Examining the Effectiveness of Connecticut’s Medicaid Family Planning Limited Benefit Program

Meghan Angley, Moiuri Siddique, Kimberly Vasquez

Community Health Program Planning: Spring 2014
Introduction

- Approximately half of the 6.6 million pregnancies in the United States each year are unintended, resulting in births, abortions, miscarriages
- Births that result from unintended pregnancies can lead to adverse maternal and child health outcomes
- Many women are unable to afford contraception
Nearly half of the childbirths in the U.S. are paid for by Medicaid (45\%)\(^1\)

> One Medicaid birth costs close to $10,500, as estimated by the Guttmacher Institute\(^6\)

In 2008, over 51% of pregnancies in Connecticut were reported as unintended\(^7\)

> Cost $93M to federal and state government\(^7\)
Medicaid family planning expansion programs have been shown to be successful in other states:

- **TAKE CHARGE** in Washington
- **California**

Connecticut implemented MFPE in 2012 for men and women of reproductive age whose income is at or below 250% of the Federal Poverty Level (FPL).
90% of enrollment in the Connecticut’s MFPE program occurs through Planned Parenthood of Southern New England (PPSNE)\(^9\)

- Over 5,000 new participants since program began
Aim 1: Examine likelihood of switching to more effective contraceptive methods among those in the MFPE group compared to the Self-Pay group

- Hypothesis: Women in the MFPE group are more likely to switch to more highly effective contraceptive methods
Aim 2: Estimate rates of unintended pregnancies among those who enrolled in MFPE compared to the Self-Pay group

• Hypothesis: Rate of UP in the MFPE group is lower than the Self-Pay
Aim 3: determine cost savings in terms of births averted and costs saved to CT Medicaid

• Hypothesis: the MFPE program will result in substantial costs saved to CT Medicaid
Study population

- PPSNE provided data for women that enrolled in MFPE and that remained self-pay clients
  - Age, race, weekly income, % of federal poverty level, center attended
  - Contraception method in 2011 and 2013
  - Excluded women not of reproductive age, pregnant or seeking pregnancy or above 250% of federal poverty level
Study population

- PPSNE provided data for women that enrolled in MFPE and that remained self-pay clients

Contraception method in 2011 (Baseline)

MFPE implemented in 2012

Contraception method in 2013 (Enrolled in MFPE)

Contraception method in 2013 (Self-Pay)
Predictors of contraception use

- Multivariate logistic regression
- Predictors: Medicaid Expansion enrollment status, age, race, income, contraception method 2011
- Outcome: Highly effective contraception use in 2013

Highly Effective \(^{12}\)
- Intrauterine device
- Depo-Provera
- Sub-dermal implant
- Hormonal patch
- Oral contraception
- Nuva-Ring
- Abstinence

Not Highly Effective \(^{12}\)
- Condoms
- Diaphragm
- Withdrawal
- Rhythm method
- No method
Models from Guttmacher Institute\textsuperscript{6,10}

<table>
<thead>
<tr>
<th>Method</th>
<th>Number of Women</th>
<th>Failure Rate of Method (%)</th>
<th>Expected Number of Pregnancies (Number x Failure Rate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IUD</td>
<td>39</td>
<td>0.8</td>
<td>0.312</td>
</tr>
<tr>
<td>Depo</td>
<td>138</td>
<td>6</td>
<td>8.28</td>
</tr>
<tr>
<td>Patch</td>
<td>16</td>
<td>9</td>
<td>1.44</td>
</tr>
<tr>
<td>Nuva-Ring</td>
<td>54</td>
<td>9</td>
<td>4.86</td>
</tr>
<tr>
<td>OCP</td>
<td>497</td>
<td>9</td>
<td>44.7</td>
</tr>
<tr>
<td>Condom</td>
<td>247</td>
<td>18</td>
<td>44.5</td>
</tr>
<tr>
<td>Abstinence</td>
<td>12</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Implant</td>
<td>11</td>
<td>0.05</td>
<td>0.006</td>
</tr>
<tr>
<td>Spermicide</td>
<td>1</td>
<td>28</td>
<td>0.28</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>2</td>
<td>22</td>
<td>.44</td>
</tr>
<tr>
<td>None</td>
<td>136</td>
<td>85</td>
<td>115.6</td>
</tr>
<tr>
<td>Total in 2011</td>
<td></td>
<td></td>
<td>220.418 pregnancies</td>
</tr>
</tbody>
</table>

\[(\text{Pregnancies in 2011})-(\text{Pregnancies in 2013})=\text{Pregnancies Averted}\]
<table>
<thead>
<tr>
<th>Outcome</th>
<th>Connecticut Specific Proportion¹¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth</td>
<td>37%</td>
</tr>
<tr>
<td>Abortion</td>
<td>51%</td>
</tr>
<tr>
<td>Miscarriage</td>
<td>12%</td>
</tr>
</tbody>
</table>

Pregnancies averted*0.37=Births averted
Pregnancies averted*0.51=Abortions averted
Pregnancies averted*0.12=Miscarriages averted

Cost of Medicaid Birth in Connecticut⁶ $10,411

Births averted*10,411=State funds saved
Results

5,660 women enrolled in MFPE

1,153 women with complete data

19,151 self-pay women

1,591 women with complete data

Final sample of 2,744

Did not differ by demographic information (p=0.668)
Hispanic women were disproportionately underrepresented in MFPE enrollment in 2013, p<0.001

RACIAL BREAKDOWN, MFPE ENROLLEES

- White: 71%
- Black: 14%
- Hispanic: 11%
- Other: 3%
- Not reported: 1%

RACIAL BREAKDOWN, SELF-PAY CLIENTS

- White: 54%
- Black: 6%
- Hispanic: 28%
- Other: 3%
- Not reported: 9%

<table>
<thead>
<tr>
<th></th>
<th>MFPE Enrollees</th>
<th>Self-Pay Clients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>25.9 ± 5.4</td>
<td>27.0 ± 6.5</td>
</tr>
<tr>
<td>Family Size</td>
<td>1.3 ± 0.8</td>
<td>1.7 ± 1.2</td>
</tr>
<tr>
<td>Weekly Income ($)</td>
<td>281.4 ± 129.7</td>
<td>288.9 ± 151.8</td>
</tr>
</tbody>
</table>
MFPE women were 7.16 times more likely to choose highly effective contraception when compared to self-pay clients.

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Odds Ratio (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MFPE vs. Self-Pay</strong></td>
<td><strong>7.16 (5.76, 8.90)</strong>*</td>
</tr>
<tr>
<td>Income Level:</td>
<td></td>
</tr>
<tr>
<td>101%-138% vs. &lt;100%</td>
<td>0.90 (0.73, 1.11)</td>
</tr>
<tr>
<td>Income Level:</td>
<td></td>
</tr>
<tr>
<td>139%-150% vs. &lt;100%</td>
<td>0.60 (0.31, 1.15)</td>
</tr>
<tr>
<td>Income Level:</td>
<td></td>
</tr>
<tr>
<td>150%-200% vs. &lt;100%</td>
<td>0.89 (0.66, 1.21)</td>
</tr>
<tr>
<td>Non–Hispanic Black vs. White</td>
<td>0.58 (0.42, 0.79)*</td>
</tr>
<tr>
<td>Hispanic vs. White</td>
<td>1.12 (0.88, 1.42)</td>
</tr>
</tbody>
</table>

Non–Hispanic Black women were 42% less likely to choose highly effective contraception, when compared to White women.
MFPE does not reduce disparity between black and white women

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Odds Ratio (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Pay</td>
<td></td>
</tr>
<tr>
<td>Non– Hispanic Black vs. White</td>
<td>0.57 (0.37, 0.90)</td>
</tr>
<tr>
<td>MFPE</td>
<td></td>
</tr>
<tr>
<td>Non– Hispanic Black vs. White</td>
<td>0.53 (0.33, 0.86)</td>
</tr>
</tbody>
</table>

The odds of using a highly effective method of contraception for black women compared to white women are similar in both groups.
Estimated Unintended Pregnancies in MFPE vs. Self-Pay, from 2011-2013

- MFPE: 84.2
- Self-Pay: 111.8
# Estimated Reproductive Events Averted Through MFPE

<table>
<thead>
<tr>
<th>Unintended Events Averted</th>
<th>Per 1,153 women with complete data</th>
<th>For every 100 women enrolled</th>
<th>For all 5660 women enrolled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnancies</td>
<td>84.2</td>
<td>7.3</td>
<td>413.4</td>
</tr>
<tr>
<td>Abortions</td>
<td>42.9</td>
<td>3.7</td>
<td>210.8</td>
</tr>
<tr>
<td>Miscarriages</td>
<td>10.1</td>
<td>0.88</td>
<td>49.6</td>
</tr>
<tr>
<td>Births</td>
<td>31.2</td>
<td>2.7</td>
<td>153.0</td>
</tr>
<tr>
<td>Cost Savings</td>
<td>$324,379</td>
<td>$28,133.50</td>
<td>$1,592,350</td>
</tr>
</tbody>
</table>
Conclusions

- Results support PPSNE’s continued enrollment of women in MFPE
  - Potential decrease in rates of UP and unintended births and funds saved
- Participants in the MFPE group were more likely to switch to a more effective birth control method than women in the self-pay group
Estimates of pregnancies averted and cost savings only reflect the first 2 years of the MFPE program.

With continued investment, MFPE may be a cost-effective option for participants, Medicaid, and Connecticut policy makers.
Limitations

Numbers are estimates since no data that link enrollees of MFPE to the outcomes of pregnancy or birth, or actual births covered by Medicaid.

Unable to obtain data on more qualitative aspects of enrollment, i.e. why MFPE eligible women chose not to enroll.

Results may not be truly reflective of the entire population of women enrolled in MFPE -- large amount of missing data on contraceptive methods.
Recommendations

- **Focus groups**: Further investigate barriers of entry into MFPE (among Hispanic women)
- **Reduce disparity**: Efforts to improve the adoption of highly effective methods of contraception among black women
- **Data Collection**: More comprehensive information on patients’ contraceptive use history
LARCs by payer type: PPSNE patients

- Medicaid (all plans)
- Commercial
- Self pay

FPLB applications doubled July to August, due to clarifications in DSS rules.

ACA plans, Medicaid expansion takes effect
Acknowledgements

- Susan Lane, Director of Financial Analysis and Public Grants at PPSNE
- Lyala Stowe, Manager, Revenue Analysis and Grant Reporting at PPSNE
- Debbie Humphries, PhD
- Crystal Gibson, MPH
- Chima Ndumele, PhD
References


Images

Slide 5: www.plannedparenthood.org
Slide 12: http://www.choiceproject.wustl.edu