

Health Service System City & County of San Francisco

Health Service Board Meeting

Infertility Coverage

January 12, 2017

Infertility

- Infertility is defined as not being able to get pregnant despite having frequent, unprotected sex for at least a year for most couples.
- Infertility may result from an issue with either you or your partner, or a combination of factors that interfere with pregnancy.

Source: Mayo Clinic (accessed 10/27/2016)

<http://www.mayoclinic.org/diseases-conditions/infertility/home/ovc-20228734>

Goals of the Infertility Benefit

- Provide services that result in a healthy live birth.
- Be respectful of the resources needed to provide this benefit.
- Recognize that culturally diverse individuals have a need and desire to bear children.
- Ensure that the medical treatment reflects the current research on the best treatment and medication to ensure a healthy live birth.

Current Infertility Benefits Offered to SFHSS Members

	Blue Shield of California	Kaiser Permanente	UnitedHealthcare
Women not required to wait a specified time period	<ul style="list-style-type: none"> ■ Waiting period 	<ul style="list-style-type: none"> ■ Year or more of attempts or demonstrated condition / causing infertility 	<ul style="list-style-type: none"> ■ Year or more of regular unprotected intercourse if the woman is under age 35 ■ If under age 44, and has infertility
Intra-cytoplasmic Sperm Injection (ICSI, 'IK-see')	<ul style="list-style-type: none"> ■ Covered 	<ul style="list-style-type: none"> ■ Not named 	<ul style="list-style-type: none"> ■ Not named
Pre implantation Genetic Determination (PGD)	<ul style="list-style-type: none"> ■ Covered 	<ul style="list-style-type: none"> ■ Covered 	<ul style="list-style-type: none"> ■ Covered

- **PGD** a test for specific genetic conditions for members who are at a high risk for having embryos with certain genetic issues

Current Infertility Benefits Offered to SFHSS Members

	Blue Shield of California	Kaiser Permanente	UnitedHealthcare
Long Term Storage	<ul style="list-style-type: none"> One retrieval and 12 months of storage per lifetime 	<ul style="list-style-type: none"> Only if associated with GIFT, IVF or ZIFT One retrieval and 6 months of storage per lifetime 	<ul style="list-style-type: none"> Not covered
GIFT / IVF / ZIFT (definitions below)	<ul style="list-style-type: none"> One GIFT, IVF or ZIFT—even if unsuccessful 	<ul style="list-style-type: none"> One GIFT, IVF or ZIFT—even if unsuccessful 	<ul style="list-style-type: none"> One GIFT, IVF or ZIFT—even if unsuccessful
Cost / Coinsurance	<ul style="list-style-type: none"> 50% 	<ul style="list-style-type: none"> 50% 	<ul style="list-style-type: none"> 50% after deductible

- **GIFT**—gamete intrafallopian transfer
- **IVF**—in vitro fertilization
- **ZIFT**—zygote intrafallopian transfer

Benefit Clarification: Assisted Reproductive Technology

Redefine the infertility to be Infertility and Assisted Reproductive Technology in order to reflect the treatments that are being undertaken to assist member in being pregnant.

Action Requested: Approve

Benefit Enhancement: Eliminate the requirement for 12-months of frequent, unprotected sex between partners of the opposite sex and require coverage to include the presence of a demonstrated condition recognized by a licensed physician and surgeon as a cause of infertility

- Eliminate the requirement for 12-months of frequent, unprotected sex between partners of the opposite sex
 - Elimination of this requirement removes a barrier for persons of the same sex
- Require coverage to include the presence of a demonstrated condition recognized by a licensed physician and surgeon as a cause of infertility.
 - Adding this requirement aligns the definition of infertility with the definition under the California State Health and Safety Code

Action: Approve the elimination and approve the requirement

Benefit Enhancement: Eliminate the age requirement for eligibility for infertility treatment.

- Eliminate the requirement for a woman to be under age 44 to receive infertility benefit.
 - Elimination of this requirement removes a barrier for age and complies with State Law prohibiting age discrimination in the offering of infertility benefits.

Action: Approve the elimination

Benefit Enhancement: Assisted Hatching

An important process in the fertilization of an egg is the ability of the sperm to penetrate the egg “shell” (zona pellucida).

Assisted hatching is a newer laboratory technique that was developed when fertility experts observed that embryos with a thin zona pellucida had a higher rate of implantation during in vitro fertilization.

- With assisted hatching, an embryologist uses micromanipulation under a microscope to create a small hole in the zona pellucida.

Action: Add assisted hatching as an approved procedure

Benefit Enhancement: Intra-cytoplasmic sperm injection

Intra-cytoplasmic sperm injection (ICSI—pronounced /ɪkˈsiː/, IK-see) is an in vitro fertilization procedure in which a single sperm is injected directly into an egg. Defective sperm function remains the single most important cause of human infertility.

Action: Add ICSI as an approved procedure

Benefit Enhancement: Pre-implantation Genetic Screening

Pre-implantation Genetic Screening (PGS):

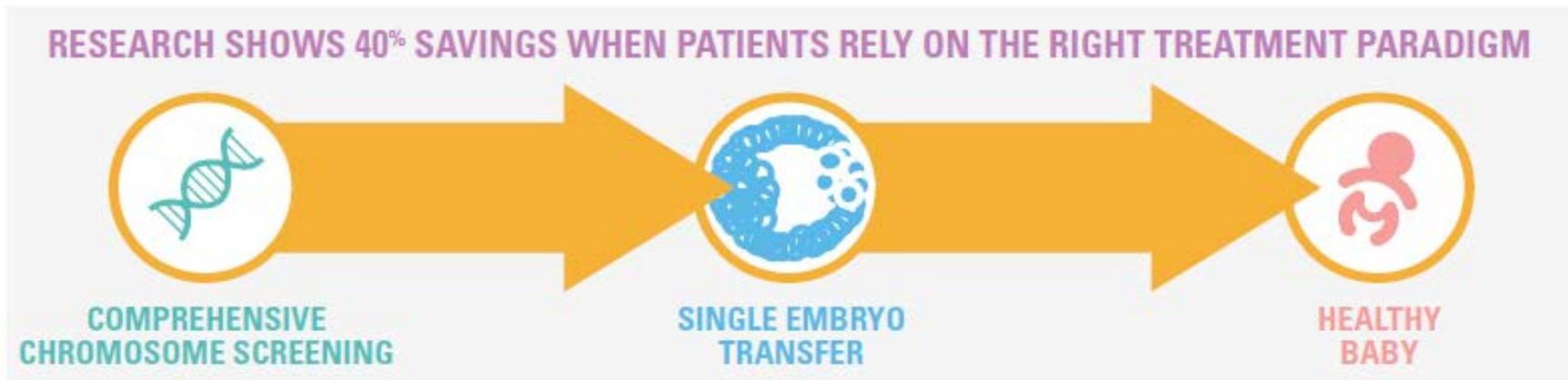
- PGS allows the embryos to be screened for aneuploidy. These embryos are then not selected for fertilization.
 - In a normal embryo, 23 sets of chromosomes are contributed by the male (sperm) and female (egg) resulting in an embryo with 46 sets of chromosomes
 - However, not all embryos are developed with a set of 46 chromosomes. Embryos that have an abnormal set of chromosomes are said to be aneuploid
 - Aneuploidy is recognized as a major cause of failed implantation as these embryos were never meant to become a fetus
- PGS has been found to reduce the rate of miscarriage and improve the success of implantation.
- This also prevents the need for implanting multiple embryos in order to have a successful implantation and reducing the possibility of multiple births.
- *Please note that pre-implantation genetic diagnosis (PGD) is covered for persons at high risk of having embryos with certain genetic issues.*

Action: Approve PGS as an approved procedure

Benefit Enhancement: Single Embryo Transfer

■ Single Embryo Transfer (SET):

- The American Society for Reproductive Medicine guidelines recommend only single embryo transfer.



Source: *Reproductive Medicine Associates of New Jersey; Infertility In America 2015 Survey and Report*

Additional Consideration for benefit definition

- Should the benefit be limited to the implantation of one embryo/egg per cycle?
 - Recent advances in the ability to identify embryo with a high likelihood of implantation and healthy baby are now available
 - Multiple births have higher risks of prematurity, future health issues and learning challenges due prematurity as the challenges the female experiences during pregnancy
- Action: Approve SET as a recommended (required) procedure

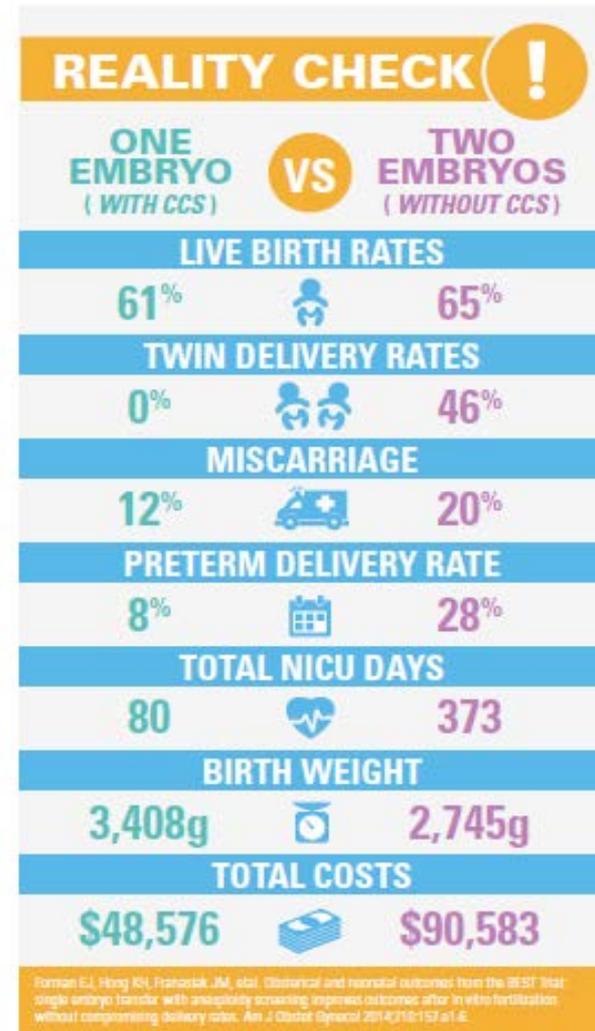


Table reproduced from http://www.rmanj.com/wp-content/uploads/2015/04/RMANJ_Infertility-In-America-SurveyReport_04152015.pdf p.4

Benefit Enhancement: Increase benefit limit to two lifetime cycles of either GIFT/IVF/ZIFT

- **Gamete intrafallopian transfer (GIFT)** is a tool of assisted reproductive technology against infertility. Eggs are removed from a woman's ovaries, and placed in one of the Fallopian tubes, along with the man's sperm.
- **In Vitro Fertilization (IVF)** is the series of procedures (often complex) in which a mature eggs is retrieved from the ovary and is fertilized with sperm in a laboratory setting. The embryo is then placed in the woman's uterus.
- **Zygote intrafallopian transfer (ZIFT)** is an infertility treatment used when a blockage in the fallopian tubes prevents the normal binding of sperm to the egg. Egg cells are removed from a woman's ovaries, and in vitro fertilized. The resulting zygote is placed into the fallopian tube by the use of laparoscopy.

Action: Increase coverage to two cycles in total of either GIFT/IVF/ZIFT in a life time

Benefit Enhancement: Increase egg storage to 12 months

- Only if associated with GIFT, IVF or ZIFT, offer one egg retrieval and 12 months of storage per lifetime*
 - *Storage costs are between \$300 and \$1,000 a year with an additional charge for thawing of between \$5,000 and \$10,000.*
 - Plans to assist the member in finding long-term storage and shipping both which will be at the member's expense
 - Egg retrieval and storage is to be available to members who medical treatment will result in the member becoming infertile

Action: Only if associated with GIFT, IVF or ZIFT, offer one egg retrieval and 6 months of storage per lifetime

Benefit Enhancements Summary

- Rename the benefit as Infertility and Assisted Reproductive Technology in order to reflect the treatments that are being undertaken to assist member in being pregnant
- Benefit Enhancements
 - Eliminate the requirement for a year of frequent, unprotected sex
 - Add the requirement for the presence of a demonstrated condition recognized by a licensed physician and surgeon as a cause of infertility
 - Eliminate the age maximum requirement
 - Add assisted hatching as needed
 - Add coverage for ICSI as needed
 - Add pre-implantation genetic screening (as soon as efficacy is confirmed)
 - Add elective single embryo transfer
 - Increase the benefit to two total cycles of either/or GIFT/IVF/ZIFT within a lifetime
 - Increase coverage for egg/embryo storage for up to 12 months after having egg retrieval in association with GIFT/IVF/ZIFT

Appendix and References

References

- 2015 Infertility in America:
 - http://www.rmanj.com/wp-content/uploads/2015/04/RMANJ_Infertility-In-America-SurveyReport-04152015.pdf

- Assisted Reproductive Technology Surveillance—United States, 2010:
 - <http://www.cdc.gov/mmwr/preview/mmwrhtml/ss6209a1.htm>

- Delayed Childbearing: More Women Are Having Their First Child Later in Life:
 - <https://www.cdc.gov/nchs/data/databriefs/db21.pdf>