Fertility Market Overview

MARCH 2022

Harris Williams

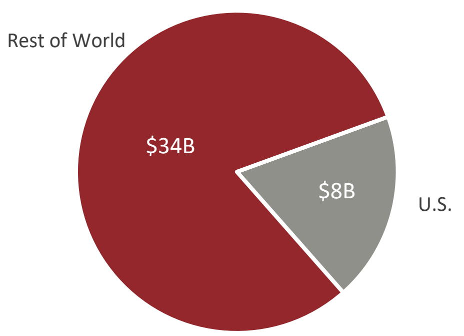
The Appeal of the Fertility Services Industry

INVESTORS ARE HIGHLY INTERESTED IN THE FERTILITY SERVICES INDUSTRY DUE TO ITS LARGE SIZE, FRAGMENTATION, AND GROWTH OPPORTUNITIES.

- The U.S. fertility market is estimated to be $8B across in-vitro fertilization (“IVF”), genetic testing, reproductive tissue storage, and donor services
  - Growing awareness of IVF and related services is creating an ever-larger addressable market opportunity; U.S. IVF services alone are estimated at >$3B and projected to grow at a ~10%+ CAGR through 2025P
- Strong, long-term demand drivers including:
  1. Cultural shift to having children later in life, as well as lifestyle and health issues increasing incidences of infertility
  2. One of few healthcare service sectors in which clinical outcomes data are measured and reported, providing potential benefit to best-in-class providers
  3. Significant private pay component provides highly attractive reimbursement profile and insulation from pricing pressures relative to other healthcare sectors
  4. Highly recession-resistant demand due to parents’ desire to build families and the ticking of the biological clock
- Highly fragmented provider landscape primarily comprising of local / regional clinics; platforms of scale are able to leverage best practices, invest in leading technology, attract new physician partners and scientists, and improve operations

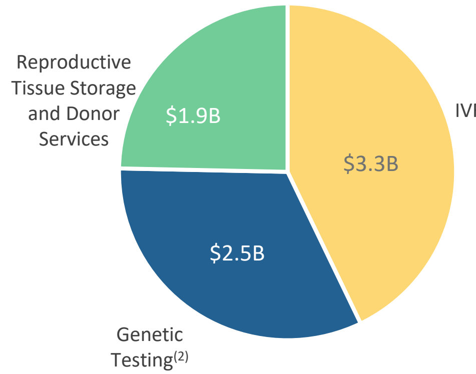
GLOBAL FERTILITY SERVICES MARKET[1]

(2019 $ in billions)



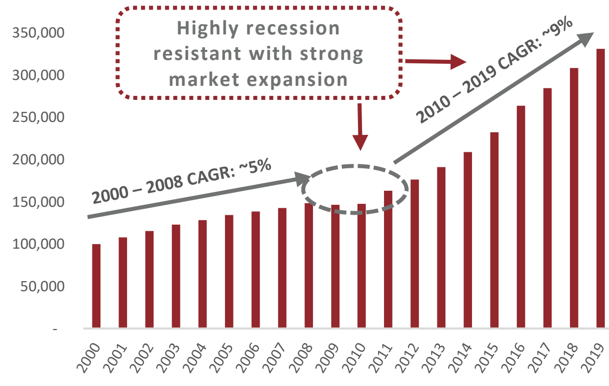
U.S. FERTILITY SERVICES MARKET[1]

(2019 $ in billions)



STRONG, RECESSION-RESISTANT DEMAND[3]

ART Cycles Performed in the U.S.



(1) HW internal estimates based on data from Allied Market Research, Cision PR Newswire, and Global Market Insights.
(2) Represents Prenatal and New-Born Genetic Testing market.
(3) CDC historical cycle data.

IVF vs. Other Fertility Treatment Methods

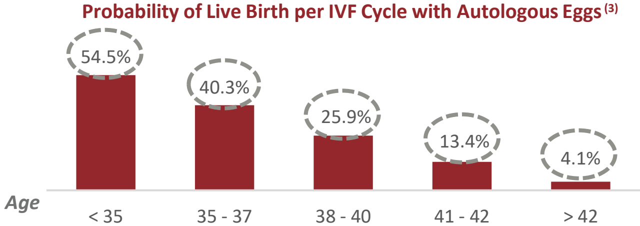
IVF IS ONE OF THE MOST SUCCESSFUL FERTILITY TREATMENTS AVAILABLE.(1)

- Most couples seeking fertility services explore multiple options with their physician, who develops a treatment plan that may consist of corrective surgery, natural cycle monitoring, ovulation induction, timed intercourse, IUI, and/or IVF
- IVF offers the highest success rates, a lower overall time to pregnancy, and greater applicability to a wider range of patients

	In Vitro Fertilization (IVF)	Other Fertility Treatments
Description	• Involves fertilization of eggs in a laboratory setting after they have been removed from the ovaries • Healthy embryo(s) is transferred back to the uterus to continue development	• Relies on medication, intrauterine insemination (IUI), or corrective surgery (hysteroscopy, laparoscopy, myomectomy, etc.) to aid in conception • Can sometimes be a first step, particularly among younger women, prior to IVF
Advantages	• Greater control results in healthier babies and reduction in multiple births • Addresses wide range of both male and female fertility issues, such as low sperm count and motility and damaged fallopian tubes	• Typically, less expensive than IVF • Sometimes able to treat infertility less aggressively
Disadvantages	• More expensive on a per treatment basis, but patients who seek IVF first can save thousands of dollars and more quickly achieve a successful birth	• Often presents more risk than IVF, including higher chance of miscarriage, multiple births, and complications from surgery • Several physical conditions, including abnormal fallopian tubes, make medication and injection treatments not possible to some patients facing infertility
Industry Average Cost(2)	• $12,000 - $25,000 per cycle (excluding medications, and assumes use of non-donor eggs on lower end); surrogacy can add $60K-$120K	• Ranges between $100 - $5,000 per treatment

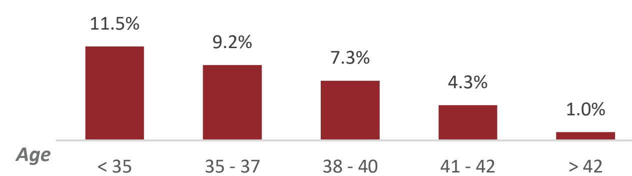
Industry Avg. Success Rates (Pregnancy Rate per Cycle)

Probability of Live Birth per IVF Cycle with Autologous Eggs(3)



Women across all ages are over 3x more likely to conceive with IVF compared to other treatments

Probability of Pregnancy Using Medication and IUI(4)



(1) Yale Medicine.
(2) IBIS World Report on Fertility Clinics in the U.S., FertilityIQ, and Harris Williams proprietary data.
(3) Statistics based on publicly available SART data.
(4) Statistics based on study published by Serena Dovey in Fertility and Sterility and shown for females who took fertility medication in conjunction with receiving Intrauterine Insemination (IUI).

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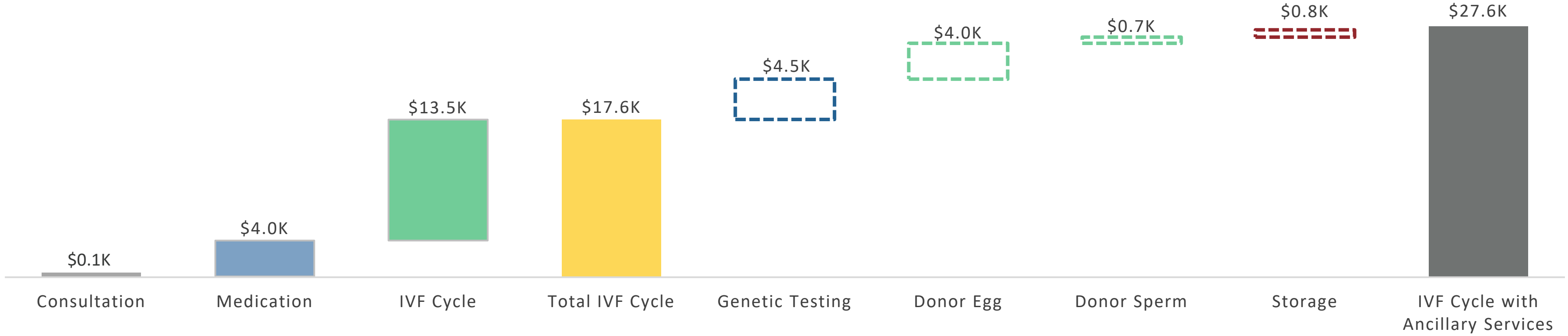
IVF Treatment Overview

THE TYPICAL COST OF AN IVF CYCLE RANGES AS PATIENTS CHOOSE THE MOST APPROPRIATE COMBINATION OF SERVICES THAT INCREASES THEIR LIKELIHOOD OF A SUCCESSFUL PREGNANCY.

TYPICAL IVF SERVICES COST BREAKOUT[1]



Consultation

Individuals who try to conceive naturally may face difficulties due to age, health conditions, or other inhibiting factors, driving them to seek fertility treatment

- Potential patients are referred to consultation visits by other physicians, or through direct-to-consumer marketing efforts
- Physician practices perform consultations for patients
- Physician determines diagnosis and discusses goals/family planning with patients. Initial assessment may include carrier screening
- Physician develops treatment plan, which may include IVF initially or after other treatment options fail

Fertility Medication

Often used in combination with other fertility treatments, including IUI and IVF

IVF

Patients choose IVF for various reasons, including:

- Medical indications (e.g. blocked tubes, severe endometriosis, pelvic adhesions)
- Prior treatments were unsuccessful
- Screen familial genetic conditions or prior recurrent pregnancy loss (using PGT-M or PGT-A in conjunction with IVF)
- Option of using donor egg and/or donor sperm

If the patient proceeds with IVF, the physician will retrieve the patient's oocytes for assessment and will fertilize oocytes with sperm and culture the resulting embryos

Preimplantation Genetic Testing

Screens for detectable genetic defects prior to selecting and transferring an embryo, which drives higher single embryo transfer and implantation rates

Donor Services

Allows patients to utilize egg and/or sperm donors

Fertility Storage/Egg Banking

Preservation of embryos, oocytes, sperm, and other reproductive tissue for future reproductive potential

(1) IBIS World Report on Fertility Clinics in the U.S., FertilityIQ, and Harris Williams proprietary data.

Strong Trends Driving Attractive Growth

FAVORABLE TRENDS WILL CONTINUE TO DRIVE STRONG GROWTH IN THE FERTILITY MARKET.

INDUSTRY GROWTH DRIVERS

INCREASING AWARENESS & ACCESSIBILITY

- Increasing awareness of fertility treatments as well as advancements in technology and genetic testing are increasing success rates and lowering total average costs to make treatment more accessible

INCREASE IN CHRONIC HEALTH CONDITIONS

- Increasing prevalence of chronic conditions and health issues driving increasing rates of infertility and demand for IVF services

CULTURAL SHIFTS

- Shifting cultural dynamics to have children later in life are driving people to use more IVF services as well as elective fertility preservation services
- Growing population of same-sex couples desiring children driving additional demand

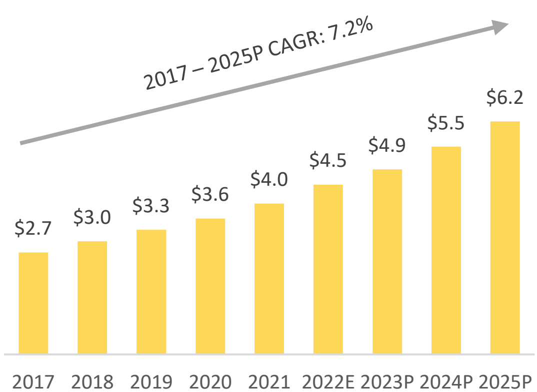
REIMBURSEMENT & BENEFIT TRENDS

- Significant private pay component, despite moderately increasing insurance coverage and employee benefits for IVF and genetic testing services

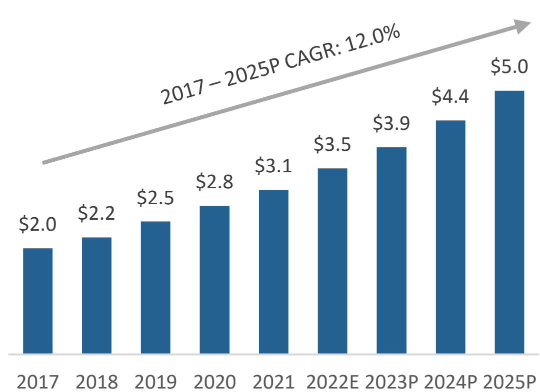
DRIVING SUSTAINED INDUSTRY GROWTH

For the Years Ended and Ending December 31, 2017 – 2025P
($ in billions)

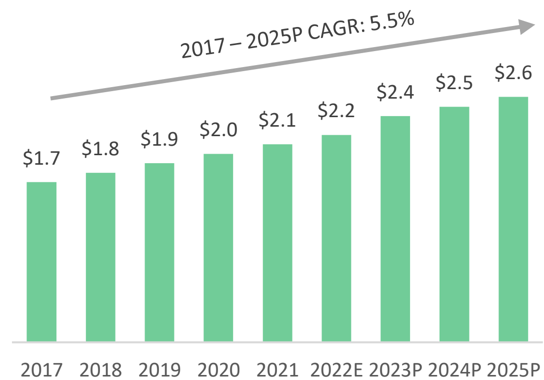
IVF SERVICES
U.S. MARKET(1)



GENETIC TESTING
U.S. MARKET(1)(2)



REPRODUCTIVE TISSUE STORAGE &
DONOR SERVICES U.S. MARKET(1)



(1) HW internal estimates based on data from Allied Market Research, CDC, and Global Market Insights (all figures stated prior to the impact of COVID-19).
(2) Represents Prenatal and Newborn Genetic Testing market.

Industry Growth Drivers: *Increasing Awareness and Accessibility*

THE INCREASING SOCIAL AWARENESS AND ACCESSIBILITY OF USING FERTILITY SERVICES, AS WELL AS PARENTS WAITING LONGER TO START A FAMILY, HAVE LED TO A RAPIDLY GROWING MARKET.

- Approximately eight million babies have been born globally using ART services since 1978[1], driven by continued technological and genetic testing advancements and substantially improved outcomes and costs, resulting in increased accessibility and demand
- Rapidly growing social awareness of fertility services, such as high-profile references in popular culture and campaigns like the National Infertility Awareness Week
  - Driving greater interest in ART services, as demonstrated by an over 124% increase in ART cycles performed from 2010 to 2019[2]
- Since 1970, the average age of first motherhood in the U.S. has increased from 21 to 26, driven primarily by an increase in first children born to women 35 and older, with significantly increased infertility issues and demand for ART services among women in their 30s and 40s[3]

GROWING CULTURAL AWARENESS

BBC **Michelle Obama reveals daughters were conceived by IVF**

CNN Dispelling taboos, Michelle Obama talks IVF and miscarriage

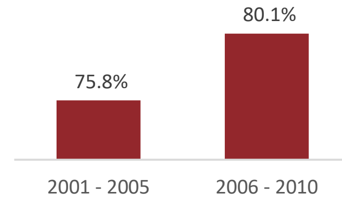
"The biological clock is real and egg production is limited, something I realized at age 34; we had to do IVF. I think that as women the worst thing that we do to each other is that we do not share the truth about our bodies, how they work or do not work."

- Michelle Obama

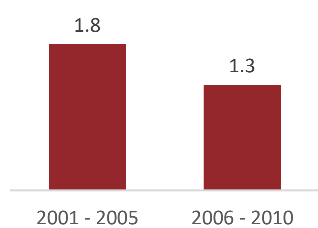
INCREASED SUCCESS RATES DRIVE ACCESSIBILITY [4]

Overall improvement in IVF techniques has resulted in higher pregnancy rates per cycle, driving down the average total cost of an IVF pregnancy, making the service more accessible to a broader population

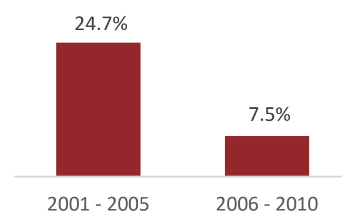
Likelihood of a Live Birth by the Fifth Cycle with IVF



Average Embryos Transferred with IVF



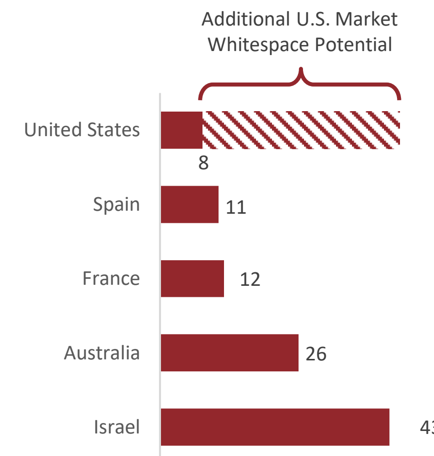
Multiple Birth Rate with IVF



ROOM TO GROW [5]

IVF Prevalence by Country

IVF Cycle per 10,000 People



(1) CNN Health (2018).
(2) CDC historical cycle data.
(3) New York Times (2018).
(4) Australian and New Zealand Journal of Obstetrics and Gynecology (2015).
(5) Oxford Academic: Human Reproduction (2018) and Reproductive Biomedicine Online (2019).

Industry Growth Drivers: *Cultural Shifts*

SOCIETAL TRENDS HAVE RESULTED IN MORE COUPLES WHO REQUIRE FERTILITY SERVICES IN ORDER TO CONCEIVE.

WOMEN DELAYING MOTHERHOOD DRIVE ART SERVICES

- Larger presence of women in the workforce and shift toward having children later in life have driven demand for ART services to increase chances of successful pregnancy later in life
  - Infertility and the probability of having children with genetic diseases increases as women age, driving increased demand for taking preventive measures with elective fertility preservation services and using ART services
- Organizations such as Single Mothers by Choice and Choice Mom have grown considerably in recent years
  - The growth of these organizations highlights the increasing number of women choosing to have children on their own, which typically requires ART services in order to conceive

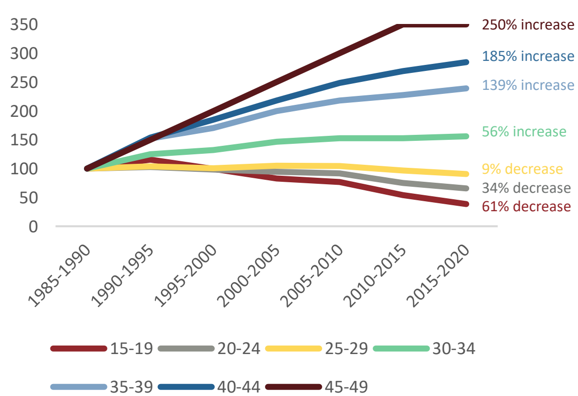
LARGE DEMAND FROM SAME-SEX COUPLES

- Cultural shifts and legislation changes have led to a growing number of same-sex couples having children
  - Approximately 16% of all same-sex households are raising children[(1)]
  - Growing number choosing to use ART services given the complexities of adoption

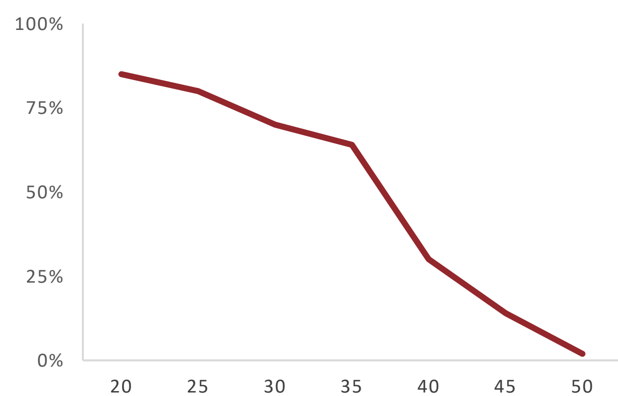
U.S. BIRTH RATES BY AGE OF MOTHER[(2)]

Years Ended and Ending December 31, 1985-2020

(Rate per Thousand Women Indexed at 100)

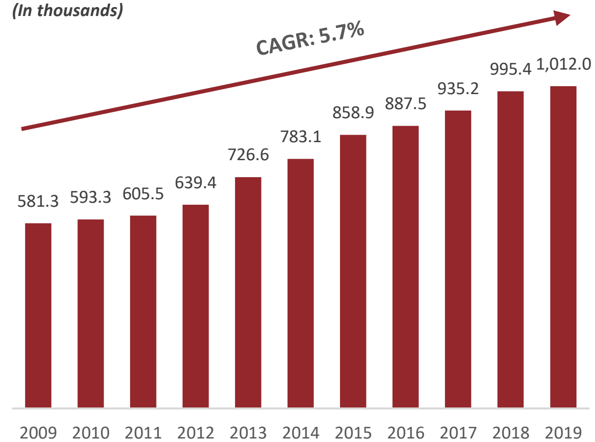


SHARP DECREASE IN PROBABILITY OF CONCEIVING WITH AUTOLOGOUS EGGS BY AGE[(3)]



GROWING POPULATION OF SAME-SEX COUPLES IN THE U.S.[(4)]

(In thousands)



HW Harris Williams

(1) Williams Institute (2018).
(2) CDC historical birth rate data.
(3) The American College of Obstetricians and Gynecologists.
(4) U.S. Census Bureau.

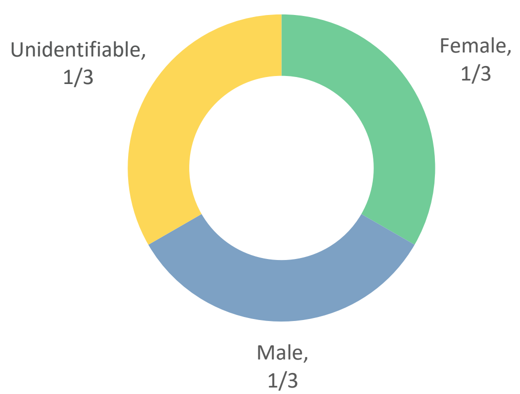
Industry Growth Drivers: *Increase in Chronic Health Conditions*

APPROXIMATELY 15% OF U.S. COUPLES ARE INVOLUNTARILY INFERTILE[1], AND RISING OBESITY, MEDICAL CONDITIONS, AND OTHER FACTORS ARE DRIVING INFERTILITY RATES HIGHER, INCREASING DEMAND FOR FERTILITY SERVICES.

- Chronic health conditions present in males and females result in similar proportions of infertility cases in each gender
- Obesity is continuing to increase across the U.S. and is a large driver of infertility issues
  - Women defined as obese are three times more likely to suffer from infertility than women with a normal body mass index (BMI)
  - Polycystic Ovarian Syndrome (PCOS), a hormonal disorder that affects roughly 10% of women by interfering with ovulation patterns and drives infertility, is linked to obesity[2]
  - Likelihood of uterine abnormalities, including endometrial polyps, increases with age and obesity
  - Male obesity reduces sperm quality and impairs the molecular structure of mature sperm
- Both sexes are susceptible to decreasing fertility rates due to increased alcohol use, stress, and limited exercise
- Females in particular are susceptible to certain genetic and hormonal medical conditions that may interfere with reproductive abilities

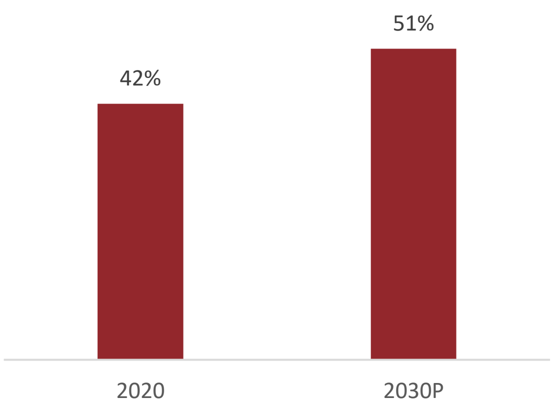
INFERTILITY CAUSES BY GENDER[3]

Percentage of Infertility Cases Attributed to Each Gender



RISING OBESITY RATES[4]

Percentage of U.S. Population Defined as Obese



MEDICAL CONDITIONS IMPACTING FERTILITY

GENETIC CONDITIONS
- *Birth Defects*
- *Chromosomal Abnormalities*

MEDICAL AND SURGICAL DISEASES
- *Uterine Fibroids and Polyps (Benign Growths)*
- *Endometriosis (Pelvic Tissue Overgrowth)*
- *Autoimmune Disorders*
- *Early Menopause*
- *Obesity*

HORMONAL CONDITIONS
- *PCOS*
- *Diabetes*
- *Thyroid Conditions*

OTHER FACTORS
- *Sexually Transmitted Diseases*
- *Cancer / Chemotherapy*
- *Risk Factors (Age, Smoking, Alcohol, Stress, Limited Exercise)*

(1) National Survey of Family Growth.
(2) U.S. National Library of Medicine (2015).
(3) National Institute of Child Health and Human Development.
(4) American Journal of Preventive Medicine, CDC historical data.

Industry Growth Drivers: *Reimbursement and Benefit Trends*

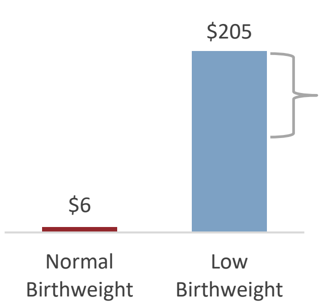
MORE ADULTS IN THE U.S. ARE GAINING ACCESS TO FERTILITY TREATMENTS DUE TO GROWING INSURANCE COVERAGE TRENDS AND FAVORABLE EMPLOYEE BENEFITS.

- Platforms of scale will comparatively benefit as coverage expands given their ability to drive better quality and negotiate higher reimbursement rates

EMPLOYERS GAIN FROM OFFERING FERTILITY COVERAGE

- Attracts new talent in competitive job markets by providing cost-saving incentives and creating a "family-friendly" culture
- Greater fertility coverage allows employees to choose the safest fertility option and minimizes time away from work
  - IVF treatments lead to fewer complications due to lower chance of multiple births and low birthweight compared to other fertility treatments
    - Multiple births are associated with expensive complications including preterm birth, low birthweight, and high rates of disability
  - Alternative fertility treatments pose greater health risks and result in greater total expense burden placed on the employer
- Two-thirds of large employers already offer some level of fertility coverage

Average Costs Associated with Low Birthweight[(1)]
($ in thousands)

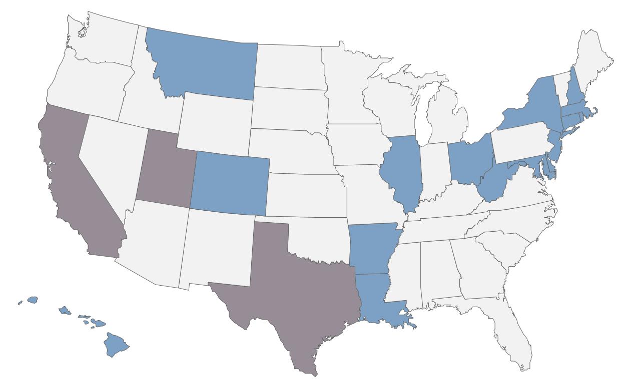


Nearly half of all charges related to prematurity / low birthweight are borne by employers or other private insurers

Select Companies Offering Fertility Benefits

CHANGING REGULATIONS

- Since the 1980s, 19 states have passed laws that require employers' insurers to either cover or offer some coverage for infertility diagnosis and/or treatment



State Laws Requiring Insurance Companies to Cover Infertility Treatment

State Laws Requiring Insurance Companies to Offer Coverage for Infertility Treatment

(1) American Society for Reproductive Medicine (2005).

Expansion of Fertility Benefits

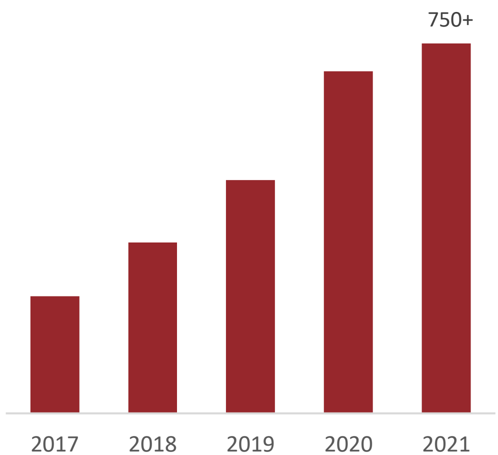
EMPLOYERS INCREASINGLY RECOGNIZE THE VALUE CREATED FROM EXPANDED FERTILITY BENEFITS.

- In order to attract and retain talent, the number of employers who offer fertility benefits has doubled since 2018
- Expanding coverage creates direct-to-employer growth opportunity
- Superior clinical results create savings opportunities for self-insured employers that are continuing to expand fertility coverage
  - Produces fewer higher-order births relative to the industry, delivering significant incremental cost savings to payors/employers

SURVEY DATA AROUND EMPLOYEES VALUING BENEFIT[1]

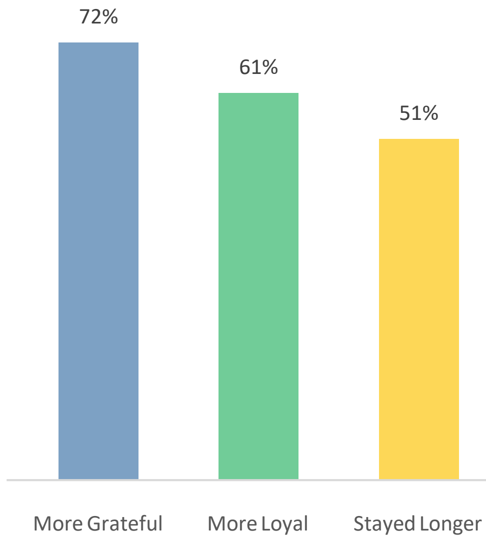
Rapid Expansion of Corporate Fertility Benefits

~33% CAGR in Employers Offering Benefits



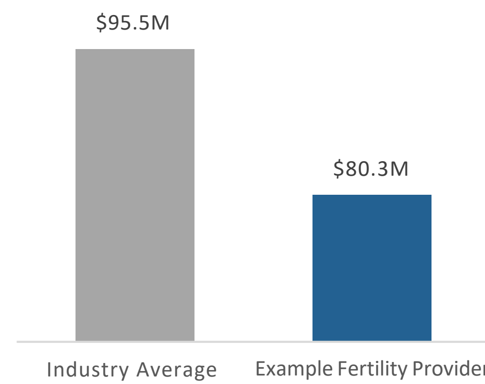
Number of Employers Offering a Fertility Benefit

Fertility Benefits Help Attract and Retain Talent



SIGNIFICANT SAVINGS FROM TOP PROVIDERS

Example of Potential Savings for IVF Deliveries for Payors per 1,000 Live Births[2]



Top Providers Offer Payors 15%+ Lower Pregnancy-Related Costs on Average per Live Birth Relative to the Industry

(1) The FertilityIQ Family Builder Workplace Index: 2019 – 2020 and The FertilityIQ Family Builder Workplace Index: 2017 – 2018.
(2) Average cost for payors per 1,000 live births, based on publicly available SART data and the weighted average outcomes across all ages for the industry vs. a top provider's founding labs for various pregnancy types.

Highly Fragmented Market

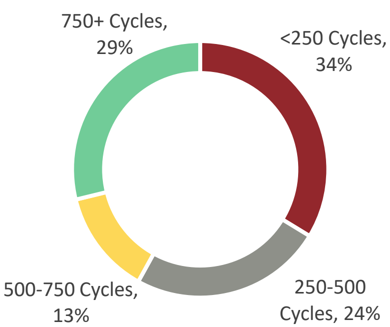
THE U.S. FERTILITY MARKET REMAINS HIGHLY FRAGMENTED AND MAINLY COMPRISES INDIVIDUAL CLINICS.

- The largest five players in the market capture only ~20% of the total IVF cycles in the U.S., representing a significant opportunity for existing players to expand national reach
- Significant opportunity to capitalize on international opportunity where few competitors of scale and quality exist

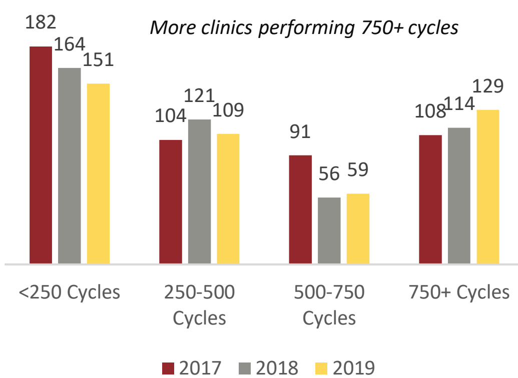
HIGHLY FRAGMENTED MARKET

U.S. Fertility Clinic Market by Cycles[1]

U.S. Fertility Clinic Market by 2019 Cycle Count

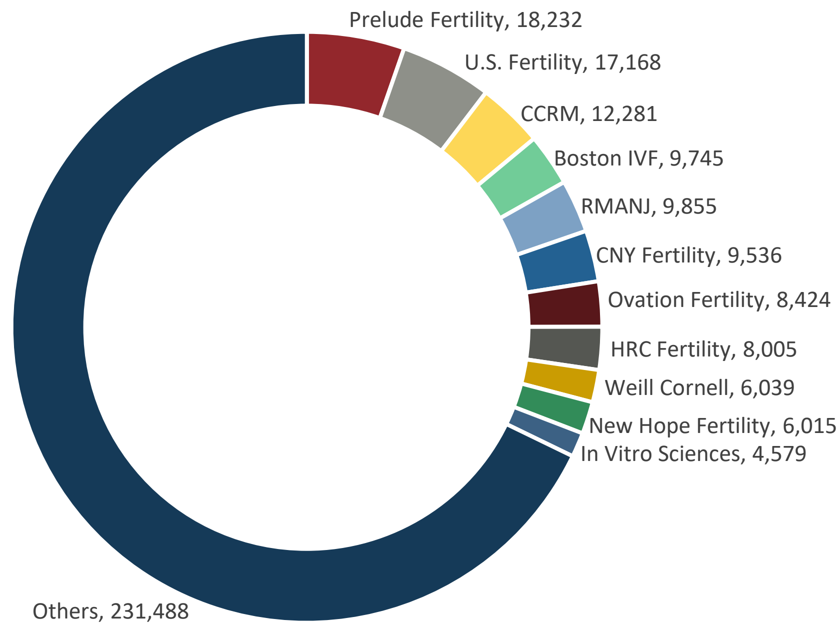


Fertility Clinics Segmented by Number of Cycles Performed



COMPETITIVE LANDSCAPE

Top U.S. IVF Clinics by Preliminary 2019 Cycle Count[1]



Harris Williams (1) IVF cycle count as of 2019 as reported by the CDC (Preliminary).

Fertility Services and Women's Health M&A Activity

TRANSACTION ACTIVITY AND INTEREST IN FERTILITY AND BROADER WOMEN'S HEALTH SECTOR HAS INCREASED DRAMATICALLY.

- Activity has been robust across all sectors of women's health, driven by continued demand growth industry-wide in fertility and the emergence of true value-based care models in OB/GYN
  - Fertility: Platform transformation continues with several large-scale platforms both in the U.S. and internationally reaching likely investment timeline maturity with current sponsors
  - OB/GYN: Unified, Women's Care Enterprises, and Axia have all experienced strong growth and recently partnered with new investors to continue their expansion

NOTABLE TRANSACTIONS[1]

	Target		Acquirer
Oct-16	Prelude	has been acquired by	MyEggBank; LEE Equity
Dec-16	Donor Egg Bank USA	has been acquired by	California Cryobank
Feb-17	RMA	has been acquired by	IVI
May-17	progyny	has received an investment from	TPG
Jul-17	OB Hospitalist Group	has been acquired by	Gryphon Investors
Jul-17	Advantia Health	has received an investment from	Deerfield
Aug-17	whusa In Vitro Sciences	has been acquired by	Sverica Capital
Oct-17	Women's Care Florida	has been acquired by	Lindsay Goldberg
Oct-17	Clinical Innovations	has been acquired by	EQT
Oct-17	Vivere	has been acquired by	Prelude
Jun-18	California Cryobank; Cbr	has been acquired by	GI Partners
Oct-18	JXR	has received an investment from	Warburg Pincus
Dec-18	Boston IVF	has been acquired by	nmc
Mar-19	inception fertility	has been acquired by	Prelude
Apr-19	CARE fertility	has been acquired by	silverfleet capital
Jun-19	Ovation Fertility	has been acquired by	Morgan Stanley
Jun-19	JXR	has completed an initial public offering	
Dec-19	Pinnacle Fertility	has been acquired by	Webster Equity Partners
May-20	IT Assets of IntegraMed	have been acquired by	USFertility; SGF
Aug-20	The Fertility Partners	has been acquired by	Peloton Capital Management
Dec-20	Unified Women's Healthcare	has been acquired by	Altas Partners
Dec-20	Women's Care Enterprises	has been acquired by	BC Partners
Dec-20	eugin	has been acquired by	Fresenius
Feb-21	ivy fertility	has been acquired by	InTandem Capital Partners
May-21	Axia Women's Health	has been acquired by	Partners Group
July-21	CCRM Fertility	has established a strategic partnership with	Unified Women's Healthcare; backed by Altas Partners; Ares
Aug-21	Women's Health USA	has been acquired by	Unified Women's Healthcare
Aug-21	OB Hospitalist Group	has been acquired by	Kohlberg & Company
Nov-21	GeneraLife	has been acquired by	KKR
Dec-21	fertility specialists network	has been acquired by	LVC LongueVue Capital
Dec-21	generate life sciences	has been acquired by	CooperCompanies
Dec-21	FutureLife	has been acquired by	CVC
Feb-22	VIOS Fertility Institute	has been acquired by	kindbody

Fertility services transactions

Other women's health transactions

(1) CapIQ, FactSet, and Harris Williams proprietary data.

Select Harris Williams Fertility Transaction Advisory

CCRM FERTILITY
a portfolio company of
TA ASSOCIATES
has established a strategic partnership with
UNIFIED WOMEN'S HEALTHCARE
a portfolio company of
ALTAS PARTNERS ARES

OVATION FERTILITY
THE NEXT GENERATION
a portfolio company of
WINDROSE HEALTH INVESTORS
has been recapitalized by
Morgan Stanley Capital Partners

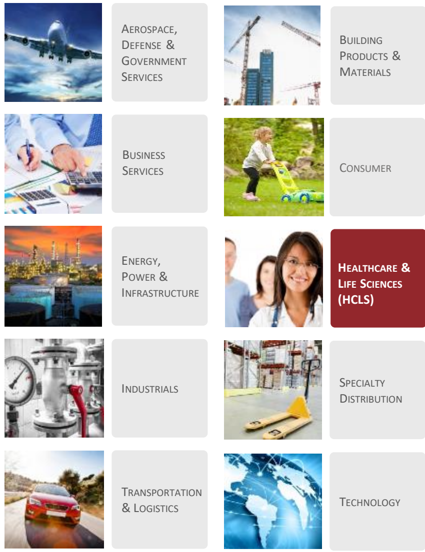
CALIFORNIA cryobank DONOR SPERM BANK
has been recapitalized by
Longitude CAPITAL
&
NOVAQUEST CAPITAL MANAGEMENT

CALIFORNIA CRYOBANK REPRODUCTIVE TISSUE SERVICES
a portfolio company of
Longitude CAPITAL
NOVAQUEST CAPITAL MANAGEMENT
has acquired
Donor Egg Bank USA

GI PARTNERS
has acquired and merged
CALIFORNIA CRYOBANK
and
Cbr cord blood registry

Harris Williams HCLS Group Overview

THE HARRIS WILLIAMS HCLS GROUP HAS DEEP SUBSECTOR EXPERTISE DEVELOPED THROUGHOUT THE HEALTHCARE CONTINUUM.



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HCLS GROUP REPRESENTATIVE EXPERIENCE

PROVIDERS

- Behavioral Health
- Dental
- Dermatology
- Gastroenterology
- Home Health & Hospice
- Medspa Services
- Multi-Specialty/Other Specialty PPM
- Orthopedics
- Physical Therapy
- Primary Care
- Urology
- Vet Products & Services
- Vision
- Women's Health

PAYORS & PAYOR SERVICES

- Cost Containment & Member Engagement Solutions
- Direct-to-Payor Provider Services
- Health Plans & Network Services
- Pharmacy Benefit Managers
- Third-Party Administrators

OUTSOURCED PHARMA SERVICES

- Commercialization Services
- CDMOs
- CROs
- Safety & Regulatory Affairs

OUTSOURCED PROVIDER SERVICES

- Clinical Provider Services
- Provider Business Services

MEDICAL PRODUCTS & DEVICES

- Cardio
- Contract Manufacturing
- Dental & Orthodontics
- Eyecare
- HME/DME/Mobility
- Medical & Surgical Equipment
- Orthopedics & Spine
- Patient Diagnostics & Monitoring
- Product Services
- Specialty Distribution

PHARMACEUTICALS

- Biotechnology
- Generic Pharmaceuticals
- OTC/Consumer Health
- Pharmaceuticals
- Specialty Pharmaceuticals

PHARMACY

- Compounding Pharmacy
- Infusion Services
- Institutional Pharmacy
- Outsourced Pharmacy Management
- Retail Pharmacy
- Specialty Pharmacy
- 340B

PROVIDER, PHARMA & DEVICE DISTRIBUTION

CLINICAL LAB SERVICES

HCIT

LIFE SCIENCES TOOLS

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