WHAT YOU DIDN’T KNOW, BUT NEED TO

In 2016, 7 million people will try to conceive through natural pregnancy, but only 5 million will be successful.

- 200,000 born with congenital health problems
- 1,000,000 miscarried
- 2,000,000 unsuccessful

20% of women are born with low ovarian reserve.
THE BIOLOGICAL REALITY OF FERTILITY

- Biologically, women are made to have babies between ages 16 and 25
- A woman’s egg quantity and quality starts to decline at age 28
- At age 20, 90% of a woman’s eggs are chromosomally NORMAL
- By age 40, 90% of a woman’s eggs are chromosomally ABNORMAL

Each month, a fertile 30-year-old has only A 20% CHANCE of conceiving naturally

WOMEN ARE HAVING CHILDREN LATER

On average, women under 30 want 2.7 children

70% of women reach 40 without hitting that target

MORE WOMEN ARE HAVING THEIR FIRST CHILD AFTER 35

1970 2006 TODAY

1 8 20

100 100 100

20% OF WOMEN ARE CHILDLLESS INVOLUNTARILY BY AGE 45
### CHANGING VIEWS ON PARENTHOOD

- Couples with higher levels of education delay parenthood and have higher rates of infertility
- Married couples are delaying parenthood to ensure financial stability
- More same sex couples are choosing to have children than ever before

### COST IMPACT OF INFERTILITY IN THE U.S.

- 2/3 of conventional IVF cycles fail
- 1/3 of "successes" lead to multiple births
- 62% are delivered pre-term
- 90% are cesarean
- $1B in healthcare cost
- From multiple births, cesarean, pre-term deliveries related to fertility treatment paid by the health plan / employer
COST IMPACT OF INFERTILITY ON EMPLOYERS AND PLANS

INFERTILITY TREATMENTS RESULT IN A 27% RATE OF MULTIPLES (TWINS OR MORE)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>IVF Effectiveness*</td>
<td>31%</td>
</tr>
<tr>
<td>Twin Delivery Rate</td>
<td>27%</td>
</tr>
<tr>
<td>Pre-Term Delivery Rate</td>
<td>65% – 90%</td>
</tr>
<tr>
<td>C-Section Rate</td>
<td>90%</td>
</tr>
</tbody>
</table>

Total Avg. Delivery and NICU Cost:
- Twins: $150k
- Triplets: $391k

COST IMPACT OF INFERTILITY ON EMPLOYERS AND PLANS

- Patients without or with a limited benefit are incentivized to transfer 2+ embryos to decrease out of pocket costs
- 90% of people believe you must insert 2 embryos to improve your success rates
BUT INFERTILITY IMPACTS MORE THAN COST

- Mothers of twins are more frequently on sick leave, hospitalized
- 90% of people with infertility issues are willing to change employers
- 68% of people without infertility issues say they highly value the benefit

61% of people believe that infertility is more stressful than divorce

INFERTILITY IN EMPLOYEES CAN RESULT IN INCREASED

- Absenteeism
- Presenteeism
- Depression
- NICU
- Stop Loss
- Employee Attrition
FERTILITY/INFERTILITY TREATMENT COVERAGE TRENDS FOR SELF-INSURED EMPLOYERS

SOME STATES MANDATE FERTILITY COVERAGE

<table>
<thead>
<tr>
<th>STATE</th>
<th>DATE ENACTED</th>
<th>MANDATE TO COVER</th>
<th>MANDATE TO OFFER</th>
<th>INCLUDES IVF COVERAGE</th>
<th>EXCLUDES IVF COVERAGE</th>
<th>IVF COVERAGE ONLY</th>
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<tbody>
<tr>
<td>Arkansas</td>
<td>1987</td>
<td>x</td>
<td></td>
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<tr>
<td>California</td>
<td>1989</td>
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<td>x</td>
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<tr>
<td>Connecticut</td>
<td>1988</td>
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<tr>
<td>Hawaii</td>
<td>1987</td>
<td>x</td>
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<td></td>
<td></td>
<td>x</td>
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<tr>
<td>Illinois</td>
<td>1991</td>
<td>x</td>
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<tr>
<td>Louisiana</td>
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<td></td>
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<td>x</td>
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<tr>
<td>Maryland</td>
<td>1985</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>1987</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
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<tr>
<td>Montana</td>
<td>1987</td>
<td>x</td>
<td></td>
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<td>New Jersey</td>
<td>2001</td>
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<td></td>
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<tr>
<td>Ohio</td>
<td>1991</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>1989</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
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<tr>
<td>Texas</td>
<td>1987</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>West Virginia</td>
<td>1977</td>
<td>x</td>
<td></td>
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</tr>
</tbody>
</table>

BUT MANY FAIL DUE TO THE FINE PRINT...

1. Includes a lifetime maximum benefit of not less than $15,000
2. Excludes IVF, but covers gamete intrafallopian transfer (GIFT)
3. Provides a one-time only benefit covering all outpatient expenses arising from IVF
4. Limits first-time attempts to four oocyte retrievals. If a child is born, two complete oocyte retrievals for a second birth are covered. Businesses with 25 or fewer employees are exempt from having to provide the coverage specified by the law
5. Businesses with 50 or fewer employees do not have to provide coverage specified by law
6. Applies to HMOs only; other insurers specifically are exempt from having to provide the coverage
7. Provides coverage for the "diagnosis and treatment of correctable medial conditions." Does not consider IVF a corrective treatment
8. Applies to HMOs only

AND SELF-INSURED/ERISA PLANS ARE EXEMPT!
EMPLOYER COVERAGE TODAY

- 25% of employers with 500+ employees offer fertility as part of their health care benefits. 19% cover IVF, 12% cover medication and 9% cover non-IVF treatments.
- Employers offer a fixed dollar defined benefit (avg. 10K).
- Infertility benefit is treated like a voluntary benefit in terms of coverage (lifetime max, opt in).
- Use of traditional health plan administrator networks.
- Plan administrators commonly require several rounds of IUI before IVF is authorized.
- Members pay upwards of 50k out of pocket after coverage is exhausted.

MORE RECENT EMPLOYER TRENDS

Benefits executives recognizing the need to support employees through this very difficult life event

- Employers moving away from plans and towards employing fertility specialty health vendors.
- Value-based programs offer full treatment cycle coverage as opposed to a defined dollar benefit (employers offering between 1-4 full treatment cycles).
- Focus is to include high touch, personalized member support as part of infertility program.
- Egg freezing is covered by 5% of all large employers and growing rapidly (11% of employers offer it in the Northeast).
COMMON INFERTILITY DEFINED BENEFIT DOES NOT SUPPORT A VALUE-BASED CARE MODEL

Conventional Treatment Plan - Fee for Service with Lifetime Maximum

<table>
<thead>
<tr>
<th>Service</th>
<th>Cost</th>
<th>Success Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>IUI w/meds (avg. 3 cycles)</td>
<td>$9,000</td>
<td>0%-16%</td>
</tr>
<tr>
<td>IVF Fresh</td>
<td>$12,000</td>
<td>31%</td>
</tr>
<tr>
<td>Freeze-All Cycle</td>
<td>+ $4,000</td>
<td>40%</td>
</tr>
<tr>
<td>Add on: ICSI</td>
<td>+ $1,800</td>
<td>36%</td>
</tr>
<tr>
<td>Add on: Assisted Hatching</td>
<td>+ $750</td>
<td>41%</td>
</tr>
<tr>
<td>Add on: PGS</td>
<td>+ $5,000</td>
<td>61%</td>
</tr>
<tr>
<td>IVF Medications</td>
<td>+ $5,000</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Total Retail Cost (For Average 1 Treatment)</strong></td>
<td><strong>$37,550</strong></td>
<td><strong>31-61%</strong></td>
</tr>
</tbody>
</table>

LEAST EXPENSIVE TREATMENTS OFTEN LEAST EFFECTIVE

Health Plan Rules Often Require 3 to 6 IUIs Before IVF Treatment

- Increases the chances of multiple births
- Patients with previously failed IUI attempts often demand 2+ embryo transfers during a single IVF cycle
ACCELERATED PATH TO IVF IS COST EFFECTIVE

Benefit Design Needs To Support The Most Effective Treatment, The First Time

Boston IVF/Harvard ‘Accelerated Path to IVF’ Trial:
- Conventional Treatment = Unstimulated and stimulated IUI
- Accelerated Treatment = No stimulated IUI (i.e., fast-track to IVF)

66.8% of patients in Accelerated Path delivered a baby as opposed to 31%

SOLUTION: VALUE-BASED BUNDLED TREATMENT BENEFIT

A full cycle treatment benefit, instead of a dollar limit, that includes the initial consult, diagnostic testing, and all infertility treatment options, including the latest embryo screening technologies, to increase per cycle success rates, decrease time to pregnancy and support a single embryo transfer.

- Members and their doctors make treatment decision based on effectiveness, not cost and coverage.
- Employers decide how many treatment cycles they wish to cover
- Coverage is combined with a personalized education and support program
**FERTILITY/INFERTILITY TREATMENT COVERAGE TRENDS FOR SELF-INSURED EMPLOYERS**

**COVERAGE FOR ALL TREATMENT TYPES**

- **IUI** (artificial insemination)
  - Natural versus medicated, HCG trigger and intrauterine insemination

- **FRESH IVF CYCLE**
  - IVF Stimulation, retrieval and fresh embryo transfer. Day 3 vs day 5

- **FROZEN IVF CYCLE**
  - Stimulated cycle with freeze embryos up front

- **FROZEN EMBRYO TRANSFER**
  - Medicated frozen cycle, with embryo thaw and transfer

- **EGG FREEZING**
  - Stimulation, egg retrieval and vitrification (no fertilization)

---

**INCLUDE COVERAGE FOR THE LATEST TECHNOLOGY**

- **PRE-IMPLANTATION GENETIC SCREENING (PGS)**
  - A procedure designed to assess embryo quality, ensuring that a viable embryo is transferred increasing success & decreasing miscarriage

- **EEVA**
  - Non-Invasive embryo predictive test aiding in embryos selection

- **INTRACYTOPLASMIC SPERM INJECTION (ICSI)**
  - Technology to inject sperm directly into the egg for optimal fertilization

- **ASSISTED HATCHING**
  - A small hole is made in the zona pellucida to improve embryo implantation

**Supports Single Embryo Transfer And Higher IVF Success Rates**
SIGNIFICANTLY IMPROVED OUTCOMES

**IVF CYCLE SUCCESS RATE**
- 63%
- National Average: 35%

**IUI CYCLE SUCCESS RATE**
- 20%
- National Average: 11%

**SINGLE EMBRYO TRANSFER RATE**
- 64%
- National Average: 21%

**MULTIPLES RATE**
- 4%
- National Average: 27%

**FERTILITY/INFERTILITY TREATMENT COVERAGE TRENDS FOR SELF-INSURED EMPLOYERS**

**POSITIVE ROI WITH VALUE-BASED TREATMENT CYCLE**

<table>
<thead>
<tr>
<th>CURRENT APPROACH</th>
<th>VALUE-BASED APPROACH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefit Structure</td>
<td>$7,000 Lifetime Maximum, $3,000 Rx Benefit</td>
</tr>
<tr>
<td>Number of Eligible Members</td>
<td>2,366</td>
</tr>
<tr>
<td>Total Fertility Treatment Cost</td>
<td>$419,000</td>
</tr>
<tr>
<td>Total Company Covered Cost</td>
<td>$105,000</td>
</tr>
<tr>
<td>Total Member Responsibility (After Benefit Exhausted)</td>
<td>$314,000</td>
</tr>
</tbody>
</table>

**COSTS RESULTING FROM INFERTILITY TREATMENT-RELATED PREGNANCIES**

| Total Number of Pregnancies | 9 | 10 |
| Total Number of Babies | 12 | 10 |
| Total Babies Resulting From Multiple Births | 5 | 1 |
| Total Maternity and NICU Costs* | $324,000 | $174,000 |
| Total Fertility Investment plus Maternity and NICU Costs | $743,000 | $364,000 |
| Total Company Covered Cost | $429,000 | $331,000 |
| Total Company Savings | $98,000 | $124,000 |
| Total Member OOP Savings | $98,000 | $124,000 |

80% Decrease in Twin Babies
82% Decrease in Cost
THE LATEST IN EGG FREEZING

**VITRIFICATION**
Ultra-rapid egg freezing, verses traditional slow freezing

**COST OF EGG FREEZING**
Averages between $6k-12K per cycle

**STORAGE**
Storage of frozen eggs ranges from $500-$800 per year

**THAW SUCCESS**
Recent studies report integrity of egg preserved >90%

**AVERAGE AGE OF WOMAN = 35 yrs**
Unmarried women and couples who need to delay parenthood

**HOW LONG CAN I PRESERVE FERTILITY?**
ASRM guidelines support a healthy woman implanting embryo to age 55

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EGG FREEZING FACTS

**FACTS**
- 75% of women who freeze their eggs do not have a partner
- 28% of women under 32 have diminished ovarian reserve

**IMPACT**
- 20% of women by age 45 are childless involuntarily
- 800% increase in egg freezing

**Reasons People Delay Starting a Family**
- Can’t afford it (33%)
- Too young (19%)
- Focused on career (48%)

---

ASRM guidelines support a healthy woman implanting embryo to age 55.
EGG FREEZING IS BECOMING WIDELY ACCEPTED AS AN IMPORTANT EMPLOYEE RETENTION TOOL

PERSONALIZED CARE MODEL TO SUPPORT AND EDUCATE MEMBERS

- Genetic Counselors
- Fertility Nurses
- Fertility Outcomes and Cost
- Personalized Case Management
- Digital App for Education and Support
- Patient Care Advocates (PCA) provide coordination, support, and access to experts
- Surrogacy Consulting
- Embryology Consulting
- Administration of Adoption & Surrogacy Reimbursement

PROPRIETARY & CONFIDENTIAL | NOT FOR DISTRIBUTION
DIGITAL TOOLS IMPROVE MEMBER BEHAVIOR AND OUTCOMES

MEMBER EXPERIENCE ENHANCED

“This process is very intricate and there is a lot of information flying around, so it is helpful when we have folks like you that make our lives easier.

Words cannot fully express my immense gratitude for you and the wealth of information that you provide on infertility. You are doing an amazing service for people who go through so much pain and disappointment, with very little understanding from those who have never walked this path in life. Thank you. Thank you. Thank you.”
It’s great to see companies recognizing the challenges some couples are having building their family. Progyny is offering those companies a better fertility benefit program, while also educating and further guiding couples through the often difficult journey ahead. Progyny has developed a model that works!

SHELDON B. JOSEPHS, FACHE, REPRODUCTIVE SCIENCE CENTER OF THE SF BAY AREA

With streamlined and targeted evaluation and straightforward access to high level treatment, Progyny has enabled the patient to complete their fertility journey faster than ever before.

DR. ALAN COPPERMAN, RMA NY

Companies that do not offer coverage for infertility treatments end up paying more in downstream maternity, delivery and NICU expenses related to these members.

Fertility benefits that offer a defined dollar maximum (average of $10K) drive members to the least expensive, least effective treatments with higher rates of twins.

There is a positive return on investment (ROI) by adding a robust fertility benefit.
THE IMPORTANCE OF A FERTILITY BENEFITS PLAN

- Members without comprehensive coverage suffer longer and have higher rates of depression, absenteeism, presenteeism, medical expenses and often leave their company.
- Companies that offer egg freezing support their female workforce and attract talent.
- The optimal benefit includes personal member care advocate to educate about the most effective treatments and guide members through the opaque and emotional process.

RESULT: EMPLOYERS CAN HELP THEIR EMPLOYEES ACHIEVE THE DREAM OF HAVING A SINGLE, HEALTHY BABY
FERTILITY/INFERTILITY TREATMENT COVERAGE TRENDS FOR SELF-INSURED EMPLOYERS

SOURCES

3. Analysis of Advanced Reproductive Births from 2005–2009 conducted by large health plan
5. Prevalence of infertility in the United States as estimated by the current duration approach and a traditional constructed approach - http://www.fertstert.org/article/S0015-0282(12)02449-1/fulltext
8. Analysis of 2012 health plan data conducted by Wakely Consulting for Progyny
18. Are We at the Edge of a Second Sexual Revolution? - http://singularityhub.com/2013/09/05/are-we-at-the-edge-of-a-second-sexual-revolution/