



Fertile Grounds: Evolution in the Global Assisted Reproductive Technology Sector

The assisted reproductive technology (ART) / fertility sector has consistently developed new technology, improved clinical outcomes, and created significant financial returns for investors over a 40-year period. The \$6B+ US market continues to grow rapidly and prospects for continued worldwide growth are strong. However, investors must be mindful of disruptive evolution in a market where scientific advances can rapidly alter the business landscape, and long-term growth may be offset by increased success rates.

Market Themes

Demographic, social, and scientific trends have increased demand for Assisted Reproductive Technology and will continue to do so in the medium term.

Demographic changes are exemplified by the continued linear increase in the ages of first marriage and childbearing in the US, growth in the purchasing power of women (holding 60% of US personal wealth), and the rise in two-earner households (in 2015, ~70% of married US women worked for pay, vs. ~56% in 1976ⁱ). Social changes in the US and internationally have opened the market to single-parent households and same-sex couples (~40% of US births in 2018 were to unmarried womenⁱⁱ and the number of same-sex couples with children has increased ~6% annually since 2010). At the governmental level, sixteen US States mandate that health insurers provide varied degrees of ART coverage, and industry-leading employers in finance, technology, and consulting now commonly offer ART employee benefits to attract and retain talent: a recent review of large employers with high-wage employees estimated that ~2/3 expected to offer coverage for IVF in 2019.

Globalization enables ART providers to advertise their services internationally, and opens secondary markets to some US-based patients. Providers in US cities such as New York, Los Angeles, and Miami, which have international renown in commerce, tourism, and health care, have particularly benefitted from rising global wealth, unprecedented consumer access to outcomes data, and global communications. In addition, consistent improvements in medications, laboratory and genetic testing, and surgical techniques attract ART patients on the margins by improving the risk/ benefit ratio (*e.g.*, a woman considering IVF in the 1990s faced an IVF-associated triplet pregnancy rate of over 4% in the 1990s and only ~1% in 2018).



An Evolving Market

One consequence is a rapidly evolving market for ART benefits management, as third-party payors and benefits managers such as Progyny and WINFertility gain influence over utilization and pricing in a growing population of potential patients. Preferred ART providers are positioned to benefit as care is steered where outcomes are achieved at reasonable cost (e.g., United Healthcare’s Fertility Solutions advertises a 25% reduction in employer ART costs through use of their designated Fertility Centers of Excellence). Providers in competitive geographies may face a volume-price tradeoff in which they must accept lower prices in order to maintain operationally adequate patient volumes. Another result is the growing submarket for gestational carriers (“surrogates”), where favorable social and policy changes have spurred 10-15% annual growth, especially in States already servicing international IVF patients, or where favorable regulatory conditions provide for enforceable contracts and parental rights.

Marwood has seen a number of provider strategies in response to these market trends: cultivating a hub-and-spoke model to support referral volume and to develop regional brand power, marketing internationally (directly or through ex-US partnerships), and integrating horizontally with other women’s health services such as general Ob/Gyn.

All US States operate under Federal policies recognizing the rights of same-sex couples and protecting the health and safety of gestational carriers, creating additional security for patients and carriers.ⁱⁱⁱ At the same time, the provider landscape is shifting, as well: academic medical centers, traditional private practices, and large private-equity-backed platforms increasingly compete to provide patient services.

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The availability of fertility outcomes data will continue to be a factor driving patient (and payor) choice. Beyond outcomes, provider attention to brand equity through investment in customer service and consumer-facing aspects of the business can be a value driver leading to greater capture of referral volume.

The Future Is Now

In the longer term, investors face danger (and opportunity) from scientific inflection points that will transform the market. Some will reduce utilization via higher success rates and fewer cycles per patient, while others will create significant revenue streams – for example, oocyte and embryo cryopreservation, considered experimental by ASRM as recently as 2012, has grown 20-30% annually to account for 25%+ of IVF cycles^{iv} while creating a new patient base of younger women planning for future fertility and a growing line of commercial services (cold storage of oocytes and embryos). Manipulation of mitochondrial DNA may further extend ART capabilities in older age groups, and in the long run, revolutionary cell and gene editing techniques may enable synthetic gametes derived from stem or



somatic cells to reshape the practice of ART and generate billions in market value.^v Savvy investors and providers will anticipate these developments by keeping close watch on scientific developments and the regulatory climate that influences them, and Marwood has accrued specific experience in analyzing these issues.

Overall, Marwood expects continued near-term growth and development in the exciting field of ART. Our clients, including providers and investors, if properly positioned and well-informed, will continue to achieve outsized returns.

About the Author

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ⁱ Glynn, Sarah Jane. "Breadwinning Mothers Continue To Be The US Norm." Center For American Progress, May 10, 2019; US Federal Reserve

ⁱⁱ Hymowitz, Kay. "Women Becoming More Likely To Plan Pregnancies." Institute For Family Studies, February 2014

ⁱⁱⁱ Marwood analysis; Surrogate.com; accessed October 2019

^{iv} Refers to 2016 data

^v "Reproduction Revolution: How Our Skin Cells Might Be Turned Into Sperm and Eggs." *The Guardian.com*, October 14, 2018; accessed October 2019.

