Incantations in the Dark: Medicaid, Managed Care, and Maternity Care

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DURING THIS DECADE A VIRTUAL DELUGE OF reports and studies have documented the inadequacies of the nation's maternity system for low-income women (see, e.g., Hughes et. al. 1987, 1988; Institute of Medicine 1986; Alan Guttmacher Institute 1988; U.S. General Accounting Office 1987; Southern Governors' Association 1985, Miller 1987). Whether measured in terms of funding levels, accessibility, appropriateness, or quality, maternity care for poor women is substandard. Elevated levels of both infant and maternal mortality and infant low birth weight among the poor are a testament to that fact.

While poor uninsured pregnant women face profound access problems, the barriers that confront pregnant Medicaid beneficiaries can be nearly as serious. One recent study found that pregnant Medicaid recipients were only slightly more likely than uninsured women to receive an adequate level of maternity care (U.S. General Accounting Office 1987). Indeed, studies have found health outcomes among infants born to Medicaid recipients to be worse than those for babies born to poor uninsured women (Utah Health Department 1987; Oregon Health Department unpublished data 1985). Medicaid's eligibility criteria, through their link to the receipt of welfare, have tended

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to limit coverage during pregnancy to young, single, poorly educated, and extremely low-income women. These demographic considerations have undoubtedly contributed to the depressed health status of Medicaid births. These unfortunate outcomes, however, are also the result of numerous structural deficiencies in the Medicaid program that have inhibited its performance as a financier of maternity care. These deficiencies include the following:

- The widespread unwillingness of private providers to treat pregnant beneficiaries (Mitchell and Shurman 1980; U.S. General Accounting Office 1987; Lazarus and Tirengel 1988; Alan Guttmacher Institute 1988).
- Depressed funding levels, particularly for ambulatory prenatal services, that do not meet even the cost of furnishing adequate care (Howell et al. 1987; Alan Guttmacher Institute 1988).
- Volatile eligibility patterns resulting from the program's extremely restrictive coverage standards (Rymer and Adler 1987). One study has concluded that at least 40 percent of all pregnant beneficiaries may be ineligible for the duration of their pregnancy (Howell et al. 1987).
- Coverage of an inadequate range of medical and health-related benefits, particularly given the inherent high-risk nature of the population (Alan Guttmacher Institute 1988; Rosenbaum 1984).
- Poor outreach and cumbersome enrollment procedures that leave many women ignorant of available benefits and many more without actual coverage until their pregnancies are nearly completed (Alan Guttmacher Institute 1988).
- Poor monitoring of the quality of care furnished and a lack of detailed standards and protocols governing the provision of care. (Institute of Medicine 1986; Alan Guttmacher Institute 1988).

Two significant events during the 1980s make Medicaid's improved performance as a maternity care payer particularly important. First, a series of federal and state reforms enacted since 1984 have made hundreds of thousands of low-income pregnant women potentially eligible for coverage. These reforms mandate coverage of all pregnant women and infants with family incomes less than 100 percent of the federal poverty level and permit coverage of women and infants with family incomes above 100 percent but below 185 percent of the federal

poverty level.[1] Since two-thirds of the more than 9 million uninsured women of childbearing age have family incomes below 250 percent of the federal poverty level (Alan Guttmacher Institute 1988), these expansions, if fully implemented, could dramatically reduce the proportion of pregnant women without health insurance. As of September 1988, 44 states and the District of Columbia had expanded coverage to reach all pregnant women and infants with family incomes below 100 percent of the federal poverty level, while thirteen states had increased eligibility standards above this threshold (table 1).

The second significant event has been the restructuring of health service delivery to Medicaid beneficiaries through the development of health maintenance organization (HMO) systems. In 1981, 282,000 Medicaid beneficiaries were enrolled in traditional HMO arrangements; by 1986 that number had grown to 2 million persons enrolled in a wide variety of plans in 30 states (Neuschler 1988). The growth of managed-care arrangements for Medicaid beneficiaries mirrors the growth of managed care among the general population (National Center for Health Services Research 1988). Since Medicaid managed-care arrangements overwhelmingly are aimed at those eligible for Aid to Families with Dependent Children (AFDC) families (Neuschler 1988), maternity-related services constitute a premier activity.

Medicaid is not alone among payers in failing to underwrite adequate levels of maternity care (Alan Guttmacher Institute 1988). The consequences of failure are, however particularly serious for Medicaid patients, because the program by definition covers women at greatest risk of both maternal and infant death and disability.

Infant mortality rates among low-income children are at least twice as high as those experienced by nonlow-income infants (Egbuonu and Starfield 1982). Maternal mortality rates for black and nonwhite women (who comprise a disproportionate percentage of all Medicaid enrollees), are four times as high as those for white women (Hughes et al. 1988). Low-income children face nearly twice the risk of long-term disability, in major part because of their higher risk for low birth weight (Egbuonu and Starfield 1982; Newacheck, Budetti, and Halfon 1986). Thus, the imperative for Medicaid to function well is particularly great.

[1] Section 4101, P. L. 100-203 (Omnibus Budget Reconciliation Act of 1987); Section 302, P. L. 100-360 (The Medicare Catastrophic Illness Protection Act of 1988).

TABLE 1
Characteristics of State Medicaid Programs for Pregnant Women, September, 1988

State	Expanded income eligibility standard	Waived asset test	Continuous eligibility for pregnant women	Presumptive eligibility	Income eligibility for pregnant women as a % of fed. poverty
Alabama	Yes	Yes	Yes	Yes	100.0%
Alaska	Yes	No	No	No	100.0
Arizona	Yes	Yes	Yes	No	100.0*
Arkansas	Yes	No	Yes	Yes	100.0*
California	Yes	No	No	No	185.0*
Colorado	No	No	No	No	54.3
Connecticut	Yes	Yes	Yes	No	185.0*
Delaware	Yes	Yes	Yes	No	100.0
District of Columbia	Yes	Yes	Yes	No	100.0*
Florida	Yes	Yes	Yes	Yes	100.0*
Georgia	Yes	Yes	No	Yes	100.0*
Hawaii	Yes	Yes	Yes	Yes	100.0*

Idaho	Yes	Yes	No	No	68.0
Illinois	Yes	Yes	Yes	Yes	100.0*
Indiana	Yes	Yes	Yes	Yes	50.0
Iowa	Yes	No	No	No	150.0*
Kansas	Yes	Yes	No	No	100.0*
Kentucky	Yes	No	Yes	No	125.0*
Louisiana	Yes	Yes	Yes	Yes	100.0*
Maine	Yes	Yes	Yes	Yes	185.0*
Maryland	Yes	Yes	Yes	Yes	100.0*
Massachusetts	Yes	Yes	Yes	Yes	185.0*
Michigan	Yes	Yes	Yes	No	185.0*
Minnesota	Yes	Yes	Yes	No	185.0*
Mississippi	Yes	No	Yes	No	185.0%
Missouri	Yes	No	Yes	No	100.0
Montana	No	No	No	No	52.1*
Nebraska	Yes	Yes	Yes	Yes	100.0*
Nevada	No	No	No	No	36.8
New Hampshire	No	No	No	No	60.3*
New Jersey	Yes	Yes	Yes	Yes	100.0*
New Mexico	Yes	No	Yes	Yes	100.0
New York	No	No	No	No	88.0*
North Carolina	Yes	Yes	Yes	Yes	100.0*
North Dakota	No	No	No	No	56.1*
Ohio	Yes	Yes	Yes	No	100.0
Oklahoma	Yes	Yes	Yes	No	100.0*
Oregon	Yes	Yes	Yes	No	100.0*
Pennsylvania	Yes	Yes	No	Yes	100.0*

TABLE 1—(*continued*)

State	Expanded income eligibility standard	Waived asset test	Continuous eligibility for pregnant women	Presumptive eligibility	Income eligibility for pregnant women as a % of fed. poverty
Rhode Island	Yes	Yes	Yes	No	185.0*
South Carolina	Yes	Yes	Yes	No	100.0
South Dakota	Yes	Yes	Yes	No	100.0
Tennessee	Yes	Yes	Yes	Yes	100.0*
Texas	Yes	No	Yes	Yes	100.0*
Utah	Yes	Yes	Yes	Yes	100.0*
Vermont	Yes	No	Yes	No	185.0*
Virginia	Yes	Yes	Yes	No	100.0*
Washington	Yes	No	Yes	No	90.0*
West Virginia	Yes	Yes	Yes	No	150.0*
Wisconsin	Yes**	No	No	Yes	120.0*,**
Wyoming	Yes	Yes	Yes	No	100.0
TOTALS	45	33	37	20	

* = State has a medically needy program.
** 100% state funded

A number of special demonstrations and studies have shown that Medicaid indeed can be modified to underwrite early, continuous, and comprehensive care and achieve notable outcomes in a highly cost-effective manner (Lennie, Klun, and Hausner 1986; Korenbrot 1984; Institute of Medicine 1986). Key reforms in such successful demonstration programs have included early, stable, and continuous enrollment; an expansion of benefits to include preventive health and patient support services as well as traditional medical and hospital care; adequate reimbursement; and extensive utilization of community-based providers skilled in caring for low-income patients and trained in the management of persons with medical and social risks. When such changes have been made, impressive results have followed, and sizable cost savings have been realized (Lennie, Klun, and Hausner 1986; Korenbrot 1984).

This then brings us to the central issues explored in this study. Have the hundreds of Medicaid managed-care plans that have blossomed over the past several years incorporated these structural reforms into their maternity component? Or have new payment arrangements been glazed like a thin icing over the existing service-delivery system for Medicaid patients without the vigorous reforms needed to ensure their success in the area of maternity care? Furthermore, have these plans in some instances tended to exacerbate rather than ameliorate Medicaid's systemic shortcomings as a maternity care payer?

In short, do Medicaid managed-care plans constitute true reform or, instead, mere incantations in the dark, chanted over the preexisting system in the vague hope that somehow things will improve?

We conclude that most current Medicaid managed-care plans do not include these necessary structural improvements, and, moreover, that, in some respects, managed-care arrangements have exacerbated preexisting problems. We are hopeful that, as states become more knowledgeable about barriers to adequate maternity care, they will reform and improve their managed-care programs. These improvements will not happen on their own, however, but, instead, must be deliberately pursued.

Overview of Medicaid and Managed Care

In this article we define managed care as any organized health provider entity (e.g., health maintenance organization, independent practice

association, or other consortium of providers) that enters into a formal agreement with a payer (in this case Medicaid) to: enroll a defined patient population; furnish or arrange for one or more types of medical care; and control patient utilization of one or more types of services. Thus, formal enrollment procedures, plan-directed utilization controls, and limitation of freedom of choice to certain providers constitute key features of managed care.

Managed care through health maintenance organizations and other prepaid health arrangements has been a Medicaid option since the program's inception. The Omnibus Budget Reconciliation Act of 1981, however, added a new dimension to managed care by significantly expanding the types of entities that could enter into managed-care arrangements with state Medicaid agencies. These amendments provide that the secretary of the Department of Health and Human Services may permit a state to enter into an agreement with any "case management system . . . which restricts the provider from or through whom a recipient can obtain primary care," so long as the system furnishes quality care and does not "unreasonably impede" access.[2]

Pursuant to this authority, states may contract with a provider, or network of providers, to arrange or furnish one or more types of outpatient services and to monitor and control utilization of inpatient care. Beneficiaries are enrolled on either a voluntary or mandatory basis. Once enrolled, beneficiaries are "locked in" to a single provider network during the term of their enrollment.

Managed-care providers can be reimbursed in one of several different ways. While prepaid health plans traditionally have been fully capitated, the newer, post-1981 entities frequently are paid on a fee-for-service basis (Freund and Neuschler 1986). Others receive fee-for-service reimbursement plus a monthly "case management" fee. Finally, some providers may be paid in accordance with a partial capitation arrangement, under which they are reimbursed at a single all-inclusive capitated rate for the outpatient services furnished to enrollees (Center for Policy Studies 1985).

Proponents of managed-care arrangements anticipate sizeable cost savings flowing from a more rationalized system that emphasizes preventive care. In fact, however, a number of state Medicaid agencies

[2] Section 1915 of the Social Security Act, as added by Section 2176 of P. L. 97-35.

have "anticipated" these costs savings simply by setting reimbursement rates that are based on some percentage (e.g., 90 percent) of amounts previously paid for the care and services included in the contract, adjusted for inflation. Such anticipated savings can potentially lead to problems, particularly if the base reimbursement levels on which the managed-care financing rests either were too depressed to attract sufficient providers or reflected program underutilization (Anderson and Fox 1987).

For example, many state programs maintain provider reimbursement levels for maternity care that are extremely low (table 2). Moreover, many services important to a good pregnancy outcome, such as health education and case management, traditionally have not been reimbursed at all (Alan Guttmacher Institute 1988; Rosenbaum 1984). By further reducing already depressed payment levels, a state may exacerbate the already difficult task of enlisting sufficient obstetrical specialists into a managed-care plan, or upgrading the scope of services offered. Indeed, depressed funding levels may diminish a provider's willingness to enroll maternity patients at all. While comprehensive maternity care has been shown to be a cost-effective investment (Institute of Medicine 1986); it nonetheless is also a relatively expensive service that considerably exceeds the average annual Medicaid expenditure per AFDC adult enrollees (Howell et al. 1988).

Methodology

This study, which was conducted during the summer of 1987, consisted of four separate components. First, contracts between state Medicaid agencies and individual plans were collected and analyzed. Second, interviews with Medicaid agency officials were conducted. Third, plan officials were interviewed. Finally, local public health personnel working in communities served by managed-care plans were interviewed.

Managed-care contracts were requested from the 30 states that, according to the National Governors' Association, offered any type of managed-care program to Medicaid beneficiaries in 1987, including HMOs, other prepaid plan arrangements, and fee-for-service, primary-care case management. The contracts were sought in order to determine whether, in the initial agreement phase of a managed-care plan, Medicaid agencies had addressed one or more of the barriers to quality

TABLE 2
Obstetrical Care: Medicaid Fees and Charges

State	Medicaid fee:** Vaginal delivery	Medicaid fee:** C-section	Average physician charge by region*		Fee as a percentage of average charge	
			Vaginal	C-section	Vaginal	C-section
Alabama	$450.00	$630.00	$961.70	$1,259.40	46.8%	50.0%
Alaska	—[a]	—[a]	1,247.90	1,591.40	—	—
Arizona	524.60[b]	736.80[b]	1,247.90	1,591.40	42.0	46.3
Arkansas	546.25	764.75	961.70	1,259.40	56.8	60.7
California	738.47	1,066.47	1,247.90	1,591.40	59.2	67.0
Colorado	510.00	582.00	1,247.90	1,591.40	40.9	36.6
Connecticut	861.30	910.00	1,122.00	1,385.30	76.8	65.7
Delaware	519.00[c]	654.00[c]	961.70	1,259.40	54.0	51.9
District of Columbia	775.00[c]	950.00[c]	961.70	1,259.40	80.6	75.4
Florida	800.00	1,200.00	961.70	1,259.40	83.2	95.3
Georgia	800.00	1,075.00	961.70	1,259.40	83.2	85.4
Hawaii	496.16	770.00	1,247.90	1,591.40	39.8	48.4
Idaho	450.00	556.00	1,247.90	1,591.40	36.1	34.9
Illinois	446.50	465.25	870.12	1,167.80	51.3	39.8
Indiana	533.00	919.10	870.12	1,167.80	61.3	78.7
Iowa	690.34	796.55	870.12	1,167.80	79.3	68.2
Kansas	750.00	1,000.00	870.12	1,167.80	86.2	85.6
Kentucky	—[a]	—[a]	961.70	1,259.40	—	—

Louisiana	455.56[c]	764.28[c]	961.70	1,259.40	47.4	60.7
Maine	500.00	500.00	1,122.00	1,385.30	44.6	36.1
Maryland	942.00	995.00	961.70	1,259.40	98.0	79.0
Massachusetts	1,471.00	1.521.00	1,122.00	1,385.30	131.1	109.8
Michigan	553.62	698.77	870.12	1,167.80	63.6	59.8
Minnesota	455.00	800.00	870.12	1,167.80	52.3	68.5
Mississippi	433.65[c]	591.15[c]	961.70	1,259.40	45.1	46.9
Montana	619.00	696.45	1,247.90	1,591.40	49.6	43.8
Nebraska	566.00	723.59	870.12	1,167.80	65.0	62.0
Nevada	708.57	1,115.00	1,247.90	1,591.40	56.8	70.1
New Hampshire	450.00	550.00	1,122.00	1,385.30	40.1	39.7
New Jersey	236.00	369.00	1,122.00	1,385.30	21.0	26.6
New Mexico	502.16	727.27	1,247.90	1,591.40	40.2	45.7
New York	1,037.00	1,137.00	1,122.00	1,385.30	92.4	82.1
North Carolina	454.75[c]	489.42[c]	961.70	1,259.40	47.3	38.9
North Dakota	295.00[c]	485.00[c]	870.12	1,167.80	33.9	41.5
Ohio	512.00	520.00	870.12	1,167.80	58.8	44.5
Oklahoma	750.00	850.00	961.70	1,259.40	78.0	67.5
Oregon	853.24	1,147.00	1,247.90	1,591.40	68.4	72.1
Pennsylvania	437.50	875.00	1,122.00	1,385.30	39.0	63.2
Rhode Island	750.00	750.00	1,122.00	1,385.30	66.8	54.1
South Carolina	485.00	543.80	961.70	1,259.40	50.4	43.2
South Dakota	325.00	550.00	870.12	1,167.80	37.4	47.1
Tennessee	725.00	925.00	961.70	1,259.40	75.4	73.4
Texas	528.00	1,000.00	961.70	1,259.40	54.9	79.4
Utah	576.35	642.59	1,247.90	1,591.40	46.2	40.4
Vermont	350.00	416.00	1,122.00	1,385.30	31.2	30.0

TABLE 2—(*continued*)

State	Medicaid fee:** Vaginal delivery	Medicaid fee:** C-section	Average physician charge by region*		Fee as a percentage of average charge	
			Vaginal	C-section	Vaginal	C-section
Virginia	625.00	820.00	961.70	1,259.40	65.0	65.1
Washington	600.48	650.52	1,247.90	1,591.40	48.1	40.9
West Virginia	600.00	883.00	961.70	1,259.40	62.4	70.1
Wisconsin	590.22	755.31	870.12	1,167.80	67.8	64.7
Wyoming	787.50	1,155.00	1,247.90	1,259.40	63.1	91.7

* These regional data are from 1986, modified to reflect inflation in professional medical costs between 1986 and 1988, at 7 percent per year.

** As of April, 1988.

[a] Fees vary by area and provider.

[b] This is an average capitation payment for a ten-month period.

[c] The state does not pay globally. This figure is a sum of the payments that would be made for 7 prenatal visits (paid per encounter), one post-partum visit, plus the physician's delivery services.

Sources: Information on Medicaid fees are from state Medicaid agencies. Information on regional average charges are from the Health Insurance Association of America, "The Cost of Having a Baby," 1987.

maternity care noted above. We received 41 separate contracts, from 29 states. Many of the contracts covered more than one plan. With the exception of New Jersey, which did not respond until the research portion of the study ended, all states administering Medicaid managed-care programs as of June 1987 were included in our contract analysis. In-depth interviews were conducted with state Medicaid officials responsible for administration of managed-care programs in Michigan, Minnesota, Missouri, Oregon, Tennessee, and Utah. The 6 state Medicaid agencies selected for an in-depth interview were chosen from the states responding to the contract portion of this study on the basis of the following criteria: multiplicity of plan models within the state; geographic diversity; program duration; and racial and ethnic characteristics of plan enrollees. We also sought to ensure representation of all three basic plan-reimbursement models: full capitation; partial capitation; and fee-for-service/case-management arrangements.

In the 6 states in which the follow-up assessments were conducted, officials of 18 managed-care plans were interviewed. The responding plans represented a broad range of capitated and fee-for-service public and private providers.

Principal Findings

There is a time-honored saying in the law that parties to a contract must look to the four corners of the document to determine their rights and obligations. A contract is *the* legally enforceable agreement between a Medicaid agency and a managed-care plan. To the extent that an agency expects a provider to perform certain activities or undertake certain responsibilities on behalf of a patient population, those expectations should be spelled out clearly within the contract if they are to be enforceable.

To be certain, virtually all managed-care contracts contain "boiler plate" language obligating parties to comply with applicable statutes and regulations. These provisions thus incorporate into the plan all relevant federal and state Medicaid statutes and regulations defining eligibility, amount, duration and scope of coverage, and provider-qualification standards. Until late 1987, however, when several states began developing special eligibility and benefit standards for pregnant patients, federal and state laws and rules contained no detailed stan-

dards governing the provision of maternity care or the qualifications of maternity care providers.

With a very few notable exceptions, the 41 managed-care contracts reviewed did not contain detailed eligibility, benefit, or provider-qualification standards. Instead, the contracts reflected the agencies' historic tendency to delegate to most providers the authority to define program content and performance levels. Indeed, the tendency of agencies to take a "hands off" approach during the contract phase is reflected in the following report on managed care submitted to the state legislature by the Minnesota Department of Public Welfare:

> Prepayment is seen as a viable alternative to fee-for-service for the following reasons: The state is currently faced with increasing health care demands on limited resources. The state may soon be faced with decisions such as "Do we allow the liver transplant for one individual at the expense of providing free immunizations to 50,000 children?" *Contracting with prepaid health plans transfers the responsibility for making treatment decisions within a limited budget to those medical organizations equipped, trained and able to appropriately make such decisions* [emphasis added] (Minnesota Department of Public Welfare 1984).

This passage indicates the willingness of governmental agencies to cede to the private sector ultimate responsibility for allocating resources, a willingness that has been noted in other aspects of the health care system as well (Bergthold 1988).

Of the 41 contracts reviewed, none included a provision guaranteeing continued enrollment for pregnant women, regardless of whether they otherwise would lose their eligibility prior to delivery (table 3). Our interviews with plans confirmed that only those women enrolled in plans otherwise obligated to provide free or reduced-cost care (such as public health agencies or community health centers) could continue with their providers on a subsidized basis if they lost Medicaid eligibility (table 4). Other plans permitted women to continue in their care only if they could pay for services. Few, if any, enrollees losing Medicaid can afford to purchase such continued coverage.

At the time the study was conducted, 3 states with managed-care contracts (Massachusetts, Michigan, and Minnesota) subsidized prenatal care for pregnant women with family incomes below 185 percent of the federal poverty level. Even in these states, however, the plan

contracts did not reflect this supplemental funding program, and contracts did not address coordination between these sources of supplementary financing and Medicaid.

Enrollment/Disenrollment Safeguards. We looked for evidence of several certain specific enrollment and disenrollment safeguards. First, we examined whether contracts provided for expedited procedures for women seeking enrollment while pregnant, in order to reduce lengthy delays in the receipt of care. Second, we sought to determine whether enrollment deferrals were given pregnant women who were assigned to plans while pregnant and who wanted to remain with a nonaffiliated provider. Third, we sought to identify contractual safeguards in the event of involuntary disenrollment of financially eligible women for reasons unrelated to their own eligibility (for examples, in situations involving the disenrollment of a family member in a state in which plan enrollment is done on a family basis).

Of the contracts surveyed, 4 provided for expedited enrollment, 4 maintained deferred enrollment policies, and 2 provided protections in the event of involuntary disenrollments (table 3). For example, Oregon permits a pregnant enrollee already under care with a nonaffiliated provider to defer enrollment until her pregnancy is completed. Two states, Hawaii and South Carolina, set forth procedures in the event that a pregnant beneficiary is disenrolled, such as giving a high-priority transfer certification in the event that a plan ceases operation.

The lack of enrollment safeguards was a common theme during interviews with plans and agency personnel. For example, state agency officials indicated that the length of time needed for enrollment ranged from 1 to 10 weeks, with the average being about 4 weeks (table 4). During the plan-enrollment period, pregnant beneficiaries can continue to seek prenatal care from a Medicaid-participating provider in the community. This means first, however, that women unable to locate obstetrical care must wait many weeks until they see a provider, and, second, that women who have initiated care with a nonaffiliated provider may be required to transfer to a plan provider once the enrollment process has been completed.

For beneficiaries who are pregnant and as yet have no provider, waits of 1 and 2 months can cost them access to vital care. Since these women already may have faced long delays in gaining initial Medicaid eligibility, it is not unlikely that many will not begin care

TABLE 3
Contract Enrollment Safeguards

	Guaranteed financial eligibility	Expedited enrollment for pregnant women	Deferred enrollment for pregnant women	Continued enrollment for financially eligible women who were involuntarily disenrolled
Alabama	N	N	N	N
Arizona	N	N	N	N
California				
San Mateo	N	N	N	N
PHP	N	N	N	N
PCCN	N	N	N	N
Colorado	N	N	N	
Connecticut				
PCN	N	N	N	N
HMO	N	N	N	N
Florida	N	N	N	N
Hawaii	N	N	N	Y
Indiana	N	N	N	N
Iowa				
Heritage	N	N	N	N
Medical	N	N	N	N
Kansas	N	N	N	N
Kentucky	N	N	NA	NA
Maine	N	N	N	N
Maryland	N	N	N	N
Massachusetts				
HMO	N	N	N	N
PCM	N	N	N	N
Michigan				
HMO	N	N	N	N
PPSP	N	N	N	N

Minnesota	N	N	N	N
Missouri	N	N	N	N
Nevada	N	N	N	N
New Hampshire	N	N	N	N
North Carolina				
Kaiser	N	N	N	N
Wilson	N	N	N	N
Ohio	N	N	N	N
Oregon				
HMO	N	Y	Y	N
PCO	N	Y	Y	N
Pennsylvaina				
Healthpass	N	N	N	N
HMO	N	N	N	N
Rhode Island	N	N	N	N
South Carolina	N	Y	Y	Y
Tennessee				
Malvy	N	N	N	N
Memphis	N	NA	NA	NA
Med Plus	N	N	N	N
Utah	N	N	N	N
Washington				
Kaiser	N	N	N	N
Kitsap	N	N	N	N
Wisconsin	N	Y	Y	N
TOTALS	0	4	4	2

TABLE 4
Characteristics, Selected Plans

	Plan accepts women pregnant at time of enrollment	Average time to enroll	Average time to disenroll	Services subsidized after Medicaid is lost
Michigan				
Comprehensive Health Service	Y	6–7 weeks	6–7 weeks	N
Cape Medical, Inc.	Y	3–7 weeks		N
Koinonia Health Services	N*	4–6 weeks	4–6 weeks	Y
Family Health Center	N*	4–8 weeks	4–8 weeks	Y
Minnesota				
Metropolitan Health Plan	Y			N
Medcenters Health Plan	Y	5–10 weeks		N
Group Health, Inc.	Y	1–4 weeks	1–4 weeks	N
U-Care Minnesota	Y	6–7 weeks	>4 weeks	N
Missouri				
Swope Parkway CHC	Y	2–6 weeks	2–6 weeks	Y
Truman Medical Center	Y	5–7 weeks	2–6 weeks	N
Total Health Care	Y	2–6 weeks	2–6 weeks	N

Oregon				
Kaiser HMO	Y	2 weeks	Immediate	N
Capitol Health Care	N	2 weeks	Immediate	N
Multicare	Y	2–6 weeks	0–4 weeks	Y
Tennessee				
Maury County	Y	6 weeks	6–8 weeks	N
Medicaid Plus	Y	2–6 weeks	2–6 weeks	N
Utah				
Case Management	Y	2–6 weeks	2–6 weeks	N
Healthwise	Y	2–6 weeks	2–6 weeks	N
TOTALS	15			4

* Pregnant women may not enroll in the plan, but will be seen on a fee-for-service basis.

at all until well into their second or third trimester of pregnancy. Given the obvious problems that long enrollment delays can cause, we were not surprised that virtually all plans and agencies interviewed noted the high proportion of women who began prenatal care late in pregnancy. Thus, plan-enrollment lagtime may be greatly exacerbating the already serious dilemma of lengthy Medicaid eligibility determination delays and delayed entry into care, which has been linked by numerous experts to a lack of sufficient resources (Fingerhut, Makuc, and Kleinman 1987; Alan Guttmacher Institute 1988).

A lack of disenrollment safeguards also led to lengthy delays at some plans. Since no state contract guaranteed diagnostic and testing procedures, specific preventive health services and specific types of inpatient delivery arrangements related to risk must be clearly articulated if a plan is to be held accountable for furnishing them.

Of the contracts reviewed, only 13 contained even a specific requirement that plans furnish maternity care (table 5). Of these, only 3 articulated a specific set of pregnancy-related benefits that should be provided. Plans reflected this contractual vagueness. From state to state, and from plan to plan, the range of services varied substantially (table 6).

Provider Treatment and Referral Protocols. Many pregnancies are low risk and can be managed by a single provider. A disproportionate percentage of low-income pregnant women, however, either enter their pregnancies with one or more medical and health risks or develop a risk during their pregnancies. Others may suddenly develop a risk at or near the time of delivery (Institute of Medicine 1986; Alan Guttmacher Institute 1988). Thus, a responsive maternity system should include ongoing risk assessments and, when necessary, specialized medical, supplemental health, and hospital procedures.

Of the contracts reviewed, only 5 contained general provisions requiring plans to refer certain patients to obstetrical specialists and only 9 contained specific provider protocols for the provision of obstetrical services (table 5). Only two states set forth their requirements in detail, however. The HMO contract utilized by the Utah Medicaid agency describes in detail the medical conditions under which pregnant patients exhibiting certain risks must be furnished specialty care and from whom such specialty care is to be obtained. This provision is a standard part of every HMO Medicaid contract in the state. Similarly, Massachusetts's contract with the state's association of com-

TABLE 5
Contract Provisions for Content of Care, Specialty Referrals and Quality Control

	Specifies maternity care a mandated service	Specifies content of care	Provisions for specialty referrals	Specific obstetric protocols
Alabama	N	—	Y	N
Arizona	N	—	Y	N
California				
San Mateo	N	—	N	N
PHP	N	—	N	N
PCCN	N	—	N	N
Colorado	Y	N	N	M
Connecticut				
PCN	N	—	N	N
HMO	N	—	N	N
Florida	N	—	N	Y
Hawaii	Y	N	N	Y
Indiana	N	—	N	N
Iowa				
Heritage	N	—	N	N
Medical	N	—	N	N
Kansas	N	—	Y	Y
Kentucky	NA	—	NA	NA
Maine	Y	N	N	N
Maryland	Y	N	N	N
Massachusetts				
HMO	Y	Y	N	N
PCM	Y	Y	N	Y
Michigan				
HMO	N	—	N	M
PPSP	N	—	N	Y
Missouri	N	—	N	N
Nevada	N	—	N	N
New Hampshire	Y	N	N	N
North Carolina				
Kaiser	N	—	N	Y
Wilson	N	—	N	N
Ohio	N	—	N	N
Oregon				
HMO	Y	—	N	N
PCO	N	—	N	Y
HMO	Y	N	N	N
Rhode Island	N	—	N	N

TABLE 5—(*continued*)

	Specifies maternity care a mandated service	Specifies content of care	Provisions for specialty referrals	Specific obstetric protocols
South Carolina	Y	Y	Y	Y
Tennessee				
Malvy	N	—	N	N
Memphis	NA	—	NA	N
Med Plus	N	—	N	N
Utah	Y	—	Y	Y
Washington				
Kaiser	Y	N	N	N
Kitsap	Y	N	N	N
Wisconsin	N	—	N	N
TOTALS	13	3	5	9

munity health centers (but not its other contracts) imposed specific provider-performance obligations in the case of high-risk pregnancies.

This lack of specificity regarding when and where specialty care should be obtained was particularly problematic given the difficulties experienced by a number of plans in securing the services of specialists. A majority of individual plans reported facing significant problems in trying to secure adequate obstetrical personnel who would affiliate with them and found themselves unable to secure specialty referrals. Plans in Michigan, Minnesota, Oregon, Tennessee, and Utah all noted provider shortages (table 7). Moreover, the lack of contractual provider-qualification and referral criteria was reflected in the wide variation among plans themselves in the practice setting such standards. Less than one-half of the plans required that pregnant women see obstetricians at least once, while only a portion established board certification and hospital-affiliation credentials for participating providers (table 7).

Quality Controls. Of the contracts reviewed, 5 contained quality control requirements specific to the evaluation of pregnancy care. While separate quality-control instruments used by state agencies may, in fact, include pregnancy-related input and outcome measurements, only 5 contracts themselves identified patient management during pregnancy as a measurable performance standard. Given the wide

TABLE 6
Covered Services by Selected Plans

	Bilingual services	Transportation	Child care	Psychosocial services	Nutritional services	Home health services	Lab/X-ray	Physician services	Nursing services	EPSDT	Pharmacy
Michigan											
Comprehensive Health Service	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y
Cape Medical, Inc.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Koinonia Health Services	N	N	N	N	Y	Y	Y	Y	Y	Y	Y
Family Health Center	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
Minnesota											
Metropolitan Health Plan	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y
Medcenters Health Plan	N	N	N	N	Y	Y	Y	Y	Y	Y	Y
Group Health, Inc.	Y	N	N	Y	N	Y	Y	Y	Y	Y	Y
U-Care Minnesota	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Missouri											
Swope Parkway CHC	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
Truman Medical Center	N	N	N	Y	N	Y	Y	Y	Y	Y	Y
Total Health Care	N	N	N	Y	N	Y	Y	Y	Y	Y	N
Oregon											
Kaiser HMO	Y	N	N	Y	Y	Y	Y	Y	Y	Y	
Capitol Health Care	N	N	N	N	N	N	Y	Y	Y	Y	N
Multicare	Y	N	N	N	N	N	Y	Y	Y	Y	Y
Tennessee											
Maury County	N	Y	Y	Y	Y	N	Y	Y	Y	N	N
Medicaid Plus	N	N	N	Y	Y	Y	Y	Y	Y	N	Y
Utah											
Case Management	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
Healthwise	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y
TOTALS	9	6	3	14	13	15	18	18	18	16	13

TABLE 7
Requirements Regarding Obstetricians, Selected Plans

	All pregnant women see OBs	OBs must be board certified	OBs must be affiliated with levels II and III	Plan reports difficulty finding OBs
Michigan				
Comprehensive Health Service	Y	Y	Y	Y
Cape Medical Inc.	Y	Y	Y	Y
Koinonia Health Services	Y	N	N	Y
Family health Center	N	Y	Y	Y
Minnesota				
Metropolitan Health Plan	Y	Y	Y	N
Medcenters Health Plan	N	N	N	Y
Group Health, Inc.	N	Y	Y	Y
U-Care Minnesota	N	Y	Y	N
Missouri				
Swope Parkway CHC	Y	Y	Y	N
Truman Medical Center	Y	Y	Y	N
Total Health Care	N	Y	N	N
Oregon				
Kaiser HMO	Y	Y		
Capitol Health Care	N	N	N	Y
Multicare	N	Y	Y	N
Tennessee				
Maury County	N	N	N	N
Medicaid Plus	N	N	N	Y
Utah				
Case Management	N	N	N	Y
Healthwise	N	Y	Y	Y
TOTALS	7	12	10	10

variation in services provided, the personnel utilized within individual plans, and enrollment and disenrollment safeguards, the lack of an obstetric-specific evaluation mechanism is significant.

Financing Adequacy. In interviewing the states and plans, an issue which commonly arose concerned the belief by plans that maternity care was severely underfinanced and that this underfinancing was exacerbated by the enrollment of a disproportionately high percentage of pregnant beneficiaries. We were not surprised that plans that were reimbursed on a fee-for-service or partial-capitation basis perceived their pregnancy enrollment rates to be disproportionately high, since they received maternity financing only for outpatient services, and these financing levels have been historically depressed.

We were surprised, however, that fully capitated plans also reported that their maternity underwriting was inadequate. These plans receive a beneficiary payment rate that includes the extensive hospitalization costs for caring for the high numbers of Medicaid infants born at low birth weights. Fully capitated plans thus should have ample funds to provide the type of highly enriched care that can yield major inpatient savings. Yet, these plans, too, reported serious underfinancing and too-high numbers of maternity patients.

One study state, Minnesota, actively tried to deal with its HMOs' concerns by furnishing a supplemental capitation payment and, ultimately, by offering to remove maternity care from the capitated payment rate altogether and reimburse providers on a fee-for-service basis. The subsequent rejection of this offer by the HMOs suggests that, indeed, full capitation constitutes an attractive financial arrangement even in the case of pregnant Medicaid enrollees. It also suggests that prepaid plans generally prefer to avoid high-cost enrollees, a tendency which has been noted elsewhere (Schlesinger 1986).

We were unable to ascertain the basis for claims by plans that a disproportionately high percentage of their patients were pregnant. The claim was made by plans even in states that did not permit women whose Medicaid eligibility was based only on pregnancy to enroll in managed-care plans. Presumably state fertility rates are taken into account in setting partial or full capitation-payment rates; fertility rates are not relevant in a fee-for-service arrangement, which pays for services actually furnished, although at a lower level.

Out-of-Plan Use of Services. There exists extensive documentation in prepaid-plan literature of out-of-plan utilization of services by HMO

and other managed-care enrollees (Schneider and Stern 1988; Chavkin and Treseder 1977; Spitz 1987; Schlesinger 1986; Luft, Maerki, and Trauner 1986). Out-of-plan utilization can result from patient dissatisfaction with the amount or quality of care received. It can also occur because a plan either deliberately or unwittingly erects utilization barriers.

One type of practice that might have a significant impact on the rate of out-of-plan utilization among low-income pregnant enrollees is a plan's failure to develop affiliations with community health providers commonly used by patients. To the extent that plans (particularly those that are inexperienced in serving the poor) fail to develop formal affiliations with community providers (which permit patients to remain with those providers for at least some of their care), they may promote extensive out-of-plan use. Such utilization not only makes appropriate patient management more difficult but also leads to a false sense of cost savings, since the cost of out-of-plan services are not borne by either the plan or payer.

Our interviews with plans, agency personnel, and local health officials indentified significant out-of-plan utilization patterns in those communities in which (a) the plan itself does not already have a previous reputation as a known and trusted community health provider (such as a community health center) and (b) where the plan refuses to enter into subcontractual relations with such community maternity providers. Virtually all health departments interviewed noted cases in which pregnant enrollees sought care on an out-of-plan basis. The extent of the problem varied greatly, however. Generally speaking, health departments located in catchment areas served by plans that were either community health centers or health care providers that traditionally cared for the poor noted fewer problems than those serving areas with plans that were not traditional providers of care to the poor. Thus, fewer problems were noted by public health officials in Detroit, Kansas City, Tennessee, and Oregon, where one or more of the managed-care plans was also a major provider of health care to low-income families. In these communities, existing provider systems for the poor had been expanded to include managed-care arrangements. As a result, there was less disruption in care-seeking patterns and, consequently, fewer out-of-plan incidents.

Serious out-of-plan problems, however, were noted in both Utah and Minnesota. In Utah, where the state incorporates rigorous ma-

ternity-risk management and referral standards into its HMO contracts, public health officials noted that plan providers were failing to comply with the standards and instead were informally instructing or encouraging high-risk women to seek care from local health agencies. These agencies, in turn, were unable to bill for services, since no authorized referral had taken place. Their care became simply an uncovered cost. Utah health officials did note that the problem began to lessen as the state Medicaid agency began more aggressive enforcement of the plan-referral requirements.

The Minnesota health department provided the most extensive description of out-of-plan utilization by pregnant patients. Instances were cited in which community providers wishing to affiliate formally with a Minneapolis plan were denied affiliation status. In a lengthy letter to the Children's Defense Fund, one Minneapolis public health official reported that language and accessibility barriers among the city's managed-care plans led to significant out-of-plan utilization patterns:

> We continue to provide service to numerous families who have been mandated to receive care elsewhere but continue with our program for the above [language and accessibility] reasons. . . Issues/concerns relate to the ability of the participating HMOs to adequately address needs of the population traditionally served by the public sector. Patients have reported long waiting times for appointments at the mandated sources, and there has been no effort to facilitate transfer of care in terms of information requests, etc. In addition, many HMOs do not have nutrition, social work, bilingual and other "support" services which we have found to be valuable complements in health care systems designed to serve high-risk populations. Furthermore, follow-up on failed appointments, referrals, etc. is lacking. It would seem that this risk population has been thrust into systems which have not been adequately equipped to deal with their various problems and concerns.

Finally, virtually all public health officials cited confusion on the part of enrollees (particularly in cases in which they were mandatorily assigned to plans) as a major cause of out-of-plan care patterns.

Discussion

The concept of managed care certainly is meritorious, particularly in the case of maternity care for Medicaid patients. A good managed-

care program theoretically can guarantee a pregnant beneficiary access to the full range of maternity care she needs, with emphasis on care that is both early and preventive. At a time when high-quality obstetrical services are virtually nonexistent for pregnant Medicaid beneficiaries in many communities, managed-care programs might play a particularly critical role.

Our study reveals, however, that, if not carefully designed, managed-care plans will suffer from all of the ills intrinsic to the Medicaid program generally, such as volatile eligibility, the absence of appropriate benefits and provider standards, and a shortage of qualified providers. Moreover, a managed-care system can add a few new adverse twists of its own, such as enrollment and disenrollment delays and mass dislocation of beneficiaries from known and trusted community providers. It appears, moreover, that in developing contractual arrangements with plans, states generally have tended to enter into broad and ambiguous agreements that do not address these barriers to adequate maternity care. With a few notable exceptions, the specific components of a sound maternity-care program have received little attention during contract negotiations.

We believe that recent trends indicate a growing sensitivity on the part of Medicaid agencies to the necessary elements of a good maternity-care program. But much needs to be done if these trends are to affect managed care. We therefore make the following recommendations.

Eligibility Guarantees. By July 1990 all states will be required to provide Medicaid to all pregnant women with family incomes below 100 percent of the federal poverty level. This near-doubling of the Medicaid-eligibility standard should help stabilize pregnant women's Medicaid coverage. Additionally, all states should exercise the option to extend coverage to women with incomes under 185 percent of the federal poverty level. Only nine states now do so (table 1).

Moreover, states can further stabilize enrollment by waiving consideration of assets in determining eligibility during pregnancy and by guaranteeing continuous enrollment regardless of any change in monthly income.[3] Not only does guaranteed coverage promote high-quality maternity care, but guaranteed eligibility during the maternity

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Section 9401, P. L. 100-203.

period constitutes an excellent quality-control mechanism in a managed-care context. Plans (at least those that are fully capitated) in which pregnant women are continuously enrolled will have a far greater incentive to deliver early and continuous care, in order to avoid high neonatal hospital bills. Plans that are not fully capitated would also have a greater incentive to deliver quality care if continuous enrollment were combined with increased payment levels, as discussed below.

Enrollment. Enrollment safeguards should be developed to make immediate enrollment in managed-care plans possible in the case of pregnant women who do not yet have providers and to permit women who already have established provider relationships to remain under the care of their providers until the end of pregnancy. For these women, plan enrollment might be deferred until the end of the pregnancy, or else plans could be required to utilize the original provider's services on a contractual basis if the provider is unaffiliated.

Disenrollment protections must also be established in order to guard against the adverse effects of involuntary disenrollments. In states in which plan enrollment is on a family, rather than on an individual basis, pregnant women should be permitted to remain in the plan even if other family members are disenrolled. In the event of involuntary disenrollment, evidence of coverage must be restored immediately and state agencies should develop agreements with state maternal and child health agencies to assist disenrolled women to find another provider.

Benefit and Treatment Protocols. States must develop and articulate detailed benefit coverage and provider treatment, referral, and affiliation protocols. Several sound models, such as those developed by Utah and Massachusetts, exist.

Providers. Managed care is not a magic spell that immediately remedies the shortage of obstetrical providers willing to treat patients. Except for some traditional staff-model HMOs, certain large health centers, and comprehensive health clinics, many managed-care plans will experience extreme difficulty in identifying sufficient numbers of obstetrical personnel with whom to affiliate. Provider recruitment might be improved with rate increases. Moreover, all plans should be required to subcontract with community providers that participate in Medicaid and agree to furnish obstetrical care in accordance with contractual standards.

Plans should also be required to have available, through contract

or on staff, providers qualified to serve high-risk patients. This involves having available board-certified personnel, such as obstetricians with admitting privileges at hospitals offering services for women and infants and neonatologists. Plans should also be required to utilize the services of licensed midwives and other midlevel professionals expert in treating low-income, high-risk women.

Quality Control. Quality-control measures must be instituted for care to Medicaid beneficiaries in managed-care plans, just as they should be for beneficiaries in traditional fee-for-service arrangements. They may be particularly important in managed-care arrangements, however, because of their "lock-in" features. A quality-control review should include an assessment of service and referral protocols, chart review, and other tested methods of quality assurance. These tools should be based on *input* measures. Some input measures are not understood, as is the case with medical care generally (Eddy and Billings 1988). Many are well accepted, however, and can be used to measure quality. These are the number and timing of visits, the frequency of risk assessments, the content of care (including medical care, nutritional assessments and supplements, health education, appropriate diagnostic testing, and so forth), and the establishment and adherence to referral mechanisms upon identification of risk.

For high-risk women, we believe that, at least for the present, quality should not be based on very gross outcome measures, such as cost savings achieved through the plan or reductions in the incidence of low birth weight. Such outcome measures are inappropriate in this setting. Improving the quality and scope of maternity care may result in increased costs and adverse outcomes, at least initially, because babies who would have aborted spontaneously or died at birth will survive with better prenatal and delivery care. Many of these babies will have low birth weights or exhibit other health problems requiring additional medical care. Input measures, however, will accurately measure the extent to which the plans are adhering to accepted standards. Moreover, outcome measures may cause plans to avoid high-risk women.

Payment Rates. Plans should have adequate funding levels to underwrite the provision of the comprehensive services needed to reverse the disproportionately high number of very high-risk infant births to Medicaid patients. Fully capitated plans may be sufficiently funded, at least in those states whose all-inclusive rates do not include flat

limits on inpatient hospital coverage, which artificially reduce the number of inpatient infant days paid for. Partially capitated or fee-for-service plans, however, are not.

We believe that, ultimately, severe underfinancing of maternity care may drive a number of the harmful plan practices described above. Low rates may prevent plans from offering high-quality care, and in some cases may actually encourage plans to deny or delay care in the hope that the patient will seek services elsewhere or simply lose eligibility before the infant is born. Although comprehensive maternity care saves both lives and dollars, the type, scope, and depth of care that produces such results goes well beyond the current level of services furnished to the majority of Medicaid beneficiaries (at least one study, however, does anticipate savings even at current benefit levels) (U.S. Congress Office of Technology Assessment 1988). Therefore, in establishing payment levels, at least for not fully capitated providers, states should adjust rates higher than historical reimbursement levels. Since 1987 a number of states have, in fact, adjusted their payment rates upward.

There is no greater challenge to managed care, or to Medicaid generally, than achieving good infant and maternity outcomes. Recent Medicaid expansions permitting coverage of all pregnant women with family incomes below 185 percent of the federal poverty level, coupled with persistently high poverty rates, will vastly increase the proportion of births in the United States that will be Medicaid financed. The human and economic consequences of not meeting this challenge within the managed-care delivery system are enormous.

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