

*Goal:*

To develop an index of contraceptive efficacy among family planning waiver participants with contraceptive claims by which programs can compare across states and over time to gauge program performance.

*Proposed Measure:*

The proposed measure uses two data elements:

1) The proportion of waiver participants using each method paid for by Medicaid in a given year (available from Medicaid family planning waiver claims)

2) The typical-use effectiveness rate of each specific method. (Source for typical use: Trussell J, Kowal D. The essentials of contraception. In: Hatcher RA, et al. *Contraceptive Technology*, 18th ed. New York: Ardent Media, 2004.)

These data can then be combined to create an index (i.e., a weighted average) of the effectiveness of the methods paid for by Medicaid.

*Rules for the Measure:*

- Short-term methods: Only if a woman has paid claims for nine months or more of contraceptive use is she considered a method user.
- Multiple method use: If a woman uses multiple methods during the year, the effectiveness rates of her methods should be prorated.
- Long-term reversible methods: A woman using an IUD or implant should be considered a method user for the method's approved period of effectiveness.
- Sterilization: A woman who receives sterilization services under the waiver should be considered a method user for the given year. After that first year, there are two options: 1) remove her from both the numerator and the denominator (since she is no longer eligible for waiver services); or 2) include her permanently going forward in both numerator and denominator. Both are valid measures and both could be calculated and presented.

*Limitations:*

The measure we propose will be useful only for looking at contraceptive effectiveness as part of a cross-state comparison of states with waiver programs (any biases inherent in the measure will be washed out looking across states) or as a measure of progress within a state's waiver program, looking forward and (where claims data are available) backwards.

Each data element also can be used separately for cross-state or cross-time comparisons. So: state X has a higher proportion of waiver participants using a paid method than state Y. And the methods used by women in state X are collectively more effective than those used in state Y.

Because Medicaid claims data do not allow us to distinguish between a woman not using contraception at all and one using a method without a paid claim (e.g., condoms, withdrawal, natural family planning), any measure of contraceptive use and effectiveness will be incomplete. One option is to accept this limitation and use the measure as is. A second option is to include the

women without a paid claim in the index. All of those women could be assumed to use no method, with an appropriate “effectiveness” rate (e.g., 15% “effectiveness” in avoiding pregnancy, on the assumption that 85% of women will become pregnant during a given year if they are sexually active, fecund and not using contraception). Or, as a third option, data from the Behavioral Risk Factor Surveillance System (BRFSS), the National Survey of Family Growth (NSFG) or a state survey could be used to estimate the proportion of women without a paid claim who are using condoms, withdrawal, etc. and who are using no method. The second or third options would be perhaps more useful for comparison purposes but would be less reliable, since it would require estimates or patently false assumptions.

Because of these limitations, the measure we propose is **not** an outcome measure in and of itself and should be talked about carefully as an intermediate program measure, so as to be clear that it substantially underestimates contraceptive use and effectiveness among program participants.

*Future Research:*

We determined that a measure on the effectiveness of contraceptive use by waiver participants is currently feasible for use across states or across time. For the long-term, addressing limitations of the data could make this index an effective outcome measure:

- 1) Comparisons with a control group (e.g., eligible non-participants in your state or similar women in a state without a waiver) is not possible without substantial new data collection or analysis (such as a targeted survey or, possibly, an analysis using an existing survey like BRFSS).
- 2) Because Medicaid claims data do not allow us to distinguish between a woman not using contraception at all and one using a method without a paid claim (e.g., condoms, withdrawal, natural family planning), any measure of contraceptive use and effectiveness will be incomplete. Substantial new data collection and analysis (such as a chart review or an entry/exit survey) would be necessary to create a complete measure of effectiveness, although estimates using data from BRFSS or NSFG could be used to provide a rough estimate of contraceptive use in the absence of a paid Medicaid claim.