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Fee-For-Data: A Strategy To Open The HMO Black Box

by W. Pete Welch and H. Gilbert Welch

Abstract: This paper outlines a simple proposal to maintain utilization data in the face of managed care growth. Health maintenance organizations (HMOs) would be required to submit claims (encounter-level data) and in return would be paid a percentage of what Medicare would pay fee-for-service providers. The capitation payment rate would be lowered to maintain budget-neutrality. This proposal would enable the collection of key data that might not otherwise be captured in a Medicare program dominated by HMOs and other forms of managed care. The data are necessary to drive Medicare policies and to gauge the impact of changes to the program. The program would be well advised to make the small additional investment to make the data system complete. The key issue in implementing such a proposal will be HMOs' ability to generate those data at reasonable cost.

The Republicans' long-run strategy for Medicare cost containment emphasizes health maintenance organizations (HMOs) and other forms of managed care. Support for this strategy goes well beyond congressional Republicans: The Clinton administration's health care reform proposal was built around managed care, a number of state Medicaid programs require that beneficiaries enroll in managed care, and several prominent commentators have endorsed managed care proposals for Medicare.1

Enrollment in risk-contract HMOs, which were virtually nonexistent as recently as 1980, has almost doubled in the past four years and now accounts for 7 percent of Medicare beneficiaries. Medicare HMO enrollment will continue to rise with the growing HMO enrollment among the nonelderly, who are more likely to choose to stay in managed care when they become eligible for Medicare.

While the growth of HMOs may help Medicare contain its costs, it has an important side effect: the loss of utilization data. No data are collected on the specific health care services received by beneficiaries enrolled in risk-contract HMOs. As more and more beneficiaries enroll in these programs, the detailed structure of health care for Medicare beneficiaries will increasingly become a "black box." It is ironic that just as Medicare is beginning to better track patient outcomes (for example, through the...
Current Beneficiary Survey), the program is at risk of losing fundamental data on health care inputs.

Although the share of Medicare beneficiaries who enroll in HMOs seems destined to increase, there are two natural limits to HMO enrollment for the foreseeable future. First, one-quarter of the Medicare population lives in rural areas, where population densities are too low to sustain competition among HMOs. Second, given the political power of the elderly, it is unlikely that HMO enrollment will be mandated. These limits to HMO expansion mean that Medicare almost certainly will retain a fee-for-service component and a claims-processing system to capture utilization data.

In this paper we outline a simple proposal to use the claims-processing system to collect utilization data from HMOs. HMOs would be required to submit claims (encounter-level data) and would be given an incentive to do so: partial fee-for-service payment. Because Medicare will have to retain its claims-processing and data systems anyway, we argue that the program would be well advised to make the small additional investment to make the data complete. We also discuss what is likely to be the key issue here: HMOs' ability to generate those data at reasonable cost.

The Value Of Utilization Data

Our proposal will involve some expenditures to cover the marginal cost of data processing. Given these costs, it is reasonable to inquire about the value of the additional data. This question is best answered by considering both the programmatic and public uses of the data.

Programmatic uses. The Health Care Financing Administration (HCFA) could use HMO utilization data in several ways.

Set capitation rates in uncompetitive markets. At present, Medicare's capitation payment is set at 95 percent of local fee-for-service cost. As HMO market share increases, this payment approach becomes more and more awkward. In metropolitan areas with a number of HMOs participating in Medicare, competitive bidding is a plausible alternative. From utilization data, HCFA could impute HMOs' standardized costs, which could be used in two ways. First, in apparently competitive markets, cost data could be used to evaluate when the bidding system had been successful in obtaining bids close to costs. Second, cost data from HMOs in uncompetitive markets could be used either to set the capitation rate or to set an upper bound on acceptable bids there.

Monitor underuse. Whereas fee-for-service providers have an incentive for overuse of services, it is well recognized that HMOs have an incentive for underuse. Without defining the "right" rate, utilization data still would greatly aid the monitoring of underuse by enabling HCFA to focus its
energies on HMOs and clinical services where underuse is most likely.  

Diffuse knowledge among HMOs. The growth of HMOs has contrasting impacts on the creation and diffusion of knowledge about which clinical services are cost-effective. On the one hand, each HMO has the incentive to obtain and create knowledge on cost-effectiveness. On the other hand, each HMO has the incentive to keep that knowledge confidential, so that its competitors do not benefit from it. Although professional norms will mitigate these tendencies, a public source of utilization data would help to diffuse knowledge on cost-effectiveness.

Help Medicare manage its fee-for-service sector. Even though HMOs' share of the Medicare market is likely to grow, containing costs in the fee-for-service sector will remain a key policy issue for years. Conceptually, it is useful to decompose cost into its components of price and quantity—cost per unit of service and the number of services. Through the Medicare fee schedule and other policies, Medicare has largely controlled the price of services. The remaining policy problem is controlling quantity.

One possible way to control quantity is to compare the utilization patterns of a group of physicians with national norms. Feeding back such comparisons to physicians who are high users may encourage them to lower their utilization rates. In addition to comparing providers with a fee-for-service norm, which is subject to the overuse incentive, an HMO norm could be used. HMO data also would assist Medicare in making policy changes. For instance, HMOs' mix of hospitalization, skilled nursing facility services, and home health visits could serve as a guide for Medicare's fee-for-service sector.

Public uses. Much like US. census data, Medicare utilization data are important to the public at large. HCFA's computers contain without question the most comprehensive health care database in the nation. The public usefulness of broad-based Medicare data is apparent in several areas.

Relationship between utilization and health. To improve our health care system, we must learn which health care services are effective and which ones are ineffective or even harmful. Utilization data are, of course, critical in linking service use to outcomes. Put differently, without the data on inputs, half of the cost/benefit equation is lost. Important insights into complication rates, volume/outcome relationships, and the value of additional health care investments have been gleaned from Medicare data.

A concrete example of the possible usefulness of utilization data comes from Medicare's end-stage renal disease (ESRD) program. The U.S. Renal Data System includes demographic data, utilization data, clinical data, and outcomes data. Using these data, investigators have developed methods to calculate the expected mortality on dialysis for individual centers, thereby facilitating quality assessment. They also have demonstrated the adverse
impact of the decreasing effective dialysis clearance on patient survival and of tissue mismatch on graft survival; these two findings have immediate clinical implications.9

Changes in medical practice. Medicare utilization data are useful in describing changes in the practice of medicine. From 1984 to 1990, for example, use of the most aggressive treatment for prostate cancer (radical prostatectomy) increased more than fivefold among Medicare beneficiaries.10 And early in this decade, treatment for gall bladder disease shifted dramatically from open to laparoscopic cholecystectomy—a trend that was accompanied by an increase in the overall rate of surgery.11 Such data are crucial for detecting emerging health care trends.

Incidence of disease. Population-based utilization data are a useful source of knowledge on the incidence of disease. In the case of cancer, the data help to substantiate other data sources, such as the focused federal data collection effort known by its acronym of SEER (Surveillance, Epidemiology, and End Results).12 In the case of other diseases such as stroke, utilization data may be the only data source that can be used to determine incidence.13

Implications of not having routine HMO data. Although Medicare claims data would remain without the addition of HMO data, the growth of managed care will mean that the residual data from the fee-for-service population are likely to become biased, overrepresenting rural and very sick persons. At the same time, the supply of providers serving this group is likely to increase. Because HMO enrollees tend to have lower utilization rates, the providers of which will not easily disappear, the growth of managed care implies that the residual supply of providers will be deployed on a shrinking fee-for-service sector.14 The combination of sample and systematic biases will seriously threaten the generalizability of Medicare data.

Of course, both HCFA’s and the public’s need for data could be met without routine data collection structures. Data collection could be episodic, customized, and targeted. Data requests could be mandated for specific time periods and to answer specific questions (for example, how many physician visits did beneficiaries in a given HMO receive this year?) But because the data structures would not be in place, fixed costs would be high, errors frequent, and response slow. Data not specifically sought would be missing, and retrospective analyses would be impossible.

A Fee-For-Data Proposal

We propose that HMOs be paid to submit claims to Medicare (Exhibit 1). The “fee-for-data” payment rate would be, say, 10 percent of what Medicare would pay fee-for-service providers for the same service. The 10
### Exhibit 1
**General Features Of The Fee-For-Data Proposal**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Fee-for-service portion</th>
<th>Capitated portion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incentive</td>
<td>To submit data</td>
<td>To control costs</td>
</tr>
<tr>
<td>Payment base</td>
<td>Medicare's current fee-for-service payment rule</td>
<td>Medicare's current capitation rate (95 percent of local fee-for-service)</td>
</tr>
<tr>
<td>Payment as a percentage of base</td>
<td>10%</td>
<td>90%</td>
</tr>
<tr>
<td>Payment timing</td>
<td>Retrospective (after claim is submitted)</td>
<td>Prospective (monthly)</td>
</tr>
</tbody>
</table>

**Source:** Authors’ analysis.

**Notes:** Many variants of this proposal are possible, as discussed in the text. HMOs are health maintenance organizations.

For example, diagnosis-related groups (DRGs) and relative value units (RVUs).

The 10 percent fee-for-service payment would be large enough to give HMOs a strong incentive to supply Medicare with detailed, accurate information on the services that they would have provided anyway. Because the bulk of their payment would remain capitated (decreased by only 10 percent), the incentive to provide additional services would be minimal. The incentive to upcode or unbundle services would be much less than in the fee-for-service sector, where payment rates are now ten times what we are proposing for HMOs.
Precedents. Requiring more data than necessary for payment is not new. Although Medicare makes prospective payments to hospitals based on the DRG of the admission, it nevertheless requires that hospitals also submit cost reports. These reports have enabled HCFA and the Prospective Payment Assessment Commission (ProPAC) to analyze hospitals’ costs to determine the adequacy of Medicare payment levels.\textsuperscript{17}

The idea of blending payment also is not new. In Medicare, a blend of capitation and fee-for-service rates for HMOs was proposed by Joseph Newhouse and recently endorsed by the Physician Payment Review Commission (PPRC).\textsuperscript{18} The purpose of this proposal is to pay more to HMOs with inherently expensive enrollees. This approach is seen as a substitute for an adequate method of adjusting payment for specific HMO enrollees to reflect their expected costs. A number of Medicaid programs make blended payments, usually to give groups of primary care physicians the incentive to control the costs of hospitalization and specialists’ services. Typically, the primary care physicians receive half of the savings relative to some target.\textsuperscript{19}

What is new in our proposal is the combination of requiring data and blending payment. Although our proposal is similar to the prior examples in that it combines a lump-sum payment with fee-for-service payment, it does so for a very different purpose. Whereas the goal of these other proposals is to share risk, our goal is to preserve the informational base. The fee-for-data payment system would give HMOs incentives to meet two goals: to practice medicine in a cost-effective manner, and to supply Medicare with detailed, accurate information on how they do it.

Potential Issues

Won’t HCFA’s administrative cost be large? A minor advantage of capitation, which this proposal would forgo, is that HCFA avoids the administrative cost of processing fee-for-service claims. If 10 percent of Medicare beneficiaries were enrolled in HMOs, the administrative cost to HCFA of processing the claims would be about $370 million.\textsuperscript{20} Given the value of the data, we consider this cost to be entirely reasonable.\textsuperscript{21}

In 1997 Medicare will implement a new claims-processing system, the Medicare Transaction System.\textsuperscript{22} This system will decrease claims-processing costs, increase the uniformity of processing, and facilitate the implementation of future policy changes, such as this fee-for-data proposal.

Why not require HMOs to supply data? Medicare might simply mandate that HMOs submit fee-for-service claims, despite the fact that the claims would not be used for payment. Unfortunately, there are good reasons to question the validity of “pseudoclaims” or encounter data. Without a financial incentive, underreporting and miscoding are likely to be
major problems.

Although the idea of requiring such pseudoclaims has a long history, there is no working model to examine, at least none that is clearly successful. A number of Medicaid programs and demonstrations have hoped to receive encounter data. Robert Hurley and colleagues summarized the results as “uneven and generally disappointing, with several programs failing to generate adequate encounter data for the first several years of the program.”

Aren’t there other, more useful data to obtain? Utilization data, of course, are not the only data that would yield insights into HMOs. The idea of “report cards” has received a lot of attention. The ideal report card would contain not only information about use but also information on quality, satisfaction, and access. Although the concept of report cards is easily understood, its implementation is anything but straightforward.

This idea, however, does have some working models, which highlight some of the limitations. Several HMOs (such as U.S. Healthcare) have published report cards on their own. It is conceivable that these data could be forwarded to HCFA and analyzed. But the sample would be biased (including only participating HMOs), and differing data systems across HMOs would severely limit HCFA’s ability to analyze the sample regularly.

The most prominent working model is based on the Health Plan Employer Data and Information Set (HEDIS), which was developed by the National Committee for Quality Assurance (NCQA). The NCQA’s Report Card Pilot Project offers thirty-six standardized performance measures for these areas: member satisfaction, quality/access, physician network, utilization, membership/finance, and revenue. Data from twenty-one participating HMOs were published in early 1995. HCFA is working with the NCQA to develop a version of HEDIS that is appropriate for Medicare.

Roughly half of the HEDIS-based measures are utilization measures or are closely related to them. The quality/access measures pertain to preventive services (such as mammography rates) or the percentage of members seeing a physician during the year, both of which are derived from utilization data. In addition, having utilization data would greatly enhance the ability to estimate cost per enrollee (which is often labeled “revenue requirements”) as well as knowledge of the physician networks, enabling analysts to distinguish between the physicians “on the books” and the physicians who deliver most of the services.

Although HEDIS provides a broader set of performance measures, our proposal has two advantages. First, it provides HMOs with an incentive to generate information in the short term and to build a data infrastructure in the long term. Second, our proposal would yield encounter-level data,
allowing for much greater flexibility in analysis. For instance, mammography rates might be calculated for inner-city versus suburban enrollees. Both approaches have a role to play.\textsuperscript{28}

**Can HMOs really generate claims data?** This is probably the key issue for our proposal. In the short term, many HMOs will have problems generating claims for certain services, especially physician services. But most or all HMOs could develop the data systems to generate such data. If so, the transition to such a system becomes an important consideration.

To consider the ability of HMOs to supply claims data, we use five major service categories, presented here with their share of estimated 1995 Medicare expenditures: inpatient hospital (50 percent); hospital outpatient department (9 percent); skilled nursing facility and hospice (4 percent); home health (9 percent); physician (22 percent) and other (6 percent).\textsuperscript{29}

**Inpatient hospital.** Few HMOs own their own hospitals. So for most HMOs, hospitalizations require some payment per admission from the HMO to the hospital. In these HMOs, claims already exist. Even HMOs that own their own hospitals tend to have admission-level data. The classic example of such HMOs are the Kaiser plans of Northern and Southern California. These two HMOs must create admission-level data, because the state of California requires the submission of such data to an all-payer database. At least half of the states have similar requirements.\textsuperscript{30} As a result, 96 percent of HMOs have admission-level data.\textsuperscript{31}

**Hospital outpatient department.** Here the situation is slightly less clear. Hospital outpatient department claims comprise one of the weaker files in the Medicare data system. More so than for other services, research on HMOs' hospital outpatient department claims is needed.

**Skilled nursing facility and hospice.** These facilities serve the elderly primarily. As such, they presumably are rarely owned by HMOs and already are geared to Medicare reimbursement. HMOs could generate claims for these services in a form that would be acceptable to Medicare.

**Home health.** About a third of HMOs own and operate a home health program, and two-thirds contract with an outside home health agency.\textsuperscript{32} The essence of home health claims is the number of visits delivered (there are only six service categories). Given this simplicity, even HMOs that operate their own home health program could submit such claims.

**Physician.** Two aspects of the organizational structure of HMOs make physician claims data problematic. First, prepaid group practices such as Kaiser have physicians on salary and thus do not typically pay claims for specific services. Encounter data are not produced as a by-product of the reimbursement process.

Second, many individual practice associations (IPAs) and network HMOs make capitation payments to individual physicians or group prac-
The payment arrangement varies in terms of the services covered and the nature of risk sharing. The payment may be pure capitation, or it may be structured to give the physicians incentives to contain costs while protecting them from excessive risk. If the payment is a pure capitation payment, that is, without risk sharing, claims-level data are not needed for payment purposes. In this case, the HMO itself lacks encounter-level data, even though the medical group may retain such data.

Despite the difficulties in obtaining physician claims data, claims-level data are being collected by HMOs. Marsha Gold and colleagues found that 87 percent of HMOs had some encounter data for in-plan physicians and other ambulatory services. In the third of HMOs in which fee-for-service was the dominant form of payment, encounter data necessarily existed. More than half of the HMOs were not fee-for-service-dominant HMOs but still required some encounter data. The remaining 13 percent of HMOs did not have encounter data. Although HMOs might plausibly overstate their data capabilities, these figures suggest that the problems of generating physician data are not insurmountable.

Steps Toward Implementation

Inevitably, some HMOs will not be able to supply data immediately for some services. In the short term, this would be acceptable. It took Medicare's fee-for-service data system years of development before the data were reliable for most services. One of the advantages of our proposal is that the 10 percent fee-for-service payment would give HMOs a sufficient incentive to supply as much reliable data as possible in the first year of implementation without penalizing HMOs to such an extent that implementation would be delayed into the indefinite future.

Nevertheless, the demands placed on HMOs to generate claims data are likely to be a major barrier to instituting this proposal. To mitigate this burden, the data requirements could be eased. At the simplest level, the proposal could apply only to Medicare Part A services (inpatient hospital, skilled nursing facility, and home health services), so that HMOs would be paid their usual capitation rate for Part B. More generally, HCFA could negotiate with the HMO industry (within congressionally set guidelines) over which other services would be covered. Criteria for inclusion of a service would be HMOs' ability to generate claims data and the value of the information to HCFA and the public. Services that might be excluded are laboratory tests, durable medical equipment, and physician hospital visits. Office visits and diagnostic imaging utilization data, although difficult, might be included. Data elements could be added as data systems evolve.

In the long term, however, having complete data is a reasonable goal, as
there are a number of external factors pushing HMOs to generate claims-level data anyway. Private employers, for example, are demanding more detailed information from the HMOs that serve their employees. More than a third of HMOs are offering employers a self-insured option, in which the employer pays the HMO fee-for-service and maintains self-insured status. This requires that the HMO generate fee-for-service claims. And group/staff HMOs are moving toward performance-based compensation, a trend that necessitates more complete data. As a result, according to the Group Health Association of America, “HMOs continue to rapidly develop their information collection, reporting, and interchange capabilities.” Consequently, the evidence on HMOs’ ability to generate claims data in the past probably overestimates the difficulties in the future.

Concluding comments. Although conceptually novel, our approach is administratively incremental. Medicare already knows how to obtain utilization information: It has been doing so since 1966. The first step toward a good system to evaluate Medicare HMOs is not to develop “ideal” measures. Rather, it is to systematically obtain information that is readily available. Ironically, our fee-for-data approach could be viewed as the creation of an incentive to supply about half of the HEDIS elements.

Although our proposal focuses on Medicare HMOs, it is more broadly applicable. Paying for utilization data may be an important step to opening up the black box of managed care in general. Our basic approach-paying HMOs to submit claims while still making a capitation payment-could be implemented by any payer that maintains a claims-processing system. This may be particularly relevant to Medicaid, which has more beneficiaries enrolled in HMOs than Medicare has.

While the capitation payment gives HMOs the incentive to contain costs, it does not necessarily ensure that quality is maintained, much less increased. For this reason, capitation as a strategy requires that consumers and oversight agencies have information regarding the process and outcome of health care.

If HMOs argue that they cannot provide these data, then they would be disclosing a serious weakness of their own. On the one hand, they are selling their ability to manage health care. On the other, they would be acknowledging their lack of information about the health care they deliver. In making the case for good information, Heather Palmer says, “Better measurement is the key to quality management-you can't manage what you can't see.” At a time when private employers are demanding more information from HMOs, the federal government needs to become a prudent purchaser. Our proposal is one way to encourage HMOs to better understand the services being delivered to the people for whom they are responsible.
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NOTES


3. Encounter-level data can mean either claims or pseudoclaim, the distinction depending on whether the data are used for payment purposes. We typically use the second meaning.

4. A number of programs use competitive bidding to set their premiums—for example, the Arizona Medicaid program and the state employees’ health benefit programs in Minnesota and Wisconsin. However, each of these programs has a standardized benefit package. In contrast, Medicare HMOs often offer coverage that includes non-Medicare-covered services, especially drugs. Hence, without a standardized benefit package (that is, a homogeneous good), competitive bidding would not necessarily have the desirable properties usually attributed to it.


15. Needless to say, the complexities of Medicare’s methodology will necessitate elaboration. For instance, skilled nursing facilities and home health agencies are reimbursed costs up to a limit that is 112 percent of the national mean cost. See House Committee on Ways and Means, Overview of Entitlement Programs (Washington: U.S. Government Printing Office, 1994). To avoid having HMOs submit cost reports, payment might be made at 100 percent of the national mean, which would be the equivalent of creating a fee schedule for days in a skilled nursing facility and home health visits.
16. This payment methodology is the AAPCC-adjusted average per capita cost.
17. Prospective Payment Assessment Commission, Report and Recommendations to the Congress (Washington: ProPAC, 1 March 1995).
20. To estimate the administrative cost of this proposal, we use current Medicare administrative costs, which are 1.9 percent of total program outlays, or about $3.3 billion in 1995. See House Committee on Ways and Means, Overview of Entitlement Programs, 131. Assume that none of the costs are associated with the 10 percent of the beneficiaries now in HMOs (not all of whom are in risk-contract HMOs) and that there are no economies of scale in claims processing. The administrative cost of HCFA processing HMO claims would be about $370 million [3.3 x .10/(1-10)]. The assumption of no economies of scale overestimates the costs, because the cost per claim is likely to rise with a shrinking fee-for-service sector.
21. HCFA requires that hospitals submit “no-pay” admission claims for HMO enrollees. These claims serve as the basis of quality-of-care reviews by peer review organizations (PROs). To our knowledge, the additional administrative cost has not been a serious issue, and the cost could be reduced. The proposal might be applied only to a 20 percent random sample of beneficiaries (selected by HCFA) to reduce claims-processing costs. Presumably, an HMO would treat its enrollees in the 20 percent sample like its other Medicare enrollees, because it is difficult to have one set of treatment practices for one group of elderly enrollees and another set for other enrollees. Then additional administrative costs are estimated to be only $75 million.
26. PPRC, Annual Report. The “employer” in HEDIS is indicative of its origin as a joint project of health plans and employers whose employees are enrolled in HMOs.
28. A new approach for Medicare HMO review builds on the DEMPAQ project (Develop and Evaluate Methods to Promote Ambulatory Care Quality). See Delmarva Founda-
tion for Medical Care, *External Review Performance Measurement of Medicare HMOs/ CMPs, Final Report to the Health Care Financing Administration* (Easton, Md.: Delmarva Foundation for Medical Care, August 1994). This approach requires claims data as well as office records. Again, fee-for-data payment would encourage HMOs to supply encounter-level data.

29. House Committee on Ways and Means, *Overview of Entitlement Programs*.


32. M. Parker and C.L. Polich, *The Provision of Health Care Services through Health Maintenance Organizations* (Excelsior, Minn.: Center for Aging and Long-Term Care, InterStudy, 1988). The only “facilities” needed by home health agencies are office space.


34. Gold et al., *Arrangements between Managed Care Plans and Physicians*, Table V.8. Claims data are, of course, always available for out-of-plan services.

35. When an HMO makes a capitation payment to an intermediate entity that actually pays individual physicians, the HMO may need to give the intermediate entity an incentive to generate claims data. We suggest that such “three-tiered HMOs” might apply our fee-for-data approach internally. That is, they might pass through the Medicare fee-for-data payment to their intermediate entity and make a somewhat lower capitation payment. Thus, these HMOs too could generate physician claims data.

36. One possible guideline would be that services representing, say, 90 percent of Medicare expenditures would be covered.

37. Although the HMO may lack immediate incentive to contain costs, in the long term it is more likely to retain the contract with the employer if costs are low. Self-insured options can be offered either in-house by the HMO itself or by a parent-owned company. Thirty-seven percent of HMOs offered a self-insured option in 1993. The number of HMOs with any type of self-insured option increased from 25 percent in 1990 to 65 percent in 1993. Group Health Association of America, *HMO Industry Profile* (Washington: GHAA, 1994), 13,104.

38. Gold et al., *Arrangements between Managed Care Plans and Physicians*, 88. One-third of group/staff HMOs that pay physicians a salary are reflecting physician productivity in payment mechanisms, which requires detailed data on physician productivity.


40. In June 1994 almost five million Medicaid beneficiaries were enrolled in full-risk capitation programs, nearly double the number in the previous year. This enrollment is concentrated in Arizona, Tennessee, Oregon, and Washington; in each of these states a majority of the beneficiaries are enrolled in HMOs. Lewin-VHI, *States as Payers: Managed Care for Medicaid Populations* (Washington: National Institute for Health Care Management, February 1995). Underuse is a greater concern for the Medicaid population than for the Medicare population, because of low capitation rates and mandatory HMO enrollment. Under current law, states need a waiver to mandate that Medicaid beneficiaries enroll in HMOs. Congress is considering legislation that would establish federal standards for mandatory HMO programs instead of case-by-case review. The fee-for-data approach could be one state option.