Examine the Effectiveness of Medicaid Family Planning Expansion in Connecticut

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Objectives

- To examine whether women enrolled in Medicaid Family Planning are more likely to use highly effective methods of contraception compared to non-enrolled women
- To examine characteristics of enrolled and unenrolled women
- To evaluate the effectiveness of the Medicaid Family Planning Expansion in reducing unintended pregnancies
- To assess whether CT has saved funds due to the expansion

Background

Medicaid family planning expansion programs have been shown to improve reproductive health outcomes and reduce unintended pregnancies.¹ Connecticut implemented Medicaid Family Planning Expansion (MFPE) in March of 2012 for men and women of reproductive age whose income is at or below 250% of the Federal Poverty Level (FPL).

Ninety percent of enrollment in the Connecticut’s MFPE program occurs through Planned Parenthood of Southern New England (PPSNE).² PPSNE has enrolled close to 5,000 new participants since implementation.³ The true effect of MFPE in reducing unintended pregnancies and cost-savings benefits of the program remains unknown.

Methods: Data

PPSNE provided individual-level data for women of reproductive age who attended a CT Planned Parenthood center for a family planning visit in 2011 (before MFPE) and 2013 (after MFPE). Women were categorized as either enrolled in MFPE in 2013 (N=1,153) or as self-paying clients in 2013 (N=1,591). Demographic information such as age, race, family size, weekly income, federal poverty level and Planned Parenthood center attended was available. The primary variable of interest was contraceptive method used (e.g., pill, IUD, condoms).

Key Findings

- MFPE enrolled women were 7.16 times more likely to choose highly effective contraception when compared to self-pay clients
- Non-Hispanic Blacks were 42% less likely to choose a highly effective method of contraception when compared to White women
- Hispanic women were disproportionately under-represented in MFPE enrollment in 2013
- In the MFPE group, from 2011-2013, an estimated:
  - 84 unintended pregnancies were averted
  - 31.2 unintended births were prevented
  - $324,279 was saved due to averted Medicaid births

Methods: Analysis

The number of unintended pregnancies, births, miscarriages and abortions were estimated for each group using methods outlined by the Guttmacher Institute in previous reports.⁴ Failure rates for each type of contraceptive method were identified and multiplied by the number of PPSNE clients using each type of contraceptive method. This calculation provided an estimate of the number of expected unintended pregnancies per group at each time period (e.g., 2011 and 2013) which allowed us to estimate the change in expected unintended pregnancies for self-pay women and women enrolled in MFPE. The number of expected unintended pregnancies was then multiplied by previously reported proportions of pregnancies expected to result in births, miscarriages and abortions. For example, in CT 51% of unintended pregnancies are expected to result in abortion and 12% are expected to result in miscarriage.¹

The number of averted pregnancies in the MFPE group was used to determine the state funds saved by reducing pregnancies that would have resulted in Medicaid covered births. Multivariate adjusted logistic regression models were used to examine characteristics of women associated with use of highly effective contraception. Analyses were conducted in SAS 9.3 and SPSS 20.
Results: Contraceptive methods and characteristics of women enrolled in MFPE

Figure 1 shows the characteristics of women enrolled in MFPE. These women were primarily low income and white with an average age around 25 years. Table 1 shows characteristics of women related to the use of highly effective contraception, enrolled in MFPE.

Results: Pregnancies, births, abortions and miscarriages averted & cost savings

The number of pregnancies, births, miscarriages and abortions averted are shown in Table 2. For the 1,153 women enrolled, there were an estimated 84.2 pregnancies averted, resulting in $324,379 saved in CT. Using this figures to estimate pregnancies averted and cost savings among all 5,660 women enrolled in MFPE, we find that over 400 pregnancies may have been averted with a cost savings of over $1.5 million. However, these figures are estimates only and should be interpreted cautiously.

Table 1. Multivariate logistic regression model of predictors of highly effective contraceptive use (N=2,744)

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Odds Ratio (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrolled in MFPE</td>
<td>7.16 (5.76, 8.90)*</td>
</tr>
<tr>
<td>Income Level: 101%-138%</td>
<td>0.90 (0.73, 1.11)</td>
</tr>
<tr>
<td>Income Level: 139%-150%</td>
<td>0.60 (0.31, 1.15)</td>
</tr>
<tr>
<td>Income Level: 150%-200%</td>
<td>0.89 (0.66, 1.21)</td>
</tr>
<tr>
<td>Income Level: 200%-250%</td>
<td>1.14 (0.72, 1.80)</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>

*statistically significant, p<0.05
Note: Income level as percent of Federal Poverty level compared to 100% of Federal Poverty Level.

Table 2. Estimated number pregnancies, births, abortions and miscarriages averted and cost savings

<table>
<thead>
<tr>
<th>Estimated Number of Events Averted</th>
<th>For every 100 women enrolled</th>
<th>For 1,153 women enrolled</th>
<th>For all 5,660 women enrolled*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnancies</td>
<td>7.3</td>
<td>84.2</td>
<td>413.4</td>
</tr>
<tr>
<td>Abortions</td>
<td>3.7</td>
<td>42.9</td>
<td>210.8</td>
</tr>
<tr>
<td>Miscarriages</td>
<td>0.9</td>
<td>10.1</td>
<td>49.6</td>
</tr>
<tr>
<td>Births</td>
<td>2.7</td>
<td>31.2</td>
<td>153.0</td>
</tr>
<tr>
<td>Cost Savings</td>
<td>$28,133</td>
<td>$324,379</td>
<td>$1,592,350</td>
</tr>
</tbody>
</table>

*Estimated events averted are based only on the 1,153 women enrolled in MFPE for whom complete data were available

Recommendations

- Advocate for continued funding of MFPE
- Conduct focus groups to understand why a large proportion of Hispanic women remain self-pay clients
- Outreach and research to increase adoption of highly effective contraception in non-Hispanic Black women
- Rigorous collection of comprehensive data on patients’ contraceptive use for future evaluations

Limitations

- Use of estimates from Guttmacher Institute rather than calculating estimates from empirical data
- Lack of information explaining racial disparities in MFPE enrollment and highly effective contraception use
- Our findings might not reflect all MFPE enrollees due to missing baseline and final contraceptive methods
- In the context of health reform, it is unclear how the Affordable Care Act will affect the need for MFPE

Conclusions

Women choose more highly effective methods of contraception when they enroll in the program, regardless of their Federal Poverty Level. This many contribute to a decrease in the number of unintended pregnancies and births, and a saving of state funds. Importantly, by increasing access to highly effective methods of contraception, MFPE could improve the reproductive health of many women in Connecticut who are unable to afford adequate reproductive health care.
Acknowledgements

We would like to thank Susan Lane and Lyala Stowe of Planned Parenthood of Southern New England, Dr. Debbie Humphries, our course instructor, Dr. Chima Ndumele, our faculty advisor, and our teaching assistant, Crystal Gibson.

References


Resources:

2) Guttmacher Institute, Pregnancy: http://www.guttmacher.org/sections/pregnancy.php
3) Choice Project (for contraception icons): http://www.choiceproject.wustl.edu