The Cost of Transgender Health Benefits

Transgender at Work

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Elizabeth Goza
Agenda

- Introductions
- Transgender Background
- Summary of Earlier Work
- Methodology
- Data
- Prevalence Results
- Cost Results
- Cost Prediction Tool for your Company
- Summary
- Q&A
Introductions

Show of Hands
  - Role
    - HR Benefits
    - HR Diversity
    - Employee Resource Group Leader
    - other
Introduction to THBs

- Transsexuals have health care needs that are often not covered on health plans.

- Employers considering including THBs were concerned that the cost was unknown and might be too high.

- No good data previously existed for
  - Prevalence of transsexualism
  - Cost of THBs
Score of 100% is a sign of Excellence.

Currently allocates points for

<table>
<thead>
<tr>
<th>Sexual Orientation in EO Policy ✓</th>
<th>Gender Identity and Expression in EO Policy ✓</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic Partner Benefits ✓</td>
<td>Transgender Wellness Benefits ✓</td>
</tr>
</tbody>
</table>

HRC Corporate Equality Index 2009
- 206 Fortune 1000 firms (21%) cover at least 1 benefit
- Of those firms:
  - 35% state they cover hormones
  - 15% state they cover surgery
Employers offering Transgender Health Benefits

(Percentages of those offering at least one THB. Source: HRC Corporate Equality Index 2009.)
Background

- Transsexuals, Crossdressers, ... others
- MTF or FTM
- Transsexuals who suffer gender dysphoria are evaluated by a therapist
- Gender Dysphoria is a persistent intense distress with one’s physical sex characteristics or their assigned sex at birth.
- There is a standard treatment for gender dysphoria (currently termed "Gender Identity Disorder," or "GID," in the clinical literature)
- Standard treatment incurs medical costs
WPATH Standards of Care (SOC)

- Standards for treatment of Gender Dysphoria
  - Treatment begins with evaluation and diagnosis of gender dysphoria/GID
  - Letter from therapist for hormones
  - 1 year Real Life Experience
  - 2 Letters, one from a Doctor, for Genital Surgery
Male to Female Time Line

Years 0
- Therapy
- Electrolysis
- RLE
- Legal Name Change

Years 1
- 2 letters for SRS
- HRT (Transitional)

Years 2
- Transition
- HRT (Maintenance)

Years 3
- SRS
Female to Male Time Line

Years 0

- Therapy

1

- 2 letters for Bottom Surgery

- HRT (Transitional)
- RLE
- Legal Name Change
- Transition
- Top Surgery

2

3

- HRT (Maintenance)
- Bottom Surgery
What is Medically Necessary?

- See the list of procedures in your handout
- Decide which procedures are
  - Medically Necessary for TG and non-TG patients
  - Medically Necessary and specific for TG patients
  - Cosmetic

- How the decision is made
  - Is the treatment covered for non-transgendered patients?
  - Is it stated to be medically necessary by specialists?
  - Is it determined to be medically necessary by insurance carriers?
  - Does the employer tell the carrier to cover it?
Opinion of the Specialists

Quotes from WPATH “Standards of Care,” Sixth Version, 2001:

- **Hormones are often medically necessary** for successful living in the new gender.
- In persons diagnosed with transsexualism or profound GID, **sex reassignment surgery**, along with hormone therapy and real-life experience, is a treatment that has proven to be effective. Such a therapeutic regimen, when prescribed or recommended by qualified practitioners, **is medically indicated and medically necessary**. Sex reassignment is not "experimental," "investigational," "elective," "cosmetic," or optional in any meaningful sense. It constitutes very effective and appropriate treatment for transsexualism or profound GID.
Sex reassignment plays an undisputed role in contributing toward favorable outcomes, and comprises Real Life Experience, legal name and sex change on identity documents, as well as medically necessary hormone treatment, counseling, psychotherapy, and other medical procedures.

Medically necessary sex reassignment procedures also include complete hysterectomy, bilateral mastectomy, chest reconstruction or augmentation as appropriate to each patient (including breast prostheses if necessary), genital reconstruction, and certain facial plastic reconstruction as appropriate to the patient.
Health Care Costs

Medically Necessary Procedures
Covered for non-TG
- Mental Health (Therapy)
- Hormones (Pharmaceuticals)
- Doctors visits to support hormones
- Surgery
  - MTF: orchidectomy, penectomy, vaginaplasty, labiaplasty
  - FTM: mastectomy, hysterectomy, metoidioplasty, phalloplasty

Medically Necessary Procedures (per WPATH)
- Breast augmentation surgery
- Facial feminization surgery
- Electrolysis

Undetermined
- Speech therapy
- Voice surgery
How Many Transgendered People are There?

Male to Female
- Not Transgender
- Halloween
- Partial Crossdressing
- Part Time Crossdressing
- Transitioned Full Time
- Post-Op

Female to Male
- Not Transgender (0)
- Halloween (1)
- Partial Crossdressing (2)
- Part Time Crossdressing (3,4)
- Transitioned Full Time (5,6)
- Post-Op (6,7)

JPMorganChase
Previous Work: Prevalence

- **Prevalence of Transgenderism (1+)**
  - Janus 1993: Ever crossdressed: MTF 6%, FTM 3%

- **Prevalence of Gender Dysphoria (5+)**
  - DSM IV GID 1994: MTF 1:30,000, FTM 1:100,000 based on Walinder, 1967 (Sweden) and Hoenig, 1974 (UK)
  - van Kesteren 1996: MTF 1:11,900, FTM 1:30,400 (Netherlands)

- **Prevalence of SRS (6+)**
  - Cuypere 2006: MTF 1:12,900, FTM 1:33,800 (Belgium)
  - Conway 2001: Inherent Prevalence MTF 1:1000 (est.)
## Previous Prevalence Results

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<tr>
<th>Source</th>
<th>Location</th>
<th>Date</th>
<th>MTF</th>
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<td>PS (Court)</td>
<td>Adults</td>
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<td>van Kestern</td>
<td>Netherlands</td>
<td>1993</td>
<td>11900</td>
<td>30400</td>
<td>18</td>
<td>HRT</td>
<td>Age 15+</td>
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<td>van Kestern</td>
<td>Netherlands</td>
<td>1988</td>
<td>18000</td>
<td>54000</td>
<td>14</td>
<td>HRT</td>
<td>Age 15+</td>
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<tr>
<td>Tsoi</td>
<td>Singapore</td>
<td>1988</td>
<td>2900</td>
<td>8300</td>
<td>16</td>
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<td>All</td>
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<td>Tsoi</td>
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<td>PS (Court)</td>
<td>Age 15+</td>
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<td>Hoenig/Kenna</td>
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<td>37000</td>
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<td>2</td>
<td>GID</td>
<td>Age 15+</td>
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Cost Experience with Employers

Lucent 2000-2003
- Paid for 2 surgeries, total $20,000 ($5,000/year)
- 150,000 employees in 2000, 33,000 in 2003

Avaya 2001-2003
- No surgeries, $0
- 40,000 employees
San Francisco’s Experience

$x$San Francisco, 2006 (37,000 employees, 60,000 insured)
- Forecast 35 surgeries/year, $750,000/year
- Actual
  - Surgery: 5 years, 11 people, $183,000 ($36,600/year)
    - All in years 1–4, e.g. pent-up demand.
  - HRT + Therapy: 1 year, 14 people, $3,300

$x$Quote from SF Mayor and Human Rights Commission, 3/06:
- “Unlike the fears expressed, none of the concerns came to pass. ... Due to its obvious affordability ... the pricing will change. While the benefits are staying the same, the transgender cost component has either substantially decreased or has been eliminated altogether. ... The beneficial cost data has already led two of the HMOs to ... treat the benefit just as it does other medical procedures such as gall bladder removal or heart surgery.”
Methodology

- Surveys sent to 55 WPATH surgeons and clinics worldwide. 14 responses, 12 of 15 major surgeons
  - # of primary surgeries in 2001, MTF & FTM
  - Total cost, MTF & FTM
  - % who were US residents, MTF & FTM
  - Questions about FTM bottom surgery.

- Subject matter experts advice on percentages in each treatment

- Known standard costs for Therapy, Hormones, Doctors
## Results: Surgical Data

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<th>Category</th>
<th>MTF</th>
<th>FTM</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td># Surgeries (all surgeons of US patients)</td>
<td>995</td>
<td>500</td>
<td>1495</td>
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<tr>
<td>Total Cost ($ millions)</td>
<td>$10.31</td>
<td>$8.97</td>
<td>$12,900</td>
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<tr>
<td>Average surgery cost</td>
<td>$10,400 (top+bottom)</td>
<td>$17,900</td>
<td>$12,900</td>
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<tr>
<td>% US residents</td>
<td>74%</td>
<td>86%</td>
<td>77%</td>
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<tr>
<td># Surgeries on US residents</td>
<td>736</td>
<td>430</td>
<td>1166</td>
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*Data Source: JPMorganChase*
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<tr>
<th>Surgery</th>
<th>% of FTMs</th>
<th>Average Cost</th>
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<tbody>
<tr>
<td>Mastectomy / Chest Reconstruction</td>
<td>80%</td>
<td>$8,500</td>
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<tr>
<td>Hysterectomy &amp; Oopherectomy</td>
<td>50%</td>
<td>$15,000</td>
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<tr>
<td>Metoidioplasty, or</td>
<td>5%</td>
<td>$10,500</td>
</tr>
<tr>
<td>Phalloplasty</td>
<td>6%</td>
<td>$23,750</td>
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# Nonsurgical Costs (Average Patient)

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<th>Cost / Patient</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Years 1+2</th>
<th>Year 3</th>
<th>Years 3+</th>
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<td>Therapy</td>
<td>$900</td>
<td>$188</td>
<td>$1088</td>
<td>$0</td>
<td>$0</td>
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<td>HRT Rx</td>
<td>$807</td>
<td>$2,129</td>
<td>$2,936</td>
<td>$363</td>
<td>$9,792</td>
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<td>HRT MD</td>
<td>$510</td>
<td>$385</td>
<td>$895</td>
<td>$255</td>
<td>$6,879</td>
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JPMorgan Chase
Incidence vs. Prevalence vs. Inherent Prevalence

**Incidence:** Number treated in a certain time (e.g. 1 year) compared to population at risk (often Age 15+.)
- Walinder 1971: 9 people had name change each year (on average) out of pop. 6,000,000 age 15+: 1 year Incidence 1:667,000

**Prevalence:** Number in population being treated during measured interval compared to population at risk.
- Authors have commented: Actual prevalence is higher.

**Inherent Prevalence:** Number in population who have/had the condition (will be treated, being treated, treatment is complete, never treated) compared to population at risk (all ages.)
- Conway 2001: 1500-2000 MTF SRS/year, male birth rate 2,000,000/year: Inherent Prevalence 1:1000 - 1:1300
Incidence, Prevalence and Intrinsic Prevalence

Untreated
Will never seek treatment

Latent
Will seek treatment

Active
Currently being treated

Historical
Has finished treatment

Incidence: New Cases In 1 Year Period

Prevalence: Active

Intrinsic Prevalence: Entire Area

Age
77
What is the Inherent Prevalence of SRS?

- 1:1,000
- 1:3,000
- 1:10,000
- 1:30,000
## What is the Inherent Prevalence of SRS?

<table>
<thead>
<tr>
<th>Total</th>
<th>MTF</th>
<th>FTM</th>
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<tr>
<td>1:1,000</td>
<td></td>
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<tr>
<td>1:3,000</td>
<td>1:2,500</td>
<td>1:4,200</td>
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<tr>
<td>1:10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1:30,000</td>
<td></td>
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</table>

- **Surgeries/Year**: 1,166
- **US Residents**: 281,421,906
- **1 year Incidence SRS**: 1:241,295 (.0004%)
- **Life Expectancy**: 77
- **Ratio SRS in lifetime**: 1:3,134 (.032%)
<table>
<thead>
<tr>
<th>Source</th>
<th>Country</th>
<th>Yr</th>
<th>MTF</th>
<th>FTM</th>
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<th>MTF Incidence</th>
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<td>Cuypere</td>
<td>Belgium</td>
<td>2006</td>
<td>12900</td>
<td>33800</td>
<td>21</td>
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<td>270,900</td>
<td>709,800</td>
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<td>Horton</td>
<td>US</td>
<td>2002</td>
<td>2533</td>
<td>4167</td>
<td>74</td>
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<td>187,496</td>
<td>333,415</td>
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<td>48000</td>
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<td>PS (Court)</td>
<td>Adults</td>
<td>480,000</td>
<td>1,040,000</td>
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<td>Age 15+</td>
<td>315,000</td>
<td>804,706</td>
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<td>HRT</td>
<td>Age 15+</td>
<td>252,000</td>
<td>756,000</td>
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<td>46,400</td>
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<td>96,000</td>
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<td>374,000</td>
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<td>400,000</td>
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<td>GID</td>
<td>Age 15+</td>
<td>74,000</td>
<td>206,000</td>
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Making Sense of Prevalence/Incidence Results

MTF Incidence

- PS
- HRT
- GID
- Linear (PS)
- Linear (HRT)
- Linear (GID)
## Treatment Estimation using Ratios

<table>
<thead>
<tr>
<th></th>
<th>MTF / 100</th>
<th>MTF Intr Prev 1:</th>
<th>MTF % of Pop</th>
<th>FTM / 100</th>
<th>FTM Intr Prev 1:</th>
<th>FTM % of Pop</th>
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<tbody>
<tr>
<td>GID in Population</td>
<td>204.024%</td>
<td>757</td>
<td>.132%</td>
<td>204.024%</td>
<td>757</td>
<td>.132%</td>
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<tr>
<td>Seek Treatment</td>
<td>120</td>
<td>1262</td>
<td>.079%</td>
<td>120</td>
<td>4183</td>
<td>.024%</td>
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<td>GID Diagnosis</td>
<td>100</td>
<td>1514</td>
<td>.066%</td>
<td>100</td>
<td>2336</td>
<td>.036%</td>
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<td>Hormones</td>
<td>90</td>
<td>1682</td>
<td>.059%</td>
<td>83</td>
<td>3377</td>
<td>.030%</td>
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<td>Transition Full Time</td>
<td>70</td>
<td>2163</td>
<td>.046%</td>
<td>83</td>
<td>3377</td>
<td>.030%</td>
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<td>2524</td>
<td>.040%</td>
<td>67</td>
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<td>.024%</td>
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<td>Chest Pain</td>
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<td>$38,500</td>
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Based on US Government - Health & Human Services 2007 data for all except SRS.

www.cms.hhs.gov
How Many Transgendered People are There?

Male to Female
- Not Transgender: 94%
- Halloween: 3%
- Partial Crossdressing: 2%
- Part Time Crossdressing: .09%
- Gender Dysphoria: .04%
- Post-Op: .024%

Female to Male
- Not Transgender (0): 97%
- Halloween (1): 2%
- Partial Crossdressing (2): 0%
- Part Time Crossdressing (3,4): .93%
- Gender Dysphoria (5,6): .047%
- Post-Op (6,7): .024%
What was the annual cost per resident for SRS?

With all these US residents having surgery, if you spread out the cost over all US residents, what was the annual cost per resident for SRS?

- $0.05
- $1.75
- $15
- $189
The cost per resident for SRS

With all these US residents having surgery, if you spread out the cost over all US residents, what was the annual cost per resident for SRS?

- $0.05
- $1.75
- $15
- $189

<table>
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<th>Value</th>
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<td>Average Cost</td>
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<td># US Residents</td>
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<td>Total Cost (millions)</td>
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<td>HRT MD</td>
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<td>Surgery</td>
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<td><strong>Total</strong></td>
<td><strong>$61</strong></td>
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Total THB Annual Cost per Resident

- Therapy: 0.7¢
- HRT MD (Transitional): 0.5¢
- HRT MD (Maint.): 4.1¢
- HRT Rx (Transitional): 1.3¢
- Surgery: 5.3¢
- HRT Rx (Maint.): 5.3¢
<table>
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<tr>
<th>Category</th>
<th>Cost</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Minimum cost</td>
<td>$.09</td>
<td></td>
</tr>
<tr>
<td>Best Estimate</td>
<td>$.17</td>
<td></td>
</tr>
<tr>
<td>Maximum cost</td>
<td>$2.52</td>
<td></td>
</tr>
<tr>
<td>Domestic Partner Benefits</td>
<td>$40.00</td>
<td>(1%)</td>
</tr>
<tr>
<td>Full Health Insurance</td>
<td>$4,000.00</td>
<td>(2001)</td>
</tr>
</tbody>
</table>
Cost Issues

☒ Cost to employer to cover is less than full cost.
   - Employer pays part, Patient pays part.
   - Most plans currently have partial coverage
   - Maintenance HRT Rx probably already covered

☒ % of TS employees with insurance unknown
   - TS unemployment rate may be higher?
   - Those having SRS are self-funded, likely covered?

☒ Magnet effect may attract costs

☒ Untreated GID may cause other costs, more treatment may save $

☒ Increased coverage may cause increased usage.

☒ Covering additional procedures (WPATH 2008) may increase cost.
## Cost Tool (Using 2001 Cost)

<table>
<thead>
<tr>
<th>Type of Cost</th>
<th>Annual Total Cost /Insured</th>
<th>Employee Share (15%)</th>
<th>Employer Share (85%)</th>
<th>Employer Currently Paying</th>
<th>Adjustments to Cost (magnet, inflation, untreated &amp; long term)</th>
<th>Increased cost to Employer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Therapy</td>
<td>$0.007</td>
<td>$0.0011</td>
<td>$0.006</td>
<td>Varies</td>
<td>0</td>
<td>$0.006</td>
</tr>
<tr>
<td>HRT Rx</td>
<td>$0.066</td>
<td>$0.0099</td>
<td>$0.056</td>
<td>$\geq$ $0.045$</td>
<td>0</td>
<td>$\leq$ $0.011$</td>
</tr>
<tr>
<td>HRT MD</td>
<td>$0.046</td>
<td>$0.0069</td>
<td>$0.039</td>
<td>$\geq$ $0.035$</td>
<td>0</td>
<td>$\leq$ $0.004$</td>
</tr>
<tr>
<td>Surgery</td>
<td>$0.053</td>
<td>$0.0080</td>
<td>$0.045</td>
<td>Varies</td>
<td>0</td>
<td>$\leq$ $0.045$</td>
</tr>
<tr>
<td>Total</td>
<td>$0.173</td>
<td>$0.0259</td>
<td>$0.147</td>
<td>$\geq$ $0.080$</td>
<td>0</td>
<td>$\leq$ $0.066$</td>
</tr>
</tbody>
</table>
Annual Cost Increase per Insured

- Employee Share: 2.6¢
- Possible Cost Increase: ≤ 6.6¢
- Currently Covered: ≥ 8¢
## 2008 Cost per Resident with Inflation

<table>
<thead>
<tr>
<th>Service</th>
<th>2008 Cost / Resident</th>
<th>7 Years of Inflation (COLA Rate)</th>
<th>2008 Cost / Resident</th>
</tr>
</thead>
<tbody>
<tr>
<td>Therapy</td>
<td>0.7¢</td>
<td></td>
<td>0.9¢</td>
</tr>
<tr>
<td>HRT Rx</td>
<td>6.6¢</td>
<td>21%</td>
<td>8.0¢</td>
</tr>
<tr>
<td>HRT MD</td>
<td>4.6¢</td>
<td>21%</td>
<td>5.5¢</td>
</tr>
<tr>
<td>Surgery</td>
<td>5.3¢</td>
<td>77%</td>
<td>9.5¢</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17.3¢</strong></td>
<td></td>
<td><strong>23.9¢</strong></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------------</td>
<td>----------------------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Breast Augmentation</td>
<td>$5000</td>
<td>184</td>
<td>$.9</td>
</tr>
<tr>
<td>Beard Removal</td>
<td>$1200 (laser) or $10,000 to $15,000 (electrolysis)</td>
<td>736</td>
<td>$8.8</td>
</tr>
<tr>
<td>Facial Feminization Surgery</td>
<td>$15,000 to $25,000</td>
<td>200</td>
<td>$4.2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>$13.9</td>
</tr>
</tbody>
</table>
Summary

- Prevalence numbers:
  - Run Rate: About 1,166 surgeries/year on US Residents
  - Incidence: 1:240,000 have surgery each year
  - Inherent Prevalence: 1:3,100 have surgery once in their lifetime

- Max cost increase/Insured: about 6.6¢ (2001), 10¢ (2008), 15¢ (if all new procedures added.)
Q & A