

Maternal and Infant Health Initiative (MIHI) Value-Based Payment Technical Support

Program Overview

The Centers for Medicare and Medicaid Services' (CMS) Medicaid Innovation Accelerator Program (IAP) is launching a new technical support opportunity for state Medicaid/Children's Health Insurance Program (CHIP) agencies to select, design, and test Value-Based Payment approaches to sustain care delivery models that demonstrate improvement in maternal and infant health outcomes. Value-Based Payment approaches refer to payment models that range from rewarding for performance in Fee-For-Service (FFS) to capitation and include Alternative Payment Models (APMs) and comprehensive population-based payments. The Medicaid IAP will select four to seven state Medicaid/CHIP agencies to receive targeted technical support for a period of two years.

The IAP opportunity complements CMS's existing [Maternal and Infant Health Initiative](#) (MIHI), which works with states to explore program and policy opportunities to improve outcomes and reduce the cost of care for women and infants in Medicaid and CHIP. The MIHI has worked for the past few years to help states improve measurement, to engage providers and beneficiaries, and to identify quality improvement opportunities to boost performance on states' maternal and infant health goals and on the [Core Set of Maternity Measures for Medicaid and CHIP](#). As evidence emerges about the impact of new models of care delivery on health outcomes, IAP seeks to support states interested in identifying payment structures that can support the sustainability and spread of effective care delivery models. In addition, IAP sees participation in this technical support opportunity as complementary to state Medicaid/CHIP agencies participating in the CMS Health Care Payment Learning and Action Network Maternity Multi-Stakeholder Action Collaborative and encourages states to participate in both activities.

States interested in participating in the Medicaid IAP opportunity are required to partner with a provider group(s), organization, and/or collaborative in their state to select, design, and test Value-Based Payment approaches that sustain care delivery models that the partner already is implementing. The care delivery models are expected to have demonstrated success in improving maternal and infant health. When selecting care delivery models, states should, for example, look at evidence of the following:

- Increased access to prenatal, postpartum, and interconception care
- Improved perinatal health outcomes
- Improved prenatal, postpartum and interconception care utilization
- Improved patient experience/satisfaction

Evidence of improvement may be indicated by performance on measures in the [Core Set of Maternity Measures for Medicaid and CHIP](#) or other indicators of the quality of health care for women and infants. To assist states in the search process, IAP conducted an environmental scan to capture examples of care delivery models (see Table 1, p. 6). The examples listed in the table are a starting point for states and should not be considered an exhaustive list of existing care delivery models.

In addition to tying Value-Based Payment to care delivery models, states may choose to partner with the same provider group(s), organization, and/or collaborative in their state to select, design, and test a Value-Based Payment approach related to improving maternal and infant health that **is not** associated with a particular care

delivery model. Examples of these types of Value-Based Payment approaches are included in the “Overview of Technical Support” section and include evidence-based reimbursement strategies that provide incentives for higher-value practice and outcomes (e.g. blended payment rates to incentivize vaginal over elective cesarean delivery, non-payment policies, enhanced reimbursement for inpatient postpartum contraception, and billable services for new providers).

Selected states will benefit from the following:

- Individualized technical support to select, design, and test Value-Based Payment approaches in partnership with provider groups, organizations, and/or collaboratives.
- A better understanding of how financing mechanisms can be used to shift maternal and infant health care toward better patient experience, increased access to prenatal care, reduced cost of care, and improved utilization of appropriate maternity care services.
- Virtual peer-to-peer support for sharing successes and barriers to implementation.
- Moving more payments to be based on value and quality to meet the state’s payment reform goals.

About the Medicaid Innovation Accelerator Program

The Medicaid Innovation Accelerator Program (IAP) is a collaboration between the Center for Medicaid and CHIP Services (CMCS) and the Center for Medicare and Medicaid Innovation (CMMI) designed to build state capacity and support ongoing innovation in Medicaid by providing targeted support to states’ Medicaid delivery system reform efforts. IAP provides support in four functional areas that IAP views as the building blocks to delivery system reform: (1) data analytics, (2) quality measurement, (3) value-based payment and financial simulations, and (4) performance improvement. With the Maternal and Infant Health Initiative Value-Based Payment opportunity, IAP seeks to offer targeted technical support to state Medicaid/CHIP programs within the value-based payment and financial simulations functional area.

Overview of Technical Support

Individualized technical support is available to states that wish to select, design, and test Value-Based Payment approaches that promote improved maternal and infant health outcomes for their Medicaid/CHIP beneficiaries. The goal is to assist the state in sustaining the selected care delivery models and in implementing Value-Based Payment approaches that can eventually be spread throughout the state. The opportunity is open to states at all levels of expertise in Value-Based Payment approaches.

IAP will provide states with technical support related to the strategic selection, design, and testing of Value-Based Payment approaches and related activities. Examples of topics for technical support include, but are not limited to the following:

- Shared Savings and Shared Risk Models
- Bundled Payments and Episodes of Care
- Pay-for-Performance Approaches
- Population-Based Payment Approaches
- Financial Incentives to Support Perinatal Regionalization (e.g. system of perinatal care within a geographic region to ensure risk-appropriate care)
- Use of Contractual Vehicles to Advance Implementation of Value-Based Payment Approaches
- Monitoring of Value-Based Payment Outcomes
- Factors for Consideration in Implementing a Value-Based Payment Approaches within Medicaid/CHIP Managed Care, Including Appropriate Levels of Risk, and Contracting Approaches

- Alignment with the U.S. Department of Health and Human Services (HHS) Value-Based Payment goals¹ and HHS Health Care Payment Learning and Action Network's APM framework²

Components of Technical Support for States

Technical support will be offered to selected states for a period of up to two years. The individualized support will be based upon each state's specific needs as identified through an Expression of Interest form, a pre-selection office hour conference call with IAP, and an initial goal setting process that each selected state will complete. The technical support team for each state will include Medicaid/CHIP policy experts, subject matter experts, data management experts, and financial simulation experts. In addition to individualized support, each state will have access to group technical support and peer-to-peer learning throughout the two years.

The content and method of technical support for selected states will be refined on the basis of each state's specific needs. The technical support process will involve the three steps outlined below with financial simulation support available throughout the process. The list of examples under each step is not exhaustive, it is intended to encourage states to consider broadly the types of support from which they could benefit.

1. Selecting Value-Based Payment approaches by exploring in detail states' maternal and infant health payment goals, objectives, and technical support needs, including:
 - a. Assessing maternal and infant health Value-Based Payment options that match the state's needs.
 - b. Identifying whether other payers' (e.g., commercial) maternal and infant health Value-Based Payment approaches exist to assist with alignment to Medicaid/CHIP.
 - c. Aligning with the HHS Value-Based Payment goals and HHS Health Care Payment Learning and Action Network's APM framework.
2. Designing maternal and infant health Value-Based Payment approaches by, as needed:
 - a. Identifying the appropriate Medicaid/CHIP authority for implementing maternal and infant health Value-Based Payment approaches in FFS and Medicaid/CHIP managed care.
 - b. Understanding the cost dimensions of the identified care delivery models.
 - c. Identifying maternal and infant health outcomes of interest, including potential data sources for data collection and relevant [Core Set of Maternity Measures for Medicaid and CHIP](#) that can be used to test and implement the selected approach.
 - d. Aiding in the design or development of a maternal and infant health Value-Based Payment approach, including specific features.
 - e. Assisting with the design of contract language, Requests for Information, incentive/penalty structures, or other state documents pertaining to the selected Value-Based Payment approaches.
 - f. Understanding the health information technology, health information exchange or interoperability infrastructure needed to support the Value-Based Payment approach and whether it is already in place in your state or requires development.
3. Testing the maternal and infant health Value-Based Payment approaches with partner provider group(s), organizations, and/or collaboratives, including:
 - a. Identifying and helping to plan for provider group(s), organization and/or collaborative's needs so that they can participate in the testing of the Value-Based Payment approaches, such as data

¹ Better Care, Smarter Spending, Healthier People: Improving Our Health Care Delivery System, <https://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2015-Fact-sheets-items/2015-01-26.html>.

² HHS Health Care Payment Learning and Action Network's APM Framework White Paper, <https://hcp-lan.org/groups/apm-fpt/apm-framework/>.

collection, tracking, and reporting, decision-support tools, electronic health records, and performance improvement tools.

- b. Assisting the state to design and implement appropriate monitoring and accountability mechanisms that improve maternal and infant health outcomes data quality.
 - c. Testing the approaches through multiple iterations, as needed.
 - d. Connecting the state to other relevant stakeholders with the goal of promoting and spreading the maternal and infant health Value-Based Payment approaches in Medicaid/CHIP in the state.
4. During the design and testing phases, the IAP technical support team will be available to provide assistance in developing financial simulations to, for example:
- a. Develop a methodology for beneficiary attribution, if needed.
 - b. Characterize the type and strength of incentives.
 - c. Identify how much risk providers can undertake.
 - d. Simulate targets and overall performance.
 - e. Estimate potential impacts on per capita costs and state spending.

CMCS, IAP, and CMMI will also collaborate to ensure activities undertaken in this technical support opportunity align with and build upon lessons learned from other Value-Based Payment and quality improvement activities, such as the Health Care Payment Learning Action and Network Maternity Multi-Stakeholder Action Collaborative, State Innovation Models, and the MIHI Action Learning Series.

State Selection Criteria

The Medicaid IAP will consider the following factors when selecting states to support:

1. Level of state commitment to advancing maternal and infant health Value-Based Payment as demonstrated by:
 - a. Support of the state Medicaid/CHIP Director.
 - b. Assurance from the state's Medicaid agency leadership that the team has or will have sufficient staff time and resources for this effort.
 - c. Identification of a team lead. The team lead will oversee and be accountable for the day-to-day work in connection with this technical support.
2. Ability to partner with a provider group(s), organization, and/or collaborative in their state that is:
 - a. Prior implementation of care delivery model(s) that has data showing success in improving maternal and infant health outcomes. (See Table, p. 6)
 - b. A letter of commitment from the provider group(s), organization, and/or collaborative stating a willingness to collaborate with the state on this project, which must be included in the Expression of Interest.
 - c. For states that also choose to test Value-Based Payment approaches not associated with a care delivery model, IAP will review the Expression of Interest to identify a stated commitment to this particular activity.
3. State readiness, as demonstrated by:
 - a. Ability to clearly articulate technical support needs.
 - b. Capacity to begin work shortly after selection for technical support.
 - c. Ability to implement Value-Based Payment approaches with existing Medicaid/CHIP authorities or, alternatively, to amend an existing Medicaid/CHIP authority or to seek a relevant new

Medicaid/CHIP authority (e.g., waiver or State Plan Amendment) within the timeframe of the IAP project.

- d. Existing relationships with stakeholder organizations (e.g., perinatal quality collaboratives, state working group, etc.) if not directly partnering with them.

During the technical support timeframe, participating states will be expected to engage in regularly scheduled meetings with the IAP and to contribute to agreed-upon deliverables.

How Do Interested States Apply for Technical Support?

To learn more about this technical support opportunity, interested states can attend an informational webinar on March 22, 2017 from 3:00-4:00 PM ET. States should submit the completed Expression of Interest form to MedicaidIAP@cms.hhs.gov by **April 27, 2017, midnight ET** with the subject line “Maternal and Infant Health VBP.” For questions about this Medicaid IAP opportunity, contact Lekisha.Daniel-Robinson@cms.hhs.gov with the subject line “Maternal and Infant Health VBP.” States selected to receive technical support through the MIHI Value-Based Payment technical support opportunity will be notified in June 2017.

IAP will host national webinars as well as make available tools and lessons learned to all states interested in learning more about Medicaid/CHIP maternal and infant health Value-Based Payment approaches.

Care Delivery Model Examples

State Medicaid/CHIP programs interested in applying are required to partner with a provider group(s), organization, and/or collaborative in their state to select, design, and test Value-Based Payment approaches that sustain the care delivery models that the partner already is implementing. The selected care delivery models are expected to have demonstrated success in improving maternal and infant health. To assist states in the search process, IAP conducted an environmental scan to capture examples of care delivery models. The examples listed in the table below are a starting point for states and should not be considered an exhaustive list of existing care delivery models.

Regardless of whether the model(s) that a state proposes for this opportunity is listed in this table, the state will be required to submit, along with its Expression of Interest form (1) information from the provider group(s), organization, and/or collaborative partners demonstrating that the model(s) has improved maternal and infant health outcomes and (2) a Letter of Commitment from the provider group(s), organization, and/or collaborative partners indicating its willingness to partner with the state.

Table 1. Examples of Care Delivery Models for Maternal and Infant Health

| Care Delivery Model | Goal(s) | Description | Setting(s) | Description of Evidence |
|---------------------|--|---|---------------|--|
| Birth Center Model | <ul style="list-style-type: none"> • Increase access to prenatal care • Improve perinatal health outcomes • Improve patient experience and satisfaction | <ul style="list-style-type: none"> • Provides family-centered, home-like care to healthy pregnant women that reduces unnecessary medical intervention and increases patient comfort and satisfaction | Birth centers | <ul style="list-style-type: none"> • Women receiving care at birth centers are less likely to experience medical interventions and more likely than their hospital birthing counterparts to have a spontaneous vaginal birth, experience increased maternal satisfaction, and breastfeed 1–2 months postpartum than their hospital birthing counterparts.^a • Birth center care is associated with lower rates of medical interventions and procedures, including use of oxytocin, episiotomy, assisted vaginal birth, and use of pain medication, compared with hospital care.^b • Overall, the literature supports birth centers as an evidence-based model that is safe and results in positive birth outcomes for low-risk women.^b |

| Care Delivery Model | Goal(s) | Description | Setting(s) | Description of Evidence |
|--|--|--|-------------------|---|
| Community Care Collaborative Model | <ul style="list-style-type: none"> • Increase access to prenatal care • Improve perinatal health outcomes • Improve patient experience and satisfaction | <ul style="list-style-type: none"> • An approach for ensuring that pregnant women who are determined to be “at risk” receive all necessary health care and social supports during and after their pregnancy | Rural communities | <ul style="list-style-type: none"> • This model’s effectiveness has not been systematically evaluated. However, longitudinal county-level data from the time period after the model was implemented were compared with data from the time period before the model was implemented, as well as with data from the same periods from a county where the model was not implemented. The results indicated that the model is associated with the following positive outcomes: increased diagnosis (recognition) of neonatal abstinence syndrome in infants, increased receipt of adequate prenatal care, and increased receipt of any prenatal care.^{c,d} |
| Community Health Access Project Pathways Model | <ul style="list-style-type: none"> • Increase access to prenatal care • Improve perinatal health outcomes • Improve patient experience and satisfaction | <ul style="list-style-type: none"> • A model that identifies women at risk for adverse birth outcomes, such as low birth weight and preterm deliveries, and links them to community health workers who work in a team with nurses, social workers, and physicians to provide home visits that include coordinated perinatal health care services and social services as needed by each client | Community based | <ul style="list-style-type: none"> • Evidence in 2015 indicates that pregnant participants had a significantly lower probability (60 percent reduction) of delivering a low-birth-weight infant, which reflected a short-run savings of \$3.36 and a long-term savings of \$5.59 for each dollar invested.^e • In Toledo, Ohio, approximately 80 percent of participants had a postpartum appointment within 2 months after birth, more than 10 percentage points higher than the general rate among nonparticipating women on Medicaid who met this target quality measure.^f |

| Care Delivery Model | Goal(s) | Description | Setting(s) | Description of Evidence |
|---------------------|---|--|---|--|
| Doula Model | <ul style="list-style-type: none"> • Increase access to prenatal care • Improve patient experience and satisfaction | <ul style="list-style-type: none"> • A standalone model that has been incorporated into home visiting and birth center models • Pregnant women receive nonmedical physical and emotional support from a doula, an individual who often has specific training and certification | Hospitals, home visiting approach (community based) | <ul style="list-style-type: none"> • The hospital-based Doula Model was significantly associated with three outcomes: increased maternal satisfaction with the birth experience, lower rates of cesarean section, and decreased analgesic use during birth.^g • Use of community-based doulas were significantly associated with five outcomes: fewer preterm deliveries, lower rates of cesarean section, decreased analgesic use during birth, improved social support, and increased rates of breastfeeding.^{h,i,j} |
| Group Prenatal Care | <ul style="list-style-type: none"> • Increase access to prenatal care • Improve perinatal health outcomes | <ul style="list-style-type: none"> • A model that is beneficial for all pregnant women but targets low-income, high-risk pregnancies. It incorporates the three components of prenatal care—risk assessment, education, and support—into one entity. | Community-based organizations, hospitals | <ul style="list-style-type: none"> • Some studies found that women in the CenteringPregnancy® program of group care had longer weeks of gestation and lower gestational weight gain, experienced lower rates of fetal demise, and delivered infants who had higher birth weights and lower odds of very low birth weights.^{k,l} • The most substantial finding in the grey literature was from a multisite evaluation that showed favorable results associated with participating in CenteringPregnancy—compared with women receiving individual prenatal care, those in CenteringPregnancy had significantly better outcomes in areas such as cesarean sections, postpartum follow-up visits, breastfeeding, birth weight, and Apgar scores, as well as reduced rates of fetal demise.^m |

| Care Delivery Model | Goal(s) | Description | Setting(s) | Description of Evidence |
|----------------------|--|---|--|--|
| Home Visiting Model | <ul style="list-style-type: none"> • Increase access to prenatal care • Improve perinatal health outcomes • Improve patient experience and satisfaction | <ul style="list-style-type: none"> • A model that provides services and information or guidance in a way that overcomes traditional barriers to effective and timely care | Home visiting approach (community based) | <ul style="list-style-type: none"> • According to a review article in the journal <i>Pediatrics</i> on the home visiting programs reviewed by HomVEE that met the DHHS criteria for an evidence-based early childhood home visiting model, Healthy Families America had a favorable effect on reducing the risk of low birth weight births.ⁿ • The Maternal and Infant Health Program of Michigan Model results indicated reductions in the following outcomes rates: infant mortality, low-birth-weight and very-low-birth-weight births, and preterm births. The results also indicated increases in the following rates: pregnant women receiving any prenatal care, pregnant women receiving adequate prenatal care, and infants receiving well-child visits in the first year of life.^o |
| Interconception Care | <ul style="list-style-type: none"> • Improve perinatal health outcomes • Improve patient experience and satisfaction | <ul style="list-style-type: none"> • A model that provides preventive care, family planning services, and screenings for and education on chronic diseases and other health needs before their coverage lapses, or extends Medicaid coverage to the interconception period | Hospitals, community-based organizations | <ul style="list-style-type: none"> • The Georgia Planning for Healthy Babies program has been shown to reduce unintended pregnancies, which also have reduced Medicaid costs related to unintended pregnancies.^{p,q} • In a literature review of the federal Healthy Start program, interconception care was shown to improve identification of untreated or undiagnosed diseases (e.g., depression, diabetes) and behavioral risk factors (e.g., domestic violence, illicit drug use) for future adverse perinatal health outcomes (e.g., preterm birth). It also was shown to improve awareness of physical and behavioral risk factors for such outcomes and self-management. Additionally, it has been shown to increase referrals to needed care among new mothers and their infants, especially those at high risk.^r • According to a Cochrane Review from 2002, counseling (during pregnancy and in the immediate postnatal period) for family planning, methods of birth control, and implantation of long-acting reversible contraceptives has been identified as an effective intervention for preventing unwanted pregnancies, including rapid repeat pregnancy, defined as pregnancy within 12–24 months of a previous birth or abortion.^{s,t} |

| Care Delivery Model | Goal(s) | Description | Setting(s) | Description of Evidence |
|---|--|---|-------------------------------|--|
| Maternity Care Coordination | <ul style="list-style-type: none"> • Increase access to prenatal care • Improve perinatal health outcomes • Improve patient experience and satisfaction | <ul style="list-style-type: none"> • Multifaceted model that varies across providers and settings and connects pregnant women and new mothers with health education, prenatal care, referrals to community resources, and counseling | Community-based organizations | <ul style="list-style-type: none"> • Results indicated that care coordination positively affects newborn birth weight and gestational age and reduces the rate of unnecessary cesarean sections.^u • Many studies have shown significant improvement in reducing low-birth-weight outcomes. For example, multiple studies indicated that a lower proportion of participants in the intervention delivered newborn infants who weighed less than 2,500 grams compared with controls.^u |
| Pregnancy Medical Home/Maternity Medical Home | <ul style="list-style-type: none"> • Increase access to prenatal care • Improve perinatal health outcomes • Improve patient experience and satisfaction | <ul style="list-style-type: none"> • A value-added, quality metrics-driven, clinical program for delivering superior care in an environment that is transparent between providers and that incorporates the sharing and joint consideration of clinical data | Maternity medical home | <ul style="list-style-type: none"> • Under the North Carolina Pregnancy Medical Home program, preliminary results indicate downward trends in the rates of low birth weight and primary cesarean delivery among pregnant women receiving Medicaid.^v • The Year 2 Annual Report for Strong Start for Mothers and Newborns Evaluation shows trends that include average rates of preterm and low-birth-weight births that are below local averages, as well as reduced miscarriage rates, NICU admissions, and unnecessary emergency department visits.^w |

| Care Delivery Model | Goal(s) | Description | Setting(s) | Description of Evidence |
|-----------------------------------|--|---|--|---|
| Prenatal Care Coordination (PNCC) | <ul style="list-style-type: none"> • Increase access to prenatal care • Improve perinatal health outcomes • Improve patient experience and satisfaction | <ul style="list-style-type: none"> • A pregnancy risk assessment • A care coordination plan agreed upon by the provider and patient • Ongoing care, care coordination, and contact from various care providers (physicians, nurses, group facilitators) in various locations (home, clinic, and/or group) • Educational services such as nutritional counseling and breastfeeding | Hospitals, community-based organizations | <ul style="list-style-type: none"> • PNCC has been associated with significantly reduced risks of low-birth-weight births, premature deliveries, and fewer NICU transfers in some states (e.g., Colorado, Minnesota, Wisconsin).^x • Eight years after implementation in several states, PNCC continues to provide protective effects for women enrolled in Medicaid who were at high risk of having poor birth outcomes and for their infants.^y |

Abbreviations: DHHS, Department of Health and Human Services; HomVEE, Home Visiting Evidence of Effectiveness; NICU, neonatal intensive care unit.

^a Hodnett ED, Downe S, Walsh D. Alternative versus conventional institutional settings for birth. The Cochrane Database Systematic Review. 2012;15(8):CD000012.

^b Alliman J, Phillippi JC. Maternal outcomes in birth centers: an integrative review of the literature. Journal of Midwifery and Womens Health. 2016;61(1):21-51.

^c Spence R, Buterbaugh C. Maine’s Project LAUNCH Final Evaluation Report. October 2008 to September 2013. The School for Community and Population Health, University of New England, Westbrook College of Health Professions. February 2014.

^d Gwaltney MK, Goodson B, Pfeifferle, Walker DK. Implementation of Project LAUNCH. Cross-Site Evaluation Findings, Volume I. OPRE Report #2014-87. December 2014. Washington, DC: Office of Planning, Research and Evaluation, the Administration for Children and Families, U.S. Department of Health and Human Services. https://www.acf.hhs.gov/sites/default/files/opre/launch_implementation_report_12_29_14_final_508.pdf

^e Redding S, Conrey E, Porter K, et al. Pathways community care coordination in low birth weight prevention. Journal of Maternal and Child Health. 2015;19(3):643-50.

^f Ohio Governor’s Office of Health Transformation. Kasich Administration Expanding Program to Improve Maternal and Child Health, Reduce Low-Birth-Weight Babies. Press release. February 2, 2012. <http://www.healthtransformation.ohio.gov/LinkClick.aspx?fileticket=WYmi2d7Jh3E%3D&tabid=136>

^g Mottl-Santiago J, Walker C, Ewan J, et al. A hospital-based doula program and childbirth outcomes in an urban, multicultural setting. Journal of Maternal and Child Health. 2008;12(3):372-7.

^h Hodnett ED, Gates S, Hofmeyr GJ, et al. Continuous support for women during childbirth. The Cochrane Database Systematic Review. 2013;7:CD003766.

ⁱ Mottl-Santiago J, Walker C, Ewan J, et al. A hospital-based doula program and childbirth outcomes in an urban, multicultural setting. Journal of Maternal and Child Health. 2008;12(3):372-7.

- ^j Breedlove, G. Perceptions of social support from pregnant and parenting teens using community-based doulas. *Journal of Perinatal Education*. 2005;14(3):15-22.
- ^k Tanner-Smith EE, Steinka-Fry KT, Gesell SB. Comparative effectiveness of group and individual prenatal care on gestational weight gain. *Maternal and Child Health Journal*. 2014;18(7):1711-20.
- ^l Tanner-Smith EE, Steinka-Fry KT, Lipsey MW. The effects of Centering Pregnancy group prenatal care on gestational age, birth weight, and fetal demise. *Maternal and Child Health Journal*. 2014;18(4):801-9.
- ^m Tanner-Smith EE, Steinka E, Steinka-Fry KT, et al. A Multi-Site Evaluation of the CenteringPregnancy® Programs in Tennessee: Final Report Presented to the Tennessee Department of Health. Peabody Research Institute. February 2012. <https://my.vanderbilt.edu/emilytannersmith/files/2012/02/Contract19199-GR1030830-Final-Report2.pdf>
- ⁿ Avellar SA, Supplee LH. Effectiveness of home visiting in improving child health and reducing child maltreatment. *Pediatrics*. 2013;132(Suppl 2):S90-9.
- ^o Meghea CI, Roman L, You Z, et al. Michigan Department of Community Health and Michigan State University. A Quasi-Experimental Population-Based Evaluation of the Michigan Maternal Infant Health Program: 2014 Annual Report. March 2015. http://www.michigan.gov/documents/mihp/2014_Annual_Report_-_MIHP_Quasi-Exp_Eval_-_MSU_Meghea_et_al_-_Final_489445_7.pdf
- ^p Badura M, Johnson K., Hensch K, et al. Healthy Start: Lessons learned on interconception care. *Women's Health Issues*. 2008;18(6):S61-6.
- ^q The Georgia Department of Community Health (DCH), Emory University, Rollins School of Public Health (RSPH), Department of Health Policy and Management (HPM). 2016 Annual Report. Center of Medicare & Medicaid Services. 2017. <https://www.medicare.gov/Medicare-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ga/ga-planning-for-healthy-babies-annual-rpt-2015.pdf>
- ^r Salihu HM, August EM, Jeffers DF, et al. Effectiveness of a federal healthy start program in reducing primary and repeat teen pregnancies: our experience over the decade. *Journal of Pediatric and Adolescent Gynecology*. 2011;24(3):153-60.
- ^s Grimes D, Schulz K, van Vliet H, et al. Immediate post-partum insertion of intrauterine devices: a Cochrane review. *Human Reproduction*. 2002;17(3):549-54.
- ^t Birgisson NE, Zhao Q, Secura GM, et al. Preventing unintended pregnancy: the contraceptive CHOICE project in review. *Journal of Womens Health (Larchmont)*. 2015;24(5):349-53.
- ^u Kroll-Desrosiers AR, Crawford SL, Moore Simas TA, et al. Improving pregnancy outcomes through maternity care coordination: a systematic review. *Women's Health Issues*. 2016;26(1):87-99.
- ^v Zero to Three Early Connections Last a Lifetime. North Carolina Pregnancy Medical Homes. September 20, 2016. <https://www.zerotothree.org/resources/866-north-carolina-pregnancy-medical-homes>
- ^w Hill I, Benatar S, Courtot B, et al. The Urban Institute. Strong Start for Mothers and Newborns Evaluation: Year 1 Annual Report. Volume 1 – Cross-Cutting Synthesis of Findings. October 2014. <https://innovation.cms.gov/Files/reports/strongstart-enhancedprenatal-yr1evalrpt.pdf>
- ^x Rishi K. Literature Review: Assessing Wisconsin Public Health Research Network's Maternal and Child Health Priority Research Questions. May 5, 2015. http://www.wphrn.org/uploads/1/2/7/8/12783470/rishi_kriti_wphrn_literature_review_2015_capstone_final.pdf
- ^y Ricketts SA, Murray EK, Schwalberg R. Reducing low birthweight by resolving risks: results from Colorado's prenatal plus program. *American Journal of Public Health*. 2005;95(11):1952-7.