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Report to the Chairman, Subcommittee on Health, Committee on Ways and Means, House of Representatives

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MEDICARE

Physician Incentive Payments by Prepaid Health Plans Could Lower Quality of Care

GAO/HRD-89-29

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Human Resources Division

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The Honorable Fortney H. (Pete) Stark
Chairman, Subcommittee on Health
Committee on Ways and Means
House of Representatives

Dear Mr. Chairman:

This report discusses financial incentives to control medical costs offered to physicians by health maintenance organizations, including plan characteristics that could jeopardize the care provided to Medicare patients. We suggest matters for the Subcommittee to consider if it deliberates modifications to the Medicare law for deterring health maintenance organizations from offering financial incentives that may encourage inappropriate responses from physicians.

We are sending copies of this report to interested committees; the Director, Office of Management and Budget; and the Secretary of Health and Human Services and are making copies available to others on request.

This report was prepared under the direction of Michael Zimmerman, Senior Associate Director. Other major contributors are listed in appendix III.

Sincerely yours,

Lawrence H. Thompson

Lawrence H. Thompson
Assistant Comptroller General

Executive Summary

Purpose

Medicare pays health maintenance organizations (HMOs) a fixed monthly amount per enrolled beneficiary to provide all health services covered by the program. This gives these "risk-contract" HMOs a financial incentive to control the use of services and assure that only necessary care is provided. In turn, HMOs often give their participating physicians financial incentives to hold down the cost of the care these physicians provide or arrange for. Many are concerned that the incentives given to the participating physicians may be so strong that they represent a potential threat to the quality of care by encouraging inappropriate reductions in service.

The Chairman, Subcommittee on Health, House Committee on Ways and Means, asked GAO to review physician incentive plans of HMOs serving Medicare beneficiaries in order to gain an appreciation for the range of incentive plans being used and the plan features that posed the greatest potential threat to quality of care. To address this issue, GAO reviewed the physician compensation arrangements and quality assurance plans of 19 HMOs operating in four states.

Background

As part of the Tax Equity and Fiscal Responsibility Act of 1982, the Congress revised Medicare's requirements for risk contracts with HMOs. Under the revised method, Medicare pays an HMO, for each beneficiary who enrolls in it, 95 percent of the expected average monthly cost of beneficiaries in the area who are not enrolled in an HMO. This payment method was expected to constrain Medicare costs. Recognizing that risk-contract HMOs have a financial incentive to reduce the amount of care provided, the Congress required them to have quality assurance systems designed to prevent inappropriate reductions in services. In 1986 the Congress also required an outside review of HMO quality of care by independent Medicare contractors. As of May 1988, about 1 million Medicare beneficiaries were enrolled in 137 HMOs with risk contracts.

In 1985-86, federal officials became aware that some hospitals were paying physicians incentives to keep hospital costs below the Medicare payment. In July 1986, GAO reported that some hospital physician incentive plans could lead to inappropriate reductions in service.[1] The Omnibus Budget Reconciliation Act of 1986 prohibited Medicare-participating hospitals and HMOs from making incentive payments to physicians.

[1] Medicare: Physician Incentive Payments by Hospitals Could Lead to Abuse (GAO/HRD-86-103, July 22, 1986).

While the ban on payments by hospitals was effective in April 1987, the effective date for HMOs has been delayed to April 1990.

Results in Brief

Most HMOs GAO reviewed make incentive payments to physicians for holding down medical treatment costs. If not properly controlled, such incentives could lead physicians to limit services inappropriately, resulting in inadequate care for Medicare patients. Incentive plans that shift much of the risk for services to physicians or closely tie individual treatment decisions to financial rewards pose the greatest potential threat to quality of care.

GAO's Analysis

There is little agreement in the health care field regarding the effect financial incentives have on quality of care, and GAO could not identify any studies relating HMO physician incentives to the quality of care provided Medicare patients.

GAO believes that the more risk transferred to physicians and the closer financial incentives are linked to decisions about individual patients, the greater the potential threat to quality of care. Specifically, features most likely to adversely affect quality are:

1.Shifting HMO risk to physicians. Some incentive plans place physicians at financial risk for the health care costs of their patients. In such plans the HMO pays the physician a fixed amount per member, and the physician must provide or pay for all covered services of enrollees in his or her group. Under such arrangements, physicians can be forced to fund care out of their own pockets. The more risk shifted, the greater the potential effect on physicians' income and the greater the potential for inappropriate reductions in services. (See p. 24.)

2.Distributing incentives based on individual physician cost performance. Because a physician is usually responsible for treating a relatively small number of HMO patients, a few expensive cases could dramatically affect his or her incentive payment. Basing incentive payments on the cost performance of a group of physicians decreases the likelihood of one patient's treatment costs significantly affecting a physician's incentive payment. The more physicians and patients over whom cost performance is measured, the farther individual treatment decisions are removed from incentive payment amounts. (See p. 25.)

3.Paying a percentage of HMO savings on patients as an incentive. Incentive payments may be based on a percentage of HMO savings, which may be calculated on total plan savings or on the savings attributable to a physician's or physician group's performance. Arrangements that provide higher percentages of savings mean that the greater the reduction in services, the higher the potential payout and, thus, the greater the potential for inappropriate reductions in service. (See p. 26.)

4.Measuring physician cost performance over a short time period. Behavioral psychology theory suggests that a relatively short performance measurement period would have a greater influence on behavior than a longer period. If an incentive payment is expected to occur close to the physician's treatment decisions, it may exert a greater influence over the physician's behavior than if it were to occur much later. Also, the shorter the performance measurement period, the fewer patients over which treatment costs are spread. (See p. 26.)

Many HMO physician incentive plans contain more than one of these four features. The more features present and the greater the potential financial effect of each, the greater the potential threat to quality. Table 1 shows the various plan features for the 19 HMOs in GAO's sample.

Table 1: Features of HMO Physician Compensation Plans

Description	Number of HMOs
Shifted risk for hospital and/or specialist services to HMO physicians and also withheld funds from the physician for distribution:	
Annually, based on group performance	2
Annually, based on combined individual and group performance	1
Monthly, based on group performance	1
Shifted risk for hospital and/or specialist services to HMO physicians without withholding funds for distribution	2
Shifted risk only for the HMO physician's own services	1
Withheld funds from physicians for distribution:	
As an annual bonus to salaried physicians, based on plan profits	1
Annually, based on group performance	5
Annually, based on individual performance	2
Quarterly and annually, based on combined group and individual performance	1
Annual bonus to salaried physicians, based on plan profits	1
No physician incentive plan	2
Total	**19**

Strong HMO management controls are needed to help identify and prevent physician behavior that adversely affects quality of care, especially for arrangements that place individual physicians at high risk and closely relate clinical decisions to financial gain. Quality assurance and utilization reviews, physician credentialing, medical record reviews, and enrollee grievance procedures can be important controls for assuring quality patient care. The Medicare statute requires HMOs to have these processes, and all the HMOs surveyed had some form of each. How effective the processes are in counter-balancing the incentives of physician plans is difficult to determine. (See p. 28.)

The Omnibus Budget Reconciliation Act of 1986 mandated that review organizations monitor the quality of certain care provided by HMOs with Medicare risk contracts. In reviewing HMO records, review organizations may have the opportunity to assess quality of care and evaluate the risk associated with physician incentives. If trends in questionable care are identified, review organizations may be able to assess the extent physician financial incentives are the cause. Review organizations may not be able to determine the effect financial incentives have on quality of care in the short term; however, they can begin to establish a data base that could provide insights into the relationship among financial incentives, physician behavior, and quality of care. (See p. 29.)

Matters for Consideration by the Subcommittee

If the Subcommittee considers modifications to Medicare to permit certain HMO physician incentive payments, it may wish to retain a ban on arrangements that closely link financial rewards with individual treatment decisions and/or expose the primary care physician to substantial financial risk for services provided by physicians or institutions to whom he or she refers patients for diagnosis or treatment. (See p. 30.)

Agency Comments

GAO did not obtain formal comments on this report.

Contents

Abbreviations

GAO	General Accounting Office
GHAA	Group Health Association of America
HHS	Department of Health and Human Services
HMO	health maintenance organization
IPA	independent practice association
OBRA 1986	Omnibus Budget Reconciliation Act of 1986
PRO	peer review organization
TEFRA	Tax Equity and Fiscal Responsibility Act of 1982

Chapter 1

Introduction

On January 20, 1987, the Chairman, Subcommittee on Health, House Committee on Ways and Means, requested us to analyze physician incentive plans of federally qualified health maintenance organizations (HMOs)[1] that provide medical services to enrollees under Medicare risk contracts. We were asked to evaluate the potential for physician incentive plans to lead to inappropriate reductions in service and to identify incentive plan characteristics that pose the greatest risk to quality of patient care.

Background

Medicare, authorized under title XVIII of the Social Security Act, is a health insurance program covering almost all Americans age 65 and over and certain individuals under 65 who are disabled or have chronic kidney disease. The program provides protection under two parts. Part A covers institutional health care, primarily hospital services. Part B covers many noninstitutional services, and most part B payments are for physician services. In 1987, Medicare paid out $50.3 billion under part A and $31.7 billion under part B for health care services and program administrative costs for about 31 million beneficiaries.

Beneficiaries obtain physician services through two basic systems. First, under the fee-for-service system, physicians charge for each service provided and are reimbursed on a unit-of-service basis. Thus, they earn more by providing more services. Under fee-for-service, there is no financial incentive for physicians to control program costs.

The second method for beneficiaries to receive services is through enrollment in an HMO. An HMO is an organization that provides directly or arranges and pays for health care for a voluntarily enrolled population for a predetermined, fixed monthly fee paid in advance (that is, capitation payment). Care is given by providers who are employees of or contractors with HMOs. The HMO assumes responsibility for providing services within a fixed amount, and in general, it has a financial incentive to minimize the use of health services. All other things being equal, the fewer services the HMO provides, the more money from the fixed fee it retains as profits.[2]

[1]Because competitive medical plans operate like HMOs, providing services for a predetermined fixed capitation rate, we included them in our review. While subject to essentially the same Medicare regulatory requirements as HMOs, competitive medical plans have greater flexibility than federally qualified HMOs in setting their commercial premium rates and types of service covered. As used in this report, the term HMO includes competitive medical plans.

[2]We use the word "profit" here to refer to money that HMOs may retain. Many HMOs are not-for-profit organizations, and for those HMOs, the term technically is "excess of revenues over expenses."

There are four common organizational structures for HMOs:

- Staff HMOs provide medical services at central facilities through physicians who are employed by the HMO.
- Group practice HMOs contract with one independent single- or multiple-specialty group practice to provide services. The physicians in the group share facilities, equipment, medical records, and support staff but are not employed by the HMO.
- Individual practice association (IPA) HMOs contract with physicians in the community to provide medical services to HMO members through their regular practices. An IPA model HMO may contract with physicians who are members of an association (a network IPA) or may contract directly with individual physicians (a direct contract IPA).
- Network HMOs contract on a capitation basis with more than one independent group practice to provide health services. Some HMOs are "mixed networks" because their structure contains some mix of group, IPA, and staff model practices.

An individual HMO may be organized into either two or three tiers. Staff and IPA direct contract models are two-tiered organizations, in which the HMO (the organization that contracts with Medicare to provide health care for the fixed monthly fee) directly employs or contracts with physicians to provide medical services. Group, network, and some IPAs are three-tiered models, in which the HMO contracts with groups, networks, or IPAs, which in turn contract with physicians to provide medical services.

Medicare Risk Contracts

The Social Security Amendments of 1972 (Public Law 92-603) authorized Medicare to contract with HMOs on either a cost reimbursement or risk basis. Risk contracts were not widely accepted by HMOs because they were at risk for all costs above their capitation rate but had to return half of their profits to Medicare and were allowed a maximum profit of 10 percent of total Medicare payments. In fact, only two HMOs ever entered into such contract arrangements. Because risk contracts with HMOs offered the potential to constrain Medicare costs, the Congress modified the program's HMO provision through the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) (Public Law 97-248). Under the revised program, Medicare pays an HMO 95 percent of the amount the program estimates it will pay per beneficiary under the fee-for-service system in the HMO's service area.

Under TEFRA risk contracts, if an HMO provides services for less than Medicare's prepaid capitation payment plus any premiums charged to the enrollees, the HMO would make a profit. The HMO may keep any profit from its Medicare risk contract that does not exceed its profit rate on its private lines of business. The statute provides that Medicare risk contract profits that exceed an HMO's private business profit rate are to be returned, either to the Medicare program through reduced capitation payments or to the Medicare enrollees through reduced cost sharing or expanded benefits. If costs are greater than revenues, the HMO suffers a loss.

The first TEFRA risk contracts were signed in April 1985, and by May 1988, about 1 million Medicare enrollees were receiving benefits under 137 risk contracts.

HMOs with risk contracts must provide all Medicare benefits,[3] and most provide these benefits, or expanded benefits, at lower or no deductibles and coinsurance than beneficiaries have under the fee-for-service system. To do this without suffering a loss, HMOs strive to control utilization of unnecessary and duplicate services, normally through a combination of administrative rules, case management, and physician financial incentives. To encourage physicians to consider costs in their medical decisions, many HMOs offer financial incentives to physicians to minimize the use of specialist physicians and inpatient care. If those incentives are not properly controlled, physicians may respond to the financial incentives by inappropriately reducing services to patients.

In July 1986, we reported that certain hospital incentive plans offered to physicians could have detrimental effects on the quality of care provided to Medicare patients.[4] Of particular concern to us at that time were plans like that offered by the Paracelsus Healthcare Corporation, which included a combination of features that, together, could provide hospital physicians too strong an incentive to undertreat patients. The Paracelsus plan distributed incentive funds monthly based on each individual physician's performance in contributing to the hospital's revenues. Each month, hospital charges for Medicare patients admitted by each physician were compared to the prospective payments the hospital received from Medicare for those patients. If Medicare payments were

[3]Competitive medical plans are not required to cover some Medicare-required benefits, such as mental health, substance abuse, and home health care.

[4]Medicare: Physician Incentive Payments by Hospitals Could Lead to Abuse (GAO/HRD-86-103, July 22, 1986).

above a set percentage of hospital charges for that month, the physician received a percentage of the difference. The fewer services ordered by the physician, the lower the hospital charges, and thus, the higher the physician incentive payment. This plan also did not contain control mechanisms, such as a quality review program, to prevent or identify abuses.

As a result of the Paracelsus case and concerns that other physicians may respond inappropriately to financial incentives, the Congress, through section 9313 of the Omnibus Budget Reconciliation Act of 1986 (OBRA 1986) (Public Law 99-509), prohibited, effective April 21, 1987, direct or indirect incentive payments by Medicare participating hospitals to physicians to reduce or limit services. The provision also prohibited HMOs with Medicare (or Medicaid) risk contracts from making such incentive payments, effective April 1, 1989. As part of the Omnibus Budget Reconciliation Act of 1987 (Public Law 100-203), the Congress extended the effective date for prohibiting HMO physician incentive payments to April 1, 1990.

OBRA 1986 required the Department of Health and Human Services (HHS) to study and report to the Congress on incentive arrangements offered by HMOs. Specifically, the Congress wanted HHS to include in the report

- a review of incentive arrangements in common use,
- an evaluation of their potential to pressure physicians to reduce or limit services in a medically inappropriate manner, and
- recommendations providing for exceptions to the OBRA 1986 prohibition to permit incentive arrangements by HMOs that encourage efficiency in utilization of medical and other services but do not have a substantial potential for adversely affecting quality.

HHS expects to complete the report on this study by December 1988.

Lack of Data Relating HMO Physician Incentives to Quality of Patient Care

Our review of the literature and discussions with federal and private health care experts did not identify any studies directly assessing the effect of HMO physician financial incentive plans on quality of care. We found little agreement in the health care field regarding the effect financial incentives have on quality of care. Studies of HMO quality of care in general reflect HMO experience primarily based on employer-sponsored group health plan enrollees and their dependents.

According to The Rand Corporation, the literature it reviewed supported the conclusion that the HMOs studied provide care whose quality was roughly comparable to quality in the fee-for-service system.[5] Another study for the Health Care Financing Administration (the HHS agency responsible for administering the Medicare program) summarized previous research that suggests that the quality of care provided by HMOs is at least equal to care provided in the fee-for-service setting.[6]

The data collection study for the HHS study mandated by OBRA 1986 and a study done by the Group Health Association of America (GHAA)[7] identified and categorized HMO physician incentive arrangements. Neither of these efforts attempted to assess the relationship between financial incentive plans and quality of care. When HHS and GHAA compared the data they had collected, they found that their initial observations varied significantly. For example, HHS's data collection contractor found that 14 percent of HMOs distribute incentive funds based on individual physician performance rather than on group performance; GHAA found 50 percent. HHS has asked its contractor to compare the results of its effort with those of GHAA and to reconcile differences between the studies.

Objectives, Scope, and Methodology

As requested by the Chairman, the objectives of our review were to (1) evaluate the potential of various types of physician incentive plans offered by HMOs to result in inappropriate reductions of services and (2) identify plan characteristics that pose the greatest risk to quality of care for Medicare beneficiaries.

We randomly selected 17 HMOs in California, Minnesota, and Florida. Those three states have the largest HMO enrollments under Medicare risk contracts, with 587,217 enrollees, or 58.8 percent of the total enrollment under TEFRA risk contracts in May 1988. In November 1987, we added two HMOs to our study: one because of its large size and long-time experience in the HMO industry; the other because information we obtained indicated that its incentive arrangement placed individual physicians

[5]G. Hammons, R. Brooks, and J. Newhouse, Evaluation of the Effects of Quality of Care of Selected Payment Alternatives Under the Medicare Program, The Rand Corporation, Sept. 1985.

[6]E. Bates and K. Connors, "Assessing Process of Care Under Capitated and Fee-for-Service Medicare," Health Care Financing Review, 1987 Annual Supplement, pp. 57-68.

[7]GHAA is an organization representing prepaid health care systems, commonly called HMOs. In December 1986, GHAA surveyed all its member organizations on various policy issues, including physician incentives. In March 1987, the Blue Cross and Blue Shield Association, using GHAA's questionnaire, surveyed its members that operate HMOs. In analyzing its results, GHAA augmented its data with Blue Cross and Blue Shield's survey data.

directly at risk for a broad range of services provided to their assigned enrollees. The two additional HMOs increased the number of enrollees in our sample HMOs to 438,646. (The November 1987 enrollment for the 17 original sample HMOs was 366,743.[8]) The HMOs included in our study are listed in appendix I.

From the 19 HMOs, we obtained information on their financial arrangements with physicians and their quality assurance plans. We focused on financial arrangements for primary care physicians because these physicians have greater involvement in risk-sharing with HMOs than do specialists and hospitals. Primary care physicians provide services to meet enrollees' usual health care needs. Typical primary care services are listed in appendix II; actual definitions of primary care services vary from one HMO to another.

We contacted officials at HHS, the Health Care Financing Administration, and health industry representatives, including GHAA, to discuss HMO physician incentive plans and their potential effect on patient care and to discuss the findings of prior and ongoing studies of the effects of HMO incentive plans. We also visited 11 of the 19 HMOs in our study to interview officials concerning incentive and quality assurance plans.

We reviewed physician financial incentive plans to identify arrangements that could potentially influence physician behavior in providing medical services. We examined the nature of the risk borne by the physicians and the distribution of the incentive funds. We reviewed whether HMOs' quality assurance plans might militate against financial incentives and help assure provision of quality care. Because of the complexity of the issues and the lack of criteria defining quality care, we did not evaluate whether HMOs were providing quality care to Medicare beneficiaries.

Our work was conducted from January 1987 through May 1988, in accordance with generally accepted government auditing standards. As requested by the Subcommittee office, we did not obtain formal comments from HMOs or HHS on this report; however, we did discuss the report contents with HHS and GHAA officials and incorporated their comments where appropriate.

[8]Includes about 115,000 enrollees gained by Humana Healthcare Plans when, in June 1987, it purchased the bankrupt International Medical Centers, Inc. Humana was in our original sample, but International Medical Centers was not.

Physician Incentive Plans and Compensation Arrangements

HMOs generally offer physicians financial incentives to encourage them to control health service use. These incentives are tied to the HMO's physician compensation system and can take a variety of forms. The basic incentive plans and compensation arrangements used by the HMOs covered by our sample are described in this chapter. The incentive plans range from annual bonuses for salaried physicians based on overall HMO profitability to putting individual physicians at financial risk for all health services used by enrollees assigned to them. All of the HMOs we reviewed used various mechanisms to attempt to assure quality of care.

How Incentives Are Funded and Distributed

HMOs receive a fixed per capita payment from Medicare to provide all Medicare-covered services. The HMOs generally deduct an amount for administration and allocate the remainder to various funds, generally separate funds to pay for (1) primary care services, (2) specialty physician or referral services, and (3) institutional services, such as inpatient hospital and skilled nursing facility services.

The funds for physician financial incentives normally come from two sources:

- Risk pools composed of funds withheld from payments to physicians.
- The difference between the per enrollee amount allocated to physicians and the actual cost of caring for enrollees assigned to physicians (i.e., the capitation approach).

Under the enrollee capitation approach, if the physician provides services for less than the per capita amount, he or she keeps the difference. Of the 19 HMOs in our review, 5 used risk pools only, 8 used risk pools in combination with the enrollee capitation approach, and 3 used the enrollee capitation approach only. Of the other three plans, two did not have a financial incentive plan, and one paid a bonus based on plan profits but did not withhold funds to form a risk pool.

Risk pools are usually formed by withholding a portion of each physician's compensation—for example, 20 percent. The withheld funds represent the physician's risk sharing in the HMO's overall cost of health services. If an enrollee needs specialty or inpatient services, generally the primary care physician is responsible for approving the referral to a specialist or the admission to a hospital or other institution. Payments for those services are deducted from the funds established for institutional or specialty services. Some HMOs use funds in risk pools to cover

any deficits in the amounts allocated for specialty and inpatient services; others use risk pools to cover only deficits for specialty services.

Depending on the use of health services, risk pools can show either a surplus or a deficit at the close of an accounting period. Surpluses are paid to physicians as incentives, with the method of sharing varying among HMOs. In case of deficits, some HMOs limit primary care physicians' risk to the amount of funds withheld in the risk pool. Others hold physicians responsible for deficits exceeding risk pool amounts, requiring them to make up deficits through decreased future payment rates, higher percentages withheld for the risk pool in the future, or direct repayment to the HMO.

The 13 HMOs included in our review that used risk pools allocated incentive fund surpluses or deficits on an individual, aggregate, or combined aggregate/individual basis. Individual risk pools tie risk and the financial consequences of that risk to each individual physician's utilization performance and clinical decisions. Under this arrangement, which was used by two HMOs and covered 19.3 percent of the enrollees in our study, if an individual physician's risk pool account has a deficit, that physician is not eligible to receive any incentive funds, regardless of the overall status of the risk pool.

Aggregate, or group, risk pools spread risk and the financial consequences of risk among a group of physicians or over the entire plan. Under this arrangement, no one physician is penalized or rewarded for his or her individual utilization patterns, and physicians treating patients who frequently require a large number of services, such as Medicare beneficiaries, are not penalized for their caseload mix. The larger the group sharing surpluses or deficits in a risk pool, the less any one physician's behavior influences the size of the pool's surplus or deficit. In our study, nine HMOs with 48.4 percent of the enrollees used group risk pools, and two HMOs with 7.8 percent of the enrollees used combination group/individual risk pools.[1]

[1]One HMO plan would distribute incentive funds to a physician's group, and the group would decide how to allocate the funds, with the provision that 50 percent of the funds should be distributed based on an individual physician's utilization of services and his or her membership status in the group. The other HMO established two accounts—one for professional services and one for institutional services. Individual physicians could be eligible for incentive funds based on the physician's individual performance only if there was a surplus in the aggregate in the institutional services funds for all primary care physicians in the service area covered by the contract.

Types of Physician Compensation Arrangements

Various compensation arrangements exist between HMOs and primary care physicians.[2] The three commonly used forms are salary, fee-for-service, and capitation.[3]

Salary Arrangements

HMOs may employ and pay a salary to physicians to provide medical services at clinics and hospitals. Under this arrangement, the HMO is at risk for utilization of services. A salaried physician's income may be tied to such factors as training, experience, performance, or tenure; it is not related to utilization of services. Salaried physicians have minimal financial risk for utilization and have few financial incentives to control service utilization, and these HMOs typically use physician education programs and peer review as cost control methods. Physicians may be paid bonuses based on plan-wide or clinic performance, or physicians may have a portion of their salary withheld, which may be paid as a bonus if the HMO has favorable overall utilization experience.

Four of the 19 HMOs in our study, representing 30.4 percent of the enrollees, provided care through salaried physicians. One withheld 2 to 4 percent of each physician's salary and conditioned its return upon favorable utilization experience for the overall HMO. Another HMO did not withhold a portion of physicians' salaries, but it offered physicians bonuses based on favorable plan-wide utilization experience. The other two HMOs with salary arrangements did not withhold any part of a physician's salary and did not have bonuses or other financial incentives.

Fee-for-Service Arrangements

As in the traditional fee-for-service system, physicians affiliated with HMOs using the fee-for-service approach are paid on a unit-of-service basis, with modifications to encourage utilization control. Under fee-for-service arrangements, HMOs may pay physicians' actual charges; the usual, customary, and prevailing charges in the area; or an amount based on a fee schedule. Physicians accept the HMO's payments as payment in full, billing enrollees only for applicable copayments.

[2]Several HMOs in our sample used more than one method for compensating physicians. To simplify the discussion, we describe the primary arrangement used by the HMO.

[3]HMOs may also use these, or similar, methods to pay specialists and hospitals for providing care to HMO enrollees.

Physicians share in the risk of overutilization of medical services through risk pools generally funded by withholding a percentage of payments. Thus, while these HMO physicians are not at risk for the provision of medical services, they can share more in the HMO's risk for the cost of services than do salaried physicians.

Four HMOs in our study, covering 21.9 percent of enrollees, paid physicians on a fee-for-service basis and withheld funds to form risk pools. Three used group risk pools, and one used an individual risk pool to cover any deficits arising in the funds established for specialty and inpatient services. One of the fee-for-service HMOs (1.1 percent of enrollees) in our study paid physicians a fluctuating percentage of prevailing charges. Depending upon utilization of services, the percentage of prevailing charges paid to physicians may change from month to month so that physicians receive more or less than 100 percent of prevailing charges. For example, the prevailing charge for a primary care procedure performed by Dr. M may be $100. If the HMO has a surplus in the funds budgeted for primary care services due to low utilization during one month, Dr. M might receive 120 percent of prevailing charges, or $120. Conversely, if in another month funds budgeted for these services drop below expected levels because of high utilization, Dr. M may receive only 70 percent of prevailing charges, or $70. Physicians paid a fluctuating percentage of prevailing charges may also have a portion of their payments withheld to be placed at risk for specialty and/or inpatient utilization.

Capitation Arrangements

As an incentive to control utilization of medical services, some HMOs have adopted capitation payment mechanisms for physician services as a replacement for the traditional fee-for-service system. Capitation requires physicians to accept a monthly designated amount as payment in full for each assigned member, no matter how often the physician provides services to each member during the month. Capitation shifts substantial portions of financial risk for medical services from the HMO to the physicians. Under capitation arrangements, an individual physician can gain or lose depending on the frequency or extent of patient services.

Capitation for primary care, overall physician services, and overall health services are the three basic types of physician capitation. Among the capitation approaches, the amount of financial risk transferred from the HMO to the physician is lowest under a primary care capitation

approach and increases as physicians are made responsible for a wider range of services in the other two types.

Primary Care Services Capitation

Primary care capitation gives a physician regular capitated payments to assume responsibility for providing a defined range of primary care services to all HMO members in the physician's assigned group. A portion of the capitation payment may be withheld and placed at risk for specialty and inpatient services. Under this arrangement, the physician has full risk for utilization of primary care services, while the HMO has the majority of risk for specialist and inpatient services.

In our study, six HMOs capitated physicians for primary care services; 37.5 percent of enrollees in our review fall under this arrangement. Of these HMOs, three (27.7 percent of enrollees) used group risk pools, one (3.6 percent of enrollees) used a combination of individual and group risk pools, and one (5.9 percent of enrollees) used individual risk pools to cover deficits in the funds for specialist and inpatient services. The remaining HMO (0.4 percent of enrollees) did not withhold funds for a risk pool.

Overall Physician Services Capitation

Under the overall physician capitation approach, the HMO capitates primary care physicians for the cost of all primary care and specialist services required by HMO members assigned to the primary care physician. This approach places greater financial risk on physicians than primary care capitation because the capitation received by the primary care physician also funds specialist services. The HMO has the majority of risk for inpatient services.

One HMO in our study (representing 0.5 percent of enrollees) used overall physician capitation with individual physicians; three (with 6.5 percent of enrollees) used it with IPAs and groups. Some HMOs may contract with IPAs or groups to provide services and may not always know how these entities pay their primary care physicians or the amount of risk transferred to the physicians. We did not go below the HMO level in the three-tiered structure HMO in our study, and thus we did not determine the compensation arrangements for or the amount of risk passed on to primary care physicians by the intermediate organizations.

The HMO capitating individual physicians for all physician services also shifted some risk for inpatient services to its physicians. This HMO withheld a portion of the capitation to cover deficits that might arise in the

funds allocated for inpatient care. The withheld amounts were combined into a group risk pool. One of the three HMOs that capitated all physician services with IPAs and physician groups used withholding in a combination of individual and group risk pools to cover inpatient fund deficits, another withheld funds to form a group risk pool, and the third did not withhold funds to form a risk pool.

Overall Health Services Capitation

Under the overall health services capitation approach, primary care physicians are capitated to provide all health benefits that the HMO members of a physician's group need, including hospital and other institutional services. This arrangement places the greatest financial risk on primary care physicians. Because physicians assume virtually all risk from the HMO, this approach is more commonly used with groups of physicians than with individual physicians so that risk exposure is spread over a broader membership base. One HMO in our study (with 3.2 percent of enrollees) used the overall health services capitation approach with physician groups.

The distinguishing features of primary care compensation arrangements and incentive funds of the 19 HMOs in our sample are contained in table 2.1.

Table 2.1: Features of HMO Primary Care Compensation Arrangements

	Number of HMOs		
Compensation arrangement	**In sample**	**Using risk pools**	**Distinguishing features**
Noncapitated systems:			
Salary	4	1	Primary care physician is employed by the HMO and receives a salary for providing primary care services.
Fee-for-service	4	4	Primary care physician is paid on a unit of service basis for providing primary care services. Physicians accept the HMO's payment as payment-in-full, billing enrollees only for applicable copayments.
Capitated systems:			
Primary care services	6	5	Primary care physician is paid a per capita amount for providing a defined range of primary care services to HMO enrollees assigned to the physician.
Overall physician services	4	3	Primary care physician is paid a per capita amount for providing all primary and specialist (referral) services required by HMO enrollees assigned to the physician.
Overall health services	1	0	Primary care physician is paid a per capita amount for providing all health services, including hospital and other institutional services, required by HMO enrollees assigned to the physician.
Total	**19**	**13**	

Stop-Loss Protection

Physicians' financial risk may be mitigated by using stop-loss protection plans, which set a dollar ceiling on a physician's financial liability for services provided to individual HMO enrollees. If the stop-loss ceiling is exceeded for an enrollee, the HMO resumes financial responsibility for that member's care. (The HMO may purchase insurance to cover these extraordinarily costly cases.) Nine of the HMOs in our study offered physicians individual enrollee stop-loss protection. For example, one HMO limited its primary care physicians' financial responsibility to $3,000 per member per year for referral physician services and $10,000 per member per year for hospital services. Another HMO offered per enrollee stop-loss protection for Medicare part A services.

Among the 10 HMOs that did not offer individual enrollee stop-loss protection, four employed salaried physicians who were not financially liable for enrollees' care. One other HMO adjusted physicians' performance measures to account for enrollees who had certain specified diagnoses that were likely to require services outside the norms for the physicians' specialties. Another HMO purchased reinsurance for itself but not for plan physicians. The other four HMOs did not offer stop-loss protection to physicians or did not offer it to physicians paid under the HMO's primary compensation arrangement.

Quality Controls

The use of financial incentives to encourage cost-conscious behavior among physicians raises concerns about quality of care for Medicare beneficiaries enrolled in HMOs. Those concerns may be tempered by various quality assurance mechanisms intended to maintain professional standards among organized groups of physicians. As required to obtain a Medicare contract, all 19 HMOs we reviewed had documented quality assurance plans. However, because federal quality assurance requirements are stated in broad, general terms, the HMOs' quality assurance activities varied both in the number of quality elements addressed and in the intensity of review activity directed to each element. Quality control elements from plans in our study included credentialing of providers, a grievance process, membership surveys, physician practice profiles, and medical record review.

A review of physicians' credentials before their affiliation with an HMO is an important, initial step in the quality assurance process. All 19 HMOs in our study used credentialing programs. Program elements might

include a review of physicians' education, training, experience, past practice patterns, hospital affiliations, and malpractice or state physician licensing board history. Thirteen HMOs in our study, covering 65.5 percent of enrollees, also updated this information through an annual recertification process.

A grievance system gives HMO members a process for resolving problems and gives the HMO an indication of how its members perceive the quality of service they receive from the HMO's providers. As required by Medicare, all 19 HMOs in our study had a system for receiving and resolving member grievances. In addition, seven HMOs (covering 65.2 percent of enrollees) also monitored member grievances. Such monitoring, with regular reports to management and appropriate medical staff, can be an important data source within a quality assurance program for identifying patterns of care needing closer review.

HMO members can also contribute important quality-of-care information through enrollee satisfaction surveys. Surveying members who recently received care can reveal quality-of-care concerns. Surveying those not using the HMO's health services can identify accessibility problems. Of the 19 HMOs in our study, 14 (with 64 percent of enrollees) surveyed their members.

HMOs can use their utilization review systems to generate physician practice profiles, which may identify patterns of physician behavior with quality implications. These profiles enable HMOs to determine individual physician practice patterns and to identify instances or trends of underutilization of services. In our study, 14 HMOs (covering 90.7 percent of enrollees) included physician profiles in their quality assurance programs.

An HMO can also use medical record review to assess the quality, content, and completeness of patient records, which may help it assess whether providers are performing appropriately. All 19 HMOs in our study had a medical record review process, selecting records from either a random sample or by specific diagnoses.

Quality assurance mechanisms, such as those discussed above, should help maintain professional standards of care. These procedures may also serve to counterbalance the influences that financial incentives exert on physicians to underprovide services.

Summary

Of the 19 HMOs in our sample, 17 had incentive plans to encourage physicians to hold down patient treatment costs. These plans ranged from annual bonuses for salaried physicians based on overall HMO profitability to putting individual physicians at risk for the costs of all health services used by assigned enrollees, with the physician retaining any funds remaining after paying for services or funding deficits if costs exceeded the capitation payments received by the physician. The potential effects on quality of care of the incentive plan features, and combinations of features, are discussed in the next chapter.

Certain HMO Financial Arrangements Offered to Physicians Could Lead to Adverse Effects on Quality of Care

Incentive funds should not be a major consideration to the physician when dealing with a person's health; however, some HMO physician financial incentives could induce physicians to respond inappropriately, leading to improper patient care. In our opinion, two main factors influence the extent to which HMO physician financial incentive plans pose a threat to quality of care:

- The immediacy of the financial reward to individual treatment decisions made by physicians.
- The extent of risk transferred to physicians.

Plans that base incentive payments on cost performance over longer periods of time, like a year, for large numbers of enrollees served by a number of physicians who have assumed little risk would not provide strong financial incentives to underserve individual patients. The closer financial incentives are to individual treatment decisions and the more risk the physician has, the higher the potential for adverse effects on quality of care.

Plan Characteristics That May Threaten Patient Care

A primary purpose of HMO physician incentive plans is to get the physician to consider the cost implications of alternative courses for diagnosing or treating patients. The goal of such plans should be to encourage physicians to select the least expensive course of care that meets the patient's needs and results in adequate care. However, incentive plans may offer such strong financial incentives to physicians to reduce utilization that quality of care could be adversely affected through the withholding of needed services.

We identified four characteristics of HMO physician incentive plans that, singly or in combination, may tend to give physicians too strong an incentive to reduce utilization and, thus, could adversely affect the quality of care given Medicare patients. Those characteristics are (1) the amount of risk shifted from the HMO to physicians, (2) the number of physicians whose cost performance is used to decide the size of the incentive pool available for distribution, (3) whether incentive payments were based on a percentage of provider savings or profits, and (4) the length of time over which cost performance is measured.

Incentive Plans That Shift Risk to Physicians

Some HMOs shift part or all of their risk to physicians. HMO incentive plans that place physicians directly at risk for patients' specialty or hospital care, or that withhold money for such care, could influence a physician to change practice patterns and to underprovide needed medical services. These arrangements require that physicians bear the risk of providing or paying for needed services, either directly from the physician's payment or from funds withheld from the physician's compensation.

Shifting financial risk to physicians can place them in a compromising position when treating potentially expensive cases. If the HMO physician must pay for specialty or institutional services out of his or her own account, the physician has an obvious incentive not to use such services.

Seven HMOs in our sample shifted risk to physicians for primary care services, three shifted risk for all primary and specialist care, and one shifted risk for all covered services. In each case, physicians face a threat to their income from costly cases and, thus, have a strong incentive to control utilization. Moreover, the more types of services for which risk is shifted, the greater the threat to physician income and the stronger the incentive to control use, perhaps to the detriment of patients. The following example illustrates how strong incentives can be.

One HMO shifted the risk for all services to physician groups with which it contracted. Each group was paid an amount for all primary and specialist services for each assigned enrollee. This amount had to cover the costs of all services provided by the group plus any referral services. Thus, the fewer services used, the more income available to the group's physicians. For hospital services, the HMO allocated an amount for each enrollee assigned to a physician group, paid for hospital care, and deducted the costs from the group's allocation. At the end of the year, the group was paid 100 percent of any surplus in its hospital account or had to fund 100 percent of any deficit, up to 120 percent of the amount originally allocated to the group's hospital account. Medicare monthly capitation rates for the major area served by this HMO were about $170 for hospital services and about $85 for physician and related services. If the HMO allocated its entire Medicare payment to the group, the physicians would face about $408 per assigned enrollee ($170 times 20 percent times 12 months) in potential losses for hospital use for a payment of about $1,020 per beneficiary ($85 times 12 months) for physician and related services. This represents a substantial risk and could strongly

encourage withholding care, especially for patients with expensive treatment needs.

Size of Physician Group for Performance Measurement

HMO incentive plans that base the amount of payment on the cost performance of individual physicians have a relatively higher potential to adversely affect quality of care than do plans based on group cost performance. The larger the group of physicians whose performance determines the amount of incentive payments, the less likely adverse effect on quality will result. The main issue in this regard is the immediacy of the linkage between treatment decisions and payment. With an individual physician responsible for a limited number of patients, the treatment decisions he or she makes have a direct effect on the size of the incentive payment received; thus, a physician can increase his or her likelihood of receiving an incentive payment by not providing treatment. The more physicians and the more patients whose treatment costs determine the size of the available incentive funds, the more remote individual treatment decisions become from the amount of payment received and the less likely reduction of quality will occur.

The following example illustrates how incentives can be stronger in plans based on individual versus group performance. One HMO in our sample divided each enrollee's capitation payment into (1) a primary care amount and (2) a referral and inpatient amount. Each physician was paid 80 percent of the sum of the primary care amount for assigned enrollees.[1] A referral and inpatient fund was established for each physician equal to the sum of these amounts for assigned enrollees. Incentive payments are computed once a year, and the physician receives half of the amount remaining in his or her referral and inpatient fund, with an upper limit of a $50 incentive payment per assigned enrollee. Thus, the fewer and less costly the referrals and hospitalizations the physician orders, the greater the amount of incentive payment the physician receives. Faced with an enrollee who could need expensive referral and inpatient services (for example, open heart surgery, for which costs can reach $25,000), the physician could be tempted to delay or withhold referral to protect his or her referral fund to enable an incentive payment. If the referral fund were made up of the referral and inpatient amounts of many enrollees of many physicians, the temptation to delay or withhold referral would probably be less.

[1]The other 20 percent was withheld in a risk pool used to cover costs of physicians who exceeded their amounts allocated for referral and hospital services. If funds remained in the risk pool at the end of the year and if a physician had not used up all the money withheld from him or her, the physician would be eligible for an incentive payment from the risk pool.

This HMO's plan also gives physicians an incentive to hold down the amount of services they directly provide because the capitation payment is the same regardless of the number of services rendered. The fewer services provided to HMO patients, the more time the physician has available to serve non-HMO patients under the fee-for-service system.

A physician has more control over the likelihood of receiving an incentive payment in plans, such as the one described above, where the distribution of incentive funds is based on measures of a physician's individual performance than in HMOs where incentive payments are based on the performance of a group of physicians, which would also normally include the cost experience of a larger number of enrollees than would be covered under an individual physician's caseload. In group distribution plans, the size of the group and number of assigned enrollees sharing risk can vary greatly. The health care industry has not formed a consensus on the appropriate group size, and there is no accepted formula for determining this.

Percentage of HMO Plan Savings

If physicians receive a percentage of HMO savings as an incentive payment, the fewer treatments provided, the higher their payment. Obviously, this represents an incentive to hold down costs and could lead to inadequate care. The pull of such an incentive would be greater if the plan were to link incentive payments to savings on an individual physician's patients, or over a short period of time.

Two HMOs in our sample made a direct linkage between plan savings or profits and physician incentive payments by conditioning the payment of incentive funds on the plan's overall financial performance. One plan withheld a portion of physicians' compensation to be returned if the plan was profitable; the other would pay its physicians a bonus from plan profits. Because these incentive payments were based on overall HMO profitability on an annual basis, and thus involved the combined performance of many physicians over a large number of patients, the potential of these two incentive arrangements to adversely affect quality was probably low.

Length of Performance Measurement Period

Basing incentive payments on physician cost performances over a short period of time, such as a month, may increase the temptation to underprovide services. Brief performance periods mean that the effect of treatment decisions on the amount of the incentive payment is always short term. Behavioral psychology theory suggests that the closer in

time a reward is given to reinforce a desired behavior, the stronger is the effect of the reward.[2] In the case of HMOs and physicians, this theory would predict that if physicians know they will be rewarded in the short term for holding down treatment costs, they will be more concerned about the costs of treatment alternatives than if rewards are possible in the long term. The effect of different lengths of performance measurement periods depends on all other features being held constant; that is, if all other features of two plans are identical, then a plan with a short performance period would probably pose a greater potential threat to quality of care than one with a longer performance period.

In addition to increasing the potential for underserving beneficiaries, short performance periods may result in greater incentives for physicians to take actions, such as delaying care, for beneficiaries needing costly treatment. This may encourage beneficiaries to disenroll from the HMO. If the beneficiary disenrolls before receiving services, the physician could be eligible for a larger incentive payment than if the beneficiary remained in the HMO.

One of our sample HMOs allocated part of its Medicare capitation payments to a fund used to pay for referrals to specialists and services above those required by Medicare that it covered, such as eyeglasses and dental care. Each month the balance in this fund was determined for each primary care physician and physician group. This physician (group) received 100 percent of any remaining money in the fund for assigned enrollees and had to pay the HMO 100 percent of any deficit. Because the ascertainment of surplus or deficit was made every month, the effect on the incentive payment of expensive referrals was always short term, without the ability to average higher cost cases over more patients, as would be the case for annual incentive plans. In fact, not only could the incentive payment be reduced, but the physician might have to make up out-of-pocket any deficit resulting from a referral. This provides a strong financial incentive to delay or withhold potentially expensive referrals. A similar fund was set up for institutional services, and every month the primary care physician (group) received 50 percent of any surplus or had to pay the HMO 50 percent of any deficit.

[2]Chapter 5, "Learning" in Charles G. Morris, Psychology - An Introduction, Englewood Cliffs, NJ: Prentice-Hall, Inc., 1982, and Chapter 3, "Learning: Basic Principles" in Jonathan L. Freedman, Introductory Psychology, Reading, MA: Addison-Wesley, 1978.

Interest Group Views on Incentive Plans

GHAA believes that physician incentives should be viewed in the context of the entire HMO operation and opposes the OBRA 1986 prohibition on HMO physician incentives as it is currently written. GHAA representatives told us that before assuming that distributing incentive funds on the basis of individual physician performance is a problem, quality assurance plans and overall performance must be assessed.

The American Medical Association has taken the position that HMO plans providing financial incentives to restrict needed medical services are unethical and should be prohibited. Association officials told us that the organization favors arrangements that distribute incentive funds based on group rather than individual physician performance. Association officials could not define the appropriate group size other than to say that it should be large enough to spread the financial risk.

The American Society of Internal Medicine believes that to control the influence of physician incentives on medical services provided to HMO enrollees, such systems should

- distribute physician risk pool withholdings based on group utilization experience rather than on an individual basis,
- limit a primary care physician's risk for specialist services, and
- provide stop-loss protection at reasonable levels to limit a primary care physician's risk under an overall capitation approach.

Controls Needed to Counterbalance Incentive Plans

In assessing the appropriateness of physician incentives, it is important to consider HMO mechanisms established to counterbalance the incentives and the effectiveness of those mechanisms in operation. Some incentives that appear singly to be inappropriate may not be if they are counterbalanced with effective controls, such as quality assurance and utilization review programs, medical record reviews, enrollee satisfaction surveys, and enrollee grievance procedures. The absence of such controls makes it less likely that physicians will satisfy the competing goals of containing medical service costs and providing appropriate medical care. It is to the HMO's advantage to ensure that its physicians provide quality care at all times. Skimping on or delaying medical care may save money in the short term, but could eventually necessitate more expensive treatment if a patient develops complications or could lead to widespread enrollee dissatisfaction and disenrollment from the HMO. Other considerations that have an important effect on physicians' behavior include professional ethics, the potential of being sued for malpractice, and the need to retain patients.

Independent Reviews of Quality of Care

Through TEFRA, the Congress established peer review organizations (PROs) to review the necessity, appropriateness, and quality of hospital care provided Medicare beneficiaries. HHS contracts with PROs to perform utilization and quality of care reviews of patient medical records. OBRA 1986 mandated a program similar to PRO reviews for HMO Medicare risk contracts. Under this program, PROs or quality review organizations are to monitor the quality of services provided by HMOs for postacute and ambulatory care.

Through their reviews of quality assurance plans and medical records, review organizations have the opportunity to learn an HMO's system for delivering care, identify mechanisms established to control utilization of medical services, and evaluate the risk associated with physician incentives, even if they do not look directly at HMO physician incentives. If trends in questionable patient care are identified, and as possible causes are sought, review organizations may be able to assess the extent to which physician incentives contribute to poor outcomes. For example, review organizations might link a poor patient outcome to a physician who did not refer patients to specialists or did not hospitalize patients when necessary because of the financial incentive not to do so. Because review organizations are only now getting involved in reviews of HMO services, they probably cannot assess the effects of incentive plans on quality of care in the short term, but they can begin to establish a data base that could provide insights into the relationship among financial incentives, physician practice patterns, and quality of patient care.

Conclusions

The primary purpose of HMO physician incentive plans is to get physicians to consider the cost implications of diagnosis and treatment alternatives. The goal of such plans should be to encourage physicians to select the least expensive course of care that meets the patient's needs and results in adequate care. However, singly or in combination, certain HMO incentive plan features have a higher potential than others to encourage physicians to inappropriately limit services. HMOs that place physicians directly at risk, or that withhold physicians' compensation and place it at risk, for specialty and/or hospital expenses without limiting their financial liability could result in the diminution of patient care. Also, arrangements in which incentive funds are distributed based on individual physician performance, cost performance over a short period of time, or a portion of the HMO's profits or savings cause concern.

We believe that incentive plans that expose the physician to substantial financial risk for services provided by other physicians or institutions

and/or closely link financial rewards with individual treatment decisions pose the greatest potential threat to quality and necessitate the highest level of quality assurance control. Medicare law already requires HMOs to have quality assurance and utilization review programs, systems to check on physician credentials, and grievance procedures to help assure that beneficiaries receive quality care. Thus, the question becomes: How effective are those systems in counterbalancing the incentives given physicians by financial incentive plans? This is a difficult question to answer. Our review of the literature and discussions with federal and private health care experts did not identify any studies directly assessing the effect of HMO physician financial incentive plans on quality of care that would help answer this question.

Matters for Consideration by the Subcommittee

If the Subcommittee considers modifications to Medicare to permit certain HMO physician incentive payments, it may wish to retain a ban on arrangements that closely link financial rewards with individual treatment decisions and/or expose the primary care physician to substantial financial risk for services provided by physicians or institutions to whom he or she refers patients for diagnosis or treatment.

HMOs and Competitive Medical Plans Included in Review

Name of plan	City	State
Av Med of California	Modesto	California
Bay Pacific Health Plan	San Bruno	California
Children's Hospital Health Plan[a]	San Francisco	California
FHP	Fountain Valley	California
French Health Plan	San Francisco	California
Healthcare	Sacramento	California
Partners Health Plan	San Bernardino	California
Inter Valley Health Plan	Pomona	California
Kaiser-Permanente	Oakland	California
Maxicare	Los Angeles	California
Peak Health Plan	San Diego	California
Health Options	Jacksonville	Florida
Humana Health Care Plans	Miami	Florida
HIP Network of Florida[a]	Fort Lauderdale	Florida
Group Health, Inc.	Minneapolis	Minnesota
HMO of Minnesota	St. Paul	Minnesota
MedCenters Health Plan	Minneapolis	Minnesota
PHP of Minnesota	Minneapolis	Minnesota
US Healthcare	Blue Bell	Pennsylvania

[a]Competitive medical plans.

Primary Care Physicians' Services

Although definitions depend on the specific HMO, primary care services usually include:

- Services and supplies provided in a physician's office, including routine office visits, minor surgery, immunizations, injections, periodic physician examinations, laboratory procedures, and other usual and customary care. These services are to be available 7 days a week, 24 hours a day.
- Visits and examinations, including consultations, during confinement in a hospital, skilled nursing facility, or other facility.
- House calls when warranted by the illness.
- Periodic health evaluations, including examinations recommended under the appropriate health maintenance standards adopted by the HMO.
- Immunizations recommended by the Centers for Disease Control and other appropriate agencies and professional societies.
- Educational assistance regarding the appropriate use of health services, personal health behavior, and achieving and maintaining physical and mental health.

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* U.S. G.P.O. 1988-241-164:80327