Introduction

Oral contraception (also known as “the pill”) is the most common method of nonpermanent birth control in the United States. Oral contraceptives contain the hormones estrogen and progestin (although some contain only progestin) and are 92 to 99 percent effective at preventing pregnancy. They are contraindicated for women with a history of blood clots, and women who are smokers over 35 are warned against using the pill.

Data on contraceptive use among teens are important as they relate to the health of young women, as well the social impact of teen pregnancy. According to national survey data from 2008, nearly half (42 percent) of all 15- to 19-year-olds in the United States have had sex at least once. This finding is not a significant change from 2002, the last time the survey was conducted. A sexually active teen that does not use contraceptives has a 90 percent chance of becoming pregnant within a year, and teen pregnancy is associated with adverse health outcomes for mother and baby.

Research also indicates that patient out-of-pocket costs play a key role in driving a patient’s decision to initiate, use, and adhere to medication therapy. While Medicaid prohibits cost sharing for family planning services, it is important to monitor the costs of these drugs to understand the relationship between use and cost sharing for those with commercial insurance.
Despite the drivers related to increased use of oral contraceptives, the most common reason to take oral contraceptives is to avoid unintended pregnancy. Recent data from the Centers for Disease Control and Prevention show that the birth rate for U.S. teenagers (ages 15 to 19) fell 6 percent in 2009 to the lowest level ever recorded. The rate in 2009 was 39.1 births per 1,000 teenagers 15 to 19 years old, down from 41.5 births in 2008 and 8 percent lower than in 2007. While the authors did not cite a reason for the decline, our data suggest that an increase in use of oral contraception among teens may be at least partly responsible.

Finally, although birth rates for teenagers are on the decline, at a rate of 41.5 per 1,000 in 2008, teenage pregnancy in the United States remains an area of concern; consequently, a large number of federal, state, and local programs have been initiated to prevent teen pregnancy. In 2010, the Department of Health and Human Services indicated that about $183 million would become available in fiscal year 2011 for programs to prevent teen pregnancy.

**Data and Methods**

This study is based on data from the 2002–2009 Truven Health MarketScan® Commercial and Multi-State Medicaid databases. The MarketScan databases are constructed from fully adjudicated inpatient medical, outpatient medical, and outpatient prescription drug claims, starting from 1996. The Commercial Database includes the healthcare experience of more than 30 million individuals annually who have employer-sponsored health insurance through large and medium-sized, self-funded employers. The MarketScan Multi-State Medicaid Database reflects the healthcare service use of individuals covered by Medicaid programs in 13 geographically dispersed states. The database contains the pooled healthcare experience of more than four million Medicaid enrollees annually, covered under fee-for-service and managed care plans.

The proportion of women that were prescribed contraceptives was determined by finding enrollees that had prescription drug claims for oral contraceptives, using the therapeutic class Contraceptive, Oral Combination. The study population was limited to women, ages 13 to 33, with at least six months of enrollment in a year and prescription drug coverage, resulting in an annual average of just over two million (2,054,615) commercially insured females and just over one million (1,268,239) female Medicaid recipients. For the commercial data, weights were applied to estimate national commercially insured rates. The percent of women with prescriptions was calculated yearly. The two age groups included adults (19 to 33) and teenagers (13 to 18).
Observations

Teen Oral Contraceptive Use

- The rate of increase in use of oral contraceptives is particularly striking among teens ages 13 to 18. In 2002, 12 percent of teens with commercial insurance filled prescriptions for oral contraceptives, compared to 14 percent of teens with Medicaid. In 2009, 18 percent of teens with commercial insurance and 18 percent of teens with Medicaid filled prescriptions for oral contraceptives (Table 1).
- During the same period, the proportion of adults with commercial insurance in 2002 was 25 percent and increased by one percent to 26 percent in 2009.
- The proportion of teens that filled prescriptions for oral contraceptives increased with age for those with Medicaid and commercial insurance (Figures 1 and 2). In 2009, 3.7 percent of 13-year-olds with Medicaid, and 2.8 percent with commercial insurance were prescribed oral contraceptives. Among 18-year-olds, 27.1 percent of those with Medicaid and 30.5 percent of those with commercial insurance filled prescriptions for oral contraceptives.

Table 1: Contraceptive Use Trends, Medicaid and Commercial Insurance, 2002 to 2009

<table>
<thead>
<tr>
<th>Year</th>
<th>Teens Ages 13 to 18</th>
<th>Adults Ages 19 to 33</th>
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<tbody>
<tr>
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<td>Medicaid</td>
<td>Commercial</td>
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<tr>
<td>2002</td>
<td>13.7%</td>
<td>21.4%</td>
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<td>2003</td>
<td>15.4%</td>
<td>25.1%</td>
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<td>2004</td>
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<tr>
<td>2005</td>
<td>16.0%</td>
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<td>2006</td>
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<tr>
<td>2007</td>
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<td>19.1%</td>
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<tr>
<td>2008</td>
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<td>16.2%</td>
</tr>
<tr>
<td>2009</td>
<td>18.0%</td>
<td>17.7%</td>
</tr>
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<td></td>
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</tbody>
</table>

Figure 1: Teen Contraceptive Use Trend by Age, Commercial Insurance, 2002 to 2009

- Percent of Women Who Filled Prescriptions for Oral Contraceptives
- Teens Ages 13 to 18
  - 2002: 13%
  - 2003: 14%
  - 2004: 15%
  - 2005: 16%
  - 2006: 17%
  - 2007: 18%
  - 2008: 18%
  - 2009: 18%

- Adults Ages 19 to 33
  - 2002: 25.2%
  - 2003: 26.3%
  - 2004: 27.0%
  - 2005: 27.1%
  - 2006: 27.5%
  - 2007: 26.9%
  - 2008: 26.9%
  - 2009: 26.3%
Cost Sharing Amounts for Oral Contraceptives

- During the same period, cost sharing for oral contraceptives for those with commercial insurance remained essentially unchanged from an average of $11.90 per filled prescription in 2002 to an average of $12.79 per filled prescription in 2009
- While Medicaid permits nominal cost sharing for some services, it prohibits cost sharing for family planning services
Limitations
This study is subject to the limitations associated with administrative claims data and should be interpreted in light of these limitations. Furthermore, we tracked filled prescriptions and therefore cannot determine how many providers prescribed oral contraceptives nor if the contraceptives were taken by the patient. In addition, this study does not include any other forms of birth control that a patient may be using.

Our study population within the MarketScan Commercial Database is likely healthier and may have greater access to health services than the entire U.S. population, as this data source represents the healthcare experience of individuals with employer-sponsored insurance.

The number of teenagers that use oral contraceptives is under-represented because these data do not include prescriptions obtained through free health clinics. National survey data indicate an even higher use rate for oral contraceptives for those under 20.

The specific states contained within the MarketScan Multi-State Medicaid Database vary over time. However, all states included in the database provide prescription oral contraceptive coverage as part of the state Medicaid program.\textsuperscript{12}
Conclusion
This study documents findings that may be helpful in understanding trends in teenage birth and pregnancy, as well as trends in contraception among women and teenagers in the U.S.

Between 1993 and 2002, contraceptive coverage mandates were estimated to account (directly and through nationally determined plans) for 30 percent of the increase in commercial coverage for oral contraceptives. In 2002, 15 states had enacted laws and or regulations requiring health insurance plans to provide contraceptive coverage, and 97 percent of private health plans provided coverage for oral contraceptives. By 2009, there were 27 states with some form of contraceptive mandate. Medicaid uses federal funding from Title X of the Public Health Service Act to provide women with family planning and contraceptive options, and in 2009, the majority of state Medicaid programs covered prescriptions for oral contraceptives. Today, oral contraceptives continue to be the most frequently used method of birth control by women in the U.S.

One reason for the continued popularity of oral contraceptives among all women, and the increase in use among teens, may be due to new formulations available that have resulted in reduced risks of adverse events and improved cycle control, including a reduction in what are known as hormone withdrawal symptoms. In addition, there is now a body of research that indicates that there is not an increase in risk for breast cancer for women who take the pill. Finally, adolescent young women are prescribed oral contraceptive pills for many reasons beyond contraception. Some of these reasons include: irregular menstrual periods, menstrual cramps, acne, premenstrual syndrome, endometriosis, and hormone replacement therapy.

Suggested Citation

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References


3 Margolis MB. Subject Matter Expert Consultant, Truven Health Analytics. Senior Director for Medical Affairs (medical information) for Teva Women’s Health Research.


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