The Maternal and Infant Health Initiative Grant to Support Development and Testing of Medicaid Contraceptive Care Measures

Introduction
Two out of three adult women enrolled in Medicaid are in their reproductive years (ages 19 to 49),¹ and Medicaid finances about 43 percent of all births in the United States.² Some states had substantially higher rates of births paid by Medicaid, with the top 10 states financing between 49 and 62 percent of births through Medicaid. Because Medicaid plays a large role in the nation’s maternal and infant health care, the Center for Medicaid and CHIP Services (CMCS) launched the Maternal and Infant Health Initiative (MIHI) in 2014.³

The initiative was built on recommendations of the Expert Panel on Improving Maternal and Infant Health Outcomes in Medicaid and CHIP, which was convened to explore program, policy, and reimbursement opportunities that could result in better care, improve birth outcomes, and reduce the cost of care for mothers and infants in Medicaid and CHIP.

One of the MIHI goals was to promote access to effective methods of contraception to improve pregnancy timing and spacing and, in turn, to improve the health outcomes for both women and children. However, there were no tested and validated contraceptive care measures available for use in the Medicaid program when the MIHI was launched.

To address this measurement gap, a MIHI grant program was established to co-develop and test a suite of contraceptive care measures with states. This analytic brief discusses the MIHI grant program, describes the contraceptive care measures developed as part of this effort, summarizes data reported by the MIHI grantees, highlights uses of the data, and identifies lessons learned.

Overview of the MIHI Grant Program
The MIHI grant program involved close collaboration at both the federal and state levels. At the federal level, CMCS worked in close partnership with the Office of Population Affairs (OPA) and the Centers for Disease Control and Prevention to develop two measures of contraceptive care in Medicaid and CHIP.

Additionally, CMCS established a grant opportunity for states to test and report measures of contraceptive care access, using these two newly-developed measures. In September 2015, 12 states and 1 territory were awarded four-year grants (Exhibit 1). At the state level, partners included state departments of public health and Medicaid agencies, managed care organizations, local providers, and other stakeholders.

Exhibit 1. Maternal and Infant Health Initiative Grantees

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¹ https://www.kff.org/womens-health-policy/fact-sheet/medicaids-role-for-women/.

This brief is a product of the Medicaid/CHIP Health Care Quality Measures Technical Assistance and Analytic Support Program, sponsored by the Centers for Medicare & Medicaid Services. The program team is led by Mathematica, in collaboration with the National Committee for Quality Assurance, Center for Health Care Strategies, AcademyHealth, and Harbage Consulting.
CMCS also established a collaborative learning opportunity to provide technical assistance to grantees and enable them to share lessons learned in calculating the measures and using them to support quality improvement efforts. The lessons learned by states in calculating the measures led to the refinement of the measure specifications by the OPA, and ultimately to endorsement of the measures by the National Quality Forum.

Description of the Contraceptive Care Measures

The MIHI grant supported state calculation of two contraceptive care measures developed by the OPA and customized for use in the Medicaid program (Exhibit 2):

1. Contraceptive Care – All Women (CCW)
2. Contraceptive Care – Postpartum Women (CCP)

These measures assess the percentage of women ages 15–44 provided a most or moderately effective method of contraception. Most effective methods include long-acting reversible contraceptive (LARC) methods such as contraceptive implants and intrauterine devices or systems (IUD or IUS) as well as irreversible surgical contraception. Moderately effective methods include injectables, oral pills, patches, rings, or diaphragms.

The measures differ in terms of when contraceptive use is measured. The CCW measure assesses the provision of most and moderately effective methods (and LARC) to all women ages 15–44 who are at risk of unintended pregnancy, by contrast, the CCP measure assesses the provision of most or moderately effective methods of contraception during the postpartum period (up to 60 days after delivery).

Both measures are calculated using claims data. Claims data have several advantages: they are relatively accessible and easy to collect and compile, they document the actual services provided, and they can be used to identify pregnant women. For each of the measures, LARC rates are reported separately. LARCs are the most effective form of reversible contraception; they last for an extended period of time and do not require user action once inserted.

However, claims data also have key limitations when used to assess contraceptive care utilization for all women (CCW). For example, claims do not capture several aspects of women’s risk of unintended pregnancy like infertility for non-contraceptive reasons and contextual information like pregnancy intention or sexual activity that may make contraceptive use unnecessary or inappropriate. As such, OPA developed a methodology to partially address this limitation leveraging data from the National Survey of Family Growth (NSFG) to help states interpret the CCW measure results4 by adjusting the rates to account for women’s risk of unintended pregnancy.

Healthy People and the World Health Organization recommend interval birth spacing of at least 18 months between births. As a result, all women who have not received contraceptive services in the postpartum period can be considered at risk for unintended pregnancy.

### Exhibit 2. Overview of the Contraceptive Care Measures in the Medicaid and CHIP Core Sets

<table>
<thead>
<tr>
<th>Contraceptive Care – All Women Ages 15–44 (CCW)</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Among women ages 15 to 44 at risk of unintended pregnancy (defined as those that have ever had sex, are not pregnant or seeking pregnancy, and are fecund), the percentage that was provided:</td>
<td></td>
</tr>
<tr>
<td>1. A most effective or moderately effective method of contraception.</td>
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<table>
<thead>
<tr>
<th>Contraceptive Care – Postpartum Women Ages 15–44 (CCP)</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Among women ages 15 to 44 who had a live birth, the percentage that was provided within 3 and 60 days of delivery:</td>
<td></td>
</tr>
<tr>
<td>1. A most effective or moderately effective method of contraception.</td>
<td></td>
</tr>
</tbody>
</table>

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4 For more information on using the NSFG to interpret the CCW rates, please see the interpretation guide available at https://www.hhs.gov/opa/sites/default/files/interpreting-rates-for-contraceptive-care-measures.pdf.
Evolution of the Contraceptive Care Measures

An innovative feature of the MIHI grant program was the agile approach CMCS took towards partnering with 12 states and 1 territory to iteratively test and refine both measures. Initially, the CCW and CCP measures were considered developmental, in recognition of the refinements that would be recommended as states gained experience with calculating, reporting, and using the measures. Grantees provided feedback on the measures to CMCS and OPA, the measure steward, through a technical assistance (TA) mailbox and periodic collaborative learning webinars. In response to grantee feedback, the measures were refined. Updates made to the CCW and CCP measures included:

- Modified numerator language for both the CCW and CCP measures to clarify the steps for determining who is included in and excluded from the numerator.
- Modified the denominator language for the CCW measure to clarify who is included in the denominator.
- Updated the Guidance for Reporting for the CCW measure to clarify there is no lookback period.
- Removed the step of adjusting for LARC removals and re-insertions in determining the CCW denominator.
- Revised the contraception codes annually to reflect new codes used by states to pay for contraceptive care.

These refinements were incorporated not only in CMCS’s technical specifications for the measures, but also in the Statistical Analysis System (SAS) code developed by the measure steward to enable states to calculate the measures using consistent methods.

Endorsement by the National Quality Forum (NQF) was another key development in the history of the Contraceptive Care measures. The NQF endorsed the CCP measure on October 25, 2016 (#2902) and the CCW measure on January 28, 2018 (#2903 and #2904)\(^5\).

The CCW and CCP measures were also added to the Adult and Child Core Sets of Quality Measures in Medicaid and CHIP. On December 5, 2016, CMCS issued an Informational Bulletin announcing the inclusion of the CCP measure in the 2017 Adult and Child Core Sets.\(^6\) In another CMCS Informational Bulletin on November 14, 2017, CMCS announced the addition of the CCW measure to the 2018 Adult and Child Core Sets.\(^7\) The measures are reported for women ages 15–20 in the Child Core Set and for women ages 21–44 in the Adult Core Set. Exhibit 3 includes a timeline of these key events.

Exhibit 3. Timeline of key events in the MIHI grant program

<table>
<thead>
<tr>
<th>MIHI grant award date</th>
<th>NQF endorses the CCP measure (#2902)</th>
<th>MIHI grantees submit second round of data</th>
<th>NQF endorses the CCW measure (#2903 and #2904)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>FEB 28</td>
<td>MIHI grantees submit first round of data</td>
<td>2016</td>
</tr>
</tbody>
</table>

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\(^5\) NQF endorsed the CCW rates for most and moderately effective methods (#2903) and LARC (#2904) as two separate measures.


MIHI Grantee Reporting on the Contraceptive Care Measures

As part of the MIHI grant, the participating states and territory were required to collect and report data for the CCW measure to CMCS. Reporting of the CCP measure was optional but encouraged.

Contraceptive Care – All Women

Exhibit 4 shows performance on the CCW measure for FFY 2016 and FFY 2017. Among the 13 MIHI grantees, the median rate for access to a most or moderately effective contraceptive among women ages 15–20 was 30.8 percent for FFY 2017 and the median rate among women ages 21–44 was 25.6 percent. The median rates changed less than 1 percentage point between FFY 2016 and FFY 2017.

This measure is intended to enable states to look at their rates of provision of contraceptive methods and where there may be room for improvement. The measure can be stratified by region to assess geographic access or by population characteristics to assess disparities.

As noted earlier, the CCW measure does not capture several aspects of women’s risk of unintended pregnancy: sexual experience, pregnancy intention, sterilization or LARC insertion in a year preceding the measurement year, and infertility for non-contraceptive reasons. As a result, all women in the denominator may not be at risk of unintended pregnancy. This limitation can be partially addressed by using data from the NSFG or other national or state-level data to adjust the rates by estimating the percentage of women not at risk for unintended pregnancy. This method is demonstrated in Exhibit 4, showing the room for improvement, taking into account women who are not in need of contraceptive services. For more information on the methodology, please see the examples developed by the OPA.9

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9 Data for FFY 2015 are not shown because it was the first year of reporting. CMCS used the data as an opportunity to learn about the challenges states faced in uniformly reporting the measures and to improve guidance for reporting.

Contraceptive Care – Postpartum Women

For the CCP measure, the number of states reporting the measure increased from 7 grantees for FFY 2015 to 10 grantees for FFY 2016 and 2017. Eight of the 13 grantees reported the measure for both FFY 2016 and FFY 2017. Two grantees that reported for FFY 2016 did not report for FFY 2017, and two grantees reported the measure for the first time for FFY 2017.10

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10 The two grantees that reported the CCP measure for FFY 2016 but not for FFY 2017 indicated system changes and staffing constraints as their reasons for not reporting the measure for FFY 2017.
Exhibit 5 shows performance on the CCP measure for FFY 2017. Among the 10 grantees reporting the measure for FFY 2017, the median rate for a most or moderately effective contraceptive within 60 days postpartum was 40.3 percent among women ages 15–20 and 36.5 percent among women ages 21–44. The median LARC rate within 60 days postpartum was 13.4 percent among women ages 15–20 and 10.3 percent among women ages 21–44.11

**Exhibit 5. Median Rates of Contraceptive Care Among Postpartum Women Ages 15–44 at 60 days postpartum, FFY 2017 (n = 10 grantees)**

<table>
<thead>
<tr>
<th></th>
<th>Ages 15–20</th>
<th>Ages 21–44</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most or moderately effective</td>
<td>40.3</td>
<td>36.5</td>
</tr>
<tr>
<td>LARC</td>
<td>13.4</td>
<td>10.3</td>
</tr>
</tbody>
</table>

**States’ Use of Contraceptive Care Data**

Grantee states have used their contraceptive care measure data to track contraceptive use, and to identify opportunities to increase access to most and moderately effective methods, including LARCs. For example, Iowa created a dashboard that used its CCW and CCP data to examine contraceptive use throughout the state, and overlaid that data with hospital-level LARC provision data. The dashboard allowed state officials to look at geographic variation in provision of LARCs among hospitals, and they plan to use this data to better understand where barriers to uptake exist among hospitals and physicians, and where additional training may be needed. Missouri is using its contraceptive care measure data to assess whether clarification in the state’s policy around LARC billing in hospital settings has led to increased billing for LARCs. California has also used its contraceptive care measure data to inform state-level policy and payment change (see box).

**California’s use of contraceptive care measure data to address barriers to LARC provision**

- California’s contraceptive care measure data indicated barriers to LARC provision.
- The state found a barrier was that providers had to wait for reimbursement for LARC products.
- To increase provider motivation to provide LARCs, the state reported it was exploring the use of centralized pharmacies to order and provide the LARC products so providers do not have to wait for reimbursement.

**Lessons Learned from the MIHI Grant Program**

Experiences with the MIHI grant program, including the availability of technical assistance through the collaborative learning opportunity, offer several lessons for quality measurement in Medicaid and CHIP.

**Refinement of a new quality measure.** When new quality measures are introduced to the Medicaid and CHIP Core Sets, states often request substantial technical assistance to implement the technical specifications and raise questions that require consultation with measure developers. In the case of the two Contraceptive Care measures, the MIHI grantees were involved during the developmental stage of the measures and helped OPA refine the technical specifications through a “co-design process.” This model may be useful for other developmental measures that could benefit from collaborative learning among Medicaid and CHIP agencies and the measure developers.

**Codes for identifying contraceptive care.** One particular area that benefited from grantee feedback was the identification of codes for the numerator. The technical specifications include a list of procedure, diagnostic, and drug codes for identifying contraceptive care in claims data. Several grantees, however, noted that they use additional codes or state-specific codes to pay for contraceptive care. In response, the measure steward expanded the list of codes in subsequent releases.

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11 Because of the small number of states reporting for both years, we do not show trends in the rates from FFY 2016 to FFY 2017.
of the technical specifications. The interactive process between grantees and the measure steward enhanced the completeness of the codes used to calculate the numerator.

**Unique technical assistance needs of U.S. territories.**

The technical assistance provided to U.S. territories to support quality measurement and improvement efforts may differ due to the unique features of their delivery system and data system. For example, the data system in the Commonwealth of the Northern Mariana Islands (CNMI) influenced the Commonwealth’s ability to collect and report the measures accurately as part of the MIHI grant program. Unlike other grantees who used claims data to calculate these measures, the CNMI used the Resource and Patient Management System (RPMS) which includes data on services provided in the hospital but not through public health clinics. As a result, the RPMS included all LARC users because LARCs were inserted only in the hospital, but only a subset of the most and moderately effective method users who received care in public health clinics. LARCs inserted in private office settings were not included. As a result, the rates reported by the CNMI were substantially lower than for other grantees. These challenges reflect the unique features of the CNMI’s delivery system and data system.

**Addressing barriers to payment and program policy.**

A number of policy and program opportunities are available to states to address factors that may influence access to contraceptive methods. States have considerable flexibility under Section 1115 Demonstrations as well as State Plans and State Plan Amendments to expand access to family planning. States also have significant flexibility within the Medicaid program regarding the provision of contraception, and can identify and implement state-specific policies aimed at increasing access to contraception, such as updating state-level payment policies to unbundle the LARC payment from the payment for delivery and to reimburse providers separately for immediate postpartum insertion of LARC. A CMCS Informational Bulletin on State Medicaid Payment Approaches to Improve Access to Long-Acting Reversible Contraception is available at https://www.medicaid.gov/federal-policy-guidance/downloads/cib040816.pdf.

States also have opportunities supported by other federal programs outside of CMCS to explore options for increasing access to contraception, such as the Title X Family Planning Program.

**Conclusion**

In summary, the MIHI grant program achieved its goal of developing and refining measures of contraceptive care access, and helping grantees to build capacity to report the measures and use them for quality improvement. Grantee experiences informed measure steward updates to make the measures more feasible, useful, and understandable to states. In addition, state feedback contributed directly to annual updates to the technical specifications, including enhanced guidance for reporting, clarifications to the step-by-step instructions, and refinements of the SAS code. Moreover, the collaborative learning opportunity enabled states to share with each other and with CMCS how the measures could be used to enhance data analytics related to contraceptive care access, address access barriers and challenges, and improve payment methodologies.

The MIHI grant program has represented a sustainable investment in the effective and efficient development of two contraceptive care measures for Medicaid and CHIP quality measurement and improvement efforts. In a relatively short period of time, both measures have secured NQF endorsement, have been included in the 2018 Adult and Child Core Sets, and have secured more than 25 states voluntarily reporting them beginning in 2019. In addition, OPA is working on the development of an Electronic Clinical Quality Measure (eCQM) for both measures. CMCS will continue to provide technical assistance to all states to spread the lessons learned from the MIHI grant program.


Several resources are available to help states collect, report, and use the contraceptive care measures in quality measurement and improvement initiatives:


For technical assistance related to the Contraceptive Care measures, please contact MACQualityTA@cms.hhs.gov.