

EMPLOYER HANDBOOK

U.S. Fertility Care in 2020



The rapid pace of scientific, cultural, and employer-led progress over the last 10 years have converged to bring fertility health to the forefront of healthcare as a critical need rather than a luxury consumer good. In 2010, Robert G. Edwards was awarded the Nobel Prize for his pioneering work with in-vitro fertilization (IVF), which was achieved through a critical collaboration with gynecologist Patrick Steptoe and embryologist Jean Purdy. Assisted reproductive technology (ART), while increasing in popularity, still carried stigma, and it wasn't typically a topic discussed in the workplace. The conversation about fertility was, in truth, a conversation about *infertility*.

Over the last 10 years, that conversation has changed dramatically.

- In 2012, the Society for Assisted Reproductive Technology (SART) removed the experimental label from oocyte cryopreservation, or egg freezing, which meant fertility clinics across the country could more easily offer the treatment.
- In 2013, the Defense of Marriage Act was declared unconstitutional, accelerating the movement for LGBTQ+ individuals and couples to build families.
- By 2018, the Pew Research Center reported that one-third of American adults — more than 100 million people — said they or someone they know has used some type of fertility treatment in order to try to have a baby.

These events triggered some forward-thinking employers to add egg freezing to their benefits offerings, making fertility preservation accessible for more female employees. Today, thousands more employers are paving the path forward by enabling equitable access to fertility care — for more women, men, single intended parents, same- and opposite-sex couples, with or without a medical infertility diagnosis. Workplace inclusion of fertility care as healthcare has challenged the stigma of infertility not just in the U.S. but globally, too.

As the way we pursue parenthood continues to grow increasingly complex and difficult to manage, it's critical that employers stay up-to-date with the latest information and tools. That's why we created our first annual State of Fertility report. In this report, we take a look at the big picture: how the way we build families has changed over time, new risks to manage, opportunities, and how to prepare for the future.

We also examine the increasingly significant role employers are playing in helping their employees pursue parenthood. We review the innovative ways employers have addressed critical gaps in classic health insurance plans as fertility coverage and managed care becomes more common. Employers are offering a number of options covering IVF to adoption and gestational carrier (GC) support. And employees are taking note — they're prioritizing benefits over pay, changing jobs to obtain these benefits, and having open and honest conversations about their experiences.

Finally, we look at the future of fertility. As our views continue to evolve rapidly, what can we expect in the future? What solutions can keep up with changing times, technology, and workplace culture? How can employers ensure their benefits are keeping up with what their employees want and need to live fulfilling lives inside and outside of the office?

We hope you'll find this handbook interesting and useful as you explore the changing face of fertility care.

One final note. At the time of writing, HR and benefit leaders are facing an unprecedented challenge trying to support teams through the time of coronavirus and COVID-19. Fertility clinics in the U.S and around the world have closed as part of our collective effort to battle the pandemic. Never before has continuity of global care within a managed fertility program been more critical. We will soon be sharing new information and tools for HR and benefit leaders to navigate the fast-evolving global issues around access to fertility treatments as well as adoption.



Tammy Sun
CEO and Co-founder

The Evolution of the Pursuit of Parenthood

Historically, the path to parenthood was linear. Married couples of the opposite sex in their early 20s would decide to start a family, the woman would get pregnant, they would have one — or multiple — children, and mothers were expected to be the primary caretakers. However, as more women have entered the workforce and acceptance of different gender roles and identities has increased, the ways we've looked at and pursued parenthood has evolved, as well.

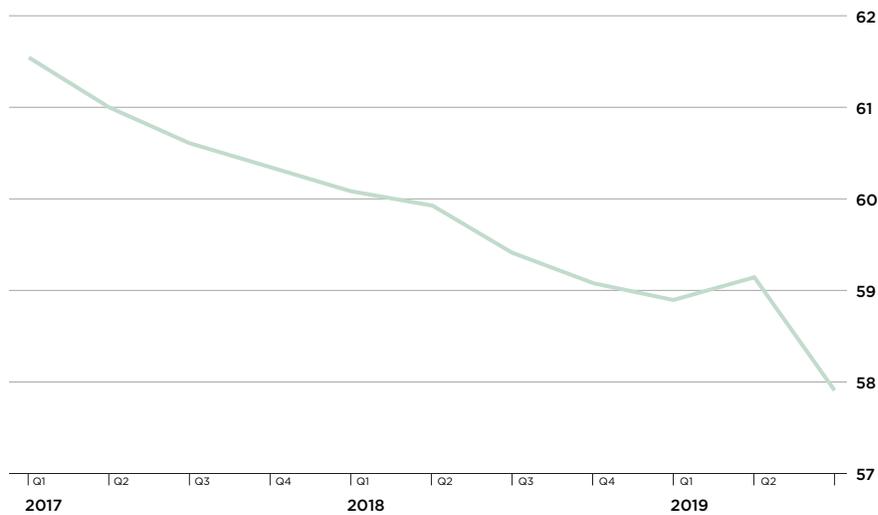
That evolution has happened in many different ways. The role of men as caregivers is changing, single parenthood by choice is becoming accepted, and our definition of what defines a “family” has become far more inclusive. The combination of these factors have led to an overall cultural shift that impacts how we think about parenthood. Here's a look at how a handful of these trends have contributed to this change.

Fertility and birth rates are dropping

The U.S. fertility rate has reached a record low, and the total number of births in 2018 is the lowest it's been in three decades.

While these falling rates can't be attributed to a single source, many experts believe much of it is due to people waiting longer to get married and have children, financial concerns, career focus, and improvements in fertility treatments.

GENERAL FERTILITY RATE IN THE U.S., 15-44 YEARS OLD

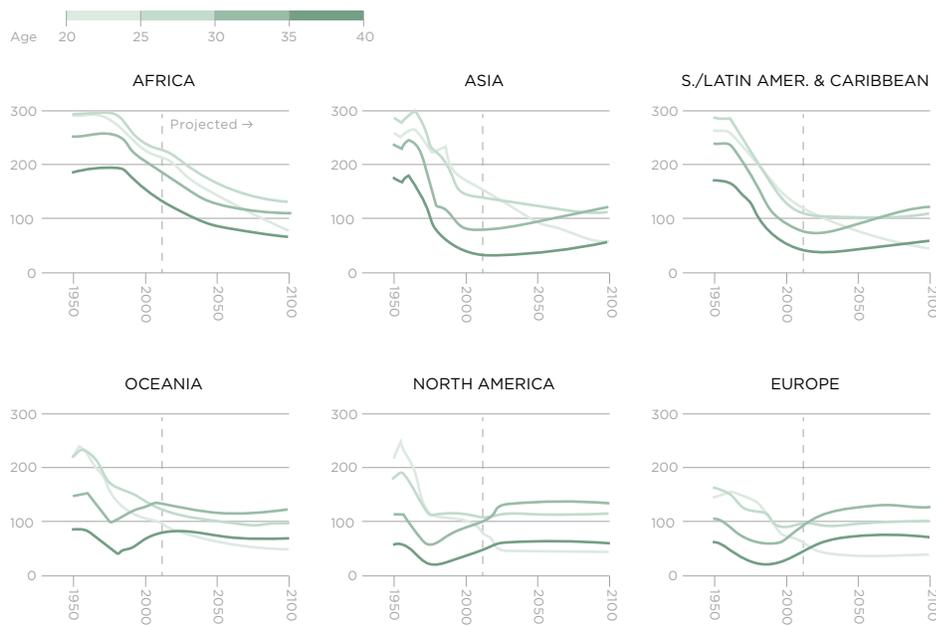


Notes: The general fertility rate refers to the total number of births per 1,000 women aged 15-44.

Couples are waiting longer to start families

Birth rates fell for nearly all racial and age groups in 2018 — the only group that saw slight gains were women in their late 30s and early 40s. The shift toward later motherhood has been attributed to increases in educational attainment, women’s growing labor force participation, as well as delays in marriage. This trend is seen globally as well, with the average age of first-time mothers in other countries sitting even higher than it does in the U.S.

CHILD BORN PER 1,000 WOMEN BY MOTHER’S AGE, 1950-2100

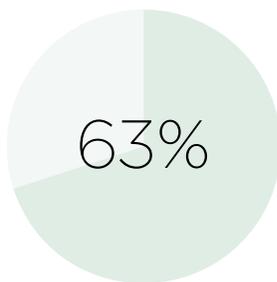


LGBTQ+ people are increasingly pursuing parenthood

Until recently, the LGBTQ+ community had little to no options for starting families due to a combination of prohibitive laws and limited access to reproductive technology. These circumstances have slowly changed dramatically in recent years. From 30 countries legalizing same-sex marriage as of 2019 to the general level of LGBTQ+ acceptance seeing improvements on a global level.

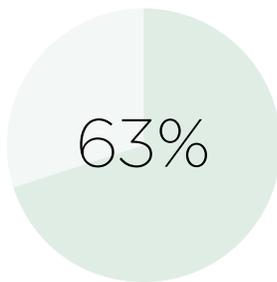
As a result, a growing number of LGBTQ+ individuals and couples are planning to start or grow their families — especially with the support of assisted reproductive technologies (ART).

INDIVIDUALS PLANNING TO START OR GROW THEIR FAMILIES



LGBTQ+ millennials

are considering expanding their families by becoming parents for the first time or by having more children (millennials ages 18-35)



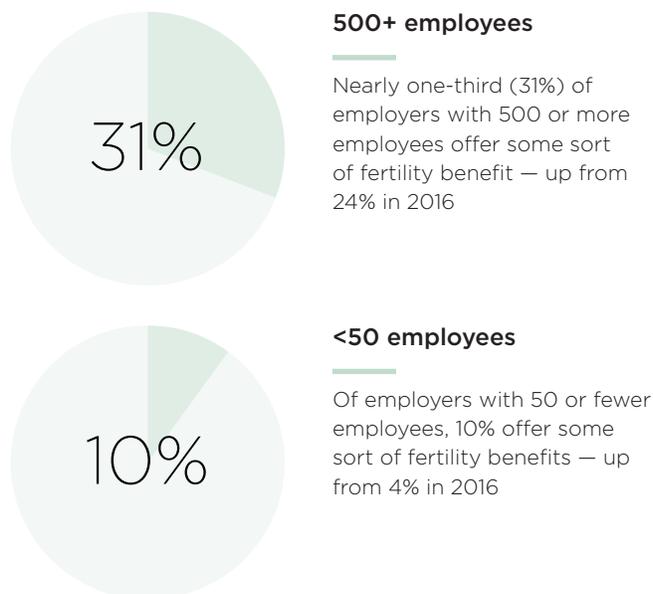
LGBTQ+ people

people planning families expect to use ART, foster care, or adoption to become parents — a significant shift away from older generations of LGBTQ parents for whom the majority of children were born through intercourse.

As a result of these factors, infertility and the demand for fertility-related technologies are at an all-time high by those waiting longer to have children or wanting more diverse family-forming options.

Fertility benefits providers have responded in kind and these services are being increasingly utilized, with 33% of American adults reporting that they or someone they know has used some type of fertility treatment in order to try to have a baby. This is only predicted to increase as the number of employers offering fertility benefits to their employees continues to grow.

EMPLOYERS OFFERING SOME SORT OF FERTILITY BENEFIT



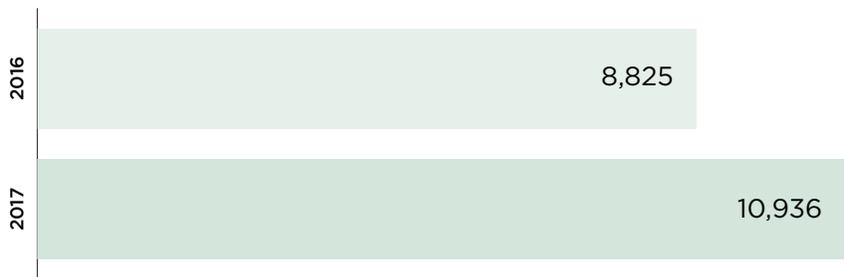
So what does all of this mean when it comes to the big picture of fertility? To better understand the current trends impacting fertility care in the U.S. and where it's headed in the next few years, let's first examine the landscape of fertility treatments.

Preservation

The rise in preservation technologies — primarily egg, sperm, and embryo freezing — has drastically changed the way people pursue parenthood. Not only do these options give individuals and couples more flexibility for the future, but they also open up the possibility of starting a family for those who might have previously been unable to due to age, lack of a partner, or illness.

Egg freezing has garnered the majority of attention in recent years. And with its quickly rising popularity, that isn't surprising. In 2017, 10,936 women froze their eggs — up from 8,825 in 2016. The market is projected to grow 25% annually over the next two years. The reasons behind this spike in interest vary, but common reasons for exploring it include a desire to focus on one's career, uncertainty around starting a family, or simply wanting to keep options open.

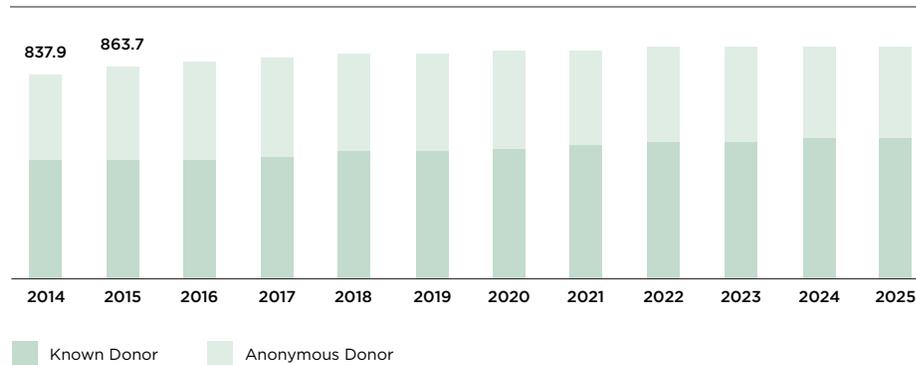
EGG FREEZING CYCLES



Source: SART

While the demand for sperm freezing isn't growing nearly as quickly as egg freezing, it's still experiencing a similar upward trend. The global sperm bank market size was estimated at \$4.33 billion in 2018 and is projected to expand at a rate of 3.3% over the forecast period. And while there are many reasons men consider fertility preservation, the most common reason for freezing sperm currently is to preserve fertility ahead of a medical procedure like cancer treatment.

U.S. SPERM BANK MARKET SIZE, BY DONOR TYPE, 2014-2025 (USD MILLION)



Source: www.grandviewresearch.com

Preservation: the big picture

Women want a choice

As women increasingly delay motherhood, they want options to create more flexible timelines for themselves — even if they ultimately decide not to start a family. Which is why nearly 90% of women said they were happy they froze their eggs, regardless of whether or not they'll get used.

Demand will drive innovation

As egg and sperm freezing services continue to become more popular, we can expect to see an even faster growth rate than we're seeing today. As a result of the high demand, we're already seeing an emergence of more cost-effective solutions, as well as a number of financial companies that offer people personal loans for fertility procedures.

This type of innovation is critical as preservation procedures can be financially prohibitive; women spend an average of \$15,000 to \$20,000 per extraction cycle for egg freezing in addition to about \$1,000 a year to store them at a facility. While we're still far from having preservation offered affordably for most people, the rise of fertility care as an employee benefit is making progress in that direction.

Men are starting to think about their own fertility

Infertility isn't only a women's issue. Approximately 40% to 50% of infertility concerns stem from issues related to men. This, paired with the growing appreciation for the link between male age and sperm health, is likely why it's becoming more common for men to seek out sperm freezing services as they age.

Assisted reproductive technology

In 1978, Louise Brown was the first person in the world to be born through in-vitro fertilization (IVF). While her birth was controversial at the time, it opened up the door to more ART procedures being conducted on behalf of individuals and couples who are struggling with infertility.

In 2017, the CDC saw a total of 284,385 ART cycles — up from the 263,577 cycles that were done in 2016. Most notably, there has also been a significant uptick in the number of people using gestational carriers, which comprised 4.2% of total cycles in 2017 — again, up from the 3% that was documented in 2016. This is a huge jump considering that, between 1999 and 2013, only about 2% (30,927) of all ART cycles used a gestational carrier.

CHARACTERISTICS OF ART CYCLES, 2017

	Patient age					Total
	<35	35-37	38-40	41-42	>43	
Total number of cycles	106,966	63,369	55,203	26,788	32,059	284,385
Cycles canceled prior to retrieval or thaw	5.4%	7.5%	9.1%	11.1%	12.0%	7.8%
Cycles stopped between retrieval and transfer or banking	7.8%	7.3%	9.7%	13.6%	14.7%	9.4%
Cycles for fertility preservation	4.6%	7.0%	5.9%	3.9%	2.3%	5.1%
Transfers using a gestational carrier	2.5%	3.4%	4.0%	5.0%	12.0%	4.2%
Transfers using frozen embryos	69.1%	71.3%	69.7%	65.8%	69.1%	69.4%
Transfers of at least one embryo with ICSI	77.4%	75.7%	74.5%	72.8%	66.5%	75.0%
Transfers of at least one embryo with PGT	27.8%	35.1%	38.6%	34.4%	28.4%	31.9%

Assisted reproductive technology: the big picture

Americans are taking on debt to start families

Like many fertility treatments, the cost of using ART isn't cheap — especially since most insurance plans don't cover fertility care. The average cost of IVF, for instance, is around \$23,000 per cycle — an amount that's difficult for most people to pay out-of-pocket. That's why more than half of all IVF candidates resort to using their credit cards to cover treatment costs, which can take years to pay off with added interest.

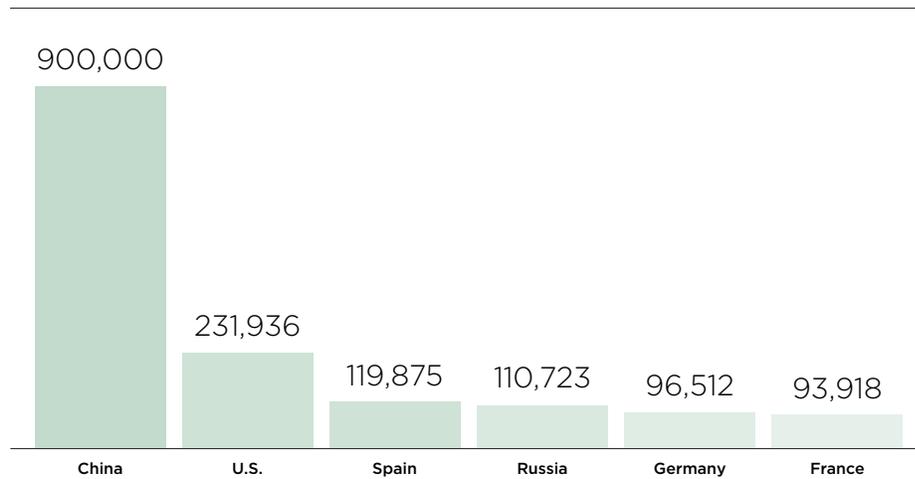
It's unfortunately an all-too-common predicament with healthcare costs. A study found that 33% of credit card holders are in debt because of medical bills. And nearly 60% said they used a card because they had no other way to pay.

The average spend on our flexible fertility debit card for employees, the Carrot Card, is \$2,282.80. Comparing this amount to the fact that more than half of Americans have less than \$1,000 saved up, it's clear that fertility treatments can pose a heavy financial burden on people.

ART is global

ART isn't only common in the United States. While the U.S. had 231,936 cycles performed in 2015, other European nations follow closely behind. Spain saw 119,875 treatment cycles performed in the same year; Russia (110,723 cycles), Germany (96,512), and France (93,918) followed not too far behind. However, China still remains the most prolific ART country in the world with 900,000 ART cycles performed in 2016.

ART CYCLES IN EACH COUNTRY



Source: Science Daily

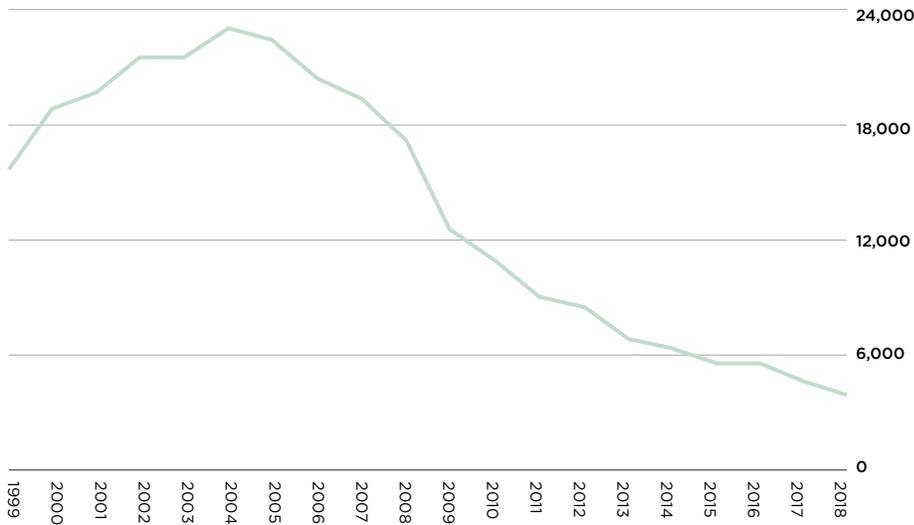
The use of gestational carriers will continue to grow

As previously mentioned, the number of people using gestational carriers for their ART procedures has grown in the past few years – especially among older women. And this trend is only likely to grow as larger numbers of LGBTQ+ individuals and couples pursue parenthood and people wait longer to have children, limiting their ability to carry their own pregnancies due to age, health, and other medically-related reasons.

Adoption

Adoption is one of the few family-forming options generally declining. According to the U.S. Department of State, [U.S. families adopted 4,059 children](#) in 2018. This is a 7% drop from 2017 and a whopping 82% decline since 2004, when adoption rates were at their peak.

ADOPTIONS BY YEAR IN THE U.S.



Adoption: the big picture

We're seeing the results of a cultural shift

The reason behind decreasing adoption rates can largely be tied to a shift in American culture. In the past 20 years, changes such as decreased stigma around teenage pregnancy and single motherhood, lower teen pregnancy rates, and the legalization of abortion have led to a decline in the number of children available for adoption. Advancements in fertility treatments have also made other options accessible to couples who may have otherwise pursued adoption.

Adoption remains popular in the LGBTQ+ community

However, adoption is still a popular option, particularly among LGBTQ+ communities. In fact, same-sex parents in the United States are four times more likely than different-sex parents to be raising an adopted child. On broader level, an estimated two million LGBTQ+ people are considering adoption, and gay and lesbian parents are raising 4% of all adopted children in the U.S.

The Pursuit of Parenthood and Work

When you put all the pieces together, how do these advances in fertility treatments affect the workplace? The most significant conclusion is that parenthood and work are becoming increasingly intertwined. This signals a shift from the “work-life balance” movement into a more realistic “work-life integration” approach.

People are recognizing how difficult it is to keep parenthood and work separated so, instead of fighting the blending of lines, they’re leaning into it and learning how to make this unification work for them. And part of accepting this new approach to work and life is having employers more heavily involved in the well-being of their employees — by extending more comprehensive benefits offerings and resources. Let’s take a look at a few themes from this handbook that support these conclusions.

Work and personal life are increasingly difficult to separate

What the data tells us is that people are becoming increasingly aware of how work affects our personal affairs, and vice versa. That's why individuals and couples are waiting longer to pursue parenthood.

They want to ensure their careers, financial situations, and personal lives are stable before starting families because they know it has the potential to disrupt their work, especially for those undergoing fertility treatments — whether that's due to the number of appointments they need to attend or the amount of time they need to take off for parental leave or the financial impact it'll have on their lives.

A diverse workforce demands diverse options

More and more companies are prioritizing the hiring of diverse employees. With this, employers need to offer a more competitive benefits package in order to attract talent from a limited pool. They also need to reconsider their benefits and whether or not they're both reflective of and inclusive of their workers if they want to retain their talent. Fertility benefits are one of the ways companies can both distinguish themselves from other organizations and give all their employees an equal opportunity to start families.

Fertility treatments are prohibitively expensive

Similar to other forms of healthcare, the cost of fertility care is difficult to manage without the support of employer-sponsored benefits. This is especially the case for women, who already face a pay gap and risk widening that gap due to the “motherhood penalty;” multiple studies found that women who decide to have children face repercussions when it comes to hiring, perceived competence, and salaries.

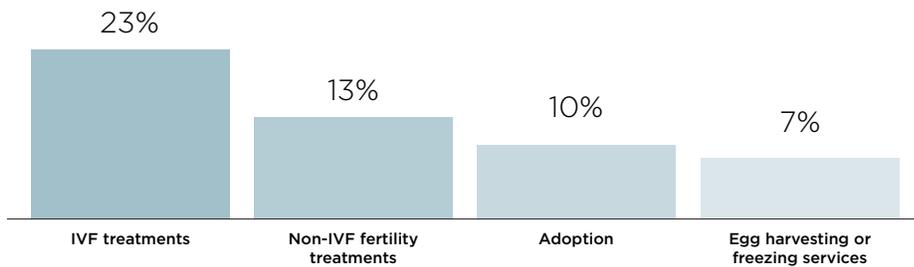
This financial penalty still exists for women who seek to either preserve the option to start a family, or can't have children on their own. And when employers don't cover fertility care, the cost falls disproportionately on these individuals, further contributing to the burden of financial discrimination in the workplace.

Thankfully, more employers and HR leaders are catching onto these trends and are stepping up to support their employees in their pursuit of parenthood. It was recently reported that about 30% of companies with 500 or more employees now provide some sort of fertility benefit.

There's a common misconception that fertility benefits are only offered by companies in the tech industry — but this couldn't be further from the truth. Fertility benefits have seen growth across multiple industries. There are more than 250 employers that offer IVF coverage in this Family Builder Workplace Index, which includes private and public companies, universities, nonprofit organizations, and a few city governments.

The types of fertility treatments these companies offer vary widely as well.

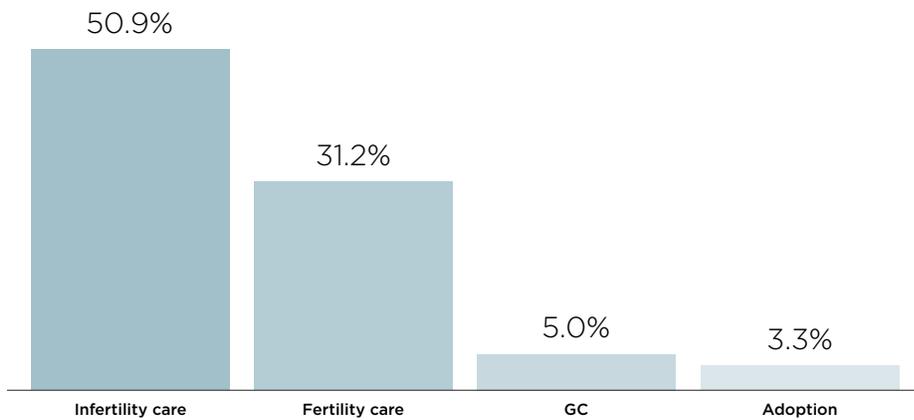
FERTILITY TREATMENTS EMPLOYERS MOST COMMONLY COVER



Sources: SHRM and IFEBP

When we look at Carrot member claims, we see them using their employee-sponsored financial benefit in a similar way.

HOW CARROT MEMBERS USE THEIR FINANCIAL BENEFIT



Source: Carrot Fertility

Beyond the benefits that employer-sponsored fertility care brings to your employees, how does this offering serve your organization? There are many upsides associated with fertility benefits.

Improved retention rates

There's so much data to support the assertion that fertility benefits lead to higher retention rates. 62% of employees who had their IVF treatments covered are more likely to remain in their current job for a longer period, and 68% of people are willing to change jobs to ensure they have infertility coverage. Similarly, employees who work at companies with adoption benefits, regardless of whether or not they're users, often feel more goodwill toward their employers.

Increased productivity

Financial stress, which is common with fertility treatments, can lead to a loss of productivity in the workplace. A study found that, among 776 people who plan to undergo some type of fertility treatment in the next 12 months, 40% reported feeling stressed about the cost of the treatment. On the other hand, 22% of employees who did have their IVF covered by their employer said they're more likely to work harder.

Reduced healthcare costs

Companies can also save in long-term healthcare costs by offering fertility treatments that encourage the birth of one healthy baby at a time, instead of leaving employees to make potentially unsafe decisions that may result in twins or other high-risk pregnancies. Otherwise, employers end up spending 12 times as much on healthcare costs for premature or low-weight babies as they do for babies without complications.

The Future of Fertility

Fertility is something that touches every single person over the course of their lives, whether they choose to pursue parenthood or not. And as we look to support our employees, friends, and loved ones, it's important that we think about the future of the industry and how we can help get it to where it needs to be.

So far, the future of fertility looks promising. All existing data points to the rapid growth of the fertility industry in the last decade. And as people wait longer to have children and demand more flexible family-forming options, perceptions about parenthood and how we pursue it are likely to continue evolving, and companies will likely innovate even faster.

But one of the biggest changes we anticipate is the increasingly significant role fertility benefits will play in the workplace. Just as medical, dental, and vision care have become a standard part of any employee benefits package, we firmly believe that fertility will soon become the fourth pillar of healthcare — a development most employees would welcome.

When this shift ultimately happens, it will introduce changes that impact society as a whole. Women will be able to pursue their careers with fewer barriers, financial-related discrimination and stress will decrease, historically marginalized populations such as the LGBTQ+ community will be given equal opportunities to succeed both in and out of work, and any stigmas around different family-forming options will slowly cease to exist.

When this happens, it'll become even more critical for employers to keep their finger on the pulse with these trends to ensure they don't lose their top talent to competitors. To do this, HR leaders should find ways today to create a culture that makes it easy to open up discussions with their employees and gauge what fertility needs are most pressing to them.

HR leaders should also be thinking about how they can prepare for this future of fertility. Again, the time to start thinking about this is now. Start conversations with fertility benefits vendors to see what your options are and to get better educated about issues you may not be familiar with. At the end of the day, the time investment will be beneficial for your employees, your company, and the future of fertility.

The current fertility care trends in the U.S. present an exciting opportunity for employers to step up and support their employees' desires to pursue their careers and their dreams of starting a family at the same time. By making the investment in fertility benefits today, your company can help lead the charge when it comes to making fertility care accessible to all.

About Carrot

Carrot Fertility is the leading global fertility benefits provider for employers, built to support employees through their entire fertility and pregnancy healthcare journey. Carrot is a turnkey solution for companies to establish a customized benefit that provides employees financial, medical, and emotional support as they pursue parenthood, resulting in better clinical outcomes. Built by some of the best fertility and family-forming experts in the world, Carrot provides the highest quality care including on-demand access to healthcare professionals and world-leading family and relationship counselors through virtual appointments and chats, as well as extensive resources to guide and support them.

Carrot's program includes egg freezing, in vitro fertilization (IVF), adoption, donor and gestational services; Carrot Rx, a premium pharmacy experience, at significant savings; Carrot Pregnancy; and the Carrot Card, an easy way for employees to pay for their care.



Carrot supports companies in 40+ countries across North America, Asia, Europe, the Middle East, and Latin America.