



The American College of
Obstetricians and Gynecologists
WOMEN'S HEALTH CARE PHYSICIANS

Chief Executive Officer
Maureen G. Phipps, MD, MPH, FACOG

May 31, 2020

Seema Verma
Administrator
Centers for Medicare and Medicaid Services
Department of Health and Human Services
Mail Stop C4-26-05
7500 Security Boulevard
Baltimore, MD 21244-1850

Re: Request for Information Regarding Maternal and Infant Health Care in Rural Communities

Dear Administrator Verma:

The American College of Obstetricians and Gynecologists (ACOG), representing more than 60,000 physicians and partners dedicated to advancing women's health, appreciates the opportunity to provide comments on the Centers for Medicare & Medicaid Services' (CMS) request for information (RFI) on maternal and infant health care in rural communities. As physicians dedicated to providing quality care to women, ACOG appreciates that CMS seeks feedback from physicians and other stakeholders in its efforts to improve health care access, quality, and outcomes for women before, during, and after pregnancy.

As you know, the United States is the only well-resourced nation with a maternal mortality rate that is on the rise.^{1,2} The stark racial and ethnic disparities in maternal mortality are also significant and concerning: Black women are three to four times and American Indian and Alaska Native women are two to three times more likely to die due to pregnancy-related causes than their non-Hispanic white counterparts.³ Notably, eight percent of the rural population is made up of Black Americans, and of the 5.2 million people who identify as indigenous, 40 percent live in rural areas on and off tribal lands.^{4,5}

Access to obstetric care in rural communities is declining. Between 2004 and 2014, approximately 179 rural counties lost hospital-based obstetric services, resulting in a 9 percent increase from 45 percent to 54 percent of rural counties without hospital-based obstetric services.⁶ Additionally, more than half of rural women live more than a 30-minute drive to the nearest hospital offering perinatal services.⁷ These realities have resulted in increased numbers of out-of-hospital births, births in hospitals without an obstetric unit, and preterm births as well as higher rates of delayed prenatal care, pregnancy-related hospitalizations, low birth weight infants, and infant mortality.⁸ To further confound rural access, the obstetrician-gynecologist professional workforce is experiencing a physician shortage and maldistribution, which disproportionately impacts rural areas. Approximately half of counties in the United States do not have a single obstetrician-gynecologist.⁹

ACOG appreciates the attention CMS, the Health Resources and Services Administration (HRSA), and the Centers for Disease Control & Prevention (CDC) have dedicated to improving health care in rural America, and especially the initiatives to address the nation's maternal mortality and morbidity crisis. For instance, the *Strong Start for Mothers and Newborns Initiative (Strong Start)* tested three models of

prenatal care for pregnant women enrolled in Medicaid and the Children's Health Insurance Program (CHIP): the pregnancy medical home, group prenatal care, and birth centers. While *Strong Start* included some rural health facilities, ACOG cautions that the findings from this initiative may not be applicable for all situations or pregnancies. However, other programs supported by the CDC and HRSA, such as perinatal quality collaboratives and home visiting programs, are effective because of the program management at the community level. It is imperative that pregnancy care options are made available to meet cultural, geographical, and patient-centered care needs that make up the complex maternal population.

To expand access, increase quality, and improve outcomes for maternal and infant health in rural communities, ACOG recommends that CMS should:

- Support and approve initiatives that extend coverage for women with a Medicaid-covered birth beyond the statutorily-mandated 60 days postpartum.
- Maintain expanded telehealth coverage and access and refrain from imposing regulations that restrict the provision of evidence-based telehealth services, including continued payment parity for audio-only telehealth visits.
- Expand Durable Medical Equipment, Prosthetics, Orthotics, and Supplies (DMEPOS) benefits to include blood-pressure monitoring, glucose monitoring, weight monitoring, and pulse oximetry as determined medically necessary and prescribed for pregnant and postpartum women to participate in comprehensive maternal monitoring through telehealth.
- Encourage state Medicaid programs to include telehealth services as covered benefits and reimburse telehealth services at rates that ensure sustainability for physician practices.
- Apply the increased Evaluation and Management (E/M) values (CPT Codes 99212 – 99214) to the global obstetric codes in the 2021 Medicare Physician Fee Schedule.
- Delay implementation of the public reporting provisions that were finalized in the Advancing Interoperability and Patient Access to Health Data final rule.
- Develop a comprehensive strategy to address issues related to prior authorization, including a reduction in the volume across the health care system, elimination of low-value prior authorization, and standardization of prior authorization requirements.
- Withdraw the Medicaid Fiscal Accountability Regulation (CMS-2393-P).
- Encourage HRSA to expand grant programs to develop new Rural Training Tracks through the Rural Residency Planning and Development Program (RRPD) to support the development of new rural residency programs in obstetrics and gynecology.
- Require hospitals to report whether they are meaningfully participating in the Alliance for Innovation on Maternal Health program (AIM), a perinatal quality collaborative, or similar maternal health quality improvement initiative.
- Partner with HRSA to encourage broad use of the Maternal Health Learning and Innovation Center (MHLIC) to support Rural Maternity and Obstetrics Management Strategies (RMOMS) participants, State Maternal Health Innovation (MHI) programs, and other HRSA grantees providing maternal care support.
- Recognize hospitals that designate the appropriate level of maternal care based on ACOG guidance in the Medicare.gov Hospital Compare search tool.
- Pilot a value-based purchasing program in which the agency rewards hospitals that appropriately transfer care during labor and delivery or other inpatient admissions related to pregnancy.

- Support the development of pregnancy medical home models to improve maternal health outcomes in rural areas and elsewhere, including in models developed Center for Medicare & Medicaid Innovation (CMMI).
- Include team-based care as a requirement in alternative payment models for obstetric care designed by CMMI.
- Encourage, along with the CDC, the inclusion of rural health representation and rural health data collection by maternal mortality review committees (MMRCs).
- Maintain a strong relationship with the Indian Health Service (IHS) and incorporate into CMS' own guidelines the quality recommendations following expert visits to rural, IHS-designated clinical sites seeking to improve health outcomes for Native women.

We provide additional information regarding certain barriers to access, quality, and quality outcomes as well as opportunities to improve in these areas below.

Access

Gaps in insurance access

A growing body of research suggests that unsafe gaps in health insurance coverage exacerbate poor maternal health outcomes.¹⁰ Rural residents are more likely to be poor and lack health insurance; they also travel longer distances to receive care or to access a range of medical, dental, and mental health specialty services.^{11,12} Rural residents are also more likely to rely on Medicaid.¹³

Medicaid is the largest single payer of maternity care in the United States; it is estimated to finance approximately 50 percent of births in rural areas.¹⁴ According to one recent study, rural residents had a nine percent greater probability of severe maternal morbidity and mortality compared to their urban resident counterparts.¹⁵ Another recent analysis commissioned by the Medicaid and CHIP Payment and Access Commission (MACPAC) found that women on Medicaid have an 82 percent greater chance of experiencing severe maternal morbidity compared with privately insured women. Among Medicaid beneficiaries, people of color and rural women are at increased risk.^{16, 17} This is, in part, due to inadequate access to care before, during, and after pregnancy.

Under current law, women who are eligible for Medicaid based on their pregnancy become ineligible 60 days after the end of pregnancy. While some women are able to successfully transition to other sources of coverage at this time, many are left in the untenable position of being uninsured shortly after a major medical event. This is true of women living in states that expanded Medicaid under the Affordable Care Act (ACA) and those that did not. According to Daw et al., nearly one in three women in Medicaid expansion states and half of women in non-expansion states experience perinatal insurance disruptions.¹⁸ Notably, 57.4 percent of all perinatal insurance disruptions included a period with no coverage.¹⁹

These disparities in perinatal insurance coverage disproportionately affect indigenous, Hispanic, and non-Hispanic Black women. New research findings confirm that at each point during the perinatal period, all categories of racial and ethnic minority women experienced higher rates of uninsurance than non-Hispanic white women. For example, from pre-pregnancy to postpartum, 75.3 percent of non-Hispanic white women had continuous insurance compared with 55.4 percent of non-Hispanic Black women, 49.9 percent of indigenous women, and 20.5 percent of Hispanic Spanish-speaking women.²⁰

These insurance disruptions – particularly those in the postpartum period – are contributing to poor maternal health outcomes. As many MMRCs have found, and the CDC has confirmed, about 33 percent of pregnancy-related deaths occur between seven days to one year following childbirth, and greater than one third of those deaths occur 43 to 365 days postpartum.²¹ The evidence from MMRCs underscores the importance of continuous coverage in the postpartum period. For example, the most recent Illinois Maternal Morbidity and Mortality Report, published in October 2018, concluded that 51 percent of all maternal deaths in the state occurred more than 60 days after the end of pregnancy.²² In Texas, 56 percent of all maternal deaths occurred after the 60-day cutoff.²³ In West Virginia, 62 percent of all maternal deaths occurred more than 60 days postpartum.²⁴ Additionally, deaths from preventable causes, including overdose and suicide, occur more frequently in the later postpartum period up to one year after the end of pregnancy.²⁵

Closing this critical gap in coverage can mean the difference between life and death for many women. **ACOG recommends that CMS support and approve initiatives that extend coverage for women with a Medicaid-covered birth beyond the statutorily mandated 60 days postpartum. This includes section 1115 waiver proposals submitted by state governments.**

Telehealth

Telehealth presents a significant opportunity to address eroding access to obstetric care due to the closure of rural obstetric units, rural hospitals, and the shortage of obstetrician-gynecologists in rural areas of the country. The use of telehealth can bridge the access gap, connecting patients in rural areas that lack an obstetrician-gynecologist. The applicability of telehealth across professions and among health care physicians, and its flexibility in being able to be used in nontraditional venues not only increases access, but also makes it cost-effective.²⁶ There is particular opportunity with telehealth services to overcome the barriers that women face in attending postpartum visits.²⁷ For women who struggle with transportation, securing child care, and not having the ability to take time off work, postpartum telehealth visits can improve attendance rates and ensure that opportunities to identify postpartum risk factors are not missed.

Telehealth could also be used to improve rural women's access to behavioral health services and treatment for substance use disorder.^{28,29} According to a 2019 study published in the *American Journal of Obstetrics and Gynecology*, substance use-related deaths were the second leading cause of deaths for women during the 12-month postpartum period, and suicide was the seventh leading cause of death during that same period.³⁰ Deaths caused by substance use disorder and suicide comprised a total of 18 percent of all maternal deaths captured in the case study.³¹ Rural residents in the case study comprised the second leading group of those who died within one year of the end of pregnancy due to overdose and suicide.³²

In rural areas where obstetrician-gynecologists report they cannot refer patients to mental health physicians and other licensed health care professionals because there are none in the area, telehealth could effectively fill that gap in care and ensure that the patient has access to all the health care services they require. In a recent study, researchers found that opioid use disorder treatment received via telehealth in obstetric practices was not associated with any statistically significant differences in outcomes compared to in-person treatment.³³ Behavioral health services and substance use disorder treatment provided via telehealth for obstetric and postpartum patients ensures access to the continuation of comprehensive care, especially in rural areas. **CMS should ensure that obstetrician-gynecologists and other obstetric care health care professionals are provided with all the necessary**

tools and flexibilities to optimize telehealth to meet the needs of their patients and effectively manage treatment for behavioral health conditions and substance use disorders.

In response to the COVID-19 pandemic, CMS relaxed several regulations that were inhibiting the use of telehealth. Lifting those barriers has allowed obstetric care practitioners to use telehealth services to provide necessary evaluations and check-ins for their pregnant patients while minimizing exposure to COVID-19. Prior to the COVID-19 pandemic, ACOG released the timely Committee Opinion *Implementing Telehealth in Practice*, which outlines steps to be taken when implementing telehealth into the practice of obstetrics and gynecology.³⁴ Additionally, a systematic review found some benefit for pregnant and postpartum women with telehealth interventions, particularly text messaging and remote patient monitoring. For instance, women who received text message and remote patient monitoring interventions had fewer unscheduled visits.³⁵ It was also noted that remote blood pressure monitoring combined with text-based surveillance could improve the rate of adherence to guidelines, and text and web-based communication resulted in significant improvement in breastfeeding continuation.³⁶ After the national emergency subsidies, **CMS should maintain expanded telehealth coverage and access and refrain from imposing regulations that restrict the provision of evidence-based telehealth services.** To increase the accessibility of obstetric telehealth services, **CMS should expand Durable Medical Equipment, Prosthetics, Orthotics, and Supplies (DMEPOS) benefits to include blood-pressure monitoring, glucose monitoring, weight monitoring, and pulse oximetry as determined medically necessary and prescribed for pregnant and postpartum women.** ACOG guidance indicates that blood pressure, glucose, and weight monitoring are essential to comprehensive obstetric care, making the availability of home monitoring equipment essential for improving access to telehealth services for pregnant and postpartum women.^{37,38} Many private plans recognize the use of blood pressure monitors and glucose monitors for other conditions, such as hypertension, hemodialysis and diabetes.^{39,40} Expanding the availability of home-based equipment used in the typical antepartum office visits would allow patients to stay at home, submit data to physicians on a regular schedule, and help physicians determine which patients should be seen in person for care. This is especially beneficial to rural women seeking perinatal care who otherwise may have to travel long distances to in-person care.

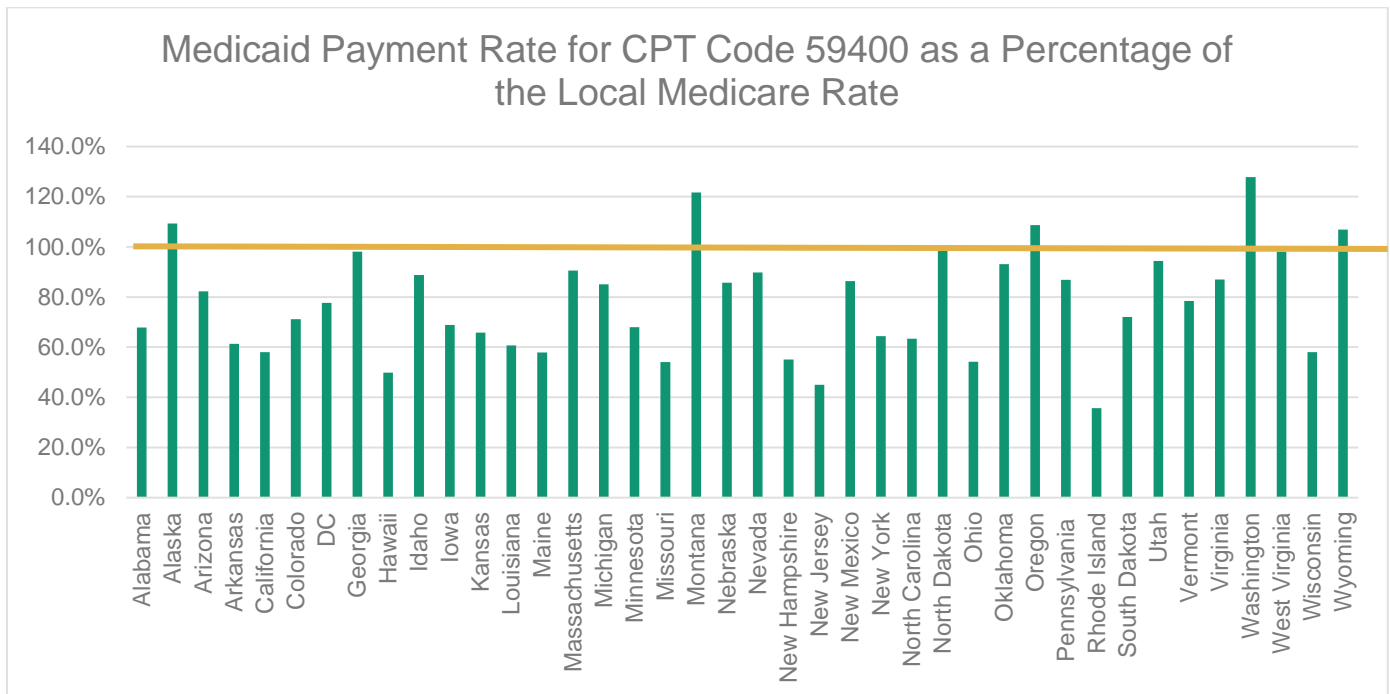
To ensure that all pregnant and postpartum women have access to telehealth visits, **CMS should recommend to Medicaid programs and private payers that they continue covering telephone visits and reimburse for audio-only visits at the same rate as audio-video visits after the COVID-19 health emergency is over.** Many patients in rural areas do not have access to a reliable internet connection or smartphone and will therefore not be able to access synchronous audio-video telehealth visits. Additionally, many patients are not comfortable with video applications and prefer audio-only visits. It is essential that all pregnant and postpartum women are able to access and seek care via telehealth, especially during the COVID-19 public health emergency, in order to maintain social distancing guidelines and reduce their risk of exposure. While several Medicaid programs and private payers have taken action to cover audio-only visits, many have still not broadened coverage for this service. This results in barriers to accessing comprehensive, evidence-based care and may force women to seek in-person care when it is not medically indicated. Further, obstetric practices should not be reimbursed at a lower rate for providing an audio-only visit when it is the only option or preferred by the patient. Audio-only visits should be reimbursed at the same rate as E/M telehealth visits. Access to synchronous audio-video visits depends on a variety of factors that physicians and other practitioners cannot control. To promote equitable access, **ACOG recommends that CMS ensure coverage and reimbursement parity for audio-only services across payers.**

Medicaid Reimbursement

Low and inequitable Medicaid reimbursement rates stand to erode access to care for pregnant and postpartum women.⁴¹ Medicaid covered 43 percent of births nationwide in 2018, and in some states it covers an even greater share.⁴² Medicaid is a critical coverage source for women living in rural communities, who could face even more significant barriers to accessing care if maternity care payments are lowered. Inequitable Medicaid reimbursement could be particularly harmful for rural women, as they are more likely to be covered by Medicaid.⁴³

Obstetric care services are typically paid for through global codes. The primary CPT codes are 59400 (routine vaginal delivery), 59510 (cesarean delivery), 59610 (vaginal delivery after cesarean), and 59618 (cesarean delivery after attempted vaginal delivery). All four of these codes include about ten months of prenatal, labor and delivery, and postpartum care services. Obstetrician-gynecologists and other obstetric practitioners typically file a claim for all of these services after the end of pregnancy. The number and timing of outpatient E/M office visits valued within the global codes is based on evidence-based guidance from ACOG and the American Academy of Pediatrics. The *Guidelines for Perinatal Care* state that “a woman with an uncomplicated first pregnancy is examined every 4 weeks for the first 28 weeks of gestation, every 2 weeks until 36 weeks of gestation, and weekly thereafter.”⁴⁴ This guidance is reflected in the number of visits valued in the global obstetric codes.

An analysis of Medicaid payment methodologies revealed that 35 state Medicaid programs use global obstetric codes for women who are covered by fee-for-service Medicaid. Five additional states have managed care organizations (MCOs) that use the global obstetric codes. The graph below maps the Medicaid payment rate for global obstetric care with a vaginal delivery to the local Medicare payment rate for each state that uses the global codes.



As demonstrated above, of the 35 states included, only seven pay at or above 100 percent of the geographically adjusted Medicare rate. Medicare payment rates are calculated to cover the cost of providing each service. Therefore, Medicaid payment rates that are less than 100 percent of the local

Medicare rate do not cover the cost of providing care to patients. California, which has both the highest birthrate and one of the lowest Medicaid reimbursement rates for obstetric care in the country, pays 59 percent of the local Medicare rate for prenatal, labor and delivery, and postpartum care.⁴⁵ The rural states of Alabama, Iowa, and Maine pay 71, 70, and 58 percent of the Medicare rate, respectively. Obstetric care practices are then required to cover the rest of the cost themselves, potentially operating at a loss.

In the 2020 Medicare Physician Fee Schedule final rule, CMS finalized increased relative value units (RVUs) for outpatient E/M office visits. This will result in increased reimbursement rates for standalone E/M visits. However, CMS did not apply these increased RVUs to the global obstetric care codes. Due to Medicare budget neutrality requirements, this will result in lower payment rates for obstetric care services beginning in 2021. These payment cuts will have a broad impact beyond the Medicare program, especially on physicians practicing in the 35 states that use the global obstetric codes and base their Medicaid payment rates on a percentage of the Medicare rate. TRICARE and commercial insurers also base their reimbursement rates on the Medicare rates established by CMS. If Medicare rates for maternity care are reduced, ACOG anticipates that payment rates will go down across payers.

In order to improve access and health outcomes for women living in rural areas, **it is imperative that CMS support rural obstetric care practitioners by applying the increased RVUs for E/M visits to the global obstetric codes in the 2021 Medicare Physician Fee Schedule.**

Applying the E/M increases to the obstetric codes would be in line with HHS's broader initiative to improve maternal health outcomes. Secretary Azar has publicly stated that the Administration is prioritizing rural and maternal health, and at the National Rural Health Association's (NRHA) annual conference, CMS Administrator Seema Verma announced the CMS/NRHA co-sponsored Maternal Health Forum to explore options for improved maternal health outcomes.^{46,47} Applying the increased E/M values to the global obstetric codes is congruent to the Administration's health care priorities, consistent with statute and CMS precedent when updating the E/M codes, and will encourage obstetrician-gynecologists and other obstetric care practitioners to continue providing care to pregnant and postpartum women covered by Medicaid. ACOG strongly recommends that CMS apply the increased RVUs to the obstetric care codes in the 2021 Medicare Physician Fee Schedule.

Administrative Burden

Electronic Health Records (EHRs) continue to represent a significant burden for many obstetrician-gynecologists. Widespread implementation of application programming interfaces (APIs) could significantly reduce administrative burden. For instance, applications like the ACOG Comprehensive Women's Health Record improve usability of EHRs with a documentation interface that matches obstetrician-gynecologists' clinical workflow and surfacing relevant clinical guidance.⁴⁸ The widespread implementation of APIs would make this and other beneficial applications more accessible to all physicians. ACOG commends CMS for finalizing interoperability requirements for health plans that will make APIs more accessible for patients and physicians. However, it is also important that CMS work with the Office of the National Coordinator for Information Technology (ONC) to ensure that the cost of API implementation is not passed to physician practices, especially those in rural areas.

Given the significant strain that the COVID-19 pandemic has placed on physician practices, **ACOG further recommends that CMS delay implementation of the public reporting provisions that were finalized in the Advancing Interoperability and Patient Access to Health Data final rule.** These provisions would increase administrative burden for physicians and other health care professionals at a time when they

must focus on caring for their patients. CMS should refrain from publicly reporting health care professionals who attest “no” to any of the three statements related to information blocking in the Quality Payment Program for performance years 2019 and 2020. Further, CMS should delay the provision which requires the public reporting of health care professionals that were not able to update their digital contact information in the CMS National Plan and Provider Enumeration System. ACOG recognizes the importance of furthering interoperability, but we do not believe that obstetrician-gynecologists or other health care practitioners should be subjected to additional administrative requirements during this public health emergency.

In recent years, prior authorization requirements and processes have become one of the greatest administrative burdens facing physicians. Prior authorization compounds the complexity of current EHRs. Standardization of prior authorization requirements would expedite automation of prior authorization, reducing clinician burden and care delays. For instance, if an obstetrician-gynecologist is ordering a standard genetic test during the prenatal care period, the payer’s prior authorization system should be able to scan the patient’s health record for the relevant risk factors and provide an immediate approval for that test when medically necessary. Currently, prior authorization forms do not integrate with both the physician’s EHR and the payer’s prior authorization system, making immediate approvals for standard-of-care services infeasible. obstetrician-gynecologists and other physicians must navigate between their EHR and several other systems to complete the prior authorization form.

Additionally, prior authorization requirements have been inappropriately employed to reduce the cost of care, even when the services in question are medically necessary and recommended by evidence-based clinical guidance. Studies show that prior authorization costs physician practices several thousand dollars per physician per year, significantly delays patient care, and may result in patients discontinuing medication or treatment.^{49,50,51} In rural areas where obstetric units and hospitals are already facing financial burdens, the costs associated with prior authorization further exacerbates difficulties in the delivery of medically necessary services by delaying payment and requiring additional resources for authorization and appeals.

ACOG recommends that CMS develop a comprehensive strategy to address issues related to prior authorization, including a reduction in the volume of prior authorization requirements across the health care system, elimination of low-value prior authorization, and standardization across payers.

Medicaid Fiscal Accountability Regulation

ACOG is concerned that the pending Medicaid Fiscal Accountability Regulation (MFAR) will jeopardize access to care for patients. This regulation, as proposed, seeks to alter the options the states can use to finance their portion of Medicaid costs and enforce new requirements on supplemental payments to physicians. ACOG believes this proposed rule could force states to reduce eligibility, cut benefits and services, increase beneficiary cost-sharing, or limit physician payments.⁵² The impact of the proposed rule is incredibly concerning given the nation’s rate of maternal mortality and severe maternal morbidity and the increased risk that women who rely on Medicaid have for poor maternal health outcomes. Further, with nearly one in four non-elderly adults in rural areas receiving care through Medicaid, women in rural communities will be disproportionately impacted by the anticipated cuts to benefits and services and decreased access to care resulting from this rule.⁵³ **ACOG recommends that the MFAR proposed rule be rescinded.**

Rural Residency Planning and Development Program (RRPD)

The Social Security Act (§711(b)(5)) provides the oversight of grants to improve rural health care to HRSA and does not impose limits to the eligible providers with the exception of meeting the definition of rural health. HRSA plans to fund 28 grants for up to \$750,000 to rural hospitals, rural community-based ambulatory patient care centers, federally qualified health centers, community mental health centers or clinics, health centers operated by the Indian Health Service, schools of allopathic medicine or osteopathic medicine, public or private non-profit graduate medical education consortiums or faith-based and community-based organizations that offer Rural Training Tracks (RTTs) for family medicine, internal medicine, and psychiatry.⁵⁴ Funding is not available for obstetrics and gynecology RTTs. **ACOG requests that CMS encourage HRSA to expand grant programs to develop new RTTs to support the development of new rural residency training programs for obstetrics and gynecology.**

Quality

Alliance for Innovation on Maternal Health (AIM)

The AIM program, developed in partnership with HRSA, is a national data-driven maternal safety and quality improvement initiative. It is based on multidisciplinary consensus-based practices designed to improve maternal outcomes. Enrollment in the AIM program occurs at the state level; hospitals have the ability to engage in AIM initiatives through their state-based entities, often perinatal quality collaboratives (PQCs) or departments of health. Participants in the AIM program collaborate with experts in perinatal quality improvement to implement patient safety bundles and learn from other organizations that have successfully improved maternal health outcomes. The patient safety bundles utilized by the AIM program are designed to reduce variations in care and improve outcomes related to common complications, such as hypertension, venous thromboembolism, and obstetric hemorrhage. As part of their participation in AIM, hospitals submit structure, process, and outcome data to their state-based entities. This data is used to understand progress towards program goals and can be used for peer comparison and learning. This rapid cycle quality improvement methodology has been used by PQCs to improve maternal health outcomes. Currently, over half of U.S. states are enrolled in the AIM program.⁵⁵

Although the bundles may be tailored to meet local needs, the AIM program seeks to reduce variations in care by having all participating hospitals work from the same evidence-based patient safety bundle framework. By working to reduce variation, AIM helps all hospitals – from large urban academic medical centers to rural hospitals – have the necessary structures in place to recognize and appropriately respond to obstetric emergencies, learn from their cases, and implement changes that improve maternal outcomes. Additionally, AIM’s Reduction of Peripartum Racial/Ethnic Disparities bundle provides important information for health care professionals serving in rural areas and areas with high American Indian and Alaska Native populations to ensure culturally sensitive care.⁵⁶ **ACOG recommends that CMS require hospitals to report whether they are meaningfully participating in AIM, a perinatal quality collaborative, or similar maternal health quality improvement initiative.**

Maternal Health Learning and Innovation Center

ACOG is the primary subrecipient of a 5-year national award to University of North Carolina at Chapel Hill by HRSA known as the Maternal Health Learning and Innovation Center (MHLIC). MHLIC is charged with development of a national resource center established to accelerate innovative and evidence-informed interventions that improve maternal health and eliminate maternal health inequities, including in support of Rural Maternity and Obstetrics Management Strategies (RMOMS) participants (HRSA-19-094). RMOMS goals include development of a sustainable network approach to coordinate maternal and obstetric care within a rural region; increased delivery of and access to pre-pregnancy,

pregnancy, labor and delivery, and postpartum services; development of sustainable financing models for the provision of maternal and obstetric care; and improved maternal and neonatal outcomes in rural settings.

Comprised of a multidisciplinary team led by the UNC Gillings School of Global Public Health, the UNC School of Social Work and the UNC School of Medicine, MHLIC works in partnership with ACOG and other organizations to advance federal and state-level efforts to eliminate preventable maternal deaths and reduce severe maternal morbidity. The three areas of focus are engagement, innovation support, and policy, with equity being foundational to all work of the MHLIC. The team has built an innovative and responsive infrastructure for this MHLIC specifically, using lessons learned from our work providing similar services for other maternal health audiences, with careful attention to program awardee needs, dissemination, and a strong focus on equity and engagement at the patient, clinician and community levels.

The goals of MHLIC are to provide capacity-building support to HRSA award recipients focused on maternal morbidity and mortality prevention via the State Maternal Health Innovation (MHI) and RMOMS Programs. Additionally, MHLIC seeks to catalog maternal health capacity-building resources in a comprehensive portal, facilitating connections with existing training and technical assistance centers and developing new tools for learning and implementation. ACOG supports these efforts through subject matter expertise, participation in innovation and engagement core team support, and personnel allocation to support RMOMS and other HRSA grantees. **ACOG recommends that CMS partner with HRSA to encourage the broad use of MHLIC to support RMOMS participants, MHI programs, and other HRSA grantees providing maternal care support.**

Levels of Maternal Care

Lack of access to risk-appropriate obstetric care increases the risk of poor outcomes from obstetric emergencies. ACOG and the Society for Maternal-Fetal Medicine (SMFM) jointly developed an Obstetric Care Consensus on Levels of Maternal Care (LoMC) which establishes a framework for regional hospital relationships that addresses maternal health needs. LoMC outlines the required minimal capabilities, physical facilities, and personnel that are required to safely care for women at various levels of risk and meet a designated level of care.⁵⁷ The purpose of LoMC is to ensure that women receive risk-appropriate care. LoMC encourages support systems to ensure appropriate care for high-risk women in rural areas via collaboration among facilities of differing levels of maternal care within a perinatal care region. Implementation of LoMC contributes to significant improvements in systems of care and facilitates quality improvement efforts based on the resources, opportunities, and needs specific to the region.⁵⁸

A coordinated and regionalized system involves multiple components. Implementation must be considered within the context of rural health challenges, including access to care by pregnant and postpartum women who are significantly impacted by the closure of obstetric services or facilities. LoMC guidance specifically directs higher level hospitals to collaborate with lower level hospitals to coordinate transport, assess resources, support quality assurance and performance improvement initiatives, analyze regional data, and assist with education. Through this support, hospitals and health systems within a region can map geographic distribution of maternity care resources to identify needs specific to rural hospitals, which may include:

- Workforce shortages
- Geographic challenges to access health care

- Continuing education and training on common and uncommon complications
- Data collection
- Access to supplies and equipment
- Collaboration with obstetrician-gynecologists or other obstetric care health care professionals and specialists.

ACOG recommends CMS provide recognition for hospitals that designate the appropriate level of maternal care based on ACOG guidance in the Medicare.gov Hospital Compare search tool.^{59, 60}

Payment and delivery models

Any innovative models for obstetric care must be designed to explicitly support rural hospitals and health care professionals, and include flexibilities to ensure culturally sensitive, patient-centered care.

Alternative payment models for obstetric care that are designed by CMMI should include LoMC and team-based care. Team-based care, when optimally implemented, provides holistic, integrated care to improve the experiences of individuals and families. The team should be informed by the expertise of obstetrician-gynecologists and may include primary care physicians, physician specialists, physician subspecialists, advanced practice nurses, certified nurse-midwives and certified midwives (CNM/CMs) and community-based health worker support. Team-based care in rural areas often utilizes telehealth to connect the patient and any number of physicians and other health care professionals where one or more of the team members cannot be physically present with the patient.^{61, 62} It has been shown to improve the health of populations and lower per capita costs.⁶³ Further, team-based care is an essential component of rural health care in areas where obstetrician-gynecologists are too few to serve the full population.

Value-based payments should be used to incentivize appropriate transfers of care based on a woman's risk factors consistent with LoMC. This will ensure that lower level hospitals are able to transfer women who are at-risk or high-risk without being financially penalized. Currently, level 1 and level 2 hospitals are disadvantaged when transferring a woman who has "risked out" of care at their facility while she is in labor. Even though that hospital has managed her labor for several hours, it is not adequately reimbursed for that patient's care if she is transferred to a higher-level facility. **CMS should consider piloting a value-based purchasing program in which the agency rewards hospitals that appropriately transfer care during labor and delivery or other inpatient admissions related to pregnancy.** This program would include data collection for the appropriate transfer of care and subsequent bonus payments to facilities that appropriately transfer care according to LoMC guidance. These bonus payments would provide a value-based support system for hospitals located in rural areas that are already struggling to keep their doors and obstetric units open.

Another model for consideration is the pregnancy medical home model. It is imperative that such models are appropriately financed. The cornerstone of successful models is additional payments that provide obstetric care practices with the flexibility to address social determinants of health and otherwise innovate their practice model. Without this added support, practices do not have the financial margin to hire the necessary staff and report performance on quality measures. The fee-for-service system is designed to reimburse practices for the cost of providing individual services, and therefore does not adequately support care management and other services required to address a variety of social needs. This reality is particularly true for obstetric care practitioners located in rural areas, who tend to see a higher proportion of patients who are covered by Medicaid.⁶⁴

There have been several pregnancy medical home models that have shown promising results. The per-patient-per-month payment allows the pregnancy medical home to address social determinants of health and other needs through care management and coordination. Some models also provide bonus payments to practices for completing certain tasks, such as a risk assessment. For example, North Carolina's Medicaid program is home to the only state-wide pregnancy medical home model in the country.^{65,66} Hundreds of practices participate in this model, including many practices located in rural areas of the state. In North Carolina, practices commit to the following for all pregnancy medical home enrollees: performing a thorough risk screening, providing face-to-face care management services, maintaining a specific nulliparous term singleton vertex (NTSV) cesarean delivery rate, and completing a postpartum visit within 60 days of delivery. Case managers also assist women in meeting social needs, such as housing, nutritious food, and support for behavioral health. Women who are enrolled in the medical home model have lower rates of infants with low birth weight and cesarean deliveries, as well as higher postpartum visit attendance rates than women who do not participate. North Carolina also estimates that the program reduced the cost of prenatal care. Other pregnancy medical home models have been shown to reduce unnecessary cesarean deliveries, increase postpartum visit attendance, and achieve other positive birth outcomes.^{67, 68, 69, 70}

ACOG recognizes that CMMI included the pregnancy medical home model in the *Strong Start for Mothers and Newborns (Strong Start)* demonstration. While CMMI concluded that this model did not significantly improve outcomes compared to the other interventions, we are concerned that the *Strong Start* demonstration may not have accurately represented robust medical home models. The final evaluation of *Strong Start* indicated that the pregnancy medical home model was implemented inconsistently and the most consistent intervention was the addition of a care manager.⁷¹ The evaluation further notes that most of the pregnancy medical home awardees did not implement a high-intensity intervention, and acknowledges that the pregnancy medical homes were also caring for more higher-risk patients than other awardees.⁷² As previously mentioned, a robust medical home model meaningfully addresses the complex social needs of pregnant and postpartum women, provides for care coordination services, and adheres to evidence-based clinical pathways. Successful models also include a value-based bonus payment system, which was not included of the *Strong Start* demonstration. **ACOG strongly recommends that CMS continue to support the development of pregnancy medical home models to improve maternal health outcomes in rural areas and elsewhere, including in models developed by CMMI.** This could include hiring additional care coordination staff or implementing telehealth for women who live far away.

2020 Maternity Core Set

The inclusion of the Prenatal and Postpartum Care measure in the Medicaid and CHIP Scorecard encourages states to report data that is aligned with federal goals and comparable across states. ACOG appreciates that the Adult Core Set recognizes the importance of postpartum care, especially in the context of maternal mortality and severe morbidity. Specifically, the measure considers the *Percentage of Women Delivering a Live Birth who had a Postpartum Care Visit on or Between 21 and 56 Days after Delivery*. Fiscal Year 2018 results indicated that 58.5 percent of women covered by Medicaid had a postpartum visit between 21 and 56 days after delivery. ACOG believes that this measure from the Adult Core Set does not provide complete data on postpartum visits, since ACOG guidance recommends a comprehensive postpartum care visit between four and 12 weeks postpartum, and contact with an obstetric care clinician in the first three weeks postpartum.⁷³ Many women have postpartum check-ins before 21 days postpartum and comprehensive visits after 56 days postpartum; therefore, the measure may not be an accurate reflection of the maternity care being provided. **ACOG recommends that CMS adjust the measure to include any outpatient visits within 90 days of delivery.** This will ensure that

CMS accounts for visits that may occur outside the 56 days. This is especially important as states consider extending Medicaid eligibility for pregnant women beyond the statutorily mandated 60 days postpartum.

ACOG also commends the work CMS is engaged in to design a new measure for inpatient hospitals to meaningfully participate in a state or national quality improvement program. As we have discussed with CMS staff in the Center for Clinical Standards and Quality/Quality Measurement and Value-Based Incentives Group, we recommend that hospitals attest to:

1. Participating in a statewide and/or national perinatal quality improvement collaborative program aimed at improving maternal outcomes during inpatient labor, delivery, and postpartum care.
2. Collecting and reporting data (preferably chart review, administrative data also acceptable) to a collaborative for the purpose of being benchmarked against other hospitals.
3. Actively implementing patient safety practices, bundles, or sustainability projects to address complications or otherwise improve quality of care based on the data collected.

Only those hospitals that answer “yes” to all of the above three criteria should be considered to be engaged in meaningful participation in a maternal health quality improvement program. ACOG believes that the above requirements, if noted in Hospital Compare, would ensure that this measure is reporting meaningful participation in quality improvement initiatives and provide women with useful information about hospitals near them.

Maternal Mortality Review Committees

As the United States continues to experience rising maternal mortality rates, nearly every state has established, is implementing, or is planning to convene a maternal mortality review committee (MMRC). MMRCs are tasked with identifying, reviewing, and analyzing maternal deaths. Upon completion of their analysis, MMRCs disseminate findings that are used to better inform and create policy recommendations to prevent future deaths. MMRCs help to illuminate the wide-ranging causes of maternal death by examining not just deaths that are pregnancy-related but also those that are pregnancy-associated. For example, MMRCs have revealed that deaths due to overdose and suicide are now the leading cause of maternal mortality in a growing number of states, including Colorado, Maryland, New York, Texas, Utah, and Virginia.^{74 75 76 77 78 79} MMRCs have access to multiple sources of information within states that aid in identifying, characterizing, and providing a deeper understanding of the circumstances surrounding each maternal death.

The CDC’s Enhancing Reviews and Surveillance to Eliminate Maternal Mortality (ERASE MM) program provides support for MMRCs for their reviews, including characterization of maternal deaths and identification of prevention opportunities. Currently, ERASE MM supports 25 state MMRCs.⁸⁰ The CDC also supports the Maternal Mortality Review Information Application (MMRIA, or “Maria”) data system with the goal of standardized the data collection from all the MMRCs. MMRIA recommends that MMRCs include a diverse membership, including representatives working in different areas of the respective state, including representatives of rural areas.⁸¹ However, despite this recommendation, only two states currently require rural representation on their committee.⁸² To ensure that the specific needs of rural areas within each state are being recognized and addressed, representatives from those rural communities, including rural Black and rural American Indian and Alaska Native communities, must be included in the data collection, analysis, policy recommendations, and follow-up improvement strategies

and processes. **CMS should encourage, along with the CDC, the inclusion of rural health representation and rural health data collection by MMRCs.**

Outcomes

Social Determinants of Health

Social and structural determinants of health describe environmental conditions, both physical and social, that influence health outcomes. Physical conditions such as lack of access to safe housing, clean drinking water, nutritious food, and safe neighborhoods contribute to poor health. Socio-political conditions such as institutional racism; police violence targeting people of color; gender inequity; discrimination against lesbian, gay, bisexual, transgender, queer, or questioning (LGBTQ) individuals; poverty; lack of access to quality education and jobs that pay a livable wage; and mass incarceration all shape behavior and biological processes that ultimately influence individuals' health and the health of communities.^{83,84,85} Such social conditions not only influence individual health but also work to create cycles that perpetuate intergenerational disadvantage.

Social determinants of health serve as a risk indicator for pregnant and postpartum women. Approximately 2.3 million people (2.2 percent of all U.S. households) live in low-income, rural areas that are more than 10 miles from a supermarket.⁸⁶ This can often cause severe limitations in access to nutritious foods for pregnant and breastfeeding women and can contribute to poorer health outcomes for women and children. Less formal education, lower health literacy, unplanned pregnancies, and poor transportation have all been associated with late initiation of prenatal care.⁸⁷ Additionally, lack of child and other dependent care can reduce a pregnant person's ability to initiate and attend prenatal appointments.⁸⁸ Prenatal care initiation in the first trimester was lower for women in rural areas compared with suburban areas.⁸⁹ And for women of color, it is important to acknowledge that institutionalized racism and other forms of discrimination are social determinants of health.^{90,91}

CMS can support quality outcomes by ensuring optimal reimbursement rates for obstetric care health care professionals who screen and participate in care coordination with other health care professionals and community-based health worker support to address social determinants of health.

Addressing the root causes of how social determinants of health affect health outcomes requires wide-reaching, policy-level changes, and most health care settings, especially in rural areas, are generally under-resourced to address the social needs of individual patients. However, tools have been developed to assist health care professionals in screening for some conditions, such as food insecurity and housing instability, and incorporate these questions into electronic medical records.⁹² A referring clinician's ability to provide referrals to housing or food services while patients are in the clinic further paves way for opportunities to address some of these issues.⁹³

Coordination with Indian Health Service (IHS)

CMS aptly recognizes in the RFI that any discussion regarding maternal outcomes is multifaceted and complex. Beyond physical health, American Indian and Alaska Native and other racial and ethnic minority populations are confronted with mental health conditions, substance use disorders, exposure to violence, bias, and the multitude of social determinants of health at disproportionate rates. Further, women of reproductive age living in rural areas have less access to care and experience poorer health outcomes than their counterparts living in urban areas.

Since the 1970s, ACOG’s Committee on American Indian and Alaska Native Women’s Health – comprised of ACOG Fellows and representatives from the American College of Nurse-Midwives (ACNM), Association of Women’s Health, Obstetric, and Neonatal Nurses (AWHONN), American Academy of Pediatrics (AAP), and the Society of Obstetricians and Gynecologists of Canada (SOGC) – has served in a consultative capacity to the Indian Health Service (IHS). The Committee works to meet the health needs of American Indian and Alaska Native women and the health care professionals who serve them by conducting site visits to regions designated by the IHS to review all aspects of care, including quality, staffing, and equipment. **CMS should work to maintain a strong relationship with the IHS and incorporate into CMS’ own guidelines the quality recommendations following site visits that seek to improve outcomes in American Indian and Alaska Native pregnancies.**⁹⁴

#####

Thank you for the opportunity to comment on the RFI on opportunities to improve health care access, quality, and outcomes for women in rural communities before, during, and after pregnancy. We look forward to working with CMS to implement policies that ensure rural women and their families have access to high-quality health care and improved health outcomes. Should you have any questions, please contact Erin Sigmon, policy analyst, at esigmon@acog.org or 202-314-2337.

Sincerely,



Maureen G. Phipps, MD, MPH, FACOG
Chief Executive Officer
American College of Obstetricians and Gynecologists

¹ Pregnancy Mortality Surveillance System, Centers for Disease Control and Prevention. Last updated February 4, 2020. Retrieved from: https://www.cdc.gov/reproductivehealth/maternal-mortality/pregnancy-mortality-surveillance-system.htm?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Freproductivehealth%2Fmaternalinfanthealth%2Fpregnancy-mortality-surveillance-system.htm

² ‘The US has the highest maternal mortality rate in the developed world. Why?’ World Economic Forum. May 19, 2016. Retrieved from: <https://www.weforum.org/agenda/2016/05/what-s-behind-america-s-shockingly-high-maternal-mortality-rate/>

³ Racial and Ethnic Disparities Continue in Pregnancy-Related Deaths, Centers for Disease Control and Prevention. September 5, 2019. Retrieved from: <https://www.cdc.gov/media/releases/2019/p0905-racial-ethnic-disparities-pregnancy-deaths.html>

⁴ Cromartie, John. Rural America At a Glance 2018 Edition. United States Department of Agriculture. November 2018. Retrieved from: <https://ageconsearch.umn.edu/record/282512/>

⁵ Kozhimannil, Katy B. PhD, MPA; Interrante, Julia D. MPH; Tofte, Alena N. MD, MPH; Admon, Lindsay K. MD, MSc. Severe Maternal Morbidity and Mortality Among Indigenous Women in the United States. February 2020; 135;2;294-300. Retrieved from: https://journals.lww.com/greenjournal/Fulltext/2020/02000/Severe_Maternal_Morbidity_and_Mortality_Among.8.aspx

- ⁶ Kozhimannil, Katy B. PhD, MPA; Hung PhD, PSPH; Hening-Smith, PhD, MPH, MSW; Casey, MS. University of Minnesota Rural Health Research Center. "Closure of Hospital Obstetric Services Disproportionately Affects Less-Populated Counties." April 2017. Retrieved from Rural Health Research Gateway: <https://rhrc.umn.edu/publication/closure-of-hospital-ob-services/>
- ⁷ Rayburn WF, Richards ME, Elwell EC. Drive times to hospitals with perinatal care in the United States. *Obstet Gynecol* 2012;119:611–6. Retrieved from: <https://www.ncbi.nlm.nih.gov/pubmed/22353960>
- ⁸ Kozhimannil, Katy B. PhD, MPA; Hung PhD, PSPH; Hening-Smith, PhD, MPH, MSW; et al. "Association Between Loss of Hospital-Based Obstetric Services and Birth Outcomes in Rural Counties in the United States," *Jama Network*, 27 March 2018. https://jamanetwork.com/journals/jama/fullarticle/2674780?utm_campaign=articlePDF%26utm_medium%3darticlePDFlink%26utm_source%3darticlePDF%26utm_content%3djama.2018.1646
- ⁹ Rayburn, MD MBA FACOG, "The Obstetrician-Gynecologist Workforce in the United States," 2017. The American College of Obstetricians and Gynecologists
- ¹⁰ Ross, Donna C.; Searing, Adam. Medicaid Expansion Fills Gaps in Maternal Health Coverage Leading to Healthier Mothers and Babies, Georgetown University Health Policy Institute, Center for Children and Families, May 2019. Retrieved from: <https://ccf.georgetown.edu/wp-content/uploads/2019/05/Maternal-Health-3a.pdf>
- ¹¹ Hart LG, Larson EH, Lishner DM. Rural definitions for health policy and research. *Am J Public Health* 2005;95: 1149–55. <https://www.ncbi.nlm.nih.gov/pubmed/15983270>
- ¹² Kozhimannil, Katy B. PhD, MPA; Interrante, Julia D. MPH; Henning-Smith, Carrie PhD, MPH, MSW; Admon, Lindsay K. MD, MSc. Rural-Urban Differences in Severe Maternal Morbidity and Mortality In The US, 2007-15. *Health Affairs* 38, No. 12(2019): 2077-2085. Retrieved from: https://www.healthaffairs.org/doi/pdf/10.1377/hlthaff.2019.00805?casa_token=kJVR_NUUdeEAAAAA:XMzCNFRJnc5pRER1zbTOL5XVQHneWfVwEGYO9Z4ON6SH15TldBfw_hLpY6gaFuB-BcMzueU208
- ¹³ How Medicaid Work Requirements Will Harm Rural Residents – And Communities, Center on Budget and Policy Priorities. Last updated: March 10, 2020. Retrieved from: <https://www.cbpp.org/research/health/how-medicaid-work-requirements-will-harm-rural-residents-and-communities>
- ¹⁴ Medicaid is Rural America's Financial Midwife. Luthra, S. 2018. Kaiser Health News. Retrieved from: <https://khn.org/news/medicaid-is-rural-americas-financial-midwife/>
- ¹⁵ Kozhimannil, Katy B. PhD, MPA; Interrante, Julia D. MPH; Henning-Smith, Carrie PhD, MPH, MSW; Admon, Lindsay K. MD, MSc. Rural-Urban Differences in Severe Maternal Morbidity and Mortality In The US, 2007-15. *Health Affairs* 38, No. 12(2019): 2077-2085. Retrieved from: https://www.healthaffairs.org/doi/pdf/10.1377/hlthaff.2019.00805?casa_token=kJVR_NUUdeEAAAAA:XMzCNFRJnc5pRER1zbTOL5XVQHneWfVwEGYO9Z4ON6SH15TldBfw_hLpY6gaFuB-BcMzueU208
- ¹⁶ Maternal Morbidity among Women in Medicaid, Medicaid and CHIP Payment and Access Commission. MACPAC. January 24.2020. Retrieved from: <https://www.macpac.gov/wp-content/uploads/2020/01/Maternal-Morbidity-among-Women-in-Medicaid.pdf>
- ¹⁷ Ibid.
- ¹⁸ "High Rates Of Perinatal Insurance Churn Persist After The ACA, " *Health Affairs Blog*, September 16, 2019. DOI: 10.1377/hblog20190913.387157
- ¹⁹ Ibid.
- ²⁰ Daw, J., Kolenic, G., Dalton, V., Zivin, K., Winkelman, T., Kozhimannil, K. and Admon, L., 2020. Racial and Ethnic Disparities in Perinatal Insurance Coverage. *Obstetrics & Gynecology*, [online] 135(4), pp.917-924. Retrieved from: https://journals.lww.com/greenjournal/Fulltext/2020/04000/Racial_and_Ethnic_Disparities_in_Perinatal.20.aspx
- ²¹ Vital Signs: Pregnancy-Related Deaths, United States. Petersen EE, Davis NL, Goodman D, et al., 2011–2015, and Strategies for Prevention, 13 States, 2013–2017. *MMWR Morb Mortal Wkly Rep* 2019;68:423–429. DOI: <http://dx.doi.org/10.15585/mmwr.mm6818e1>.
- ²² Illinois Maternal Morbidity and Mortality Report, Illinois Department of Public Health, page 16. October 2018. Retrieved from: <https://dph.illinois.gov/sites/default/files/publications/publicationsowhmaternalmorbiditymortalityreport112018.pdf>
- ²³ Texas Health and Human Services Maternal Mortality and Morbidity Task Force. Maternal Mortality and Morbidity Task Force and Department of State Health Services Joint Biennial Report. September 2018. Retrieved from: <https://www.dshs.texas.gov/mch/pdf/MMMTFJointReport2018.pdf>
- ²⁴ West Virginia Department of Health and Human Resources. West Virginia Infant and Maternal Mortality Review Annual Report: Maternal CY 2013. Charleston (WV): WVDHHR; 2015. Retrieved from: http://reviewtoaction.org/sites/default/files/portal_resources/2015%20legislative%20report.pdf
- ²⁵ For Addicted Women, the Year After Childbirth Is the Deadliest. Vestal, Christine. 2018. Pew Stateline. Retrieved from <https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2018/08/14/for-addicted-women-the-year-after-childbirth-isthe-deadliest>.

- ²⁶ Health disparities in rural women. Committee Opinion No. 586. American College of Obstetricians and Gynecologists. *ObstetGynecol* 2014;123:384-8. Retrieved from: <https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2014/02/health-disparities-in-rural-women>
- ²⁷ Cornell, Andria; McCoy, Carolyn; Stampfel, Caroline; Bonzon, Erin; Verbiest, Sarah. Creating New Strategies to Enhance Postpartum Health and Wellness. *Matern Child Health J* (2016) 20:S39–S42 DOI 10.1007/s10995-016-2182-y. Retrieved from: <https://link.springer.com/content/pdf/10.1007%2Fs10995-016-2182-y.pdf>
- ²⁸ American College of Obstetricians and Gynecologists, Task Force on Collaborative Practice. “Collaboration in practice: implementing team-based care / developed under the direction of the Task Force on Collaborative Practice.” 2016. Retrieved from: <https://www.acog.org/-/media/project/acog/acogorg/clinical/files/task-force-report/articles/2016/collaboration-in-practice-implementing-team-based-care.pdf>
- ²⁹ American College of Obstetricians and Gynecologists, “Recommendations to the Indian Health Service on American Indian/Alaska Native Pregnant Women and Women of Childbearing Age with Opioid Use Disorder.” 2017. Retrieved from Indian Health Service: https://www.ihs.gov/sites/opioids/themes/responsive2017/display_objects/documents/acogguidelines2018.pdf
- ³⁰ Goldman-Mellor, PhD, Sidra; Margerison, PhD, Claire E. Maternal drug-related death and suicide are leading causes of postpartum death in California. *American Journal of Obstetrics and Gynecology*. Volume 221, Issue 5, November 2019, Pages 489.e1-489e.9. Retrieved from: <https://www.sciencedirect.com/science/article/pii/S0002937819307471>
- ³¹ Ibid.
- ³² Ibid.
- ³³ Guille C, Simpson AN, Douglas E, et al. Treatment of Opioid Use Disorder in Pregnant Women via Telemedicine: A Nonrandomized Controlled Trial. *JAMA Netw Open*. 2020;3(1):e1920177. Published 2020 Jan 3. doi:10.1001/jamanetworkopen.2019.20177. Retrieved from: <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2759839>
- ³⁴ Implementing telehealth in practice. ACOG Committee Opinion No. 798. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2020;135:e73–9. Retrieved from: <https://www.acog.org/-/media/project/acog/acogorg/clinical/files/committee-opinion/articles/2020/02/implementing-telehealth-in-practice.pdf>
- ³⁵ DeNicola N, Grossman D, Marko K, Somalkar S, Butler Tobah YS, Ganju N, et al. Telehealth interventions to improve obstetric and gynecologic health outcomes: a systematic review. *Obstet Gynecol* 2020;135:371–82.
- ³⁶ Ibid.
- ³⁷ Kilpatrick SJ, Papile L, and Macones GA, eds. AAP Committee on Fetus and Newborn and ACOG Committee on Obstetric Practice. Guidelines for Perinatal Care. Eighth Edition. 2017.
- ³⁸ Optimizing postpartum care. ACOG Committee Opinion No. 736. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2018;131:e140–50.
- ³⁹ Cardiovascular Monitoring Equipment for Home Use: Pulse, Blood Pressure, Telemotors, and Pacemaker Monitors. Aetna. Retrieved from http://www.aetna.com/cpb/medical/data/500_599/0548.html.
- ⁴⁰ Medicare: Blood Sugar Monitors. Retrieved from: <https://www.medicare.gov/coverage/blood-sugar-monitors>.
- ⁴¹ Health Affairs Blog, April 10, 2019. Physician Acceptance of New Medicaid Patients: What Matters and What Doesn't. DOI: 10.1377/hblog20190401.678690. Available at: <https://www.healthaffairs.org/doi/10.1377/hblog20190401.678690/full/>
- ⁴² Medicaid and CHIP Payment and Access Commission. Medicaid's Role in Financing Maternity Care. January 2020. Retrieved from: <https://www.macpac.gov/wp-content/uploads/2020/01/Medicaid%E2%80%99s-Role-in-Financing-Maternity-Care.pdf>
- ⁴³ Center on Budget and Policy Priorities. How Medicaid Work Requirements Will Harm Rural Residents – And Communities. March 10, 2020. Retrieved from: <https://www.cbpp.org/research/health/how-medicaid-work-requirements-will-harm-rural-residents-and-communities>
- ⁴⁴ Kilpatrick SJ, Papile L, and Macones GA, eds. AAP Committee on Fetus and Newborn and ACOG Committee on Obstetric Practice. Guidelines for Perinatal Care. Eighth Edition. 2017. Page 150.
- ⁴⁵ Department of Health Care Services, Medi-Cal Rates. 2019. Retrieved from: <http://files.medical.ca.gov/pubsdoco/Rates/RatesHome.asp>.
- ⁴⁶ US Department of Health and Human Services. 2019. HHS Awards \$9 Million to Develop New Models to Improve Obstetrics Care in Rural Communities. Retrieved from <https://www.hhs.gov/about/news/2019/09/10/hhs-awards-9-million-new-models-obstetrics-care-rural-communities.html>.
- ⁴⁷ Centers for Medicare & Medicaid Services Newsroom. 2019. Remarks by Administrator Seema Verma at the National Rural Health Association Annual Conference. Retrieved from: <https://www.cms.gov/newsroom/press-releases/remarks-administrator-seema-verma-national-rural-health-association-annual-conference>
- ⁴⁸ Dorsata for Women's Health Providers: <https://www.dorsata.com/womens-health-providers/>

- ⁴⁹ Morley CP1, Badolato DJ, Hickner J, Epling JW. The impact of prior authorization requirements on primary care physicians' offices: report of two parallel network studies. *J Am Board Fam Med.* 2013 Jan-Feb;26(1):93-5.
- ⁵⁰ Gupta A, et al. Insurance approval for proton beam therapy and its impact on delays in treatment. *Int J Radiat Oncol Biol Phys.* 2019 Jul 15;104(4):714-723.
- ⁵¹ Zhang Y1, Adams AS, Ross-Degnan D, Zhang F, Soumerai SB. Effects of prior authorization on medication discontinuation among Medicaid beneficiaries with bipolar disorder. *Psychiatr Serv.* 2009 Apr;60(4):520-7.
- ⁵² ACOG Comment on CMS Proposed Rule: Medicaid Fiscal Accountability Regulation. Dated January 31, 2020. Retrieved from: <https://www.regulations.gov/document?D=CMS-2019-0169-3311>
- ⁵³ Center on Budget and Policy Priorities. How Medicaid Work Requirements Will Harm Rural Residents – And Communities. March 10, 2020. Retrieved from: <https://www.cbpp.org/research/health/how-medicaid-work-requirements-will-harm-rural-residents-and-communities>
- ⁵⁴ Health Resources & Services Administration. Federal Office of Rural Health Policy and Bureau of Health Workforce. Rural Residency Planning and Development Program Funding Opportunity Number: HRSA-19-088. Retrieved from: https://grants.hrsa.gov/2010/Web2External/Interface/Common/EHBDisplayAttachment.aspx?dm_rtc=16&dm_attid=a03df4fa-db34-4fd1-b549-7a8808df4a37.
- ⁵⁵ Alliance for Innovation on Maternal Health. AIM States & Systems. Retrieved from: <https://safehealthcareforeverywoman.org/aim-states-systems-2/>
- ⁵⁶ Alliance for Innovation on Maternal Health (AIM), Reduction of Peripartum Racial/Ethnic Disparities. Retrieved from: <https://safehealthcareforeverywoman.org/patient-safety-bundles/reduction-of-peripartum-raciaethnic-disparities/>
- ⁵⁷ Levels of maternal care. Obstetric Care Consensus No. 9. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2019; 134:e41-55. Retrieved from: <https://www.acog.org/-/media/project/acog/acogorg/clinical/files/obstetric-care-consensus/articles/2019/08/levels-of-maternal-care.pdf>
- ⁵⁸ Ibid.
- ⁵⁹ Levels of maternal care. Obstetric Care Consensus No. 9. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2019;134:e41-55. Retrieved from: <https://www.acog.org/Clinical-Guidance-and-Publications/Obstetric-Care-Consensus-Series/Levels-of-Maternal-Care?IsMobileSet=false>
- ⁶⁰ Medicare.gov Hospital Compare search tool: <https://www.medicare.gov/hospitalcompare/search.html?>
- ⁶¹ American College of Obstetricians and Gynecologists, Task Force on Collaborative Practice. "Collaboration in practice: implementing team-based care / developed under the direction of the Task Force on Collaborative Practice." 2016. Retrieved from: <https://www.acog.org/-/media/project/acog/acogorg/clinical/files/task-force-report/articles/2016/collaboration-in-practice-implementing-team-based-care.pdf>
- ⁶² Implementing telehealth in practice. ACOG Committee Opinion No. 798. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2020;135:e73-9. Retrieved from: <https://www.acog.org/-/media/project/acog/acogorg/clinical/files/committee-opinion/articles/2020/02/implementing-telehealth-in-practice.pdf>
- ⁶³ Value-based payments in obstetrics and gynecology. ACOG Committee Opinion No. 744. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2018;132:e53-9. Retrieved from: <https://www.acog.org/-/media/project/acog/acogorg/clinical/files/committee-opinion/articles/2018/08/value-based-payments-in-obstetrics-and-gynecology.pdf>
- ⁶⁴ Medicaid's Role in Financing Maternity Care, MACPAC. January 2020. Retrieved from: <https://www.macpac.gov/wp-content/uploads/2020/01/Medicaid%E2%80%99s-Role-in-Financing-Maternity-Care.pdf>
- ⁶⁵ Pregnancy Medical Home. NC Medicaid. March 15, 2019. Retrieved from: <https://files.nc.gov/ncdma/documents/files/1E-6.pdf>
- ⁶⁶ Berrien, K., Ollendorff, A. and Menard, M., 2015. Pregnancy Medical Home Care Pathways Improve Quality of Perinatal Care and Birth Outcomes. *North Carolina Medical Journal*, [online] 76(4), pp.263-266. Retrieved from: <https://www.ncmedicaljournal.com/content/76/4/263>
- ⁶⁷ Agrawal, Anisha. Case Study: Wisconsin's Obstetric Medical Home Program Promotes Improved Birth Outcomes. National Institute for Children's Health Quality, National Academy for State Health Policy. September 2017. Retrieved from: <https://nashp.org/wp-content/uploads/2017/10/Wisconsin-Case-Study-Final.pdf>
- ⁶⁸ Pregnancy Medical Home Pilot Program Final Evaluation Report. Texas Health and Human Services. September 2017. Retrieved from: <https://hhs.texas.gov/sites/default/files/documents/laws-regulations/reports-presentations/2017/pregnancy-medical-home-pilot-final-eval-sept-6-2017.pdf>
- ⁶⁹ Ollove, Michael, "New Maternal Mortality Strategy Relies on 'Medical Homes.'" December 5, 2017. The Pew Charitable Trust. Retrieved from: <https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2017/12/05/new-maternal-mortality-strategy-relies-on-medical-homes>
- ⁷⁰ Community Care of North Carolina, Clinical Program Analysis. May 2015. Retrieved from: <https://www.communitycarenc.org/sites/default/files/2017-11/roi-document-may-2015.pdf>

- ⁷¹ Strong Start for Mothers and Newborns Evaluation: Year 5 Project Synthesis, Volume 1: Cross-Cutting Findings. October 2018. Retrieved from: <https://downloads.cms.gov/files/cmimi/strongstart-prenatal-finalevalrpt-v1.pdf>
- ⁷² Ibid.
- ⁷³ Optimizing postpartum care. ACOG Committee Opinion No. 736. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2018;131:e140–50.
- ⁷⁴ Metz TD, Rovner P, Hoffman MC, Allshouse AA, Beckwith KM, Binswanger IA. Maternal Deaths From Suicide and Overdose in Colorado, 2004-2012. *Obstet Gynecol*. 2016;128(6):1233-1240. Retrieved from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5121076/>
- ⁷⁵ Maryland Department of Health. "Maryland Maternal Mortality Review 2018 Annual Report." December 12, 2018. Retrieved from: <http://healthymaryland.org/wp-content/uploads/2019/01/Health-General-Article-%C2%A713-1207-2018-Annual-Report-Maryland-Maternal-Mortality-Review.pdf>
- ⁷⁶ New York Department of Health. "New York Stated Maternal Mortality Review Report: 2012-2013." August 2017. Retrieved from: https://www.health.ny.gov/community/adults/women/docs/maternal_mortality_review_2012-2013.pdf
- ⁷⁷ Texas Department of State Health Services. "Legislative Brief: Investigating Maternal Mortality in Texas." November 2017. Retrieved from: <https://www.dshs.texas.gov/mch/pdf/Dec2017-Investigating-Maternal-Mortality-Brief-FINAL.pdf>
- ⁷⁸ Utah Department of Health, Public Health Indicator Based Information System. "Complete Health Indicator Report of Maternal Mortality." November 2019. Retrieved from: https://ibis.health.utah.gov/ibisph-view/indicator/complete_profile/MatMort.html
- ⁷⁹ Virginia Department of Health. "Chronic Disease in Virginia Pregnancy Associated Deaths, 1999-2012: Need for Coordination of Care." August 2019. Retrieved from: <https://www.vdh.virginia.gov/content/uploads/sites/18/2019/08/MMRT-Chronic-Disease-Report-FINAL-VERSION.pdf>
- ⁸⁰ Erase MM Program, Centers for Disease Control and Prevention. Last updated February 26, 2020. Retrieved from: <https://www.cdc.gov/reproductivehealth/maternal-mortality/erase-mm/index.html>
- ⁸¹ MMRIA. Building U.S. Capacity to Review and Prevent Maternal Deaths. Getting Started. Retrieved from: <https://reviewtoaction.org/content/members>.
- ⁸² Kozhimannil, Katy B. MACPAC Public Meeting Transcript, Washington, DC. January 23, 2020. Pages 302-303. Retrieved from: <https://www.macpac.gov/wp-content/uploads/2019/10/January-2020-Meeting-Transcript.pdf>
- ⁸³ Metz J, Hansen H. Structural competency: theorizing a new medical engagement with stigma and inequality. *Soc Sci Med* 2014;103:126–33. Retrieved from: <https://www.sciencedirect.com/science/article/pii/S0277953613003778>
- ⁸⁴ National Academies of Sciences, Engineering, and Medicine. A framework for educating health professionals to address the social determinants of health. Washington, DC: The National Academies Press; 2016. Retrieved from: <https://www.nap.edu/catalog/21923/a-framework-for-educating-health-professionals-to-address-the-social-determinants-of-health>
- ⁸⁵ Bourgois P, Holmes SM, Sue K, Quesada J. Structural vulnerability: operationalizing the concept to address health disparities in clinical care. *Acad Med* 2017;92:299–307. Retrieved from: https://journals.lww.com/academicmedicine/Fulltext/2017/03000/Structural_Vulnerability_Operationalizing_the.18.aspx
- ⁸⁶ Access to Affordable and Nutritious Food: Measuring and Understanding Food Deserts and Their Consequences. United States Department of Agriculture Economic Research Service. 2009. Retrieved from: https://www.ers.usda.gov/webdocs/publications/42711/12716_ap036_1_.pdf
- ⁸⁷ Improving Access to Maternal Health Care in Rural Communities. Centers for Medicare and Medicaid Services. 2019. Retrieved from: <https://www.cms.gov/About-CMS/Agency-Information/OMH/equity-initiatives/rural-health/09032019-Maternal-Health-Care-in-Rural-Communities.pdf>
- ⁸⁸ Improving Access to Maternal Health Care in Rural Communities. Centers for Medicare and Medicaid Services. 2019. Retrieved from: <https://www.cms.gov/About-CMS/Agency-Information/OMH/equity-initiatives/rural-health/09032019-Maternal-Health-Care-in-Rural-Communities.pdf>
- ⁸⁹ Agency for Healthcare Research and Quality. 2012 national healthcare disparities report. AHRQ Publication No. 13-0003. Rockville (MD): AHRQ; 2013. Available at: http://www.ahrq.gov/research/findings/nhqrdr/nhdr12/nhdr12_prov.pdf
- ⁹⁰ Importance of social determinants of health and cultural awareness in the delivery of reproductive health care. ACOG Committee Opinion No. 729. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2018;131:e43–8.
- ⁹¹ American College of Obstetricians and Gynecologists, Our Commitment to Changing the Culture of Medicine and Eliminating Racial Disparities in Women's Health Outcomes. Retrieved from: <https://www.acog.org/about/our-commitment-to-changing-the-culture-of-medicine-and-eliminating-racial-disparities-in-womens-health-outcomes/our-commitment-to-changing-the-culture-of-medicine-resources>
- ⁹² Gottlieb L, Sandel M, Adler NE. Collecting and applying data on social determinants of health in health care settings. *JAMA Intern Med* 2013;173:1017–20. Retrieved from: <https://jamanetwork.com/journals/jamainternalmedicine/article-abstract/1682357>

⁹³ Importance of social determinant of health and cultural awareness in the delivery of reproductive health care. ACOG Committee Opinion No.729. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2018;131:e43-8. Retrieved from: <https://www.acog.org/-/media/project/acog/acogorg/clinical/files/committee-opinion/articles/2018/01/importance-of-social-determinants-of-health-and-cultural-awareness-in-the-delivery-of-reproductive-health-care.pdf>

⁹⁴ American College of Obstetricians and Gynecologists. Recommendations to the IHS from the Rural Maternal Safety Meeting, Committee on American Indian/Alaska Native Women’s Health. August 4, 2014. Retrieved from: https://www.pccpc.org/sites/default/files/resources/Rural%20Maternal%20Safety%20Final%20wlogo_right%20copy.pdf