

Frequently Asked Questions About the Contraceptive Use Performance Measures (Developmental)

About the FAQs

These Frequently Asked Questions (FAQs) were developed to assist states in calculating and reporting the Performance Measures related to Contraceptive Use. The FAQs were compiled from questions asked during the Center for Medicaid and CHIP Services Maternal and Infant Health Initiative Webinar, Measuring Contraceptive Use in Medicaid and CHIP, held on November 5, 2014.

To obtain technical assistance with reporting the Contraceptive Use measures, please contact the TA mailbox at MACQualityTA@cms.hhs.gov.

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1. What are the definitions of the performance measures for contraceptive use and are they considered intermediate outcome or access measures?

The two measures are defined as follows:

- **Primary measure (intermediate outcome):** Percentage of women ages 15–44 years of age who are at risk of unintended pregnancy that adopt or continue use of FDA-approved methods of contraception that are most or moderately effective (i.e., male or female sterilization, implants, intrauterine devices [IUD] or intrauterine systems [IUS], Depo-Provera (the ‘shot’), oral contraceptive pills, patch, ring, and diaphragm).
- **Sub-measure (access):** Percentage of women ages 15–44 years of age who are at risk of unintended pregnancy that adopt or continue use of FDA-approved methods of contraception that are long-acting reversible contraception (LARC) (i.e., implants, IUDs, or IUSs).

The primary measure is considered an intermediate outcome measure because it reflects what happens at the end of the clinical encounter. Although a benchmark has not been set for performance, a very high percentage of women should be using one of the most or moderately effective methods of contraception. The primary measure is designed to encourage providers to screen all women for pregnancy intention, and to counsel more fully about contraceptive options so that more women use the most and moderately effective methods of contraception.

The sub-measure is focused on the use of LARC and is viewed as an access measure. This measure is designed to encourage providers/service sites that are performing well below the mean or median to focus on removing unnecessary barriers to LARC access. This would not be an appropriate measure for setting a high benchmark or using a pay-for-performance approach, due to concerns that this could lead to coercive practices.

2. What population groups are included in the measures?

The measure denominator includes all women of reproductive age, that is, ages 15–44, who are enrolled in Medicaid in the measurement year. The age range of 15–44 years covers the years when most childbearing occurs, and allows for a consistent age range to compare data reported by states and between data reported by states and national data collected by the Centers for Disease Control and Prevention’s (CDC) National Center for Health Statistics.

3. What are the varying levels of effectiveness of the contraceptive methods?

The performance measures are based on the fact that some methods are more effective than others at preventing unintended pregnancy.¹ The contraceptive methods can be categorized into three tiers:

- **Most effective methods, including:** female and male sterilization, intrauterine devices (IUD) or intrauterine systems (IUS), and contraceptive implants. Long-acting reversible contraception (LARC) is a subset of the most effective methods, i.e., IUD and implant. The most effective methods have a failure rate that is less than 1 percent under typical use over one year.
- **Moderately effective methods, including:** Depo-Provera (the ‘shot’), oral contraceptive pills, patch, ring, and diaphragm. The moderately effective methods have a typical failure rate of 6 to 12 percent over one year.
- **Least effective methods, including:** condom, withdrawal, sponge, rhythm, and spermicide. The least effective methods have a typical failure rate of 18 to 28 percent over one year.

¹ Trussell J. Contraceptive efficacy. In: Hatcher RA, Trussell J, Nelson AL, Cates W, Kowal D, Policar M, Eds. Contraceptive Technology: 20th revised edition. New York, NY: Ardent Media, 2011.

Some women use no method of contraception. Not using any method at all has a failure rate of approximately 85 percent over one year.

Several studies clearly document a strong association between the type of contraceptive method a woman uses and a woman's probability of unintended pregnancy. A large study in Missouri, known as the CHOICE study, is a recent example. It found that women who used the pill, patch, or ring were more than 22 times as likely to experience an unintended pregnancy compared to women who used an IUD or implant.²

4. What data sources are used to calculate the measures?

Medicaid eligibility and claims data are used to calculate most aspects of the measures, including identifying all Medicaid-enrolled women of reproductive age (ages 15–44), women who were pregnant at any point in the measurement year, women who were infecund due to non-contraceptive reasons, the type of contraceptive method used, and whether a LARC method was removed and/or inserted in the measurement year.

Data from the National Survey of Family Growth (NSFG) are used to estimate the proportion of women who were not at risk of unintended pregnancy, and the approximate proportion of women who were permanently sterilized or received LARC in a year preceding the measurement year. Question 5 provides additional information on how the NSFG data are used in calculating the measure.

5. Can survey data be used for computing the measure?

Population-based surveys, such as the Pregnancy Risk Assessment Monitoring System (PRAMS), the Behavioral Risk Factor Surveillance System (BRFSS), and the National Survey of Family Growth (NSFG), can provide useful information about the population as a whole. PRAMS collects state-specific, population-based data on maternal attitudes and experiences before, during, and shortly after pregnancy (<http://www.cdc.gov/PRAMS/>). BRFSS surveys monitor state-level prevalence of the major behavioral risks among adults associated with premature morbidity and mortality (<http://www.cdc.gov/brfss/>). The NSFG collects nationally representative information on family life, marriage and divorce, pregnancy, infertility, use of contraception, and men's and women's health (<http://www.cdc.gov/nchs/nsfg.htm>).

However, these data sources do not replace the need for clinical performance measures that document characteristics of the population served by a specific group of providers within a specific clinical context. Clinical data are needed to accurately measure performance in a specific context and to develop measures for which providers can feel accountable.

Ideally, clinical performance measures will be aligned with population-based measures so that providers and key stakeholders can compare how a given provider or clinic is doing compared to the state or national average.

6. How are the NSFG data used in calculating the measures?

NSFG data are used to supplement the claims data in two ways:

- First, the NSFG data will help identify the proportion of women who are not at risk of unintended pregnancy. Thus, this enables the measure to capture the women who are at risk of unintended pregnancy due to the fact that they are likely not using any contraception at all, or are using the least effective methods.
- Second, NSFG data are used to identify the women who were sterilized or received LARC in a year preceding the measurement year. This is important because both sterilization and LARC are long-lasting, and only measuring the procedures that were performed in the measurement year under-estimates providers' actual performance.

² Winner B et al. Effectiveness of long-acting reversible contraception. *New England Journal of Medicine*, 2012, vol. 336, no. 21, pp. 1998–2007.

Use of national survey data to accompany claims data is a novel approach. However, we recognize that NSFG data represent the entire nation and may not accurately represent the characteristics of individual states. Despite this limitation, in the absence of other data sources from the states, we think that using NSFG is worthwhile because it allows us to fill critical gaps in claims data. We are also exploring ways that the estimates could be adjusted to better reflect key demographic characteristics of individual states' Medicaid populations.

7. Please explain the concept of a 'ceiling' and how it is different from a benchmark.

The purpose of the 'ceiling' is to be fair to providers, by accounting for the fact that some proportion of enrollees will not be at risk of unintended pregnancy because they have never had sex, are infecund/incapable of getting pregnant due to non-contraceptive reasons, are pregnant, or are seeking pregnancy.

The 'ceiling' is not the same as a benchmark. The ceiling is intended to provide information about what the highest level of performance could be, after accounting for women who are not at risk of unintended pregnancy. This information can then be used to set a benchmark. The use of NSFG data to set the ceiling allows states to make a more evidence-based decision about what a realistic performance benchmark might be.

8. Why are postpartum women excluded from the measure?

Postpartum contraceptive use is not included in this measure for several reasons. First, we consider these measures for use primarily by primary care providers. Second, other measures are under discussion that would address other settings/populations, such as postpartum women whose postpartum contraceptive needs should be met during pregnancy/postpartum visits to providers who specialize in pregnancy-related care such as obstetricians and midwives, rather than primary care providers. So, although we strongly support the development of measures focused on postpartum contraception, in the interests of harmonization with these likely future measures, and to keep the target audience for these measures focused on primary care, we decided against including postpartum contraception.

9. These measures are developmental. What are the next steps in further developing the measures?

The next steps in developing the measures include the following:

- Finalize NSFG estimates and update the measure specifications with 2011–2013 NSFG data (due for release in December 2014)
- Examine the use of claims data rather than the NSFG data to identify previous insertion of LARC. For example, we will assess the feasibility of using a look-back period of 5 to 10 years using claims data, and any bias introduced by including women in the denominator who moved on/off Medicaid in the look-back period
- Document the reliability of the claims data used in this measure, as part of our application to NQF for endorsement
- Better document the use of NDC codes in the measure specifications
- In addition, CMS and CDC will engage states in providing feedback on their experiences calculating, reporting, and using the measures.

10. The webinar on November 5, 2014 included a slide about the impact of teen and unintended pregnancy, and poor birth spacing, on a wide range of outcomes. Please provide the citations for this slide.

The citations below document the current burden of unintended pregnancy and poor birth spacing in the United States:

- Ventura, S., et al. Estimated pregnancy rates and rates of pregnancy outcomes for the United States, 1990–2008. *National vital statistics reports*, 2012. 60(7).
- Finer, L.B. and M.R. Zolna. Unintended pregnancy in the United States: incidence and disparities, 2006. *Contraception*, 2011. 84(5): pp. 478–85.
- Gemmill, A. and L.D. Lindberg. Short interpregnancy intervals in the United States. *Obstet Gynecol*, 2013. 122(1): pp. 64–71.

There is a large body of literature examining the impact of teen and unintended pregnancy, and poor birth spacing, on a wide range of outcomes. Below is a list of selected references:

- Benedict, M.I., R.B. White, and D.A. Cornely. Maternal perinatal risk factors and child abuse. *Child Abuse Negl*, 1985. 9(2): pp. 217–24.
- Crowne, S.S., et al. Relationship between birth spacing, child maltreatment, and child behavior and development outcomes among at-risk families. *Maternal Child Health J*, 2012. 16(7): pp. 1413–20.
- Chen, I., G.S. Jhangri, and S. Chandra. Relationship between interpregnancy interval and congenital anomalies. *Am J Obstet Gynecol*, 2014.
- Conde-Agudelo, A., et al. Effects of birth spacing on maternal, perinatal, infant, and child health: a systematic review of causal mechanisms. *Stud Fam Plann*, 2012. 43(2): pp. 93–114.
- Conde-Agudelo, A., A. Rosas-Bermudez, and A.C. Kafury-Goeta. Birth spacing and risk of adverse perinatal outcomes: a meta-analysis. *JAMA*, 2006. 295(15): pp. 1809–23.
- Getz, K.D., et al. Short interpregnancy interval and gastroschisis risk in the National Birth Defects Prevention Study. *Birth Defects Res A Clin Mol Teratol*, 2012. 94(9): pp. 714–20.
- Conde-Agudelo, A., A. Rosas-Bermudez, and A.C. Kafury-Goeta. Effects of birth spacing on maternal health: a systematic review. *Am J Obstet Gynecol*, 2007. 196(4): pp. 297–308.
- Gipson J.D., M.A. Koenig, and M.J. Hindin. The effects of unintended pregnancy on infant, child, and parental health: a review of the literature. *Stud Fam Plann*, 2008. 39(1): pp. 18–38.
- Gunnes, N., et al. Interpregnancy interval and risk of autistic disorder. *Epidemiology*, 2013. 24(6): pp. 906–12.
- Hayes, H., et al. Short birth intervals and the risk of school unreadiness among a Medicaid population in South Carolina. *Child Care Health Dev*, 2006. 32(4): pp. 423–30.
- Hoffman, S. and R. Maynard. *Kids Having Kids: Economic costs and social consequences of teen pregnancy*. Washington, DC: Urban Institute Press, 2008.
- Howard, E.J., et al. The association between short interpregnancy interval and preterm birth in Louisiana: a comparison of methods. *Matern Child Health J*, 2013. 17(5): pp. 933–9.
- Hussaini, K.S., D. Ritenour, and D.V. Coonrod. Interpregnancy intervals and the risk for infant mortality: a case control study of Arizona infants 2003–2007. *Matern Child Health J*, 2013. 17(4): pp. 646–53.

- Kwon, S., et al. Relationship between interpregnancy interval and birth defects in Washington State. *J Perinatol*, 2012. 32(1): pp. 45–50.
- Kozuki, N., et al. The associations of birth intervals with small-for-gestational-age, preterm, and neonatal and infant mortality: a meta-analysis. *BMC Public Health*, 2013. 13(Suppl 3): p. S3.
- Martin, L.A. and N.L. Horriat. The effects of birth order and birth interval on the phenotypic expression of autism spectrum disorder. *PLoS One*, 2012. 7(11): p. e51049.
- Salihu, H.M., et al. The impact of birth spacing on subsequent fetoinfant outcomes among community enrollees of a federal healthy start project. *J Community Health*, 2012. 37(1): pp. 137–42.
- Shachar, B.Z. and D.J. Lyell. Interpregnancy interval and obstetrical complications. *Obstet Gynecol Surv*, 2012. 67(9): pp. 584–96.
- Tsui, A.O., R. McDonald-Mosley, and A.E. Burke. Family planning and the burden of unintended pregnancies. *Epidemiol Rev*, 2010. 32(1): pp. 152–74.

11. How can states obtain more information about calculating and reporting the measures?

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