Feminine Reproductive Options



- IUI of partner with a uterus
- IVF using partner or donor eggs/sperm and/or partner's uterus or GC
- Uterine transplantation in the future?

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ASRM & FDA Guidelines: Gamete Donation

- Medical history and physical exam
- STI testing
- Risk factor questionnaire
- Psychological counseling

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Access to Fertility Services

- No data on transgender persons specifically
- Non-discrimination laws vary by jurisdiction

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Ethical Considerations in Family Building

Reproductive autonomy
Well-being/interest of the offspring
Safety of procedures/treatments
Impact on society

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Perinatal, Pregnancy, and Parenting Issues

- Web-based survey
- 41 transmen; 61% had used T
- 80% resumed menses w/in 6 months
- 88% cases used own eggs
- 2/3 of pregnancies were planned
- 7% used fertility meds
- Similar OB outcomes in T and non-T users
- Desire for supportive resources
- Lack of provider awareness and knowledge

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Clinical Summary

- Many transgender persons desire children and are of reproductive age at the time of transition
- Transgender persons should be offered fertility preservation prior to cross-sex hormone therapy and gender-affirming surgery
- Transgender persons should have access to fertility services
- Multidisciplinary team approach
- Research should be encouraged

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Defining fertility preservation

Fertility preservation is the process of saving or protecting eggs, sperm, or reproductive tissue so that a person can use them to have biological children in the future.

-AFP and NICHD

Iatrogenic Infertility: An impairment of fertility by surgery, radiation, chemotherapy or other medical treatment or intervention affecting reproductive organs or processes.

- Potential side effect of necessary medical treatment
- Underlying diagnosis for another disease or condition
- Does not include:
  - "Elective" egg freezing for naturally arising diminished ovarian reserve or aging
  - Treatment for a diagnosis of infertility itself, e.g., procedures/medications to cause a pregnancy such as IUI or IVF

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Who needs fertility preservation?

Trans Population:
- Before gender-affirming surgery; removal of the testicles or ovaries causes permanent infertility
- Possibly before beginning cross-hormone therapy; may cause temporary infertility, but long-term fertility impacts not known; FP later would require cessation of hormone treatment and possible psychological distress

Cancer Patients:
- Before chemotherapy, radiation, and/or surgery affects gametes and/or reproductive organs
- Maintenance therapies and/or late effects of treatment may create incompatibility with pregnancy

Others at risk:
- Sickle cell disease or some hematologic conditions especially if bone marrow transplant is required
- Prior to prophylactic surgery, e.g., oophorectomy; hysterectomy
- Emerging: to screen and avoid genetic conditions

Studies:
- In trans and cancer populations: participants identify genetic parenthood as a concern
- In young adult cancer survivors, unaddressed infertility is associated with higher levels of anxiety, depression, and lower Q of L

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How much does Fertility Preservation cost?

Fertility Procedure/Option	Average Cost
Oocyte/Embryo Cryopreservation	$10,000 - $15,000
Ovarian Tissue Cryopreservation*	$10,000 - $12,000
Sperm Banking/FDA Testing	$1,000
Testicular Tissue Freezing**	$2,500
Intrauterine Insemination (IUI)	$400
In Vitro Fertilization (IVF) (Cycle)	$15,000
Donor Sperm (Vial)	$400
Donor Oocytes	$25,000
Gestational Surrogacy	$50,000 - $100,000+

**ASRM removed experimental label in Dec. 2018*
*** Still classified as "investigational"*

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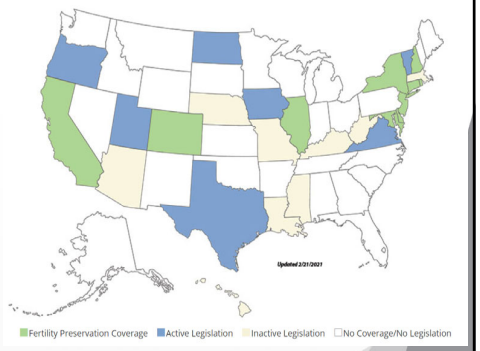
Legislative Summary 2017-to DATE

31+ M Lives Covered!

11 States Have Enacted FP Coverage:

California	New Hampshire*
Connecticut	New Jersey
Colorado*	New York*
Delaware*	Rhode Island
Illinois	Utah**
Maryland	

*Also includes IVF coverage
**Medicaid; for cancer patients only



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California Coverage

- 1st state to add stand-alone FP coverage
- Based on state law: Knox Keene Act
- Insurers must cover BASIC HEALTH CARE SERVICES
- Bill "clarifies" existing coverage for those at risk for iatrogenic infertility

Los Angeles Times

Fertility options for cancer patients must be covered under new California law

By MELODY GUTIERREZ | STAFF WRITER OCT. 13, 2019 | 8:02 AM

SACRAMENTO – California will require health insurance companies to cover the cost of fertility procedures for patients undergoing treatment that can make it difficult to have children, such as chemotherapy, under a bill signed by Gov. Gavin Newsom on Saturday.

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SB 600

SENATE BILL No. 600

Introduced by Senator Portantino

February 22, 2019

An act to add Sections 1374.551 and 1374.552 to the Health and Safety Code, and to add Sections 10119.61 and 10119.62 to the Insurance Code, relating to healthcare coverage.

- Signed into law October 19, 2019
- Not a new mandate, but rather a codified existing law
- Categorized *fertility preservation* services as distinct from *infertility services*
- Only affected DMHC plans
  - Did not include Medi-Cal
  - Did not include self-insured ERISA plans

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SB 600 - Language

- **SECTION 1.**
- Section 1374.551 is added to the Health and Safety Code, to read:
- **1374.551.**
- (a) When a covered treatment may directly or indirectly cause iatrogenic infertility, standard fertility preservation services are a basic health care service, as defined in subdivision (b) of Section 1345 and are not within the scope of coverage for the treatment of infertility for the purposes of Section 1374.55.
- (b) For purposes of this section, the following definitions apply:
- (1) "Iatrogenic infertility" means infertility caused directly or indirectly by surgery, chemotherapy, radiation, or other medical treatment.
- (2) "May directly or indirectly cause" means medical treatment with a possible side effect of infertility, as established by the American Society of Clinical Oncology or the American Society for Reproductive Medicine.
- (3) "Standard fertility preservation services" means procedures consistent with the established medical practices and professional guidelines published by the American Society of Clinical Oncology or the American Society for Reproductive Medicine.

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Iatrogenic Infertility

- *"Iatrogenic infertility" means infertility caused directly or indirectly by surgery, chemotherapy, radiation, or other medical treatment.*

Surgery:
- Oophorectomy and/or Hysterectomy
- Orchiectomy

Other medical treatment:
- Cross-sex hormones

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Side Effect

- *"May directly or indirectly cause" means medical treatment with a possible side effect of infertility, as established by the American Society of Clinical Oncology or the American Society for Reproductive Medicine.*

Updated in 2021:
Exogenous hormones and gonadectomy have well recognized impacts on fertility, and providers may encounter patients seeking fertility preservation and/or assisted reproduction.

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"Standard" Procedures

- *"Standard fertility preservation services" means procedures consistent with the established medical practices and professional guidelines published by the American Society of Clinical Oncology or the American Society for Reproductive Medicine.*

Updated in 2021:
Fertility preservation options include sperm, oocyte, and embryo cryopreservation as well as ovarian tissue cryopreservation. Prepubertal testicular tissue cryopreservation is considered investigational.

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Details of Coverage

- Scope of coverage includes all procedures and medications that are "medically necessary" for fertility preservation
- Fertility consultation
- Sperm analysis, banking, and freezing
- Ovulation induction, monitoring, oocyte retrieval, freezing of oocytes or fertilization and freezing of embryos
- Storage of frozen tissues
- Specifics of coverage not established:
- Number of sperm specimens banked;
- Number of egg maturation and collection cycles;
- Medications;
- Lab work; embryology; screening of embryos, etc.
- Duration of storage

DMHC regulations pending

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Fertility preservation coding

Two codes are available to practitioners for billing in these scenarios. Z codes are a special group of codes provided in ICD-10-CM for the reporting of factors influencing health status and contact with health services. The diagnosis is included as a Z code because the actual code for the underlying cancer diagnosis cannot be used while counseling or providing management for fertility preservation.

Z31.62 Encounter for fertility preservation counseling
This code includes encounter for fertility preservation *counseling* prior to cancer therapy and prior to surgical removal of gonads. Although the wording as above may imply cancer treatment or removal of gonads, these are meant as examples and this code can be used for elective fertility preservation for non-cancer or surgical removal of gonads patients as well. This code should be used whenever an E/M component is involved, such as initial visit or subsequent counseling/management visits.

Z31.84 Encounter for fertility preservation procedure
This code includes encounter for fertility preservation procedure prior to cancer therapy and prior to surgical removal of gonads. As noted above, although the wording may imply cancer treatment or removal of gonads, these are meant as examples and this code can be used for elective fertility preservation for non-cancer patients as well. This code should be used whenever a procedure is being performed such as egg retrieval or oocyte culture.

Any other relevant diagnosis code should be used (ASRM Coding Cmte)

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FP and ART CPT codes

Advanced Reproductive/Fertilization Services	CPT Codes
Cryopreservation, mature oocyte(s)	89337
Cryopreservation; immature oocyte(s)	0357T
Cryopreservation; embryo(s)	89258
Cryopreservation; sperm	89259
Cryopreservation; reproductive tissue, ovarian	0058T
Cryopreservation; reproductive tissue, testicular	89335
Follicle puncture for oocyte retrieval, any method	58970
Ultrasonic guidance for aspiration of ova, imaging supervision and interpretation	76948
Culture of oocyte(s)/embryo(s), less than 4 days	89250
Culture of oocyte(s)/embryo(s), less than 4 days; with co - culture of oocyte(s)/embryos	89251
Assisted embryo hatching, microtechniques (any method)	89253
Oocyte identification from follicular fluid	89254
Sperm identification from aspiration (other than seminal fluid)	89257
Sperm identification from testis tissue, fresh or cryopreserved	89264
Extended culture of oocyte(s)/embryo(s), 4 - 7 days	89272

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FP and ART CPT codes

Ovulation Induction	CPT Codes
Injection, chorionic gonadotropin, per 1,000 USP units	10725
Injection, urofollitropin, 75 IU	J3355
Injection, menotropins, 75 IU	S0122
Injection, follitropin alfa, 75 IU	S0126
Injection, follitropin beta, 75 IU	S0128
Injection, ganirelix acetate, 250 mcg	S0132
Management of ovulation induction (interpretation of diagnostic tests and studies, non face-to- face medical management of the patient), per cycle	S4042

Storage (per year)	CPT Codes
Storage; oocyte(s)	89346
Storage; embryo(s)	89342
Storage; sperm/semen	89343
Storage; reproductive tissue, testicular/ovarian	89344

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Rationales for Coverage

1. Fertility Preservation is *Medically Necessary*
2. Treatments are *Standard of Care*
3. Low Cost & Potential Cost Offsets
4. Ethical Bases for Coverage

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