



THE ROLE OF MEDICAID IN PROMOTING ACCESS TO HIGH-QUALITY, HIGH-VALUE MATERNITY CARE

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One of the most challenging aspects of health care improvement and reform is ensuring that individuals, particularly those who are vulnerable and low income, have access to care. Just as challenging is the imperative to ensure that the care accessed is of the highest quality possible. The Institute of Medicine (IOM) report, *Crossing the Quality Chasm*, identified the primary goal of any high-quality health care system: The ability to furnish the right care, in the right setting, at the right time. This aim must also be the primary goal of Medicaid in regard to providing access to high-quality care for women throughout the reproductive cycle. Nationwide, Medicaid is a large purchaser of maternity care; in 2006, the program paid for 43% of all births and maternity costs represented 29% of all hospital charges to Medicaid. Under current federal law, state Medicaid agencies have to fulfill several obligations related to assessing, ensuring, and improving the quality of care, particularly for enrollees who receive services through managed care arrangements.

The main purpose of this article is to analyze and describe the role of Medicaid in facilitating access to care for pregnant women and ensuring high-quality maternity care that is affordable. It first summarizes the federal Medicaid requirements regarding eligibility, coverage of benefits, financing, and service delivery, with a special emphasis on existing quality provisions. Then, it discusses current issues and recommends several Medicaid reforms, particularly in the area of quality assessment and improvement. All reforms, including Medicaid reforms, should seek to support the IOM-identified aims. Much of the emphasis in Medicaid policy development has been focused on access to care and great need for reform remains in the area of quality assurance and improvement, and disparity reduction because the program can play a significant role in this regard as well. More broadly, health care reform may provide an opportunity to revisit key issues around access to and quality of maternity care, including the benefit package, the content of services covered in the package, the frequency with which these services should be furnished, and the development of meaningful measures to capture whether women of childbearing age, including pregnant women, regardless of insurance status, indeed receive efficient, timely, effective, safe, accessible, and woman-centered maternity care.

Introduction

One of the most challenging aspects of health care improvement and reform is ensuring that individuals, particularly those who have low incomes or other risk factors that make them vulnerable to poorer health outcomes, have access to care. Just as challenging is the imperative to assure that the care accessed is

of high quality. The Institute of Medicine (IOM) defines quality as a multidimensional concept encompassing “effective, efficient, timely, patient-centered, safe and equitable” care; the IOM further defines the concept as the “degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge” (Berwick, 2002).

The primary purpose of this article is to analyze and discuss the role of Medicaid in facilitating access to care for pregnant women and ensuring high-quality maternity care that is affordable. It first describes the federal Medicaid requirements regarding eligibility,

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coverage of benefits, financing, and service delivery, with a special emphasis on existing quality provisions. Then, it discusses current issues and recommends several Medicaid reforms, particularly in the area of quality assessment and improvement.

Evolution of the Medicaid Program in Relation to Women and Pregnancy

The Medicaid program is a jointly financed, federal-state health program that pays for health and long-term care services for low-income and resource-limited individuals, families, and people with disabilities. Medicaid finances coverage for basic health care for 20 million low-income women throughout the United States, with women comprising 69% of all adult Medicaid beneficiaries (Kaiser Family Foundation, 2007). Over its nearly 45-year history, the program has undergone significant changes, primarily transitioning from a relatively modest welfare program to one of the nation's largest provider of health care coverage to people under age 65. It has evolved along with the changing health care system and created flexibility for states to customize their programs to meet the needs of their enrollees. As a result, the program has financed an increasing proportion of medical expenses of all U.S. births to low-income pregnant women, an upward trend that has remained consistent since the mid-1990s (Agency for Healthcare Research and Quality, 2006), from 38% in 1993 to 43% in 2006 representing 1.69 million and 2.05 million maternal discharges, respectively. Medicaid requires states to cover "pregnancy-related" services and allows states to enhance routine prenatal care benefits with additional services for women most at-risk for adverse birth outcomes. Across the nation, Medicaid finances from 21.4% to 66.8% of all births in a state (Hill et al., 2009; March of Dimes, 2006) and 70% of all births in Washington, DC. Maternal and newborn charges now comprise approximately 27% to 29% of all Medicaid inpatient charges, and maternity procedures account for six of the top 10 inpatient procedures billed to Medicaid (Andrews, 2008; Kaiser Family Foundation, 2007).

Affordability, accessibility, and continuity of health insurance coverage are critical to the adequate assessment and improvement of the quality of care and for achieving better health outcomes on a population basis. Health insurance coverage thus represents a crucial first step in enhancing access to services, encouraging the appropriate use of care, and improving health outcomes. Medicaid has served to fill a substantive void in a health insurance environment in which a large proportion of lower and moderate income women happen to be uninsured before and during pregnancy, particularly at the beginning of pregnancy, and again after the postpartum period (Adams, Gavin, Handler, Manning, & Raskind-Wood, 2003). Medicaid has had

an important impact on access to prenatal care and in its earlier years has been significantly associated with major declines in maternal and infant mortality as a result of its impact on access to hospital care (Davis & Schoen, 1978). At the same time, even as the evidence to date underscores the contribution Medicaid has made to improved coverage, access, and outcomes, it also reveals that much work remains to be done to ensure Medicaid's effectiveness in reducing disparities in maternal health and health care (Adams et al., 2003; Baldwin et al., 1998; Cole, 1995; Currie & Gruber, 1996; Kaiser Family Foundation, 2007; Kenney & Dubay, 1995; Piper, Ray, & Griffin, 1990).

Clearly, health care services financed by Medicaid can have a significant impact on the access to, and the utilization of, prenatal and perinatal care and ultimately maternal and child health outcomes for a highly vulnerable population of women throughout the nation and in fact for all women owing to the large percentage of births covered by the program and its spillover effects on the larger health care system. An understanding of Medicaid's role as a resource for pregnant women is key in determining how to improve access to care, assess quality of care, and implement effective and lasting maternity care reform. Regardless of whether congress addresses some of the shortcomings identified in the Medicaid program, including the critical first step of providing coverage to all low-income women regardless of pregnancy status so that quality can be truly assessed and improved on a population level, many aspects of the program can be modified and acted upon today so that improvements in individual coverage and access to quality services can be achieved for a majority of low-income pregnant women. While congress debates the inner workings of the health reform legislation, Medicaid has the potential to be a leader in maternity care quality improvement and disparities reduction. Furthermore, if congress enacts reform and reform is implemented, Medicaid will likely retain a significant role in the payment of care for low-income individuals, including women of childbearing age, and strengthen its potential to ensure that the care is of high quality.

Because the success of Medicaid in leading efforts to improve the quality of maternity care and reduce disparities is predicated on who is actually eligible for services and the types of benefits that are covered for eligible and enrolled women of childbearing age, it is important to first describe the basic design of the Medicaid program to understand who is currently in, who is currently out, and what care is available to those who are enrolled.

Medicaid Eligibility and Enrollment of Pregnant Women

Medicaid eligibility is predicated on two major criteria—categorical and financial—and actual receipt of

benefits is dependent on the ability to navigate the enrollment process. At each stage, a woman may fail to make the cut.

Categorical eligibility

Historically, Medicaid has been a program that requires being linked to a recognized eligibility category. For example, one eligibility category is being pregnant or within the postpartum period. Low-income women who do not receive Medicaid have been likely to be ineligible for Medicaid because they do not fall into one of the program's recognized mandatory or optional eligibility categories (Salganicoff & An, 2008; Kaiser Family Foundation, 2005; Handler, Zimbeck, Chavkin, & Adams, 2003). Put another way, they are single, working, adult women of reproductive age or members of childless couples. Following pregnancy and after the postpartum period ends, unless women requalify as parents or persons with disabilities, they lose coverage, even if their income is sufficiently low to qualify them from a financial standpoint.

Financial eligibility

Federal law requires all states participating in the Medicaid program to cover pregnant women whose income is up to 133% of the federal poverty level—the equivalent of \$29,326.50 for a family of four in 2009, with many states exercising the option to cover pregnant women well above this mandatory threshold (Figure 1). Furthermore, once a woman enrolls in Medicaid, states are required to provide care without interruption for the whole pregnancy and until the last day

of the month in which the 60th postpartum day occurs, regardless of any changes in economic circumstances (42 U.S.C. §1396a(e)(5)). The infant born to a woman who is receiving Medicaid on the date of her child's birth is deemed eligible for Medicaid on the date of birth and remains eligible for 1 year as long as her mother remains eligible and the infant is a member of the woman's household (42 U.S.C. §1396a(e)(4); 42 CFR... CFR §435.117).

Presumptive eligibility

To reduce enrollment delays, Medicaid permits states to establish a period of "presumptive" (i.e., temporary) eligibility for pregnant women, to span the time period between application for coverage and enrollment. As of 2008, 28 states and Washington, DC, offered presumptive eligibility (Hill et al., 2009).

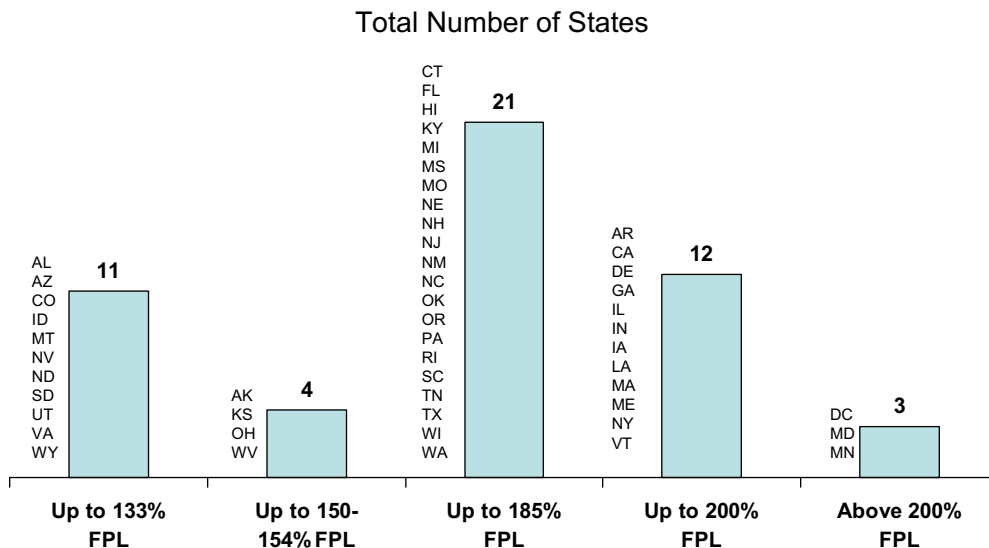
Outstationing

States can "outstation" the enrollment process by placing eligibility workers in health care settings other than the traditional welfare offices to help women initiate the application process and assist them with documentation collection and submission. States must offer outstationed enrollment in federally qualified health centers and disproportionate share hospitals (42 U.S.C. §1396a(a)(55)).

The special role of citizenship documentation

States can streamline eligibility by eliminating much of the paperwork associated with the application process. But since 2006 the federal Deficit Reduction Act has

Medicaid Upper Income Eligibility Levels for Pregnant Women



Source: GW Analysis Based on Data by Urban Institute and National Academy of State Health Policy, 2009.

Figure 1. Medicaid upper income eligibility levels for pregnant women.

imposed stringent citizenship documentation requirements on applicants, which paradoxically seems to have its heaviest impact on citizens as well as on the ability of health care providers to furnish appropriate care (Ku, 2006; Repasch, Finnegan, Shin, & Rosenbaum, 2008; Shin, Finnegan, Hughes, & Rosenbaum, 2007). In the case of undocumented women, Medicaid coverage is restricted to emergency care necessary to treat an emergency medical condition, defined in statute and regulations as a medical condition (including emergency labor and delivery)—after sudden onset—manifesting itself by acute symptoms of sufficient severity (including severe pain) such that the absence of immediate medical attention could reasonably be expected to result in: i) placing the patient's health in serious jeopardy; ii) serious impairment to bodily functions; or iii) serious dysfunction of any bodily organ or part (42 CFR §440.255(c)). The federal government does not consider pregnancy itself to constitute a medical emergency for the purposes of Medicaid eligibility. More recently, the Children's Health Insurance Program Reauthorization Act (CHIPRA) of 2009, P.L. 111-3, gave states the option to cover pregnant women who are legal immigrants and have been in the country for fewer than 5 years, if otherwise eligible. The law also relaxes the documentation requirements somewhat: individuals who otherwise meet eligibility requirements must receive Medicaid benefits while in the process of proving their citizenship.

Medicaid Coverage of Benefits and Adequacy of Maternity Care

Regardless of how women become eligible for Medicaid, all pregnant enrollees are entitled to what the Medicaid statute terms "pregnancy-related" services.

Coverage rules

As a matter of federal law, all state Medicaid programs must cover "pregnancy-related" services defined as prenatal, delivery, and postpartum care as well as items and services necessary to treat conditions that could arise during or that complicate a pregnancy (42 U.S.C. §1396a(a)(10); 42 CFR §§ 440.210(a)(2) and 440.210(a)(3)). Although the term "pregnancy-related services" is not a defined benefit class, the pregnancy-related service obligation means that states must cover all pregnancy-related treatments and services that fall within the law's 27 recognized coverage classes, that is, all of the benefit categories spelled out in the statute and implementing regulations that are mandatory and optional benefits (e.g., inpatient and outpatient hospital services, physician services, laboratory and x-ray services, certified nurse-midwife services, medical or other remedial care provided by licensed practitioners, clinic services). This way of structuring benefit coverage for pregnant women

means that there are several covered service options by which women receive necessary pregnancy-related care, which in some cases are covered by all states because they are required in federal law (e.g., physician services, certified nurse-midwife services) and in other cases may vary significantly from state to state because they are at state option (e.g., medical or other remedial care provided by licensed practitioners, clinic services). At the same time, state criteria must be reasonable and the limitations states use must relate to the concept of medical necessity (42 U.S.C. §§1396a(a)(17) and a(30)). These coverage rules make it very difficult for a state to refuse to pay for necessary treatments under covered service classes in the case of pregnant women because the "pregnancy-related" test is a "diagnostic" standard that supersedes Medicaid's required and optional coverage classes and is not a service clause.

For a pregnant woman receiving Medicaid benefits as an individual under age 21 before becoming pregnant (another eligibility category), the Medicaid Early and Periodic Screening Diagnostic and Treatment benefit defines the full scope of coverage (Rosenbaum & Markus, 2006; Markus, Rosenbaum, Crumbley, Stewart, & Cox, 2006; Markus, Rosenbaum, Joseph, & Stein, 2006). Once pregnant, a determination would be made regarding her eligibility category and whether to requalify as a pregnant woman under the existing income eligibility level to receive pregnancy-related services or remain covered as a child.

Some states offer what is termed an "enhanced" or "enriched" pregnancy package, which may include additional services, such as smoking cessation support and nutritional counseling. States that offer enhanced benefits may elect to limit their availability to women categorized as high risk on the basis of medical or social characteristics or a combination of the two (Hill et al., 2009).

Periodicity schedules

States typically consult guidelines approved by the American College of Obstetricians and Gynecologists, the U.S. Preventive Services Task Force, and state professional organizations when determining their benefits package and provision of care schedules for pregnant Medicaid beneficiaries. Although it is likely that some standardization results from the use of these clinical treatment protocols, states are granted a large degree of latitude in determining the types and schedules of services they will provide.

Cost sharing

Because Medicaid eligibility is tied to low family income, cost sharing is generally limited but permitted under certain conditions (42 U.S.C. §1396o; §1396o-1). In the case of pregnant women, states may not impose premiums (42 U.S.C. § 1396o-1(b)(3)(A)(ii)) or cost

sharing for services related to the pregnancy or to any other medical condition that may complicate the pregnancy (42 U.S.C. § 13960-1(b)(3)(B)(iii)).

Financing Arrangements and Delivery Systems of Pregnancy-Related Services

Medicaid encompasses two entitlements, an entitlement to the individual and an entitlement to the states. Any woman who meets established eligibility requirements for Medicaid benefits in the state in which she resides is entitled to receive those benefits. States are also entitled to receive federal matching payments (known as Federal Medical Assistance Percentage) for a share of the costs they incur providing benefits to Medicaid beneficiaries. Both entitlements are legally enforceable (Jost, 2003; Mann, 2003).

Pregnant women receive services either in their state's Medicaid fee-for-service (FFS) or managed care (MC) programs or both (e.g., they may receive prenatal care while enrolled in MC but switch to FFS for labor and delivery services and then return to MC in the postpartum period). Medicaid MC arrangements vary from primary care case management systems that organize primary care services for the state to comprehensive MC organizations (MCOs) that are at financial risk via capitated payments for offering a comprehensive range of both ambulatory and inpatient care through provider networks selected and overseen by the MCO. States typically require pregnant women to enroll in MC during pregnancy or may not allow women who become pregnant to disenroll from their MC plans in favor of FFS. Some states may cover pregnant women in their FFS program until they can enroll in a MC plan. The ability or the requirement to move back and forth between FFS and MC can create additional barriers for the continuity of care received and presents special challenges for monitoring and improving the quality of maternity care received by pregnant women in Medicaid.

Role of Medicaid in Promoting Quality Maternity Care

By law, states have a broad obligation to describe in their Medicaid state plan the methods and standards used to ensure that services are of high quality whether they are provided in FFS or in MC (42 U.S.C. § 1396a(a)(22)(d); 42 CFR § 440.260). In addition, states that rely on MC to organize the delivery and payment of services for their pregnant enrollees must abide by quality assessment and improvement and external quality review standards detailed in MC regulations (42 CFR Part 438 et seq.; 42 CFR § 438.200-242; 42 CFR § 438.310-370). In particular, the state must have a written quality strategy that includes two main components. The first component consists of the state's use

of contract provisions with participating MCOs that incorporate standards related to a number of key aspects of access and quality that each MCO should uphold, including the availability of services; assurances of adequate capacity and services; coordination and continuity of care; coverage and authorization of services; provider selection; enrollee information; confidentiality; enrollment and disenrollment; grievance systems; subcontractual relationships and delegation; practice guidelines; quality assessment and performance improvement program; and health information systems. The second component focuses on procedures that the state may use to, among other things, assess the quality and appropriateness of care and services furnished to all Medicaid enrollees under the MC contracts and to individuals with special health care needs, regularly monitor and evaluate MCO compliance with federal standards and any national performance measures and levels that may be identified and developed by the Centers for Medicare and Medicaid Services (CMS) in consultation with states, and arrange for annual, external independent reviews of the quality outcomes and timeliness of, and access to, the services covered under each MCO contract.

As large purchasers of maternity care, state Medicaid agencies can play a significant role in assessing, ensuring, and improving its quality and they have broad latitude do so within the existing federal framework. Additionally, given the demographic characteristics of Medicaid's non-elderly, non-disabled population, the vast majority of Medicaid enrollees are women of childbearing age or their children, making quality assessment and improvement of services furnished to this population a natural priority likely to generate an immediate pay off for the program as well as a more lasting one for the state's population health. Furthermore, the push to MC in the late 1980s and early 1990s primarily focused on women and children as two key groups particularly suited for receiving services in a MC environment because they are high users of primary and preventive care and can highly benefit from a coordinated system of care, two promises of MC from its inception. Medicaid MC quality and performance are thus central to pregnancy outcome. The manner in which MCOs structure, deliver, and perform their health care obligations can exert a significant impact on the quality, timeliness, and outcomes of health care for pregnant women. One key assumption in enrolling pregnant women in MC is that MCOs and providers who are subject to the financial risks associated with poor pregnancy outcomes will have strong financial and business incentives to provide an optimal mix of services, including cost-effective preventive care.

Studies evaluating the quality of Medicaid maternity care
There is a dearth of studies focusing on the quality of maternity care provided to women in Medicaid FFS

or MC and how it might compare with the quality of maternity care provided to women who are privately insured or uninsured. Most of the studies reviewed for this article examined the impact of Medicaid MC on maternity process and outcome indicators, comparing it to the impact of Medicaid FFS and/or private insurance (Conover, Rankin, & Sloan, 2001; Cooper, Hickson, Mitchel, & Ray, 1999; Goldfarb et al., 1991; Howell, Dubai, Kenney, & Sommers, 2004; Kaestner, Dubai, & Kenney, 2005; Krieger, Connell, & LoGerfo, 1992; Van Hoof et al., 2000). None of the studies examined maternity care quality in Medicaid MC in a comprehensive fashion, which is understandable given the complexity of the policy and research questions within the topic, but together they address many key aspects of the system. Figure 2 depicts an analytical model built by the first author from the existing Medicaid MC studies on pregnancy outcomes, which largely follows the Donebedian logic model of structure, process, outcomes for assessing and improving quality (Donebedian, 1988).

Overall, there are too few studies to draw firm conclusions about the comparative quality of services provided between MCOs and other forms of service delivery and payment, such as FFS and/or primary care case management (Table 1). The studies taken together show conflicting results, with some suggesting adequate performance and others showing care of more limited quality.

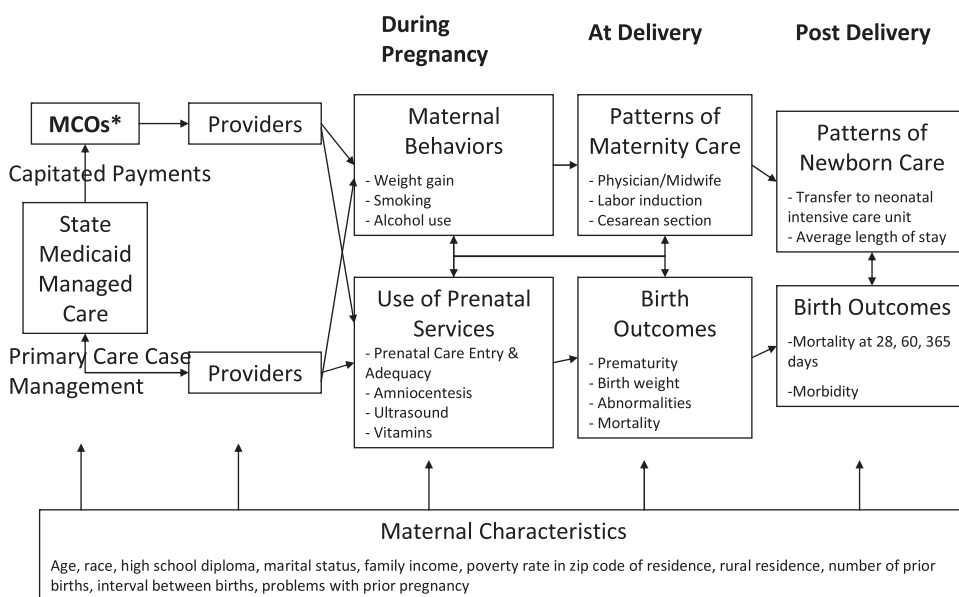
Two studies found that prenatal care use appeared equivalent for Medicaid MC and FFS enrollees (Goldfarb et al., 1991; Krieger et al., 1992), but in one of the

two studies MC enrollees had babies who had slightly higher birthweights than FFS enrollees (Krieger et al., 1992). Another study also examined patterns of maternity care and found that, once Medicaid enrollees in one state were in statewide capitated MC, they seemed to use midwives more frequently than physicians, had higher rates of vaginal births than cesarean sections, and experienced a reduction of electronic fetal monitoring and labor induction than before enrollment in statewide capitated MC and than Medicaid enrollees in another, similar state without MC (Conover et al., 2001). On the other hand, when comparing women in Medicaid MCOs with those in private MCOs, women in Medicaid MC had higher rates of no prenatal care or late (i.e., beginning in the third trimester) prenatal care (Krieger et al., 1992). It is important to note that the studies reviewed did not indicate how prenatal care received by women in Medicaid MCOs or FFS compared with that for women who were uninsured.

Existing opportunities to strengthen the quality of maternity care in Medicaid MC through the federally required annual external audit

By law, states have to abide by a number of federal requirements to ensure that MC programs implement standards of access and quality. The federal Balanced Budget Act of 1997 and subsequent Medicaid MC regulations (42 CFR parts 433 and 438) require states to have an annual external review process for their Medicaid MC programs. State Medicaid agencies must contract with qualified outside entities, known as External Quality Review Organizations (EQROs), to conduct

Logic Framework: Impact of Medicaid Managed Care on Birth Outcomes



* Managed care organization

Source: Markus, A., GWU SPHHS Department of Health Policy, Fall 2008

Figure 2. Logic framework: Impact of Medicaid MC on birth outcomes.

the analysis and evaluation of the data and information collected in specified mandatory activities. They may also utilize the EQROs for optional activities, which typically require additional funding and can include i) calculating performance measures, ii) conducting performance improvement projects, and iii) conducting focused studies of quality of care. States can require their MCOs to follow a common methodology to implement and assess an intervention that is standardized across plans (e.g., use of a psychosocial screening tool targeted at pregnant women) in an effort to examine improvement in the MC program as a whole. Although states often identify in their EQRO contracts some component of maternity care as a required or an optional topic for MCO quality improvement activities, the development and implementation of these activities remain too infrequent. When they do occur, they tend to be narrow in scope and a one-time effort, with little consistency among states and within states among MCOs in approaches adopted so that findings may be compared. The majority of these initiatives focus on Healthcare Effectiveness and Data and Information Set (HEDIS) process or utilization measures, which are limited in the case of maternity care, and not outcomes, and do not stratify the target populations by risk level (e.g., high-risk pregnant women), or race/ethnicity, or primary language, or other important factors.

Existing opportunities to strengthen the quality of maternity care in Medicaid MC through national, regional, and local quality improvement collaboratives

Under the existing federal framework for quality assessment and improvement in Medicaid, states have the authority to create collaboratives with their MCOs to improve maternity care and perinatal outcomes and the ability to lead these initiatives through consensus building to delineate and carry out common interventions, tools, and measures that focus specifically on pregnant women at risk of experiencing negative birth outcomes. Washington, DC, for example, initiated in 2008 two MCO collaboratives, one of which focuses on improving perinatal health outcomes in the District where Medicaid financed 70% of the births in 2007. At the federal level, the CMS, in conjunction with the National Initiative for Children's Healthcare Quality, developed the national Neonatal Outcomes Improvement Project and four states—Alaska, New York, North Carolina, and Ohio—have formally entered the project. This pilot initiative is intended to be a major collaborative effort among government agencies, the health care sector, and other invested organizations to improve neonatal outcomes through broader adoption of proven clinical interventions, many of which focus on pregnant women, the treatment of maternal chronic medical conditions such as

diabetes and hypertension, and the early identification of pregnancies at high risk for prematurity.

New opportunities to strengthen the quality of maternity care for all pregnant women through the new federal quality program created under CHIPRA

Until 2009, state obligations remained broadly defined at the federal level with state discretion to tailor their access and quality standards as desired. With the enactment of Children's Health Insurance Program Reauthorization Act of 2009, the federal government is now vested with the responsibility of developing a comprehensive pediatric quality assurance program for all children, including children in Medicaid, CHIP, and private insurance. To the extent that states take up the new option to cover pregnant women without a waiver under separate CHIP programs or if they already cover pregnant women under separate CHIP programs, this new program may lead to the development of federally endorsed perinatal outcomes measures and improvement projects that could also apply to Medicaid and other sources of coverage.

Key Principles for a High-Quality, High-Value Medicaid Program and Recommendations for Change

Sixty-two million women in the United States are of childbearing age (Kaiser Family Foundation, 2007). Improving health for women and children remains a prominent goal of the health community and is dependent on achievement of two central goals: 1) ensuring access to preconception, prenatal, and postpartum care; and 2) improving the quality of the care provided (Johnson, Atrash, & Johnson, 2008; Rosenbaum, 2008; Salganicoff & An, 2008; Wise, 2008). For decades, health care professionals and leaders have called for improvement in outcomes for pregnant women through prevention and management of risk factors associated with pregnancy. Yet, 17 million women in the United States remain uninsured and maternal and child health statistics indicate that significant barriers to optimal outcomes of care still exist for those who do have coverage.

The Medicaid program has and will continue to play a central role in the delivery and improvement of maternity care—particularly for at-risk populations—even under the current health reform bills under consideration by Congress. One quarter of low-income adult women in the United States receive health care coverage through the Medicaid program (Kaiser Family Foundation, 2007). Despite efforts to increase eligibility and improve enrollment, many questions remain unanswered in regard to the quality of the Medicaid program and its delivery of pregnancy-related care (Dubay, Joyce, Kaestner, & Kenney, 2001). In an attempt to answer these questions and address these issues,

Table 1. What Do We Know About Medicaid MC and Its Impact On Birth Outcomes?

State/Program	Data Sources	Study Design	Perinatal Outcomes	Key Findings
Medicaid Primary Care Case Management vs. Medicaid FFS				
Pennsylvania/Health-PASS in Philadelphia (Goldfarb et al., 1991)	Inpatient charts at one hospital for 217 HealthPASS deliveries and matched sample of 217 Medicaid FFS deliveries; year = 1988; <i>n</i> = 434 women who delivered at the hospital that year	Retrospective, matched (on age, race, marital status), case-control analysis of inpatient charts of women who delivered at the hospital during the study year from the same zip code region, one with mandatory MC, the other with FFS	Substance use, alcohol use, prenatal care, cesarean section, birth weight, gestational age, neonatal intensive care unit admission, infant mortality	No significant differences were noted between groups, or among provider or patient behavior with respect to obstetrical care with low adequate prenatal care (39%) and high rates of low birthweight (20%) among both populations
Medicaid MCOs vs. Medicaid FFS				
Washington State/Medicaid MC (Krieger et al., 1992)	Linked Medicaid eligibility, enrollment, and claims files and discharge files with birth certificate files; year = 1983–1988; <i>n</i> = all women who delivered live infants during that period and were enrolled in Medicaid MC plans with 1,106 in Medicaid MC plans, 4,830 in FFS, and 4,434 in private MC plans	Retrospective, controlled study with 3 cohorts in 1) Medicaid MC plans, 2) Medicaid FFS, and 3) the same plans but non-Medicaid (i.e., privately insured)	Prenatal care, birth weight	Medicaid women in Medicaid MC plans had similar rates of prenatal care use compared to women in FFS Medicaid and equal or modestly improved birth weight distribution, but had lower rates of prenatal care use and poorer birth outcomes than women enrolled in the same MC plans but insured privately so that parity with the general population remains an issue.
Medicaid Mandatory MC (PCCM and MCOs) vs. Medicaid Voluntary MC (PCCM and MCOs)				
Ohio/10 counties with MC (Howell et al., 2004)	Medicaid enrollment data linked with birth certificate data; year = 1993–1998; <i>n</i> = 4,917 women with two deliveries covered by Medicaid	Cohort analysis in 10 counties of differences in perinatal outcomes between mandatory and voluntary Medicaid MC, with women serving as their own controls, with one birth before, and one following implementation of mandatory MC in 1996	Timing of initiation of prenatal care, number of prenatal care visits, smoking, repeat cesarean section, and infant birth weight	No impact found on infant birth weight but women were less likely to have a repeat cesarean section.
Medicaid MC Program (all MCOs) vs. Individual Medicaid MCOs				
Connecticut/Husky-A Plan (van Hoof et al., 2000)	Medicaid MC encounter data coupled with inpatient and outpatient chart abstraction; year = January to June 1997; <i>n</i> = 275 unique patients with live newborn during study period	Descriptive, quality-of-care study comparing prenatal care and birth outcomes for pregnant adolescents enrolled in three (of 7) different health plans, using HEDIS and PHS quality indicators	Rate of prenatal care initiated in the first trimester, rate of patients who received appropriate frequency of prenatal care, specific components of prenatal care, cesarean section, average length of stay, birthweight, prematurity	The only significant difference in the plans was found among the frequency of prenatal care performance measures, and were otherwise comparable, with their care meeting most of the HEDIS and PHS measures.
Tennessee/Tenn Care (Cooper et al., 1999)	Linked Medicaid enrollment files and birth certificates; year = 1995; <i>n</i> = 34,402 infants	Retrospective cohort analysis of infants born in 1995 to women enrolled in TennCare of differences in perinatal outcomes among participating MCOs	Prenatal care use, birth weight, death in the first 60 days of life, delivery of an ELBW (<1,000 g) infant in hospitals without level 3 neonatal intensive care units or NICU	There were no differences among MCOs for birth weight, but one MCO was found to have infants 2.8 times more likely to die within 60 days of life and also had a higher proportion of ELBW infants born in hospitals without level 3 neonatal intensive care units.

Medicaid MCO vs. Private MCO Washington State/ Medicaid MC (Krieger et al., 1992)	See above	See above	See above
Medicaid Births vs. Non-Medicaid Births Missouri/Medicaid MC (Missouri Department of Health and Social Services, 2006)	Tracking system	Prenatal care, spacing, smoking, repeat teen birth, percent on WIC, cesarean section, birth weight, very low birthweight not delivered at level III hospitals	Found no effect on trends for key MCH indicators compared to non-Medicaid births. However, because of the relatively poor Medicaid population, the indicators are generally much worse for the Medicaid population than for the non- Medicaid population.
Statewide Medicaid MC Program Net Effect Tennessee/TennCare (Conover et al., 2001)	Pre-post design with a difference-in- difference approach using North Carolina as a control to assess differences in perinatal outcomes based on Medicaid status	Prenatal care, prenatal procedures, care patterns at labor and delivery, birth abnormalities, infant mortality	TennCare was found to have no significant impact on infant mortality, and women in TennCare were more likely to have no prenatal care or wait until third trimester for prenatal care initiation by comparison with North Carolina.

Source: Markus, A., GWU SPHHS Department of Health Policy, June 2008.

much has been written about Medicaid reform specifically as it relates to pregnancy-related care.

The IOM report, *Crossing the Quality Chasm*, identified the primary goal of any high-quality health care system as “The ability to furnish the right care, in the right setting, at the right time.” To achieve this goal for women and newborns, a high-performing Medicaid maternity care system should follow four key principles:

- Provide eligibility to all adult women based on family income alone, without regard to pregnancy status, from entry into adulthood through attainment of Medicare eligibility at age 65 because pinpointing and thus legislating the age when women are no longer of childbearing age would be extremely difficult, if not impossible.
- Provide coverage of all treatments and health care interventions, including preventive care, that are pregnancy related, broadly defined, and that are regarded by experts based on the evidence as part of the standard of care for all pregnant and postpartum women and their newborns, including those facing higher medical and social risks, because Medicaid coverage is designed to be available to eligible low-income and medically impoverished persons at the point of greatest health care need.
- Provide financing to strengthen the actual delivery system, with an emphasis on community health centers and other community health providers serving low-income women and thus a high proportion of Medicaid-eligible pregnant women and their newborns, via direct subsidies to offset the financial burden of cost sharing, if imposed, and to cover the cost of furnishing enabling services, and through compensation that is tied to quality performance.
- Provide delivery of services that respects the coverage of an evidence-based standard of care (see second bullet) and the privacy and confidentiality of health information while ensuring access to the necessary data for appropriate treatment, adequate payment, and regular and systematic measurement of processes and outcomes of care so that care provided to Medicaid enrollees can be assessed and compared with the care provide to non-Medicaid individuals.

Based on these principles, we propose a number of key and specific recommendations to improve the performance of the Medicaid program for pregnant women and maternity care: 1) fixing the eligibility gap, 2) consolidating and expanding the benefit package, 3) ensuring the financing of community health providers, and 4) improving the quality of services delivered. The first three recommendations are

Table 2. Key Principles for a High Performing Medicaid Program and Specific Recommendations for Improvements in Access to Maternity Care

Provide Eligibility	Provide Coverage	Provide Financing
<p><i>Key Recommendation</i> Fixing the Medicaid eligibility gap</p>	<p><i>Key Recommendation</i> Consolidating and expanding the benefit package</p>	<p><i>Key Recommendation</i> Ensuring the financing of community health providers</p>
<p><i>Specific recommendations</i></p>	<p><i>Specific recommendations</i></p>	<p><i>Specific recommendations</i></p>
<p>Expand Medicaid coverage to reach all low-income women of childbearing age by creating a new “poverty level women” eligibility category for women, which parallels the category used for children; eligibility could be set at some minimum to be determined (e.g., <100% federal poverty level) with a state option to extend coverage to additional women. Eliminate the ban on Medicaid coverage of non-emergency care in the case of undocumented pregnant women. Eliminate the citizenship documentation requirements and make documentation a state option. In the event that no general optional coverage of low income women is added, at a minimum allow states to cover all low income women (whether preconception or postpartum) for preconception and interconception family planning services and supplies as a state plan amendment (SPA) with CMS instead of via the more complex Section 1115 waiver system.</p>	<p>Have the federal government provide comprehensive guidance to states regarding the meaning of “pregnancy related services” in the context of Medicaid’s required and optional service categories. The guidance should offer consolidated policies covering the health care needs of women throughout the reproductive life cycle by merging care for pregnant women, family planning, and breast and cervical cancer into a “reproductive health care” package focused on prevention and treatment. The terms of coverage should be expressed not only in relation to covered benefit classes but also in relation to all procedure codes that relate to pregnancy and that fall within covered classes. Have the federal government provide states with comprehensive guidance on reforms that seem to improve the rate of early entry into care among Medicaid patients, whether in FFS or MC settings. Encourage states to develop more concrete and uniform guidelines for the standard of care and the provision of care to pregnant women across states so as to enhance quality of care for pregnant women and provide a foundation for further comparative quality research. Encourage states to cover, recognize, and report billing for preventive visits and preconception health services (e.g., preconception counseling) under their family planning waiver programs.</p>	<p>Ensure pregnant women-centered coverage by ensuring access to comprehensive reproductive health services provided by federally qualified health centers through increased support under the Medicaid prospective payment system and supplemental payments made by states under their Medicaid MC contracts to adjust for any changes in the scope of services furnished made in the preceding fiscal year. Include health centers in state Medicaid pay-for-performance initiatives that may be considering measuring the concept of “medical home” in the particular case of pregnant women, preferably once a comprehensive set of outpatient quality maternity care measures has been developed and vetted and adequate reimbursement for performance can be determined.</p>

Source: Markus, A., GWU SPHHS Department of Health Policy, June 2008.

prerequisites for increasing the effectiveness of the last recommendation. Table 2 provides details of the first three key recommendations; the section below focuses on the fourth recommendation.

Improving the quality of services delivered

The emphasis on quality has been less than optimal over the life of the Medicaid program, but has increased among state Medicaid agencies over the past 5 to 10 years. States are federally required to ensure that services are of high quality in their entire program and to develop and use standards for access and quality to hold MCOs accountable and to monitor services provided under MC. Many states require MCOs to report results using the NCQA HEDIS measurement system or HEDIS-like measures. Still, little is known about processes and outcomes of care under Medicaid, how they compare with other programs and payers, and how closely matched they are with the recognized and recommended standard of care for maternity services. In addition, the HEDIS measurement system remains imperfect and lacks comprehensive measures of maternity care quality and performance that extend to the outpatient sector. Finally, the HEDIS measurement system does not

systematically require health plans to report measures by race and ethnicity, gender, or other key variables associated with poorer access and outcomes, thereby hampering states’ ability to examine disparities in the receipt of services that persist despite the many safety-net features associated with the Medicaid program.

The recommendations listed focus on current opportunities for which sufficient legal authority exists today and on changes related to the performance of service delivery that would require federal and/or state action. Most of these are congruent with health reform packages under consideration by Congress.

- *Recommendation 1:* Take advantage of the existing opportunities under federal Medicaid law, particularly around Medicaid MC, to strengthen the quality of maternity care furnished to pregnant women and newborns at the state level. These opportunities include:
 1. Reviewing and revising (when up for bidding or re-bidding) contractual provisions in the service agreements signed by Medicaid agencies and their participating MCOs to include more specific language related to maternity care access and quality.

2. Reviewing and revising state quality strategies to ensure that more emphasis is placed on maternity care across the program, including through the establishment of MCO collaboratives specifically targeting improvement in perinatal health outcomes.
 3. Refining the external quality review process so that it encompasses the calculation of new performance measures, and the design and implementation of performance improvement projects and clinical studies focused on maternity care, an emphasis that should be reflected (when up for bidding or re-bidding) in the provisions of the EQRO contracts signed by Medicaid agencies and their external reviewers.
 4. Encouraging state Medicaid agencies to engage in the creation of system-wide measurable quality outcome objectives through participation in local/state, regional and/or national collaboratives, such as the CMS National Neonatal Outcomes Improvement Project or the quality initiatives of Title V state agencies (e.g., Regional Perinatal Standards).
- *Recommendation 2:* Create a more unified approach to quality measurement, assessment and improvement of maternity care at the national level, building on the new CHIPRA requirements as well as voluntary initiatives undertaken in the private sector or as private–public partnerships. These changes include:
 1. Establishing a new independent federal commission on quality, with a specific subcommission focused on maternity care, which would be charged with, first, reviewing the extent to which Medicaid ensures comparable access to affordable, quality services compared with employer-sponsored insurance, individual private insurance, and other public insurance (e.g., CHIP) and reduces health disparities; and, second, making system-wide recommendations for improvement. Alternatively, the Medicaid Access and CHIP Payment and Access Commission, recently established by CHIPRA, could take on this expanded role.
 2. Requiring the Department of Health and Human Services to create a separate maternal health quality measurement program, the purpose of which would be to develop and implement quality measures for maternity care, design a continuous and uniform reporting system, recommend core measures of program performance for Medicaid and other insurance programs, award demonstration grants in maternity care measurement and improvement, and monitor and report on the quality of care of pregnant women enrolled in Medicaid and CHIP. Alternatively, the new federal quality program created under CHIPRA could be expanded to include a comprehensive

set of maternal health measures, building on the currently proposed measures of timeliness of prenatal care and cesarean section rate for low-risk, first-birth women to be part of the initial core set of child health measures under CHIPRA, and assessments of the quality of maternity care provided to all pregnant women enrolled in Medicaid, CHIP, and private insurance.

3. Increasing the focus on quality of care and improve the understanding of health care disparity in access and utilization of maternity care provided to Medicaid-covered women to inform programmatic and policy development by encouraging further research directed toward determining sources from which disparities may stem.
4. Incentivizing states to strengthen their pregnancy-related programs through the enactment of a performance-based approach to federal financing that would spur states to adopt eligibility reforms, coverage and payment reforms, health care access reforms, and reforms in pregnancy-related quality improvements and establish a federal contribution rate of 90% for states that adopt all such reforms, thereby aligning the federal contribution for pregnancy care with that used for family planning services and supplies.

Conclusion

The IOM report, *Crossing the Quality Chasm*, identifies the primary goal of any high-quality health care system: the ability to furnish the right care, in the right setting, at the right time. This must also be the primary goal of Medicaid in regard to providing access to high-quality care for women throughout the reproductive cycle. All reforms should seek to support this aim. Much of the emphasis in policy development has been focused on access to care and great need for reform remains in the area of quality assurance and improvement, and disparity reduction. Health care reform may provide an opportunity to revisit the benefit package, the content of services covered in the package, the frequency with which these services should be furnished, and the development of meaningful measures to capture whether women of childbearing age, including pregnant women, regardless of insurance status, indeed receive adequate, timely, effective, safe, accessible, and culturally appropriate maternity care.

References

- Adams, K., Gavin, N., Handler, A., Manning, W., & Raskind-Wood, C. (2003). Transitions in insurance coverage from before pregnancy through delivery in nine states, 1996-1999. *Health Affairs*, 22, 219–229.
- Agency for Healthcare Research and Quality. (2006). H-CUPnet [on-line]. Available at: <http://hcupnet.ahrq.gov/>.

- Andrews, R. (2008). The National Hospital Bill: The most expensive conditions by payer, 2006. AHRQ Statistical Brief #59. Available at: <http://www.hcup-us.ahrq.gov/reports/statbriefs.jsp>.
- Baldwin, L. M., Larson, E. H., Connell, F. A., Nordlund, D., Cain, K. C., Cawthon, M. L., et al. (1998). The effect of expanding Medicaid prenatal services on birth outcomes. *American Journal of Public Health*, 88, 1623–1629.
- Berwick, D. (2002). A user's manual for the IOM's 'Quality Chasm' Report. *Health Affairs*, 21, 80–90.
- Cole, N. (1995). *Increasing access to health care: The effects of Medicaid expansions to pregnant women. Final report prepared by Abt Associates for the Health Care Financing Administration*. Cambridge, MA: Abt Associates.
- Conover, C., Rankin, P., & Sloan, F. (2001). Effects of Tennessee Medicaid managed care on obstetrical care and birth outcomes. *Journal of Health Politics, Policy, and Law*, 26, 1291–1324.
- Cooper, W., Hickson, G., Mitchel, E., & Ray, W. (1999). Comparison of perinatal outcomes among TennCare managed care organizations. *Pediatrics*, 104, 525–529.
- Currie, J., & Gruber, J. (1996). Saving babies: The efficacy and cost of recent changes in the Medicaid eligibility of pregnant women. *Journal of Political Economy* 1263–1296.
- Davis, K., & Schoen, C. (1978). *Health and the war on poverty: A ten-year appraisal*. Washington, DC: The Brookings Institution.
- Donabedian, A. (1988). Quality assessment and assurance: Unity of purpose, diversity of means. *Inquiry*, 25, 173–192.
- Dubay, L., Joyce, T., Kaestner, R., & Kenney, G. (2001). Changes in prenatal care timing and low birth weight by race and socioeconomic status: Implications for the Medicaid expansions for pregnant women. *Health Services Research*, 36, 374–398.
- Goldfarb, N., Hillman, A., Eisenberg, J., Kelley, M., Cohen, A., & Dellheim, M. (1991). Impact of a mandatory Medicaid case management program on prenatal care and birth outcomes: A retrospective analysis. *Medical Care*, 29, 64–71.
- Handler, A., Zimbeck, M., Chavkin, W., & Adams, K. (2003). The effect of welfare reform on the reproductive health of women. In H. Wallace, G. Green, & K. Jaros (Eds.), *Health and welfare for families in the 21st century* (2nd ed.). (pp. 149–163) Sudbury, MA: Jones and Bartlett Publishers.
- Hill, I., Hogan, S., Palmer, L., Courtot, B., Gehshan, S., Belnap, D., et al. (2009). *Medicaid outreach and enrollment for pregnant women: What is the state of the art? Prepared for the March of Dimes*. Washington, DC: The Urban Institute and National Academy of State Health Policy.
- Howell, E., Dubay, L., Kenney, G., & Sommers, A. (2004). The impact of Medicaid managed care on pregnant women in Ohio: A cohort analysis. *Health Services Research*, 39, 825–846.
- Johnson, K., Atrash, H., & Johnson, A. (2008). Policy and finance for preconception care: Opportunities for today and the future. *Women's Health Issues*, 18(Suppl), S2–S9.
- Jost, T. (2003). The tenuous nature of Medicaid entitlement. *Health Affairs*, 22, 145–153.
- Kaestner, R., Dubay, L., & Kenney, G. (2005). Managed care and infant health: An evaluation of Medicaid in the US. *Social Science & Medicine*, 60, 1815–1833.
- Kaiser Family Foundation. (2005, July). Women and health care: A national profile. Available at: <http://www.kff.org/womenshealth/whp070705pkg.cfm>. Accessed July 5, 2008.
- Kaiser Family Foundation. (2007, October). Issue brief: An update on women's health policy. Medicaid's role for women. Available at: http://www.kff.org/womenshealth/upload/7213_03.pdf. Accessed June 22, 2008.
- Kenney, G., & Dubay, L. (1995). *A national study of the impacts of Medicaid expansions for pregnant women. Working Paper*. Washington, DC: Urban Institute.
- Krieger, J., Connell, F., & LoGerfo, J. (1992). Medicaid prenatal care: A comparison of use and outcomes in fee-for-services and managed care. *American Journal of Public Health*, 82, 185–190.
- Ku, L. (2006, July 13) Revised Medicaid documentation requirement jeopardizes coverage for 1 to 2 million citizens. Center on Budget and Policy Priorities. Available at: <http://www.cbpp.org/7-13-06health2.htm>.
- Mann, C. (2003). The flexibility factor: Finding the right balance. *Health Affairs*, 22, 62–76.
- March of Dimes. (2006). Request for proposals: Medicaid: Outreach enrollment of pregnant women March 2006. Available at: http://www.marchofdimes.com/professionals/855_4322.asp. Accessed June 23, 2008.
- Markus, A. R., Rosenbaum, S., Crumbley, A., Stewart, A., & Cox, M. (2006). *Fulfilling the promise: How states invest in child development under Medicaid and SCHIP—A 50-state compendium of coverage and payment policies of preventive pediatric care*. New York: The Commonwealth Fund.
- Markus, A. R., Rosenbaum, S., Joseph, J., & Stein, R. E. K. (2006). From SCHIP Benefit design coverage to individual coverage decisions. [Policy Brief #6]. Washington, DC: Department of Health Policy, School of Public Health and Health Services, The George Washington University.
- Missouri Department of Health and Social Services. (2006). *Recent trends in Medicaid health status indicators* Jefferson City, MO.
- Piper, J., Ray, W., & Griffin, M. (1990). Effects of Medicaid eligibility expansion on prenatal care and pregnancy outcome in Tennessee. *Journal of the American Medical Association*, 264, 2219–2223.
- Repasch, L., Finnegan, B., Shin, P., & Rosenbaum, S. (2008). *Assessing the effects of Medicaid documentation requirements on health centers and their patients: Results of a "second wave" survey*. Washington, DC: The George Washington University School of Public Health and Health Services Department of Health Policy and RCHN Community Health Foundation.
- Rosenbaum, S. (2008). Women and health insurance: Implications for financing preconception health. *Women's Health Issues*, 18(Suppl), S26–S35.
- Rosenbaum, S., & Markus, A. (2006). *The Deficit Reduction Act of 2005: An overview of key provisions and their implications for early childhood development*. New York: The Commonwealth Fund.
- Salganicoff, A., & An, J. (2008). Making the most of Medicaid: Promoting the health of women and infants with preconception care. *Women's Health Issues*, 18(Suppl), S41–S46.
- Shin, P., Finnegan, B., Hughes, L., & Rosenbaum, S. (2007). *The Medicaid documentation requirements: An initial assessment of Medicaid documentation requirements on health centers and their patients. With Support from the RCHN Community Health Foundation*. Washington, DC: The George Washington University School of Public Health and Health Services Department of Health Policy.
- Van Hoof, T., Casey, B., Tate, J., Linnane, J., Petrillo, M., & Meehan, T. (2000). The status of prenatal care among Medicaid managed care patients in Connecticut. *Evaluation & The Health Professions*, 23, 409–421.
- Wise, P. (2008). Transforming preconceptional, prenatal, and inter-conceptual care into a comprehensive commitment to women's health. *Women's Health Issues*, 18(Suppl), S13–S18.

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