Background

- The non-invasive prenatal screening (NIPT) test, available as of October 2011, allows couples to learn whether their fetus has Down syndrome (DS) as early as 9 weeks into gestation.
- Given the availability of this test, more couples are expected to receive a prenatal diagnosis of DS.
- Upon receiving a prenatal DS diagnosis, expectant parents must make decisions about their pregnancy options with limited time and information.

Some studies have been conducted on the financial impact of having a child with DS:

- Control group: parents of one or more children, all without any diagnoses
- DS study group: parents of a child with at least one medical claim associated with DS

Study Objective

- To determine whether the rate of income growth among parents of children with DS differs from that among parents of children without chromosomal conditions.

Methods

Data

- The data from the OptumHealth Reporting and Insights employer-based claims database were used to conduct this retrospective cohort study in the US.
- A panel of consecutive years of parents' income information was created for each beneficiary. Parents with more than two consecutive years of income data were included in this study.
- In the study, parents and children were identified through their employment, including primary subscribers and their covered beneficiaries.
- While children were covered through age 18, database were used to conduct this retrospective cohort study.
- The data from the database was used to conduct this retrospective cohort study.
- Parents of a child with no claims while child is <18 years of age
- Parents of children with DS had lower mean annual income growth rate than their matched controls (4.0% vs. 4.1%, p = 0.001).

Results

- No statistically significant differences existed in mean annual income growth rate when analyzed separately for mothers (4.0% vs. 4.0%) and fathers (4.1% vs. 4.1%, p = 0.517).
- The findings cannot be generalized to secondary earners, among whom the impact may be different.

Discussion

- Parents of children with DS have lower mean annual income growth compared to those of children without chromosomal conditions. This difference was not statistically significant among mothers and fathers when analyzed separately.
- Using the 2014 US median income of $50,383 and $39,621 among yearly full-time working men and women, respectively, this difference in income growth translates into $55 annual reductions for fathers and $52 annual reductions for mothers.
- Further research is warranted to determine whether the impact of having a child with DS on parents' income differs with the age of the child.

Limitations

- Income growth trajectory of spouses or secondary earners
- Macro factors (e.g., state policies, changes in tax laws, etc.)
- Distributions of DS and non-DS groups were estimated.

References