

2014

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Recommended Citation

Seema Mohapatra, Using Egg Freezing to Extend the Biological Clock: Fertility Insurance or False Hope?, 8 Harv. L. & Pol'y Rev. 382 (2014)

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Using Egg Freezing to Extend the Biological Clock: Fertility Insurance or False Hope?

Seema Mohapatra, JD, MPH*

In June 2013, a feature in the women’s magazine *Cosmopolitan* asked the question: “Freezing [our] eggs—is this what we’re all doing now?”¹ The answer seems to be “not quite yet,” but egg freezing has been touted in the popular press as the great equalizer for women—the modern day equivalent of the pill, but with even more potential.² The story in *Cosmopolitan* details the egg freezing exploits of a twenty-eight-year-old woman, Reese, who thought to herself, “I’m at peak fertility. If I can save these eggs at their prime, I have to.”³ The story recounts how Reese flew to Los Angeles from Las Vegas to freeze her eggs. Reese “put \$12,500 on her debit card,” underwent the egg retrieval process that caused her stomach to throb “from being punctured so many times,” and “felt a new peace of mind” after fifteen eggs were retrieved. In the story, Reese states that egg freezing “helped [her] take control of [her] life.”⁴

Media reports abound with similar positive stories of egg freezing. The message seems to be, “If it’s good enough for Sofia Vergara, Kim Kardashian, and Maria Menounos, it’s good enough for you.”⁵ Op-eds in major publications, such as *The New York Times* and *The Wall Street Journal*, are urging women to freeze their eggs.⁶ *The New York Times* ran a story about how potential grandparents are paying for egg freezing procedures for

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¹ Sarah Elizabeth Richards, *Freezing Your Eggs—Is This What We’re All Doing Now*, COSMOPOLITAN (June 2013), <http://www.cosmopolitan.com/advice/tips/fertility-fears>. Richards has been the main voice espousing egg freezing in various newspapers, magazines, and blogs. Richards froze her own eggs, and details her story and the story of other “freezers” in her book. See generally SARAH ELIZABETH RICHARDS, MOTHERHOOD, RESCHEDULED: THE NEW FRONTIER OF EGG FREEZING AND THE WOMEN WHO TRIED IT (2013).

² See, e.g., Lara Naaman, *Now That Everyone’s Freezing Their Eggs. . . Should You?*, GLAMOUR (Mar. 2013), <http://www.glamour.com/health-fitness/2013/03/now-that-everyones-freezing-their-eggs-should-you>; Sarah Elizabeth Richards, *Why I Froze My Eggs (And You Should, Too)*, WALL ST. J. (May 3, 2013, 7:16 PM), <http://online.wsj.com/news/articles/SB1001424127887323628004578458882165244260>.

³ Richards, *supra* note 1.

⁴ *Id.*

⁵ Naaman, *supra* note 2.

⁶ See, e.g., Ronald Bailey, *The Ethics of Egg Freezing: What’s Wrong With Women Resetting Their Biological Clocks?*, REASON.COM (May 22, 2012), <http://reason.com/archives/2012/05/22/the-ethics-of-freezing-eggs>; Sarah Elizabeth Richards, *Freeze!*, SLATE (May 20, 2013, 6:45 AM), http://www.slate.com/articles/double_x/doublex/2013/05/egg_freezing_why_more_women_don_t_do_it.html; Sarah Elizabeth Richards, *We Need to Talk About Our Eggs*, N.Y.

their daughters as a form of “fertility insurance.”⁷ Even noted feminist professor Marcia Inhorn wrote an op-ed stating that she wished she had had the chance to freeze her eggs.⁸ Inhorn described her personal struggles in balancing her career and family as a thirty-five year old woman.⁹ “Those years between age [thirty-five] and [forty] were difficult ones for me. My dual desires to establish myself in my career and to become a mother were literally colliding,” she wrote.¹⁰ Inhorn stated that this dilemma, which she calls the “fertility penalty,” is one that most “highly educated, professional women” know all too well.¹¹ Instead of lobbying for better support in the workplace to lessen this phenomenon, however, she urges female graduate students to freeze their eggs for use after they are more financially secure, have found a mate, and have achieved tenure.¹² Similarly, in Anne Marie Slaughter’s (in)famous article in *The Atlantic*, “Why Women Still Can’t Have It All,” she advocates for egg freezing in order to increase women’s career options.¹³

Although there has been a lot of popular press and Internet chatter about egg freezing, there is little in the legal literature that examines the legal, ethical, and policy problems involved with egg freezing.¹⁴ Egg freezing has not stirred up debate in academic discourse the way that other reproductive technologies, such as gestational surrogacy¹⁵ and pre-implantation genetic diagnosis (“PGD”)¹⁶ have. This article tries to fill that gap with a

TIMES (Oct. 22, 2012), <http://www.nytimes.com/2012/10/23/opinion/we-need-to-talk-about-our-eggs.html>; Richards, *supra* note 2.

⁷ See Elissa Gootman, *So Eager for Grandchildren, They’re Paying the Egg-Freezing Clinic*, N.Y. TIMES (May 13, 2012), http://www.nytimes.com/2012/05/14/us/eager-for-grandchildren-and-putting-daughters-eggs-in-freezer.html?pagewanted=all&_r=0.

⁸ Marcia C. Inhorn, *Women, Consider Freezing Your Eggs*, CNN (Apr. 9, 2013, 7:56 AM), <http://www.cnn.com/2013/04/09/opinion/inhorn-egg-freezing/>.

⁹ *Id.*

¹⁰ *Id.*

¹¹ *Id.*

¹² *Id.*

¹³ Anne-Marie Slaughter, *Why Women Still Can’t Have It All*, THE ATLANTIC (June 13, 2012, 10:15 AM), http://www.theatlantic.com/magazine/archive/2012/07/why-women-still-cant-have-it-all/309020/?single_page=true (“I recommend establishing yourself in your career first but still trying to have kids before you are 35—or else freeze your eggs . . .”); see also Jodi Kantor, *Elite Women Put a New Spin on an Old Debate*, N.Y. TIMES, June 21, 2012, at A1; Richards, *supra* note 1 (“[P]rofessor Anne-Marie Slaughter has argued that if more women froze eggs, we’d see more of them stay in the workforce and move up to leadership positions.”).

¹⁴ June Carbone and Naomi Cahn have written an excellent article about the class differences that exist between those who may be able to defer pregnancies through egg freezing and those who would not be able to afford such luxuries. See June Carbone & Naomi Cahn, *The Gender/Class Divide: Reproduction, Privilege and the Workplace*, 8 FLA. INT’L U. L. REV. 287, 287–90 (2013). I consider their arguments in Part IV of this article.

¹⁵ Gestational surrogacy refers to the process whereby an embryo is created with an egg and sperm from the intended parents (or from donor eggs and sperm) via IVF and then transferred into the uterus of a genetically unrelated surrogate. Seema Mohapatra, *Stateless Babies and Adoption Scams: A Bioethical Analysis of International Commercial Surrogacy*, 30 BERKELEY J. INT’L L. 412, 413 (2012).

¹⁶ “Preimplantation genetic diagnosis involves removing multiple ova from the mother, directly fertilizing them with sperm, and incubating them until they become pre-embryos.

comprehensive look at this new technology. I argue that egg freezing technology, while promising, poses significant legal, economic, and social problems. These require that we tread carefully in embracing this new technology. Certainly, we should not view egg freezing technology as a panacea that obviates the need to address gender inequities that force women into a children-or-career dilemma. I examine this technology through the lens of relational autonomy to understand the context within which women are making the “liberating” choice to freeze their eggs. I argue that physicians should use a heightened standard for informed consent for egg freezing for social reasons, more similar to the Common Rule, which is used for informed consent to research, rather than the typical standard for informed consent to treatment.¹⁷ This will help women who choose egg freezing appreciate the many unknown risks that exist with this technology.

Part I of this article describes the science and statistics related to fertility preservation, and specifically egg freezing. I discuss how egg freezing has evolved from a fertility preservation method for medical patients facing the loss of fertility into an option for all women who may wish to delay fertility. Part II of this article provides an overview of the legal landscape for egg freezing both for medical and non-medical¹⁸ reasons. I highlight the potential importance of informed consent in the egg freezing process, especially in the context of those women who may delay fertility based upon an expectation that their frozen eggs are likely to work when “thawed out,” even though that may not be the case. There may be conflicts of interest at play here because fertility clinics stand to benefit financially every time a woman decides to freeze her eggs. In this section, I consider what informed consent for egg freezing may look like and how tort law should play a part in encouraging disclosure of risks related to egg freezing. Part III of the article describes insurance coverage for infertility and egg freezing. In this part, I describe how the popularity of social egg freezing could hinder policy efforts to increase insurance coverage for infertility more generally. In Part

When the pre-embryos are approximately three days old and contain eight cells, one of those cells is removed for biopsy to determine if the embryo will develop any genetic disorders. Based on the biopsy results, patients may consider the genetic profiles of the pre-embryos and decide which ones they would like to have implanted. The procedure can cost \$18,000 per cycle and screens for over one hundred conditions and almost every known genetic chromosomal defect.” Seema Mohapatra, *Examining Global Legal Responses to Prenatal Gender Identification and Sex Selection: A Bioethical Analysis*, 13 NEV. L.J. 690, 699 (2013) (internal citations omitted).

¹⁷ See discussion on the Common Rule, *infra* note 115 and accompanying text.

¹⁸ In this article, I use the term “social egg freezing” or “egg freezing for non-medical reasons” to refer to the situation where women seek to freeze their eggs to avoid future infertility. I use these terms because they are the most common phrases used to describe these situations and not to implicate any normative judgment on individuals who use artificial reproductive technology in this manner. I use “egg freezing for medical reasons” to refer to those who are undergoing medical treatment that may cause infertility and who are freezing their eggs to try to avoid medically-related infertility. Some believe that the term “social” is problematic when contrasted to “medical” because “it downplays the importance of having genuine reproductive options in one’s life.” Angel Petropanagos, *Reproductive “Choice” and Egg Freezing*, 156 CANCER TREATMENT & RES. 223 (2010), available at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3086489>.

IV, I analyze other policy and ethical critiques of social egg freezing. I consider how the lack of insurance coverage for egg freezing determines the population able to take part in egg freezing and how women of color and poor women are less likely to be able to jump on the egg freezing bandwagon. I also discuss the potential negative effects of egg freezing on maternity leave, flexible work policies, and work/life balance. This section also considers how egg freezing contributes to the medicalization of reproduction and other related ethical issues. Finally, I describe how a relational autonomy model is better for the egg freezing context than the individual autonomy construct typically used in informed consent jurisprudence.

I. EGG FREEZING: THE SCIENCE AND THE STATISTICS

In Part I, I will first outline the science of egg freezing and then discuss the costs of egg freezing. Next, I will discuss the two ways egg freezing is being used: as fertility preservation both for women who face medical treatment that may threaten future fertility and for women who choose to delay pregnancy and childbirth for non-medical reasons. Finally, I discuss the scientific risks and benefits of the egg freezing procedure.

A. *Fertility Preservation Options for Women*

There are only a few fertility preservation techniques available to women and girls that are not currently considered experimental. Females are typically born with a finite number of immature follicles, each containing a single egg, referred to as the “ovarian reserve.”¹⁹ At birth, the female baby normally has approximately 1 to 2 million oocytes, the immature follicles comprising the ovarian reserve. That number drops naturally to 200,000–500,000 at puberty, and to a mere 1000 by menopause.²⁰ This fertility drop is more rapid than previously thought. One study found that the vast majority of women studied had lost 88% of their maximum ovarian reserve by the age of thirty, and 97% by the age of forty.²¹ Relatedly, a woman’s fertility drops from 86% at age twenty to 52% at age thirty-five, 36% at age forty, and to only 5% at age forty-five.²²

¹⁹ *What Is Normal Female Fertility, and How Is It Affected by Cancer Treatment?*, MY-ONCOFERTILITY.ORG, http://www.myoncofertility.org/animations/what_normal_female_fertility_and_how_it_affected_cancer_treatment (last visited Aug. 4, 2013). Fertility preservation methods are better established in males than females. This Article focuses on methods used for females because of its emphasis on egg freezing.

²⁰ Yunhai Chuai et al., *Preservation of Fertility in Females Treated for Cancer*, 8 INT’L J. BIOLOGICAL SCI. 1005, 1006 (2012).

²¹ Richard Alleyne, *Women Lose 90 Percent of ‘Eggs’ by 30*, THE TELEGRAPH (Jan. 27, 2010, 2:30 AM), <http://www.telegraph.co.uk/health/healthnews/7079641/Women-lose-90-percent-of-eggs-by-30.html>.

²² Bailey, *supra* note 6.

Currently, “embryo freezing is the most common and successful method of preserving a woman’s fertility.”²³ For embryo freezing, however, there needs to be a partner or sperm donor. Thus, for those without a partner, such as single adults and children, such a preservation technique is not available.

In order to freeze embryos, eggs must be extracted, fertilized, frozen, and stored until such time as the woman is prepared to attempt to become pregnant (for example, following cancer treatment) or to implant them into a surrogate.²⁴ Survival rates per thawed embryo vary considerably, ranging from 35% to 90%.²⁵ Although there are additional forms of fertility preservation, including ovarian transposition and fertility-sparing surgery, many of these are experimental.²⁶ Egg freezing is an option that is attractive to those who cannot undergo embryo freezing.

1. *The Egg Freezing Process*

The process of egg freezing begins with the woman who is undergoing the procedure “inject[ing] herself with hormones to stimulate multiple egg production,” a process that is very similar to harvesting eggs for in vitro fertilization (“IVF”).²⁷ The hormones women need to inject can have side effects, such as bloating,²⁸ and most fertility clinics recommend that women avoid exercise and sexual activity during this time.²⁹ The hormones that women take to produce multiple ova have been associated with ovarian hyperstimulation syndrome, which, although rare, is very serious.³⁰ Some critics argue that more research is needed to determine whether such hormone injections are safe for women.³¹

²³ Fertility and Women With Cancer, AM. CANCER SOC’Y, <http://www.cancer.org/acs/groups/cid/documents/webcontent/acspc-041244-pdf.pdf> (last visited Aug. 4, 2013).

²⁴ *Id.*

²⁵ Jaymeson S. Stroud et al., *Effects of Cancer Treatment on Ovarian Function*, 92 FERTILITY & STERILITY 417, 425 (2009), available at http://www.reproductivefacts.org/uploadedFiles/ASRM_Content/News_and_Publications/Selected_Articles_from_Fertility_and_Sterility/EffectsOfCancerTreatment.pdf.

²⁶ *Fertility and Women With Cancer*, *supra* note 23. Ovarian tissue freezing, GnRH agonist treatment, and oral contraceptive treatment are all currently experimental methods of fertility preservation.

²⁷ Joanne P. Galst, *What’s a Young Woman to Do? The Pros and Cons of Social Egg Freezing*, AM. FERTILITY ASS’N: INFERTILITY & FAMILY BLDG. 1–2, <http://www.theafa.org/article/whats-a-young-woman-to-do-the-pros-and-cons-of-social-egg-freezing/> (click on “Download Fact Sheet”) (last visited Oct. 31, 2013).

²⁸ *Id.* at 3.

²⁹ *See, e.g., The Egg Banking Process*, CTR. FOR FERTILITY PRESERVATION AT SHADY GROVE FERTILITY, <http://centerforfertilitypreservation.com/egg-freezing/the-egg-banking-process/> (last visited May 7, 2014); *Getting Through the Two Week Wait*, SHADY GROVE FERTILITY, <http://www.shadygrovefertility.com/newsletter/two-week-wait> (last visited May 7, 2014); *The IVF Process*, FERTILITY SPECIALISTS OF TEX., <http://www.fertilitytexas.com/ivf/the-ivf-process/> (last visited May 7, 2014).

³⁰ Kimberly M. Mutcherson, *Transformative Reproduction*, 16 J. GENDER RACE & JUST. 187, 224 (2013).

³¹ Galst, *supra* note 27, at 3.

To monitor the process, a woman must have multiple samples of blood taken along with periodic transvaginal ultrasounds.³² When the eggs reach the appropriate size, the woman, who is under IV sedation, will have a reproductive endocrinologist use a needle to extract the eggs from the ovaries.³³ The eggs are then immediately frozen using a slow-freeze method or a flash-freeze process called vitrification.³⁴ Multiple egg-retrieval cycles may be needed because it is more difficult for thawed eggs to be fertilized by sperm, since the outer coating of the egg changes.³⁵ In addition, damage can occur to the membrane of the egg as a result of ice crystals that form due to the freezing process.³⁶ This can potentially lead to rupture of the egg's cellular membrane.³⁷ The greater number of eggs extracted, the higher chance for success; however, there are no guarantees. The time needed to undergo egg freezing or embryo freezing is four to six weeks,³⁸ although some centers are performing the technique in as little as two weeks.³⁹

When the woman is ready to use her eggs, the eggs will have to thaw and then be fertilized with sperm via a process similar to IVF.⁴⁰ Not all the eggs will survive the cryopreservation and/or the thawing process.⁴¹ Those eggs that become fertilized (now as embryos) will be transferred back into the woman's uterus using a catheter.⁴²

B. *The Costs of Egg Freezing*

Although a promising technology, the high costs of egg freezing will be an insurmountable barrier for most women.⁴³ The costs may run between \$9000 and \$20,000 per cycle for the egg-freezing procedure with additional costs of \$2000 to \$4000 per cycle for the drugs.⁴⁴ One cycle may generate

³² *Id.* at 2.

³³ *Id.*

³⁴ *Egg Freezing FAQ's*, USC FERTILITY, http://www.uscfertility.org/fertility_options/egg_freezing/egg_freezing_faqs.php (last visited Sept. 22, 2013).

³⁵ Galst, *supra* note 27, at 2.

³⁶ *Id.* at 2–3.

³⁷ *Id.* at 3.

³⁸ *Egg Freezing FAQ's*, *supra* note 34.

³⁹ *Cycle Overview*, PACIFIC FERTILITY CTR. OF L.A., <http://www.pfcla.com/medical-info/in-vitro-fertilization-ivf/ivf-cycle-overview> (last visited May 7, 2014).

⁴⁰ *See id.*

⁴¹ Galst, *supra* note 27, at 2.

⁴² *Id.*

⁴³ *See* Carbone & Cahn, *supra* note 14, at 287–88.

⁴⁴ There are various estimates of the cost of egg freezing. One estimate by egg freezing advocate Richards was \$9000–\$13,000 per cycle. *Id.* Others estimate the cost at \$12,000–\$20,000 per cycle. Galst, *supra* note 27, at 4. Other sources estimate the cost of the freezing procedure as between \$10,000–\$15,000 per cycle. Jennifer Ludden, *Egg Freezing Puts the Biological Clock on Hold*, NPR (May 31, 2011, 12:01 AM), <http://www.npr.org/2011/05/31/136363039/egg-freezing-puts-the-biological-clock-on-hold> (discussing the price of the procedure). Regardless of the exact number, this amount is prohibitively expensive for most women.

between ten and twenty eggs.⁴⁵ Depending on any specific woman's situation, she may need to or wish to repeat the procedure multiple times.⁴⁶

The costs estimated above, which are taken from reports in the popular press, do not take into account the cost of yearly storage for the eggs.⁴⁷ If a woman decides to freeze her eggs for twenty years, the storage fees alone could be over \$10,000.⁴⁸ The cost estimate used also does not include the cost of the IVF procedure required to use the frozen eggs, which again costs several thousand dollars.⁴⁹ All together, the process of freezing eggs, storing them, and then having them implanted has been estimated to cost more than \$40,000,⁵⁰ which may actually be a modest estimate depending on how long a woman stores her eggs.

C. Egg Freezing for Medical Reasons

Egg freezing was first developed as a way to potentially preserve fertility in cancer patients and others who received treatment that could cause infertility.⁵¹ Each year, approximately 140,000 Americans younger than forty-five years old are diagnosed with cancer.⁵² Unfortunately, many treatments used to beat cancer can subject patients to the risk of infertility.⁵³ Infertility can be defined as not being able to start or maintain a pregnancy or as not being able to conceive a child after one year of trying to get preg-

⁴⁵ See Sarah Elizabeth Richards, *Do You Have to be Rich to Freeze Your Eggs?*, SLATE (Aug. 22, 2013, 2:19 PM), http://www.slate.com/articles/double_x/doublex/2013/08/the_cost_of_egg_freezing_after_years_of_prohibitive_pricing_clinics_are.html.

⁴⁶ Ludden, *supra* note 44 (discussing the price of the procedure).

⁴⁷ *Id.*

⁴⁸ Storage fees can be up to \$600 per year. Galst, *supra* note 27, at 4.

⁴⁹ *Id.*

⁵⁰ Ludden, *supra* note 45. As another alternative, a form of egg freezing procedure called "minimal stimulation" is offered in a handful of American clinics although it has been offered in Europe and Japan much longer. Richards, *supra* note 44. With minimal stimulation, a targeted three to seven eggs would be harvested with an oral ovulation induction drug called clomiphene citrate in conjunction with only five or so hormone shots per cycle. *Id.* The drug costs run between \$500–\$1000 and the minimal stimulation ranges from \$5000–\$9000 in comparison to the traditional egg freezing approach. *Id.* While the drug protocol is not as intense and the costs are lower, there is a risk of mood swings associated with the clomiphene citrate as well as assertions by "mainstream fertility doctors" that the traditional egg freezing "protocol results in more normal embryos overall and hence higher pregnancy rates." *Id.* (emphasis in original).

⁵¹ See generally Seema Mohapatra, *Fertility Preservation for Cancer Patients and Reproductive Justice*, HARV. J. ON RACIAL & ETHNIC JUST., (forthcoming 2014) (describing the process of fertility preservation for cancer patients in detail).

⁵² FERTILE HOPE, CANCER & FERTILITY: FAST FACTS FOR ONCOLOGY PROFESSIONALS 1 (2008), available at http://www.fertilehope.org/uploads/pdf/08_FH_Onc_FastFacts.pdf.

⁵³ Erin Allday, *Chemo Impacts Female Fertility More Than Thought*, S.F. CHRON. (Sept. 12, 2011), <http://www.sfgate.com/news/article/Chemo-impacts-female-fertility-more-than-thought-2310393.php>.

nant.⁵⁴ Not all cancer treatments impact fertility the same way for all patients.⁵⁵

The American Society of Clinical Oncology (“ASCO”) published guidelines in 2006 recommending that oncologists address the possibility of infertility with patients and “be prepared to discuss possible fertility preservation options or refer appropriate and interested patients to reproductive specialists” as part of the informed consent process.⁵⁶ In 2013, ASCO further updated its recommendations to make “medical oncologists, radiation oncologists, gynecologic oncologists, urologists, hematologists, pediatric oncologists, and surgeons” also responsible for addressing the risk of infertility with cancer patients of reproductive age or their parents or guardians.⁵⁷ The informed consent procedure requires the health care provider to document, as part of the treatment planning process, “the consideration of scientific evidence, weighing potential harms and benefits, reproductive potential, anticipated delay of childbearing, and patient preferences.”⁵⁸ The practice guidelines set forth by ASCO, however, do not substitute for the treating physician’s professional judgment for the care of the cancer patient, and the physician’s participation is voluntary.⁵⁹ One survey found that 38% of physicians had no knowledge of ASCO’s guidelines, and that only 25% distributed educational literature on the subject.⁶⁰ In one study, more than half of the male and female cancer survivors of reproductive age, who were surveyed between 1999 and 2005, had no recollection of a discussion regarding the possible fertility implications of their cancer treatment.⁶¹ Studies further suggest that women with cancer are less likely to be given information about preserving their fertility than men.⁶² Physicians seem to be discussing ferti-

⁵⁴ AM. CANCER SOC’Y, *supra* note 23; Am. Soc’y for Reprod. Med., *Fact Sheet: Defining Infertility*, REPRODUCTIVEFACTS.ORG (2014), http://www.reproductivefacts.org/uploadedFiles/ASRM_Content/Resources/Patient_Resources/Fact_Sheets_and_Info_Booklets/Defining%20infertility%20FINAL%20%202-19-14.pdf.

⁵⁵ Chuai et al., *supra* note 20. *See generally* Mohapatra, *supra* note 51. Chemotherapy, which is common treatment for cancer, can cause infertility as chemotherapy kills growing cancer cells, as well as normal fast-growing cells such as those in the reproductive system. *Chemotherapy’s Effects on Organs / Body Systems*, STANFORD CANCER INST., http://cancer.stanford.edu/information/cancerTreatment/methods/managing_effects/organs.html (last visited Aug. 4, 2013). Similarly, radiation therapy, which uses high-energy rays to kill cancer cells, may affect surrounding healthy cells. AM. CANCER SOC’Y, *supra* note 23. Hormone therapies used to treat certain cancers can affect the reproductive capability as well, although the specific effects on fertility of certain new treatments, such as vaccines, immune therapies, or biological response modifiers, is not yet known. *Id.*

⁵⁶ Stephanie J. Lee et al., *American Society of Clinical Oncology Recommendations on Fertility Preservation in Cancer Patients*, 24 J. CLINICAL ONCOLOGY 2917, 2917 (2006).

⁵⁷ Alison W. Loren et al., *Fertility Preservation for Patients with Cancer: American Society of Clinical Oncology Clinical Practice Guideline Update*, 31 J. CLINICAL ONCOLOGY 2500, 2503 (2013).

⁵⁸ *Id.* at 2504.

⁵⁹ *Id.* at 2502.

⁶⁰ Gerry P. Quinn et al., *National Survey of Physician Practice Patterns: Fertility Preservation and Cancer Patients*, 27 J. CLINICAL ONCOLOGY CRA9508 (2009), available at <http://meeting.ascopubs.org/cgi/content/abstract/27/18S/CRA9508>.

⁶¹ Lee et al., *supra* note 56, at 2926–30.

⁶² AM. CANCER SOC’Y, *supra* note 23.

ity preservation options less with African Americans, women, and those without health insurance.⁶³

D. Egg Freezing for Social Reasons

In addition to serving as a fertility preserver for female cancer patients, egg freezing is increasingly being thought of as a way for otherwise healthy women to delay motherhood for a few years for social or career reasons.⁶⁴ The promise of egg freezing allows women to preserve their eggs when they are in their mid-twenties to mid-thirties to have a chance at a successful pregnancy at a time of their choosing.⁶⁵ To date, approximately 2000 babies have been born using frozen eggs worldwide, and the numbers are increasing as many more women have decided to preserve their fertility by freezing their eggs.⁶⁶ Fertility clinics across the nation are seeing an increase in the number of women wanting to preserve their eggs for a time later in life.⁶⁷

Egg freezing is creating new hope that delaying the biological clock may be possible.⁶⁸ This is especially important because the number of women having their first child while in their thirties and forties has quadrupled since 1970, while the number of women having their first child in their early twenties has declined by one third.⁶⁹

There are several reasons why more and more women are waiting to have children. First, many women want to establish their careers and financial stability.⁷⁰ Second, many women want to find a partner they can see themselves having a child with, especially as the median age for marriage is increasing.⁷¹ A thirty-eight-year-old woman commented that freezing eggs in order to delay fertility “buys you time, it eliminates any pressure . . . [she] thought it was a really good insurance policy.”⁷² It appears that at least anecdotally, women are freezing eggs at younger ages—not only when they are facing an impending decline in fertility. “The mentality of freezers is changing . . . it’s a different story when your back is up against the wall. But the younger women say, ‘It’s so empowering. It’s liberating. It’s a great backup.’”⁷³

⁶³ Mohapatra, *supra* note 51.

⁶⁴ Galst, *supra* note 27, at 2.

⁶⁵ Gillian M. Lockwood, *Social Egg Freezing: The Prospect of Reproductive ‘Immortality’ or a Dangerous Delusion?*, 23 REPROD. BIOMED. ONLINE 334, 339 (2011), available at <http://download.journals.elsevierhealth.com/pdfs/journals/1472-6483/PIIS1472648311002835.pdf>.

⁶⁶ Naaman, *supra* note 2.

⁶⁷ *Id.*

⁶⁸ *Id.*

⁶⁹ Claudia Kalb, *Should You Have Your Baby Now?*, NEWSWEEK (Aug. 12, 2001, 8:00 PM), <http://www.newsweek.com/should-you-have-your-baby-now-151201>.

⁷⁰ Bailey, *supra* note 6.

⁷¹ *Id.*

⁷² Allison Motluk, *Growth of Egg Freezing Blurs ‘Experimental’ Label*, 476 NATURE 382 (Aug. 23, 2011), available at <http://www.nature.com/news/2011/110823/full/476382a.html>.

⁷³ Richards, *supra* note 1.

Advocates of egg freezing for social reasons state that women can focus on self-improvement, cultivate the career that they desire, find the relationship that they want, decrease the risk of birth defects by using younger eggs, and take charge of their lives until they are ready to become mothers by freezing their eggs at a younger age for use later on.⁷⁴ Although the sample size is admittedly small, women who have frozen their eggs are “overwhelmingly satisfied” with the experience.⁷⁵ A recent study surveying 140 Belgian women found that 95% of the women said they would freeze their eggs again, with 70% saying they wish they had done it sooner.⁷⁶ Some women feel that this new ability to control when one has children is the “final frontier of the fight for gender equality,” because doing so allows women to focus on their careers without feeling the pressure of their biological clocks—something their male counterparts are free from.⁷⁷ Sarah Elizabeth Richards, an author and egg-freezing advocate, has written several articles and a book about the practice. Richards states that freezing her eggs made her feel as if her “future seemed full of possibility again.”⁷⁸ Richards notes that egg freezing is being used by women who do not even know if they want children at all, and that the option to freeze eggs gives these women more time to figure out if they want to be mothers.⁷⁹ She says “more and more women are seeking refuge in the freezer” and this “freedom from panic” gives women more time to decide what is best for their lives.⁸⁰

⁷⁴ See Richards, *supra* note 2; SYLVIA ANN HEWLETT, CREATING A LIFE: PROFESSIONAL WOMEN AND THE QUEST FOR CHILDREN 33, 86 (2002) (The biological clock does appear to be incongruous with a high achieving professional life for women. Hewlett found that 42% of high earning women over age 40 in corporate America are childless and only 14% of them had not wanted children.).

⁷⁵ Julie Zeilinger, *Women Are Overwhelmingly Satisfied With Egg Freezing, Says Study*, HUFFINGTON POST (July 16, 2013, 5:27 PM), http://www.huffingtonpost.com/2013/07/16/egg-freezing-women-satisfied-study_n_3605657.html.

⁷⁶ *Id.*; see also *Women Who Freeze Eggs Wish They'd Done It Earlier: Study*, N.Y. DAILY NEWS (July 10, 2013, 2:31 PM), <http://www.nydailynews.com/life-style/health/women-feel-regs-egg-freezing-study-article-1.1395014>.

⁷⁷ Zeilinger, *supra* note 75.

⁷⁸ Richards, *infra* note 79.

⁷⁹ Sarah Elizabeth Richards, *The Agony of the Undecided: Does Egg Freezing Help Women Know if They Want Kids?*, HUFFINGTON POST (Aug. 8, 2013, 4:39 PM), http://www.huffingtonpost.com/sarah-elizabeth-richards/does-egg-freezing-help-women-know-if-they-want-kids_b_3727885.html. Richards claims that if a woman freezes her eggs, it is less likely she will be plagued with “what ifs” later on in life. *Id.* Richards makes an interesting observation on the reactions of women who go through the egg freezing process. *Id.* She asserts that “[w]omen tend to react in one of two ways. In the first scenario, the act of freezing nudges them along the mommy track. That’s because it’s nearly impossible to go to umpteen doctor’s appointments, assault yourself with hormones, clean out your savings account and undergo surgery without admitting to yourself that you might not want more than an option. You might actually want a baby. . . . On the other hand, there are women who freeze their eggs to ‘check the box’ so they feel as if they’ve done something to take care of themselves and escape the cultural pressure . . .” *Id.*

⁸⁰ *Id.* The American Society of Reproductive Medicine (“ASRM”) reviewed four randomized controlled trials, finding little difference in the effectiveness of the fresh eggs used in IVF and the use of frozen eggs from the vitrification process. Sarah Elizabeth Richards, *We Need to Talk About Our Eggs*, *supra* note 6.

E. Scientific Risks of Egg Freezing

This Part has thus far discussed the process and costs of egg freezing and the potential for the technology to help those who face the loss of fertility for medical reasons, as well as those who wish to delay childbearing for other reasons. In this section, I highlight the many unknowns of this technology.

One of the first unknowns is how well this technology will work with eggs frozen years before they are to be used. Some studies suggest that there is no significant difference in rates of pregnancy between fresh eggs used for IVF and frozen eggs used for IVF.⁸¹ Additionally, a recent review of 900 babies born from frozen eggs found no greater risk of birth defects than those conceived naturally.⁸² The current studies only speak to eggs frozen for short periods of time, however, and it is not clear we can extrapolate results for long-term egg freezing from this data. In these studies, the frozen eggs used were not frozen for decades as they conceivably could be in the case of younger women who freeze with the intention of having children many years in the future. Even after the procedure is completed and the eggs are safely extracted, there is no guarantee that the eggs will “thaw successfully, fertilize successfully, implant successfully,” and ultimately result in a pregnancy leading to a live birth.⁸³

Also, with egg freezing still relatively new, “there are only a couple of thousand babies born from frozen eggs in the world.”⁸⁴ While some studies have suggested that IVF procedures using fresh eggs are just as successful as IVF procedures using frozen eggs, other studies have shown that IVF success rates with frozen eggs are significantly lower when compared with IVF using fresh eggs.⁸⁵ Still, depending upon the age of the eggs and expertise of the doctor, the success rates when using frozen rather than fresh eggs could be as high as 30% to 50% per attempt.⁸⁶ However, a recent survey of fertility clinics in the United States offering egg freezing indicates that nearly half have never attempted a pregnancy with thawed eggs.⁸⁷ There is a real chance that the frozen eggs will not result in a pregnancy when the patient decides to try to become pregnant.⁸⁸

Egg freezing was considered experimental in the United States until late in 2012,⁸⁹ but since then, the promise of fertility insurance has taken

⁸¹ Sarah Elizabeth Richards, *We Need to Talk About Our Eggs*, *supra* note 6.

⁸² Richards, *supra* note 2.

⁸³ Galst, *supra* note 27, at 3.

⁸⁴ Richards, *supra* note 6.

⁸⁵ Kutluk Oktay et al., *Efficiency of Oocyte Cryopreservation: A Meta-analysis*, 86 FERTILITY & STERILITY 70, 70 (2006). This study compared the older slow-freezing procedure, however, so it is possible that the flash freezing techniques will have better outcomes compared with fresh eggs.

⁸⁶ Richards, *supra* note 2.

⁸⁷ *Id.*

⁸⁸ *Id.*

⁸⁹ THE PRACTICE COMMS. OF THE AM. SOC'Y FOR REPROD. MED. AND THE SOC'Y FOR ASSISTED REPROD. TECH., *Mature Oocyte Cryopreservation: A Guideline*, 99 FERTILITY AND

off.⁹⁰ Depending on the woman's individual situation, egg freezing could be a "shot in the dark," as very few babies have been born from frozen eggs to women over the age of thirty-eight.⁹¹ Most babies born from frozen eggs were conceived from the eggs of much younger women, many of them egg donors.⁹² Although the American Society of Reproductive Medicine ("ASRM") removed the "experimental" label from egg freezing, ASRM was careful not to endorse the practice.⁹³ In fact, ASRM actually found a "lack of data on safety, efficacy, cost-effectiveness, and potential emotional risks" associated with egg freezing.⁹⁴ In addition, ASRM warned against the widespread use of egg freezing because it may "give women false hope and encourage women to delay childbearing."⁹⁵

II. EGG FREEZING: THE LEGAL LANDSCAPE

Part II of this Article summarizes different legal and regulatory issues related to egg freezing. First, I discuss the regulations governing assisted reproductive technology ("ART") in the United States and note the lack of regulation of egg freezing. Then, I analyze how tort law and the doctrine of informed consent in general may help women make educated decisions about egg freezing. Finally, I summarize the current regulations related to insurance coverage of ART and analyze how egg freezing fits into such requirements. In this Part, I highlight the ways that both statutory and tort law could be better used to protect the parties involved in egg freezing. Specifi-

STERILITY 37, 41 (2013). The ASRM removed egg freezing from its classification as "experimental" during October 2012 following ASRM's first review in four years. Rob Stein, *Freezing Eggs to Make Babies Later Moves Toward Mainstream*, NPR (Oct. 19, 2012, 5:00 AM), <http://www.npr.org/blogs/health/2012/10/23/163107113/freezing-eggs-to-make-babies-later-moves-toward-mainstream>. Following a review of nearly 1,000 published studies on egg freezing, the Assisted Reproductive Technology Practice Committee specifically concluded that egg freezing and thawing techniques have improved. *Id.*; see also Inhorn, *supra* note 8. But see Lynn M. Morgan & Janelle S. Taylor, *Op-Ed: Egg Freezing: WTF?*, FEMINIST WIRE (Apr. 14, 2013), <http://thefeministwire.com/2013/04/op-ed-egg-freezing-wtf/> ("Just six short months ago (October 2012), [ASRM] determined that egg freezing would no longer be 'experimental' technology.")

⁹⁰ Even prior to the experimental label being removed, media reports promoted egg freezing as an insurance policy against infertility, often without noting the risks involved in this experimental procedure. Sona Makker, *Egg Freezing: Taking a Closer Look at the Experimental Label*, RH REALITY CHECK (Mar. 22, 2012, 9:09 PM), <http://rhrealitycheck.org/article/2012/03/22/egg-freezing-taking-closer-look-at-experimental-label/>.

⁹¹ Motluk, *supra* note 72.

⁹² *Id.*

⁹³ Charlotte Schubert, *Egg Freezing Enters Clinical Mainstream*, SCIENTIFIC AM. (Oct. 23, 2012), <http://www.scientificamerican.com/article.cfm?id=egg-freezing-enters-clinical-mainstream>. John Robertson suggests that the ASRM may have prematurely labeled this procedure as not experimental due to its own lower, self-serving standards of care with regards to egg freezing. John Robertson, *Egg Freezing and Egg Banking: Empowerment and Alienation in Assisted Reproduction*, 1 J.L. & BIOSCIENCES (forthcoming 2014) (manuscript at 20–22), available at <http://jlb.oxfordjournals.org/content/early/2014/03/28/jlb.lsu002.full.pdf+html>.

⁹⁴ Morgan & Taylor, *supra* note 89.

⁹⁵ *Id.*

cally, I argue that physicians should approach egg freezing for social reasons more as research than as treatment, and thus should be required to disclose that there are unforeseeable risks associated with the process.

A. *The Regulatory Framework Governing Assisted Reproductive Technology*

Like many other types of ART, egg freezing practices in the United States are subject to few direct restrictions. The field of ART is known for being the “Wild West,”⁹⁶ and many scholars believe that the lack of direct regulation is a good thing. Professor Judith Daar, an expert in the legal issues related to ART, has written approvingly of the current regulatory framework within the ART field, advocating a consumer based approach to ART.⁹⁷ Daar argues that the patchwork of laws and regulations governing ART in the United States actually do work together to create a system that is not as *laissez faire* as commentators sometimes suggest.⁹⁸

The oldest law governing ART, the Fertility Clinic Success Rate and Certification Act of 1992, requires fertility clinics to report their pregnancy success rates to the Secretary of Health and Human Services, but does not cover egg freezing.⁹⁹ The Centers of Disease Control (CDC) make the statistics reported pursuant to this law available to the public.¹⁰⁰ However, there is no monetary penalty if fertility clinics choose not to report these statistics. Instead, noncompliant clinics are placed on a list of non-reporters published by the CDC.¹⁰¹ Even without any real teeth in the law, only about 8% of clinics do not report these statistics yearly.¹⁰² This low rate of noncompliance suggests that this type of reporting statute does offer at least some accountability for fertility clinics. If egg freezing continues to gain popularity, it may be worth considering expanding this law to include reporting of egg freezing success rates. Just as IVF was a fledgling form of ART at the time of this law’s passage, egg freezing is similarly in its commercial infancy. Because egg freezing involves women who may be giving up their opportunity to have a child without medical intervention, it is particularly important that women are aware of how many successful births a clinic has had with frozen eggs. Additional details such as the age of the women into which the

⁹⁶ Some scholars disagree with the label “Wild West.” Judith Daar writes that labeling the United States as a “nothing is regulated” country is an “urban myth.” Judith Daar, *Federalizing Embryo Transfers: Taming the Wild West of Reproductive Medicine?*, 23 COLUM. J. GEN. DER. & L. 257, 258, 265 (2012).

⁹⁷ Judith F. Daar, *Regulating Reproductive Technologies: Panacea or Paper Tiger?*, 34 HOUS. L. REV. 609, 610–16 (1997).

⁹⁸ Daar, *supra* note 96, at 258–61.

⁹⁹ 42 U.S.C. § 263a-1 (2012). Another part of the Act allowed the CDC to develop a model certification program for embryo laboratories, which it did in 1999. See Daar, *supra* note 96, at 268. No state has adopted that program into law. *Id.*

¹⁰⁰ 42 U.S.C. § 236a-5 (2012). This law was enacted to help educate the fertility consumer about which clinic has better results. See Daar, *supra* note 96, at n.31.

¹⁰¹ Daar, *supra* note 96, at n.32.

¹⁰² *Id.*

eggs were implanted, the age of the women when they froze their eggs, and how long the eggs were frozen could help women compare clinics. It also may make more salient how new this technology is because many clinics will likely not have had any live births from frozen eggs and may not for several years.

Federal agencies such as the CDC, the Food and Drug Administration (“FDA”), and the Centers of Medicare and Medicaid Services (“CMS”) indirectly regulate the ART field. For example, in 2005, the FDA issued regulations requiring tissue banks to test donors and donated tissue for a variety of infectious diseases, including HIV and Hepatitis.¹⁰³ Such regulations apply to any ART clinics that use donor eggs or donor sperm. Physicians involved in ART are also indirectly regulated through state licensing of physicians.

Although some argue that regulation may help protect the vulnerable parties to ART, such as would-be parents and women seeking help getting pregnant, others believe that regulation would cause discrimination in who is able to access such technology. For example, in areas where parenthood is highly regulated, such as in adoption, often unmarried couples; same-sex individuals; and single, older, or poor men or women are unable to adopt. Some believe that if ART were subject to more regulation, similar restrictions would develop governing who can access such technology, limiting access to married couples, for example, or excluding single women and gay couples.¹⁰⁴

B. Tort Law as an Incentive for Disclosure of Risks

1. Duty to Disclose Risks Associated with Egg Freezing

Instead of increased regulations, which may limit access to ART, including egg freezing, some suggest that tort law may be an effective tool in holding physicians involved in ART accountable to patients.¹⁰⁵ Specifically, the doctrine of informed consent may protect patients, as it requires physicians to disclose available treatment choices, material risks, and potential benefits of each treatment decision.¹⁰⁶ The primary goal of informed consent in tort law has been to support individual patient autonomy.¹⁰⁷ The informed consent doctrine requires physicians to provide patients with enough information so that the patient is able to make a well-educated decision about her

¹⁰³ 21 C.F.R. § 1271.75 (2013).

¹⁰⁴ See Mutcherson, *supra* note 30, at 230 (noting that state regulation has sometimes excluded ART coverage “for non-married couples, for women who are past a certain age, or for couples who plan to use gametes other than their own”).

¹⁰⁵ Daar, *supra* note 96, at 645.

¹⁰⁶ *Id.* at 628–30.

¹⁰⁷ See Pamela Laufer-Ukeles, *Reproductive Choices and Informed Consent: Fetal Interests, Women’s Identity, and Relational Autonomy*, 37 AM. J.L. & MED. 567, 571 (2011).

care.¹⁰⁸ In *Schloendorff v. Society of New York Hospital*, the seminal case that established the principles of informed consent, the court stated that every adult with capacity “has a right to determine what shall be done with his own body. . . .”¹⁰⁹ Therefore, under tort law, a physician has to adequately inform a patient about the risks and benefits of a particular treatment or procedure. The failure to do so would mean that the patient has not been able to make an informed decision, and thus, the consent is not valid and the physician could be subject to tort liability.¹¹⁰ Thus, in the egg freezing context, to satisfy this requirement, physicians would need to convey information regarding the health risks to both the woman and the child as well as the success rates with egg freezing and thawing, and alternatives to egg freezing. For treatments or procedures, many jurisdictions still use the “reasonable physician” standard of informed consent.¹¹¹ That is, the information conveyed to a patient would be reasonable if a reasonable physician would believe that such disclosure was sufficient.¹¹² Thus, if a patient is seeking out egg freezing for social reasons, a reasonable physician may not disclose that she has never performed such a procedure before, although reasonable patients may consider such information important in choosing a physician. Other jurisdictions adopt the “reasonable patient” standard for treatments or procedures, which is a more patient-friendly standard, requiring disclosure of the risks a reasonable patient would deem necessary.¹¹³ In such jurisdictions, if a reasonable patient would wish to know a physician’s expertise in egg freezing, this would be dispositive.¹¹⁴

When a healthy woman comes to a doctor to seek out egg freezing to extend her biological clock, I do not believe either one of the informed consent regimes outlined above is adequate. An enhanced procedure similar to those used for informed consent to research, such as the “Common Rule,” should be used in these types of cases. The “Common Rule” is a federal statute that sets forth informed consent procedures that must be used in government funded research involving human subjects.¹¹⁵ It describes the basic elements of informed consent, which include a requirement that a researcher acknowledge that the particular treatment or procedure may involve risks to the subject that are currently unforeseeable.¹¹⁶ I believe that this serves as a useful model for the current state of egg freezing for extending the biological clock.

¹⁰⁸ See Nadia N. Sawicki, *The Abortion Informed Consent Debate: More Light, Less Heat*, 21 CORNELL J.L. & PUB. POL’Y 1, 3 (2011).

¹⁰⁹ See *Schloendorff v. Soc’y of N.Y. Hosp.*, 105 N.E. 92, 93 (N.Y. 1914).

¹¹⁰ See Maya Manian, *The Irrational Woman: Informed Consent and Abortion Decision-Making*, 16 DUKE J. GENDER L. & POL’Y 223, 239 (2009).

¹¹¹ Sawicki, *supra* note 108, at 19.

¹¹² *Id.*

¹¹³ See *id.*

¹¹⁴ See *id.*

¹¹⁵ See 45 C.F.R. § 46.116 (2005).

¹¹⁶ *Id.* at 45 C.F.R. § 46.116 (B)(1) (2005).

In the social egg freezing context, women seem to be seeking out physicians who will retrieve the eggs, as opposed to the case in typical informed consent cases, where a physician is recommending a procedure. This is relevant because it is even more important that physicians inform patients of the success rates of egg freezing and their own experience and successes (or failures) with such procedures. So much is unknown about egg freezing. Without acknowledging these unknowns, physicians agreeing to the procedure may be complicit in giving women false expectations about their future fertility. Egg freezing can be thought of as “hope in the freezer.” Women who are worried about their future fertility and their chances of being able to conceive a child are vulnerable. They may undergo undue risks in order to preserve their fertility. To ensure that women are not holding on to false hope, the informed consent process for egg freezing must disclose the unknowns in the procedure: no eggs have been frozen for decades, so it is not clear what long term freezing does to the egg itself and the potential for a healthy baby.¹¹⁷ Similarly, most births with frozen eggs have been donor eggs from younger women implanted into younger women.¹¹⁸ It is not yet known how effective implanting eggs into women in their forties or fifties will be. In addition, because egg quality decreases with age, it is not clear if the eggs extracted from a woman in her late thirties will be as effective as the clinical studies that were completed with much younger women as research subjects. All of these disclosures must be discussed with the elective egg freezing patient so there is no false hope about the potential of egg freezing to somehow guarantee a baby later in time. In addition to these specifics, similar to the “Common Rule” requirements, physicians should acknowledge that there are unforeseeable risks to the woman and her future children. This is especially the case when a woman who is not infertile is seeking to delay pregnancy with the expectation that by freezing her eggs, she will be able to choose when she becomes pregnant via IVF. The frozen eggs may not result in a pregnancy, and if a woman waits till her forties or fifties, it may be too late for her to have a biological child in another way. As mentioned previously, the ASRM found a “lack of data on safety, efficacy, cost-effectiveness, and potential emotional risks” related to egg freezing.¹¹⁹ In fact, ASRM warned against the widespread use of egg freezing because it may “give women false hope and encourage women to delay childbearing.”¹²⁰ The ASRM’s position should be part of the disclosure procedure as well.

It is also important to ensure that women understand the disclosures before they decide to freeze their eggs. Some researchers have developed an

¹¹⁷ See Galst, *supra* note 27, at 3.

¹¹⁸ See Motluck, *supra* note 72.

¹¹⁹ Morgan & Taylor, *supra* note 89.

¹²⁰ *Id.*

informed consent tool for egg donors.¹²¹ The tool allows physicians to understand whether prospective egg donors understand the information they have received about the risks and benefits of egg donation. The researchers adapted a questionnaire used for cancer patients enrolling in clinical trials to determine if “egg donors had both a subjective and objective appreciation of the donation process, that is, ‘how well informed the donor feels about’ the egg donation process and the ‘facts and concepts relevant to oocyte donation.’”¹²² A similar tool could be adapted for women who seek out egg freezing to ensure that women really understand the risks and unknowns in this procedure.

In contrast to disclosing risks, there has been some discussion in the popular press about whether physicians should actually be proactively informing healthy women in their twenties and thirties about the option to freeze their eggs. Primary care physicians are not typically the ones approaching the subject of egg freezing with their patients.¹²³ Rather, women are seeking out egg freezing as an option. Some contend that this “ask me first” approach results in women overestimating the age at which fertility becomes an issue, and women feeling betrayed by their doctors for not counseling them more on this issue.¹²⁴ Given the costs and infancy of the technology, physician counseling about fertility decline does not need to include a discussion of egg freezing at this time. Due to all the unknowns about how successful the technology will be when eggs are preserved for several years or even decades, a physician does not have a duty to offer egg freezing as an option to healthy women.

In fact, sometimes doctors and clinics have a conflict of interest when they advise healthy, fertile women to undergo egg freezing.¹²⁵ Egg freezing is an expensive process, and a doctor associated with a fertility clinic and the clinic itself often have a financial interest in increasing the number of healthy patients that use their services. A healthy woman who may have gotten pregnant without the assistance of ARTs, who chooses to freeze her

¹²¹ See generally Skillern et al., *Egg Donor Informed Consent Tool (EDICT): Development and Validation of a New Informed Consent Tool for Oocyte Donors*, 99 FERTILITY AND STERILITY 1733 (2013), available at <http://www.ncbi.nlm.nih.gov/pubmed/23410899>.

¹²² Naomi Cahn & Jennifer Collins, *Fully Informed Consent for Prospective Egg Donors*, 16 VIRTUAL MENTOR 49, 49–56 (2014), available at <http://virtualmentor.ama-assn.org/2014/01/pdf/hlaw2-1401.pdf>.

¹²³ Ludden, *supra* note 44.

¹²⁴ Kalb, *supra* note 69.

¹²⁵ Often fertility clinics include contract provisions that contain liquidated damages clauses to protect themselves from tort suits. For example, Extend Fertility, one of the first businesses to offer commercial egg freezing, has a “Client Services Agreement” that contains a liquidated damages clause stating that “in the event of the loss, injury, damage or destruction of your eggs caused by Extend’s (or Storage Provider’s) failure to exercise reasonable care or other Duty of Extend to you, liquidated damages shall be in the amount of \$400 for each oocyte and with a limit of \$5,000 for all of your retrieved eggs.” Furthermore, by signing the agreement the client also waives and relinquishes any right that she has to a jury trial. As such, a potential client who experiences an injury from Extend Fertility’s services has a lesser chance of receiving a favorable verdict if litigation ensues. Client Services Agreement, Extend Fertility (on file with author).

eggs to delay motherhood, is essentially signing up for paying for the egg freezing procedure and future IVF if she chooses to use her eggs in the future. The costs of both will be borne by the woman to the benefit of the doctor and clinic. This conflict of interest may not be evident to women seeking to freeze their eggs, so it should be disclosed to women within the informed consent procedure. It is also not clear if the clinic that freezes will allow her to transfer her eggs to another fertility clinic when she decides to have IVF years later. Women may move, may change doctors, or may just decide to find a lower cost carrier. Ethically and practically, women should be informed about the egg freezing and future IVF process at the time of the decision making about fertility preservation.

2. *Duty to Disclose the Availability of Egg Freezing Technology*

In addition to disclosing the risks, as fertility preservation becomes more common, physicians may need to disclose the availability of this technology as a matter of course, especially to cancer patients facing potential infertility due to their cancer treatment. Currently, oncologists are only encouraged by ASCO to discuss fertility preservation, but the standard of care will likely change as these technologies become commonplace. Oncologists currently have discretion about whether to discuss fertility preservation with a patient, depending upon the progression of the patient's disease. This is likely to change. Just as the failure to procure informed consent for surgical or other treatment that may cause infertility is actionable in tort, it is quite possible that the lack of a discussion of fertility preservation in cancer patients will become the successful basis for a malpractice case based on lack of informed consent.¹²⁶

¹²⁶ See, e.g., *Haley v. United States*, 739 F.2d 1502, 1503-04 (10th Cir. 1984) (plaintiffs recovered for medical negligence under the Federal Torts Claims Act after patient's uterus was removed by doctors without informed consent disclosing need for removal); *Jordan v. Louisiana ex rel. Bd. of Adm'rs of La. State Univ. Agric. and Mech. Coll., Health Serv. Div.*, 40 So. 3d 1139, 1141 (La. Ct. App. 2010) (patient recovers in a malpractice action because she was not aware of the possible risks associated with the surgery and the defendants failed to obtain her consent before the procedure); *Smith v. Reisig, M.D., Inc.*, 686 P.2d 285, 286 (Okla. 1984) (malpractice suit due to an unnecessary hysterectomy that resulted in complications to Ms. Smith's bladder that was mistakenly punctured during the procedure); *Redford v. United States*, No. 89-2324 (CRR), 1992 WL 84898, at *1 (D.C. Super. Ct. Apr. 10, 1992) (medical malpractice against Walter Reed Army Medical Center for failing to explain to the patient that the surgical removal of her uterus, fallopian tubes, and ovaries was an elective remedy to eliminate pelvic pain, which was the standard of care). *But see* *Jackson v. State*, 938 So. 2d 688, 689 (La. 2006) (no lack of informed consent found when patient underwent surgery to remove a uterine fibroid for the purpose of increasing her fertility, which instead resulted in a total abdominal hysterectomy, when she signed a consent form that disclosed risk of hysterectomy).

III. INSURANCE COVERAGE FOR INFERTILITY AND EGG FREEZING

A. *The Current Insurance Landscape*

Infertility is a disease that currently affects over seven million people.¹²⁷ However, only fifteen states require insurance coverage for either infertility diagnosis or treatment.¹²⁸ Thirteen of those states have laws that require insurers to actually cover infertility *treatment*.¹²⁹ Two states—Louisiana and New York—prohibit excluding coverage for a condition typically covered because that condition may result in infertility.¹³⁰ California, Louisiana, and New York specifically *exclude* coverage for IVF, while most states require insurance companies to provide coverage for the procedure.¹³¹ Five states—Arkansas, Hawaii, Maryland, Rhode Island, and Texas—only require coverage if the woman is married, leaving same-sex couples and unmarried women without a benefit that is conferred upon others who pay similar premiums.¹³² One state, Minnesota, actually mandates that “medical assistance shall *not* provide coverage for fertility drugs when specifically used to enhance fertility.”¹³³ The laws vary from state to state, with only some mandating coverage for IVF and others requiring proof of a long history of infertility and imposing a cap on the total cost of treatment.¹³⁴ The remaining states have been statutorily silent on the issue.

Additionally, the Affordable Care Act (“ACA”) does not include coverage for egg freezing or infertility in general, although RESOLVE (the national infertility association) and other infertility advocates were hopeful that the ACA would include treatment for infertility within its essential health

¹²⁷ The Am. Soc’y for Reprod. Med., *Quick Facts About Infertility*, REPRODUCTIVEFACTS.ORG, <http://www.reproductivefacts.org/detail.aspx?id=2322> (last visited Nov. 3, 2013); MARGARETE SANDELOWSKI, WITH CHILD IN MIND: STUDIES OF THE PERSONAL ENCOUNTER WITH INFERTILITY 62–63 (1993).

¹²⁸ *Insurance Coverage in Your State*, RESOLVE, http://www.resolve.org/family-building-options/insurance_coverage/state-coverage.html (last visited Nov. 4, 2013) (listing summaries of laws by state) [hereinafter RESOLVE]. The states that have such coverage are Arkansas, California, Connecticut, Hawaii, Illinois, Louisiana, Maryland, Massachusetts, Montana, New Jersey, New York, Ohio, Rhode Island, Texas, and West Virginia. See ARK. CODE ANN. §§ 23-85-137, 23-86-118 (2012); CAL. HEALTH & SAFETY CODE § 1374.55 (West 2012); CONN. GEN. STAT. §§ 38a-509, 38a-536 (2011); HAW. REV. STAT. §§ 431:10A-116.5, 432:1-604 (2011); 215 ILL. COMP. STAT. 5/356m (2012); LA. REV. STAT. ANN. § 22:1036 (2012); MD. CODE ANN., INS. § 15-810 (LexisNexis 2011); MASS. GEN. LAWS ch. 175, § 47H (2011); MONT. CODE ANN. § 33-31-102(3)(v) (2011); N.J. STAT. ANN. § 17:48-6x (West 2012); N.Y. INS. LAW §§ 3216(i), 3221(k)(6), 4303(s) (McKinney 2012); OHIO REV. CODE ANN. § 1751.01(A)(7) (LexisNexis 2012); R.I. GEN. LAWS § 27-19-23 (2012); TEX. INS. CODE ANN. § 1366.005 (West 2012); W. VA. CODE § 33-25A-2(1) (2011).

¹²⁹ *State Laws Related to Insurance Coverage for Infertility Treatment*, NCSL (Mar. 2012), <http://www.ncsl.org/research/health/insurance-coverage-for-infertility-laws.aspx> (last visited Nov. 4, 2013) [hereinafter NCSL].

¹³⁰ *See id.*

¹³¹ *See id.*

¹³² See Jessie R. Cardinale, *The Injustice of Infertility Insurance Coverage: An Examination of Marital Status Restrictions Under State Law*, 75 ALB. L. REV. 2133, 2134 (2012).

¹³³ NCSL, *supra* note 129; MINN. STAT. ANN. § 256B.0625(13)(a) (2013).

¹³⁴ RESOLVE, *supra* note 128.

benefits.¹³⁵ Although maternity care is covered as an essential health benefit, infertility is not.¹³⁶

Currently, there is no required insurance coverage for fertility preservation, even if it is for medical reasons. Recently, a California bill was vetoed that would have required coverage for egg freezing/sperm freezing and preservation for future use for cancer patients who faced potential infertility following chemotherapy.¹³⁷ Although the bill was widely supported by several medical groups heavily involved in both reproductive and cancer services, it was strongly opposed by business and insurance groups.¹³⁸ Governor Jerry Brown, in his October 11, 2013 veto message, pointed out that large group employers already have the ability to deliver benefit packages without the bill.¹³⁹ Even in a state with such widespread support for fertility preservation, the legislation was not able to become law. This demonstrates what an uphill battle advocates face in requiring coverage of fertility preservation, even for sympathetic cancer patients. It is unlikely that insurance coverage for social egg freezing will ever garner support. Additionally, given the unknowns involved, it is not clear that this is a normative goal that should be strived for.

B. Implications for the Future Insurance Landscape

One of the policy considerations if social egg freezing becomes more widespread is how this will affect women who did not freeze their eggs but are infertile due to their advanced age. Many women's health advocates believe that infertility is a stigmatized health condition that is not taken seriously. Health insurance treats medical problems that individuals face, and there is no scientific disagreement that infertility is a medical problem. However, many insurers do not cover infertility treatment, and as described above, only a few states require such coverage. Even for those insurers that voluntarily cover IVF currently, it is possible that insurers will stop offering this coverage if the practice of social egg freezing for future use becomes more common. Due to the price of egg freezing, most women who will choose social egg freezing are likely to be wealthier women who have good health insurance. "Good" health insurance often covers some types of infer-

¹³⁵ See *id.*; Davina Fankhauser, *You, Infertility and Essential Health Benefits*, FERTILITY WITHIN REACH (Jan. 5, 2012), <http://www.fertilitywithinreach.org/blog/you-infertility-and-essential-health-benefits>.

¹³⁶ In February 2013, the Department of Health and Human Services established ten essential health benefits: ambulatory patient services; emergency services; hospitalization; maternity and newborn care; mental health and substance use disorder services, including behavioral health treatment; prescription drugs; rehabilitative and habilitative services and devices; laboratory services; preventive and wellness services and chronic disease management; and pediatric services, including oral and vision care. See 45 C.F.R. §§147, 155, 156 (2010).

¹³⁷ See Bob Norberg, *Bill Regulating Biosimilar Drugs Vetoed*, CAL. HEALTHLINE (Oct. 15, 2013), <http://www.californiahealthline.org/capitol-desk/2013/10/bill-regulating-biosimilar-drugs-vetoed>.

¹³⁸ See *id.*

¹³⁹ See *id.*

tility treatments currently. However, if in twenty years, 20% of the female population in their twenties freeze their eggs and wait till they are in their forties to try to get pregnant via IVF, it is very possible that insurers will rethink generous policies. If women are seen as “choosing” to become infertile, insurance may stop treating this condition as a medical condition. It is difficult to see how insurers would distinguish between those who choose to wait till they are in their forties to have children and therefore need the aid of IVF with those whose life circumstances did not allow them to try to have a child before then.

There is also a policy issue regarding whether those who face infertility due to a medical treatment should be treated differently than those who choose egg freezing to delay fertility. Some believe that because the “infertility of women in treatment for cancer is physician caused” as opposed to “the infertility of women who freeze for age-related reasons,” which is non-physician caused, the two groups should be thought of differently on moral grounds.¹⁴⁰ This distinction could lead to insurance only covering infertility treatment for patients who lost their fertility due to medical treatment. There are many causes of infertility other than medical treatment, such as endometriosis, ovulation disorders, and thyroid disease.¹⁴¹ These reasons are not “physician-caused,” but few would argue that these should not be covered. Additionally, though advanced age is a cause of infertility,¹⁴² there are many reasons a woman may be older when she tries to have a child. For example, she may not have found a partner earlier or may have been focusing on educational and career goals first. It would be very difficult as a practical matter to make a distinction for insurance purposes between those women who delay child bearing due to such reasons and women who delay because they have frozen their eggs. Additionally, if insurers start restricting insurance coverage for IVF even more, many women will not be able to afford it. Other infertile women who did not freeze eggs, especially minorities, will suffer. Women of color already access ART at lower rates than white women, even though they face the same or higher rates of infertility.¹⁴³ However, when insurance coverage for infertility is provided, the percentages of women who use ART become equalized amongst women of all races.¹⁴⁴ This shows the power of health insurance to equalize access to ART. In Section A of Part IV, I discuss the ramifications of the costs of egg freezing on who can use this technology further.

In Part II of this Article, I suggested how a heightened informed consent standard, and possibly insurance coverage, can be used to help women

¹⁴⁰ Petropanagos, *supra* note 18, at 223–35.

¹⁴¹ *Causes of Infertility*, MAYO CLINIC, (July 19, 2013), <http://www.mayoclinic.org/diseases-conditions/infertility/basics/causes/con-20034770>.

¹⁴² AM. SOC'Y OF REPRODUCTIVE MED., *AGE AND FERTILITY: A GUIDE FOR PATIENTS* (2012), https://www.asrm.org/uploadedFiles/ASRM_Content/Resources/Patient_Resources/Fact_Sheets_and_Info_Booklets/agefertility.pdf.

¹⁴³ See Judith F. Daar, *Assessing Reproductive Technologies: Invisible Barriers, Indelible Harms*, 23 BERKELEY J. GENDER L. & JUST. 18, 39 (2008).

¹⁴⁴ See *id.* at 40.

who seek egg freezing for fertility preservation. In the next Part, I focus on the ethical and policy issues that remain, even if tort law or insurance coverage is in place.

IV. ETHICAL AND POLICY ISSUES AND EGG FREEZING

This Article has examined the legal and regulatory concerns raised by egg freezing and suggested a heightened informed consent procedure to ensure that those choosing egg freezing to extend their biological clock know that there are no guarantees that such egg freezing will result in a child years down the line. In Part IV, I first examine the socioeconomic justice concerns with egg freezing, including class and race disparities that may result with the use of this technology. Then, I critique the role that egg freezing may play in the medicalization of pregnancy. I also argue that it may lead to a slippery slope, where some may feel like because they spent so much to freeze their eggs, they should go ahead and use pre-implantation genetic diagnosis (“PGD”) to ensure a “perfect baby.” In this Part, I also argue that egg freezing may create a stigma among those women who choose not to freeze, especially in the workplace. Finally, I end my analysis with an overarching discussion of relational autonomy in order to better frame the discussion of why egg freezing seems to hold so much promise for women. All of these critiques point to the fact that egg freezing should not be seen as a perfect solution to the problem of the biological clock. Although not as “sexy,” accommodations made for working mothers, such as paid leave and child care, may go much further as a normative solution to the biological clock than egg freezing.

A. *Socioeconomic Justice Concerns*

The high cost of egg freezing and the fact that it is not covered by insurance means that only women who can afford to use the technology will be able to. The popular narrative about egg freezing seems to assume that the audience will be able to “max out their credit card” for egg freezing. But the cost of egg freezing is more than those living in poverty make in one year.¹⁴⁵ As a result, rich, successful career women are the prime audience for egg freezing. Magazine articles suggest, “[i]magine a future when women get the procedure as part of a corporate benefits package, rather than burning up their credit cards or turning to their parents.”¹⁴⁶ That statement alone speaks volumes about who can use this technology: those who are in jobs where they get a benefit package and those whose parents can afford to pay for this elective procedure.

¹⁴⁵ Carbone & Cahn, *supra* note 14, at 307.

¹⁴⁶ Richards, *supra* note 1.

Additionally, balancing a career and family is difficult due to the lack of social support for women trying to balance both.¹⁴⁷ Egg freezing does not do anything to help equalize workplace policies for women. There is a real potential for social egg freezing to exacerbate the class schisms that already exist between rich and poor women.¹⁴⁸ June Carbone and Naomi Cahn have argued that even if women in the working class had enough money for the egg freezing process, their career paths are much different than those of college-educated women.¹⁴⁹ Because middle class women have established a career and financial independence before they decide to have children, when they decide to use their frozen eggs, they will not be at risk of losing their jobs. In contrast, working class women, who do not usually have such supportive careers, will often be fired during their pregnancy, or just after their babies are born.¹⁵⁰ Furthermore, middle class women are more likely to work during their pregnancies, continuing to develop their careers and establish their income, while significantly fewer working class women are employed during their pregnancies.¹⁵¹ Carbone and Cahn note that egg freezing is not a realistic option for working class women to delay their fertility,¹⁵² and that “the possibility of a later planned pregnancy has increasingly become associated only with the better educated and well off.”¹⁵³

Carbone and Cahn warn that egg freezing “may become just another form of coercive motherhood,” with women feeling like they need to freeze their eggs or any future infertility will be their fault, or that they cannot be a good employee without delaying their fertility.¹⁵⁴ Furthermore, egg freezing may give women “false hope,” making them think that they will automatically be able to have children just because they froze their eggs, not taking into account all the medical issues and risks that go along with the process of retrieving the eggs, and the complications that might arise from having children later in life.¹⁵⁵

Carbone and Cahn suggest that in order to address the complex dilemmas that egg freezing poses, there must be greater economic opportunity for non-middle class women.¹⁵⁶ They also advocate developing supportive work environments, changing attitudes about “interrupted careers” because of family planning, helping to get new, and especially young mothers back to

¹⁴⁷ See Morgan & Taylor, *supra* note 89.

¹⁴⁸ See Carbone & Cahn, *supra* note 14, at 288–89.

¹⁴⁹ See *id.*

¹⁵⁰ See *id.* at 296–97.

¹⁵¹ See *id.* at 297. Relatedly, the authors also argue that these dynamics allow for the working and middle classes to be further differentiated by the way that they parent their children. *Id.* at 298. They argue that “timing issues allow upper middle class parents to invest more in their children; with secure jobs, flexibility, and higher incomes, upper middle class women can become even more helicopter-ish in their parenting.” *Id.*

¹⁵² *Id.*

¹⁵³ *Id.*

¹⁵⁴ *Id.* at 304–05.

¹⁵⁵ *Id.* at 305.

¹⁵⁶ *Id.* at 313.

work after they have their babies, and improving workplace benefits, like family leave.¹⁵⁷

Although some scholars praise the potential of egg freezing for allowing women to focus on careers over family,¹⁵⁸ Carbone and Cahn's scholarship points out how much work there is that needs to be done to bolster workplace policies to allow women from all socioeconomic backgrounds to have children, should they wish to. The media's recent praise for social egg freezing may be hampering the vital public dialogue required to effect a change in the workplace to support families and mothers.¹⁵⁹ The high cost of social egg freezing makes it available only to affluent women, and making it easier to have babies later for a privileged few does nothing to ameliorate the dynamics of the workplace that lead to women delaying childbirth.¹⁶⁰ These are important critiques, but the long-term solutions suggested are likely to take years and maybe even generations to achieve. In the short-term, however, egg freezing is being embraced by younger women as a real option to beat the biological clock. In order to ensure that women know the unknowns of the procedures, physicians must play a heightened role in communicating the unforeseeable risks with egg freezing, as I have advocated in Part II, Section B of this Article. Additionally, the relational autonomy analysis I suggest in Section D of this Part adds a frame to the workplace issues highlighted by Carbone and Cahn. As I suggest in that section, it is necessary to understand the employment context within which women choose egg freezing to determine whether egg freezing is an autonomous choice for women.

So far, the popular narrative about egg freezing has been middle-class and white. This is not surprising, as this mimics the population using other forms of ART, but "mothering while black" or "mothering while poor" are quite different from the mothering experiences that white, middle-class women have. In the black community, there is a distrust of the medical and public health community, especially in the realm of reproduction. In *Killing the Black Body*, Dorothy Roberts outlines the history of forced sterilizations and policies to limit reproduction of black women in the United States.¹⁶¹ With the backdrop of this history, and given that the black community as a group is socioeconomically disadvantaged compared with whites in the United States,¹⁶² it would not be surprising if black women accessed this

¹⁵⁷ *Id.* at 313–16.

¹⁵⁸ See Imogen Goold & Julian Savulescu, *In Favour of Freezing Eggs for Non-Medical Reasons*, 23 *BIOETHICS* 47, 47 (2009).

¹⁵⁹ Jacoba Urist, *There's More to Life Than Freezing Your Eggs*, *THE ATLANTIC* (May 14, 2013), <http://www.theatlantic.com/health/archive/2013/05/theres-more-to-life-than-freezing-your-eggs/275812/>.

¹⁶⁰ *Id.*

¹⁶¹ See generally DOROTHY ROBERTS, *KILLING THE BLACK BODY: RACE, REPRODUCTION, AND THE MEANING OF LIBERTY* (1997).

¹⁶² Michael A. Fletcher, *Fifty Years After March on Washington, Economic Gap Between Blacks, Whites Persists*, *WASH. POST* (Aug. 28, 2013, 8:37 PM), http://www.washingtonpost.com/business/economy/50-years-after-the-march-the-economic-racial-gap-persists/2013/08/27/9081f012-0e66-11e3-8cdd-bcdc09410972_story.html?tid=pm_business_pop.

technology at much lower rates than whites. This could set up a situation where white women, who already have more privilege in the workplace and fewer roadblocks than black women, would gain further advantage through use of this technology—with potentially more career success and financial stability for white mothers than black mothers. The technology is still in its infancy, so it is not known whether these predictions will come to fruition. However, it is important to consider how cost and trust in health care will affect who accesses egg freezing.

B. Egg Freezing and the Medicalization and Commercialization of Reproduction

There is a worry that egg freezing “furthers the medicalization and commercialization of women’s bodies.”¹⁶³ Although women are proactively choosing to freeze, and this is an elective procedure, it is a very expensive procedure and fertility clinics and doctors who are performing the freezing are benefitting from this new market.¹⁶⁴ Although press reports have been overwhelmingly positive, egg freezing has also been described as “invasive, dangerous, unregulated, and insanely expensive.”¹⁶⁵ Some critics believe egg freezing involves undergoing health risks “for the slim possibility that they might, one day, face infertility.”¹⁶⁶ By freezing her eggs, a woman is essentially signing up to have a future child via IVF. She may choose not to use those frozen eggs, but if she did wait until her forties or fifties based on her decision to freeze, her frozen eggs may be her only option. Medicalizing reproduction due to social constraints on women’s ability to mother at a younger age may be a bad trade off.

The Society for Assisted Reproductive Technology (“SART”) Practice Committee’s reclassification of egg freezing from experimental to non-experimental was supposed to lead to insurance carriers paying for egg-freezing procedures.¹⁶⁷ This seems unlikely, however, as I have discussed above. It is worrisome that the SART Practice Committee report about the safety of egg freezing “was based on pregnancies, not healthy births.”¹⁶⁸ Due to the relatively new use of frozen-egg technology, while studies have compared birth defect rates of frozen-egg live births to naturally conceived live births with no discernible difference, ample time to study long term differences has not occurred.¹⁶⁹

Relatedly, if women begin to feel like they have better control of their biological clock with egg freezing, they may also wish to have greater con-

¹⁶³ Bailey, *supra* note 6.

¹⁶⁴ Ludden, *supra* note 44.

¹⁶⁵ Morgan & Taylor, *supra* note 89.

¹⁶⁶ *Id.*

¹⁶⁷ Rob Stein, *Freezing Eggs to Make Babies Later Moves Toward Mainstream*, NPR (Oct. 19, 2012, 5:00 AM), <http://www.npr.org/blogs/health/2012/10/23/163107113/freezing-eggs-to-make-babies-later-moves-toward-mainstream>.

¹⁶⁸ *Id.*

¹⁶⁹ Bailey, *supra* note 6.

trol over what kind of baby they would have.¹⁷⁰ Because using frozen eggs necessarily implicates IVF, women who freeze their eggs spend a lot of money to do it, and may wish to use ensure “perfect” babies using pre-implantation genetic diagnosis (“PGD”). PGD currently allows women to screen for diseases, genetic conditions, and gender.¹⁷¹ PGD screening options are already offered at many fertility clinics offering egg freezing services.¹⁷² If only upper class women can afford egg freezing and PGD, it is quite possible that the only women who would “suffer” from having babies with genetic conditions or non-gender balanced families would be poorer women. This is another way class differences may be exacerbated with egg freezing.¹⁷³

C. Stigma

There also currently seems to be some social stigma associated with egg freezing, and egg “freezers” worry that they will be labeled as “baby crazy. . . or desperate.”¹⁷⁴ However, I believe it is likely that any such stigma will dissipate as egg freezing becomes more commonplace. Further, if egg freezing takes off, women who choose not to freeze their eggs may be stigmatized, particularly in highly competitive workplaces. Because the price of egg freezing will be beyond the finances of most women, elite women will be the only ones who will be able delay pregnancy and reap career benefits. Those who are unable to freeze their eggs will be stuck with their biological clocks.

Additionally, just as the choice to have a baby is often a career killing move in some careers, choosing not to freeze one’s eggs may be seen as a sign that a woman is not serious about her career. Already there are anecdotal reports of egg freezing being offered by law firms.¹⁷⁵ One can imagine that if such a benefit is available in a workplace, a woman who announces her pregnancy in her late twenties or early thirties may face stigma, because she chose the option that may be less desirable for the firm. There are many reasons why being a mother younger may be personally more satisfying—especially in terms of having more energy to spend on children and having more life left with one’s children. Most importantly, many women may not wish to medicalize pregnancy. Having a baby the old-fashioned way may

¹⁷⁰ Jon Holmlund, *The Egg-Freezing Express*, BIOETHICS @ TIU BLOG (May 7, 2013), <http://blogs.tiu.edu/bioethics/2013/05/07/the-egg-freezing-express/> (quoting Christine Rosen, *The Ethics of Egg Freezing*, WALL ST. J. (May 3, 2013, 7:20 PM), <http://online.wsj.com/news/articles/SB10001424127887323628004578459182762199520>).

¹⁷¹ *Id.*

¹⁷² Rosen, *supra* note 170.

¹⁷³ Carbone & Cahn, *supra* note 14, at 310.

¹⁷⁴ Richards, *supra* note 1.

¹⁷⁵ Glenn Cohen, *Will Your Law Firm (or Other Employer) Pay for Your Egg Freezing? Should It?* (Online Abortion and Reproductive Technology Symposium), HARVARD BILL OF HEALTH BLOG (Apr. 21, 2013), <http://blogs.law.harvard.edu/billofhealth/2013/04/21/will-your-law-firm-or-other-employer-pay-for-your-egg-freezing-should-it-online-abortion-and-reproductive-technology-symposium>.

become just that: old-fashioned. Just as there are women who choose to have a drug-free (epidural-free) childbirth, “natural pregnancies” may become the realm of the “crunchy granola” women who reject egg freezing. There is a real possibility that workplaces will decide that instead of offering more generous childcare and maternity benefits, choosing to cover egg freezing may be a better bet. This is especially true in businesses like law firms and investment banks, which see women opting out after a few years. Of course, the other side of this argument is that maybe women would not opt-out if they could delay pregnancies until they were further along in their careers—having made partner, received tenure, or otherwise gotten to a more financially secure position. After they delay, though, they will still need workplaces that will allow maternity leave and allow flexible schedules. They will still need reliable, safe childcare (although affordability may be less of a factor for these high-income earning women). And they will still need to be able to share the care burden at home. Egg freezing does not solve these issues, and if a woman waits until she is older to have a baby, she may need even more help than if she were younger. Additionally, it is not clear whether an older woman would be as likely to return to her job after delivering a baby as a younger woman. From an employer’s point of view, it may be more difficult to temporarily lose a more senior employee during maternity leave than a younger woman who is in the earlier stages of her career. The law firms offering egg freezing may be taking a very short sighted approach toward their female workforce.

Egg freezing also does not seem to promote reproductive justice.¹⁷⁶ A reproductive justice analysis focuses on long-term goals such as better work and home lives for women, quality education, and affordable healthcare. This recognizes that such life conditions must be in place for women to make fully autonomous health decisions.¹⁷⁷ Reproductive justice requires women to have not just economic, but social and political power and resources to make healthy decisions about their bodies.¹⁷⁸ Egg freezing seems to put a band-aid on the problem of how difficult it is for women to have a career and raise a family concurrently. Compared with setting up support networks or effective maternity and childcare policies to ease the burden on women who choose to have children according to their biological clock, egg freezing seems to be an easier solution for employers to advocate.

D. Autonomy

When considering the ethics of egg freezing, often arguments are made that adding choices about reproductive freedom enhances a woman’s auton-

¹⁷⁶ See Zakiya Luna, *From Rights to Justice: Women of Color Changing the Face of U.S. Reproductive Rights Organizing*, 4 SOCIETIES WITHOUT BORDERS 343, 350 (2009); Sarah London, *Reproductive Justice: Developing a Lawyering Model*, 13 BERKELEY J. AFR. AM. L. & POL’Y 71, 71–72 (2001).

¹⁷⁷ See *id.*

¹⁷⁸ See Luna, *supra* note 176, at 349–50; London, *supra* note 176, at 75.

omy. However, the individualized notion of autonomy that is the lynchpin of the informed consent doctrine may not actually be the most apt framework to analyze ARTs, including egg freezing. “[P]roviding women with all the relevant medical information does not necessarily mean that they are given full freedom of choice.”¹⁷⁹ As some have put it, “leaving women alone does not do enough to support autonomy. On the other hand, regulating and restricting those choices can go too far in undermining autonomy.”¹⁸⁰ One problem with using only individual autonomy to analyze egg freezing is that this approach does not acknowledge the potential societal harm that embracing such a technology may cause. Egg freezing is not “a reproductive decision that only affects the decision maker,” but rather has the potential to have “negative implications on society as a whole.”¹⁸¹ Some scholars have suggested that relational theory is the better vision of autonomy to use with reproductive technologies, instead of looking at an individualized notion.¹⁸² The positive, enabling views of egg freezing, grounded in liberal ideology, focusing on rights and individual autonomy exercised through informed consent, do not tell the whole story about egg freezing.¹⁸³ Rather, a relational approach to autonomy may be more appropriate for analyzing the use of egg freezing for social reasons.¹⁸⁴ The focus on individual autonomy in the egg freezing context seems to be missing the forest for the trees. That is, it is important to look at the individual decision within the societal context that the decision is made. Why is the prospect of undergoing a medical procedure to retrieve one’s eggs, and spending tens of thousands of dollars to do it, exciting or freeing for women? The social pressures and dynamics must be examined in context.¹⁸⁵ Relational theory attempts to enhance autonomy by studying the social structures that support

¹⁷⁹ Shiri Shkedi-Rafid & Yael Hashiloni-Dolev, *Egg Freezing for Non-Medical Uses: The Lack of a Relational Approach to Autonomy in the New Israeli Policy and in Academic Discussion*, 38 J. MED. ETHICS 154, 157 (2012).

¹⁸⁰ Pamela Laufer-Ukeles, *Reproductive Choices and Informed Consent: Fetal Interests, Women’s Identity, and Relational Autonomy*, 37 AM. J.L. & MED. 567, 573 (2011).

¹⁸¹ See Jody Lynne Madeira, *Woman Scored?: Resurrecting Infertile Women’s Decision-Making Autonomy*, 71 MD. L. REV. 339, 393 (2012).

¹⁸² See generally Catriona Mackenzie & Natalie Stoljar, *Introduction: Autonomy Refigured*, in RELATIONAL AUTONOMY: FEMINIST PERSPECTIVES ON AUTONOMY, AGENCY AND THE SOCIAL SELF 3 (Catriona Mackenzie & Natalie Stoljar eds., 2000); Susan Dodds, *Choice and Control in Feminist Bioethics*, in RELATIONAL AUTONOMY: FEMINIST PERSPECTIVES ON AUTONOMY, AGENCY AND THE SOCIAL SELF 213 (Catriona Mackenzie & Natalie Stoljar eds., 2000).

¹⁸³ Shkedi-Rafid & Hashiloni-Dolev, *supra* note 179, at 156 (discussing opposition to Israel’s policy allowing and regulating egg freezing for non-medical reasons). The Israel National Bioethics Council issued recommendations permitting egg freezing for both medical and social reasons (such as fertility decline). *Id.* at 155. Israel is one of the first countries to allow and regulate egg freezing for social uses. *Id.* at 154. Because of Israel’s pro-natal policies, this is not surprising.

¹⁸⁴ See *id.*; Susan Sherwin, *Relational Approach to Autonomy*, in THE POLITICS OF WOMEN’S HEALTH: EXPLORING AGENCY AND AUTONOMY 26–28 (Susan Sherwin ed., 1998).

¹⁸⁵ See Laufer-Ukeles, *supra* note 107, at 571; cf. Pamela Laufer-Ukeles, *Mothering for Money: Regulating Commercial Intimacy*, 88 IND. L.J. 1223, 1245–47 (2013) (using relational autonomy to analyze the surrogacy industry in the United States).

a woman's decision, and putting conditions into place to "optimize noncoercive and deliberate decision making."¹⁸⁶ It recognizes that in order to make an autonomous decision, a noncoercive social situation is required.¹⁸⁷ So, when a woman chooses to freeze her eggs, the choice may not be truly autonomous if she is doing it because of constraints she faces at work, with family life, or with childcare. If having a child earlier means that she will take a step back in her career or not have enough money for child care due to a lack of support at home and lack of affordable child care options, then a woman may not be exercising autonomy by delaying motherhood. Instead, she may feel like this is choosing the best of many bad options.

As mentioned earlier, there have been stories in the media about graduation gifts of egg freezing or parents otherwise giving their daughters money to freeze their eggs to preserve their own chances of becoming a grandparent.¹⁸⁸ Although meant as a positive "to take the pressure off," it is questionable whether an adult woman who is freezing her eggs because her parents paid for it is exercising true autonomy. Women already feel social pressure to find a mate by a certain age. Going through the arduous and expensive process of egg freezing because of such a "gift" (based on one's parents' worries about not having grandchildren) seems to cut against a woman's autonomy.

When considering a relational approach to autonomy for egg freezing, we must view a woman's decisions in the context of her social ties—her family, her friends, her work, and her society.¹⁸⁹ Why are women seeking out egg freezing as an option? We need to examine the social constraints that are causing women to make the "choice" to freeze their eggs, and the "choice" to spend thousands of dollars to plan for future age-related infertility. Although the accounts I described earlier paint a rosy picture of liberation felt by women freezing their eggs, there is not enough emphasis on why women need this technology. If professional workplaces were hospitable places for women to have babies while they were younger and less financially established, it is unlikely that egg freezing would hold such appeal. But the weak maternity and childcare policies currently maintained by employers cause women to be excited about this option to extend their fertility. Relational theorists argue that it is preferable to attempt to rework societal norms and other oppressive conditions in a woman's life rather than to encourage women to adapt to these norms.¹⁹⁰ Thus, changing the workplace and childcare policies are better normative goals than facilitating social egg freezing.

The simple fact that a technology exists does not mean that normatively the use of that technology is positive. If greater numbers of women do freeze their eggs for social reasons, there may be an expectation that hard

¹⁸⁶ Sherwin, *supra* note 184, at 26–28.

¹⁸⁷ *Id.*

¹⁸⁸ See Gootman, *supra* note 7.

¹⁸⁹ Mackenzie & Stoljar, *supra* note 182.

¹⁹⁰ *Id.*

working women should think ahead and freeze their eggs. Given the unknowns of this technology and the required use of IVF through this process, this is not a path that should be somehow required. If law firms and investment banks start including egg freezing as a part of their compensation package, women who would like an earlier start on motherhood, possibly without medical help, may be perceived as not as a career-oriented or as likely to be “partner material” compared to their counterparts who take advantage of the technology. As the technology gains popularity, I worry that a two-tiered system may form between women in the professional workplace: between those who are “serious” about their career—and thus freeze their eggs—and those who choose the so-called mommy track. As it is, in competitive, high-paying fields, such as medicine, business, and law, women feel pressure “to be like men.” The fact that men can father babies when they are eighty does not mean that women should aspire to that. This medicalization of pregnancy and childbirth should not be required for women who can and wish to get pregnant naturally and within the limits of their biological clock.

Technology can sometimes hamstring women’s choices rather than liberate them. The fertility industry will gain many new and healthy clients if egg freezing takes off. Women who are not infertile, but who freeze their eggs, are locked into using those eggs from that clinic should they decide to thaw them. Physicians play an important part in communicating the infancy of this technology to women. Physicians must act as a fiduciary and should acknowledge the many unknowns associated with egg freezing. Physicians do not need to talk women who are determined to freeze out of their decision, but they should adopt a heightened standard of informed consent that informs women that egg freezing involves risks to them and their potential children that are currently unforeseeable.

More research needs to be done to examine whether children born of egg freezing will face any medical or social problems as a result of the freezing and thawing process, or even as a result of having an older mother. Will these children be more likely to have to take care of their mothers? While women may feel liberated by being able to wait longer to have children, they may be signing their children up to take care of them sooner due to their advanced age.

V. CONCLUSION

I have outlined some of the ethical, legal, and policy concerns with egg freezing, while acknowledging that perhaps the public embrace of egg freezing is pragmatic. Having more reproductive choices for women is an appealing concept, but it merely delays the difficult workplace choices facing women who wish to have a family. Advocates for egg freezing state that calls for social change “fail to satisfactorily answer to the realities facing women now—those women who will grow old fighting for social change that does not come, who are fired the day they return from maternity

leave.”¹⁹¹ However, I worry that if egg freezing is embraced by employers as a way to delay the “opting-out” concept, those women who wish to have a child when they are younger may be seen as less committed and this reproductive “option” may become more of a perceived requirement. To counter this concern, I suggest a more robust informed consent process, similar to the process used in research. This would help ensure that women make educated decisions. I also worry that the availability of this technology will lead to a greater divide between professionally educated women and those women in lower income, hourly-wage jobs—who will likely be unable to take advantage of this technology due to cost. Advocating for supportive work environments and care environments so that women can have a career and children earlier in life is a more important goal than blindly enabling this technology. As some commentators have noted, “it is incumbent upon us to work towards educational and labour market strategies that do not perceive liberation as going hand in hand with medicalization, but are flexible enough to allow separate but equal life trajectories for men and women alike.”¹⁹² A few decades ago, babies born using assisted reproduction were referred to as “test tube babies,” and today most people do not think twice about differences between babies conceived “naturally” or via assisted reproduction.¹⁹³ Similarly, it is possible that egg freezing may become a much more commonplace path to reproduction. However, it is not there yet, and this article attempts to highlight many of the issues that need to be addressed before we embrace the promise of egg freezing as fertility insurance.

¹⁹¹ *Hot Debate Over Frozen Eggs*, ANTHROPOLOGY & PRACTICE (Apr. 17, 2013), <http://anthropologyandpractice.com/2013/04/15/hot-debate-over-frozen-eggs>.

¹⁹² Shkedi-Rafid & Hashiloni-Dolev, *supra* note 183, at 156.

¹⁹³ *See Interview: Ethical Questions*, PBS, <http://www.pbs.org/wgbh/americanexperience/features/interview/ethical-questions> (last visited Apr. 19, 2014).

