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# Medicare Physician Payment Rates Compared to Rates Paid by the Average Private Insurer, 1999-2001

*A study conducted by*
*Direct Research, LLC for the*
*Medicare Payment Advisory Commission*

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# MEDICARE PHYSICIAN PAYMENT RATES COMPARED TO RATES PAID BY THE AVERAGE PRIVATE INSURER, 1999 - 2001

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## EXECUTIVE SUMMARY

This research uses claims data and other information to estimate average physician fees paid by private insurers for the period 1999 – 2001. Private rates are compared to Medicare rates for the same services, then averaged across all services to generate an aggregate estimate of the "gap" between Medicare and typical private rates. The 1999 – 2001 estimates are compared to similar data for the period 1989-1996.

In 2001, Medicare physician fees were 83 percent of average private rates. By this measure, the gap between Medicare rates and typical private rates narrowed substantially throughout the 1990s. The comparable estimates for 1999, 1996, and 1994 were 76 percent, 71 percent, and 66 percent, respectively.

This change occurred because Medicare fees rose over this period while private fees did not. From 1994 to 2001, the cumulative Medicare fee increase (17 percent) was not substantially different from the cumulative increase in the Medicare Economic Index (16 percent). Average private fees, by contrast, are estimated to have fallen slightly during this period.

Declining private fees in the 1990s appear largely to be a consequence of shifts in private health plan enrollment. Enrollment in high-paying indemnity plans fell substantially, while enrollment in lower-paying managed care plans rose. These enrollment changes, by themselves, are large enough to suggest significant deflation in average private rates.

By type of service, Medicare fees for visits and other medical services in 2001 were near the average private level. Medicare fees for major procedures, tests, and imaging were below the average private level. This pattern – higher Medicare fees for visits, lower fees for other services – has held true since the inception of the Medicare Fee Schedule.

Projecting the Medicare-to-private ratio beyond 2001 undoubtedly involves some error, yet substantial information is available for making a projection. Deflation of private fees may be over. Private plan enrollment began shifting away from the lowest-paying insurers in 2000, and that shift appears to have continued through 2002. Medicare fees, by contrast, fell in 2002 and are projected to fall again in 2004. The Medicare-to-private fee ratio almost certainly declined from 2001 to 2003, but by 2003 it probably had not reached the low levels seen in the early 1990s.

## 1: BACKGROUND: WHY TRACK PRIVATE INSURER'S PAYMENT RATES?

Physicians' willingness to serve Medicare beneficiaries is a key measure of access to mainstream care in the Medicare program. Surveys and measures based on administrative data show that a high fraction of all practicing physicians accept Medicare patients. Historically, physicians' acceptance of any new Medicare patients was about the same as their acceptance of any new privately insured patients (Schoenman and Cheng, 1999). Recent small declines in access to physician care appear to have affected Medicare and private payers equally (Trude and Ginsburg, 2002). In early 2002, physicians still treated Medicare and privately insured patients identically in terms of willingness to take some new patients, but blanket acceptance of all new Medicare patients declined somewhat relative to historical levels (Schoenman and Feldman, 2002).

Payment levels clearly play a role in determining whether or not physicians will accept an insurer's patients. For fee-for-service Medicaid in particular, more than half of physicians cited low reimbursement as a very serious problem (Shoenman and Cheng, 1999). With tight supply of physician labor in most markets, physicians have become increasingly unwilling to accept Medicaid and charity care patients (Cunningham, 2002).

Relative fee levels – the gap between Medicare and private payers -- may be an important indicator of likely access problems when physicians' practices are full or nearly full. In a full practice, serving a lower-paying patient means the loss of an opportunity to serve a better-paying patient. When practices are full and patients from high-paying insurers are plentiful, physicians rationally become reluctant to take on additional patients from lower-paying insurers. In effect, the higher-paying insurers outbid the lower-paying ones for physicians' time, regardless of the absolute level of payment.

Historically, the Physician Payment Review Commission (PPRC) tracked the relationship between Medicare, Medicaid, and private fee levels. PPRC combined claims data from several payers, actuarial estimates of Health Maintenance Organization (HMO) rates, and data on payers' market shares to estimate average private rates (PPRC 1995, PPRC 1996).

The PPRC stopped reporting on this issue after 1996. At that time, private payers' rates were falling, due mainly to shift of enrollment toward tightly managed (low fee) plans. Medicare's rates, by contrast, were steadily rising. Unsurprisingly, complaints about inadequacy of Medicare rates fell, and the issue of the "fee gap" lost importance. In addition, at that time it appeared that traditional fee-for-service arrangements were disappearing due to the growth of more complex contracting arrangements from HMOs. This limited the value of the measures based on claims, data, where the impact of these new arrangements (subcapitation, withhold and bonus) had to be estimated from survey or actuarial opinion.

Current market conditions are the reverse of those seen in 1996. Medicare's physician payment rates were reduced substantially in 2002, increased slightly in 2003, and are projected to decline further in 2004. In addition, tightly managed health care plans have lost market share to arrangements such as PPOs (Gabel et al., 2002). Accordingly, subcapitation and other complex contractual arrangements are being displaced by traditional fee-for-service reimbursement, and physicians may face a growing opportunity cost for serving Medicare beneficiaries.

Accordingly, the Medicare Payment Advisory Commission ordered an update of the prior analysis, to see where Medicare fees stand relative to average private fees at this time. This analysis will be one of several inputs to the Commission's recommendations regarding Medicare physician payment and payment updates.

The next section of the paper briefly summarizes methodology of the prior (PPRC) and current studies. The following section gives results for the 1999 – 2001 period. The final section puts projected changes through 2003 into a long-run perspective, tracking changes in fees and physician costs from the early 1990s through the 2003 projection.

## 2: USING CLAIMS DATA TO ESTIMATE AVERAGE PRIVATE PAYERS' PHYSICIAN PAYMENT RATES: METHODS

This section estimates private payers' physician fees relative to Medicare rates using two large claims databases and other information. This replicates earlier work by the Physician Payment Review Commission (PPRC 1996, page 218). Insurers agreed to continue to participate in the project with the understanding that fees for specific services, fee levels for small geographic areas, and the identities of the individual participating plans would not be identified. Some modifications to earlier methods are made to account for changes in the underlying data sources since 1994.

### 2.1 Methods used for the 1989-1996 PPRC analysis

The PPRC's estimates of the Medicare-to-private fee differential were based on these elements:

- Two large private payers' claims databases:
  - One database provided a good estimate of rates paid by the average Blue Cross Blue Shield plan. This was verified in early years by direct comparison to average rates calculated directly from a sample of Blue Cross Blue Shield plan data.
  - The other database provided an estimate of typical commercial insurer rates, based on one large commercial insurer. There was no way directly to determine whether or not this large insurer was representative of commercial insurers generally.
- A third large claims database, the MedStat MarketScan data. The Medstat database captures claims information from employees of (mainly) Fortune 500 companies, and so in principle shows fee levels for a broad cross-section of the population with employer-sponsored health insurance coverage.
- An actuarial estimate of typical HMO payment rates. For the PPRC analysis, it was not possible to obtain claims data from HMO plans. Instead, a single estimate of typical HMO rates (as a percent of Medicare rates) was obtained from a consultant, under promise of anonymity.
- Estimates of insurers' shares of physician practices. This was based on American Medical Association's Socioeconomic Monitoring System survey, part of which asked physicians about payers' shares of their practice revenues.

In broad outline, the payment estimate was derived by screening the claims data to remove records that were not full payment for major services, then calculating a price index separately from each database. The separate payer-level estimates of price levels were weighted together based on payers' shares of physician practice revenue.

The Medstat MarketScan data were never directly used in the fee level calculation. Instead, Medstat provided an independent check on the fee levels estimated from the

other insurers. That is, the appropriately weighted average of the other insurers' data was close to the fee level obtained directly from Medstat. This gave independent confirmation that the fee levels estimated from the two main data sources were approximately correct, and, by inference, that the large commercial insurer's rates were probably reasonably representative of commercial insurers generally.

***Screening of the claims data.*** The large claims databases required substantial screening and adjustment prior to use. In general, the goal of these screens was to identify total payment to the physician, for claims that reflect full payment for major services. This requires screening out claims for partial payments (for example, Medigap-type claims) and for minor services (for example, assistant at surgery rather than the surgery itself). It also requires correctly using the financial fields on the claim to build up total payments, including payment from patient (coinsurance and deductible) and insurer. Even after screening out claims that were identifiable as partial payment/minor service claims, an overall trim was applied to remove claims with outlier payment amounts, amounts less than one-third or more than three times the average payment for a particular service.

For both large claims databases, nearly half the records were screened out in this process. By far the majority of the screened records were Medigap-type claims. That is, these were claims for over-65 retirees where the insurer was paying the Medicare deductible and coinsurance amounts.

***Construct price indices using Medicare volumes as weights***. The next step was to construct a Medicare-weighted price index for each payer separately, then to weight the individual payer numbers based on their estimated market share. For the two large claims databases, that meant calculating average payment per service for each current procedural terminology (CPT) code (and any pricing-relevant modifier), then comparing those rates to Medicare payments for the same services. The overall index for any payer was the weighted average of these service-level comparisons, using Medicare's volume in each service as the weight in the price index. This is a standard Laspeyres price index, with average private and Medicare payment per service as the prices being compared, and Medicare service volumes as the "basket" of services being priced.

The choice of Medicare weights for constructing the price index matters significantly. In theory, either Medicare service volume or private service volume could be used to weight up prices for the individual services. The estimated Medicare-to-private fee ratio was about 5 percentage points lower when Medicare volumes were used as the weights in the price index. That is, Medicare rates appear lower (relative to private) when Medicare volumes are used in the price index calculation. This occurs because Medicare pays relatively well for visits, and relatively less well for tests and procedures. Tests and procedures constitute a higher proportion services for Medicare than for private payers. Using the Medicare volume puts more emphasis (weight) on the services where Medicare pays most poorly relative to private insurers. The index, as constructed, directly answers the question most relevant to Medicare policy: How much would total Medicare spending have increased (or decreased) if Medicare had paid typical private rates for the physicians' services it purchased, rather than Medicare fee schedule rates?

***Estimate of HMO payment rates.*** HMOs were generally not represented in the Blue Cross Blue Shield or Commercial insurer data. Payment rates for HMOs were obtained from different sources at different times in the PPRC analysis. Initially, a PPRC survey of managed-care plans yielded estimated payment rates for roughly 30 plans that used the RBRVS for pricing. None of those plans reported pricing services below the Medicare level, and the average plan reported paying about 25 percent more than Medicare. Subsequently, an expert actuary was consulted. The actuary proposed a figure of 20 percent, which was used in the final (1996) PPRC analysis.

***Practice revenue share by payer***. The American Medical Association's Socioeconomic Monitoring System (SMS) survey provided data on the shares of practice revenues by payer. The SMS has information on share of revenues for BCBS plans, for other private payers, and separately, for HMOs (percent of practices with a contract, and, for those with a contract, share of revenues from HMOs).

The weighting of the payment estimates was always somewhat approximate. First, the HMO revenues were assumed to come entirely from the non-BCBS private payer market share, so HMO market share directly reduced the "other private" insurers' market share. (This was done largely in response to criticism that the estimated private rates were too high, because this assumption led to maximum reduction in estimated payment rate.) Second, payers were weighted in proportion to revenues rather than in proportion to volume of care. This was an oversight, but an analysis of the data showed that reweighting the three payers in proportion to volume would have had only a minor impact on the overall price estimate.

## 2.2 Methods used for the current analysis, 1999 - 2001

The current analysis follows the prior work with five main changes:

First, instead of dividing payers into Blue Cross Blue Shield, Commercial, and HMO, this analysis uses the modern terminology of indemnity, preferred provider organization (PPO), point-of-service option (POS), and health maintenance organization (HMO). The large commercial insurer participating in this project no longer maintains a single-product file, but instead separately identifies enrollment by these plan types. That change allows us to weight the individual components within that commercial insurer separately, rather than assuming that the Commercial Insurer data reflect a national-average mix of indemnity and PPO data, as was approximately the case in 1994. The Blue Cross Blue Shield proxy is a self-described national PPO, and is therefore categorized as a PPO for this analysis.

Second, the source of data for weighting the payers has changed. As late as 1994, the distinction between Blues and Commercial plans still held some relevance, and physician survey data gathered practice revenues by those categories. By 1999, this was no longer the case. Neither Blues nor Commercial insurers are monolithic entities, and none of the current physician surveys (American Medical Association, Medicare Payment Advisory

Commission, or an ongoing survey by the Center for Studying Health System Change) separately tracks Blue Cross Blue Shield share of physician revenues.

Instead, for this analysis, we used data on employees' enrollment by type of plan to weight the components of the data. An ongoing survey sponsored by the Kaiser Family Foundation (KFF) and the Health Research and Educational Trust (HRET) monitors employer-sponsored insurance on an annual basis (Gabel et al., 2002). Plan type shares from that survey were used to weight the data. Some sensitivity analysis (in the results section below) tests some variations on those weights.

Third, we now have two potential sources of HMO fee level information. An ongoing survey by Milliman USA provides a survey-based estimate of HMO payment levels (Milliman USA, 2002). Alternatively, the commercial insurer data separately identify their own HMO product, which (after analysis) turned out to have a substantially lower average payment rate than the average reported in the Milliman USA data. Alternative assumptions about the proper HMO payment level are also tested in the sensitivity analysis in the results section.

Fourth, the claims data from all sources were noticeable cleaner, more uniform, and more accurately processed than in prior years. A larger fraction of claims was directly identifiable as minor service/partial payment claims. A small fraction was removed by the general trim to remove price outliers. All payers now report enough data to impute reasonably accurate pricing-relevant CPT modifiers.

Fifth, site of service differentials were explicitly factored into the analysis. As Medicare has moved to resource-based practice expense payments, site-of-service differentials have become an increasingly important determinant of Medicare payment rates. Failure to account for lower rates paid when selected procedures are performed in facilities would result in a substantial overstatement of Medicare payment rates. Inclusion of the site-of-service differential results in rates that properly reflect Medicare payment.

## 3: USING CLAIMS DATA TO ESTIMATE AVERAGE PRIVATE PAYERS' PHYSICIAN PAYMENT RATES: RESULTS

This section presents the results of the Medicare-to-private price comparison. The first section presents current data (through 2001). The second compares current data with historical data back to 1989. The third gives projections of the Medicare-to-private price ratio through 2003.

### 3.1 Medicare-to-private fee ratio, 1999-2001

Using the methods outlined in the previous section, Medicare rates averaged an estimated 81 to 83 percent of private rates in 2001, depending on the exact method used (Table 1). The baseline scenario categorizes the data into four insurance types (indemnity, PPO, POS, HMO), and weights each type by estimated employer-based enrollment shares in these plans. Where there were multiple observations within a type of plan (e.g., two PPO plans), the multiple observations were equally weighted. Using this method, Medicare is estimated to have paid 83 percent of typical private rates in 2001.[1]

**Table 1: Medicare Physician Payment Rates as Percent of Average Private Rates, Under Alternative Weighting Assumptions, 1999-2001**

| | Alternative 1 | Alternative 2 | Alternative 3 | Alternative 4 |
|---|---|---|---|---|
| Year | Baseline | Use PPO plans only | Give BCBS one-third market share | Use survey-based HMO fee estimate |
| 1999 | 78% | 74% | 78% | 75% |
| 2000 | 82% | 78% | 82% | 79% |
| 2001 | 83% | 81% | 83% | 82% |

Source: Analysis of private claims and enrollment data, 1999-2001, matched to Medicare physician-supplier procedure summary file data

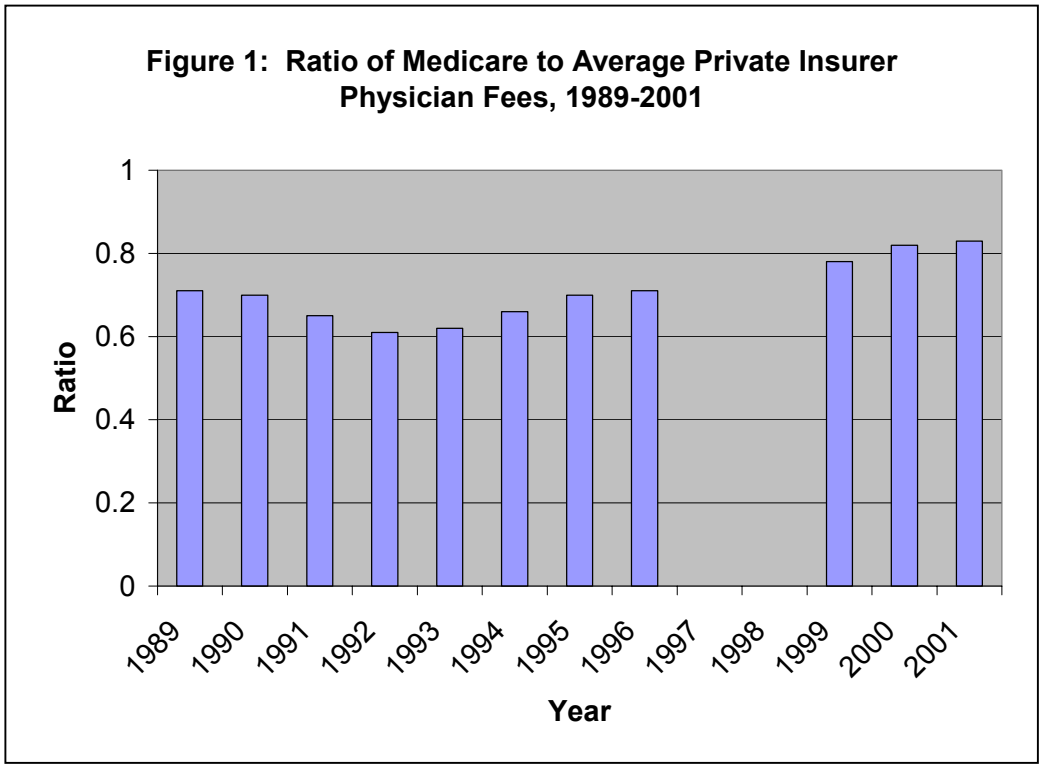
Alternative scenarios show that other reasonable approaches to weighting the payer data give substantially similar estimates of the level and trend in prices. Currently, PPOs are the most popular form of private coverage. If we compare Medicare to just the PPO plans in the database, the estimated Medicare-to-private ratio falls slightly (Table 1, scenario 2). A second alternative gives the Blue Cross Blue Shield proxy one-third weight in the overall estimate. This produces results identical to the baseline scenario (Table 1, scenario 3). Finally, we can replace the claims-based estimate of HMO

[1] As noted in the methods section, Medicare volumes were used as the weights applied to individual CPT-code observations. If private volume were used, visits would be weighted more heavily, and the estimated ratio of Medicare to private rates would be 4 to 5 percentage points higher than shown here.

payment rates with a survey-based estimate developed by Milliman USA (Milliman 2001). The Milliman USA estimate of HMO payment rates is somewhat higher than the estimate derived from claims data, and, accordingly, under this approach the estimated ratio of Medicare to average private rates falls slightly (Table 1, scenario 4).

### 3.2 Comparison to historical levels and examination of trends

These data strongly suggest that the ratio of Medicare to private fees rose substantially from 1994 onward (Figure 1).[2] Although the data are not available for all years, the upward trend was apparent through 1996, and appears again in the data from 1999 to 2001.

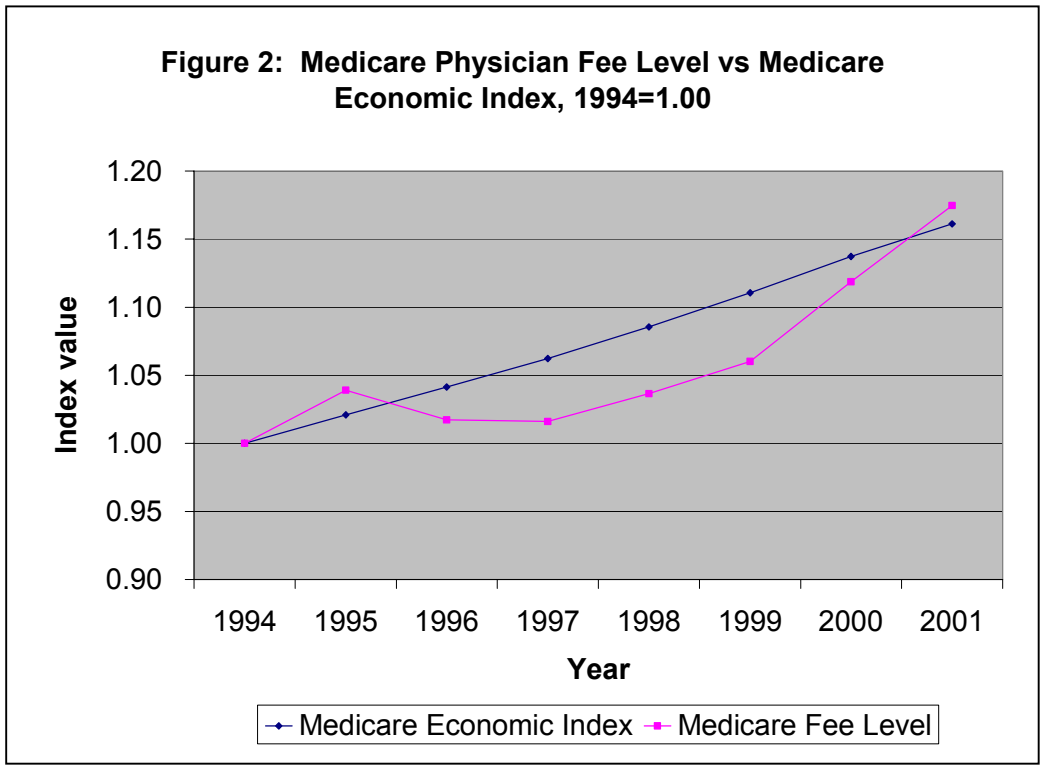



The decline in the ratio from 1989 to the 1991 – 1993 period can reasonably be attributed to fee cuts in the Medicare program. In anticipation of the introduction of the Medicare Fee Schedule, the Congress reduced fees for procedures that appeared most overvalued relative to the fee schedule, starting with reductions in payment for cataract surgery in 1986, and spreading to a broad list of (primarily) surgical procedures through 1991 (PPRC 1992).

After 1993, the cumulative fee increases in the Medicare program eventually reached a level matching the cumulative increase in underlying cost inflation (Figure 2). Inflation is measured by the Medicare Economic Index, a measure of increase in physicians' costs

[2] Prior estimates of the Medicare-to-private ratio are drawn from PPRC 1996.

adjusted for the overall increase in productivity in the U.S. economy. Medicare's fee increases lagged behind the rate of inflation in the early part of this period. By 2001, however, the cumulative Medicare physician fee increase more-or-less matched cumulative productivity-adjusted increase in physicians' costs.[3]




For private plans, we have no direct measure of fee inflation, but the changing pattern of private plan enrollment suggests that private fees probably fell during this period. Table 2 shows enrollment by type of plan, based on annual surveys conducted by the Kaiser Family Foundation and the Health Education and Research Trust (Gabel et al 2002). This period saw a substantial shift of enrollment out of high-paying traditional (indemnity) insurance and into lower-paying managed care plans.

[3] For the years 1994 – 1998, these are not the published fee increases, but instead were measured by MedPAC staff directly from the claims data. The published update factor may have a separate set of adjustments for changes in law and regulation that are kept separate from "the update". The net impact on fees includes both the update and any effects of changes in law and regulation.

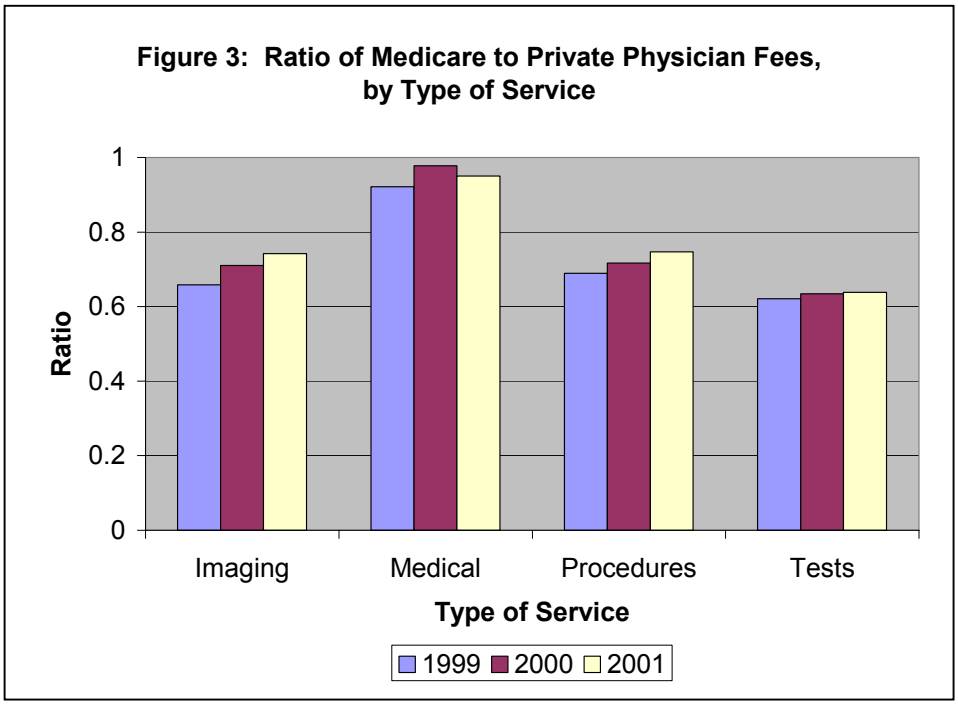
| Table 2: Deflationary Impact of the Shift in Private Enrollment Mix, 1993-2001, Holding Fee Levels Constant | | | |
|---|---|---|---|
| | | | |
| **Plan Type** | **Fee Level (Medicare = 1.0)** | **Private Enrollment Share, 1992** | **Private Enrollment Share, 2001** |
| Indemnity | 1.70 | 46% | 7% |
| PPO | 1.35 | 26 | 48 |
| POS | 1.15 | 7 | 22 |
| HMO | 1.00 | 21 | 23 |
| | | | |
| 1993 weighted average | 1.42 | | |
| 2001 weighted average | 1.25 | | |
| 1993 to 2001, percent change | -12% | | |
| | | | |
| Source: Enrollment data taken from Gabel et al., 2002 | | | |

This enrollment shift imparts a substantial downward bias to average private physician fees over this period. This can be quantified by the following calculation: Hold private fee levels constant within each type of plan, and determine how the weighted average fee level would change solely due to the shift of enrollment.

That calculation is shown in at the bottom of Table 2. Based on a reasonable assumed spread of fee levels across plan types, this shift in enrollment would have reduced average private physician fees by about 12 percent, all other factors held constant. That is, if private plans had kept fees constant over this period, the enrollment-weighted average of fees would have fallen about 12 percent from 1993 to 2001, due solely to the shift toward lower-paying plans (Table 2, last row).

This enrollment trend slowed and then reversed in 2001, resulting in a predicted increase in average private fees due to the shift away from HMO toward higher-paying plan types. On net, the enrollment shift between 2000 and 2001, by itself, would have increased the average private physician fee nearly 1.4 percent (data not shown).

Finally, the ratio of Medicare to average private fees varies substantially by type of service. For office visits and other Medical services, Medicare rates are near parity with average private rates (Figure 3). For other types of services, Medicare rates tend to be substantially below private rates. This pattern has been true since the initial implementation of the Medicare Fee Schedule (PPRC 1995, p. 85). To a large degree, it reflects Medicare policies intended to increase payment for evaluation and management services while reducing payment for other services, compared to historical payment levels based on usual, customary, and reasonable rates.




### 3.3 Projections beyond 2001

Any projections of the Medicare-to-private fee ratio beyond 2001 are necessarily speculative. Using the information available, however, we can offer projections based primarily on the change in Medicare rates.

The Medicare portion of the rate changes is known or can be based on reliable projections of likely changes in Medicare rates. The CMS Office of the Actuary states that the 2002 update was –4.8 percent, and that the update for the last 9 months of 2003 was 1.6 percent (for an annual average update of 1.2 percent)..

The significant unknown in the projection of the Medicare-to-private fee ratio is the behavior of private fees. Private employer health insurance enrollment changes from 2001 to 2002 should have had only a small impact on average private rates. From 2001 to 2002, PPO and HMO enrollment among covered employees grew at the expense of other options (Gabel et al 2002). Based on the calculation above, the net effect of the enrollment changes from 2001 to 2002 should be to increase average private fees by less than 0.5 percent. Thus, given that the patterns of enrollment across private plan types appear reasonably stable (from the standpoint of calculating average private fees), the major unknown is the rate at which fees are increasing or decreasing within the four types of plans.

Table 3 gives projections of the Medicare-to-private fee gap for a variety of assumptions about private fee inflation in the next two years. The projected Medicare fee reductions will almost certainly reduce the Medicare-to-private fee level, but the magnitude of the reduction will depend on the rate of inflation in private payers' physician fees.

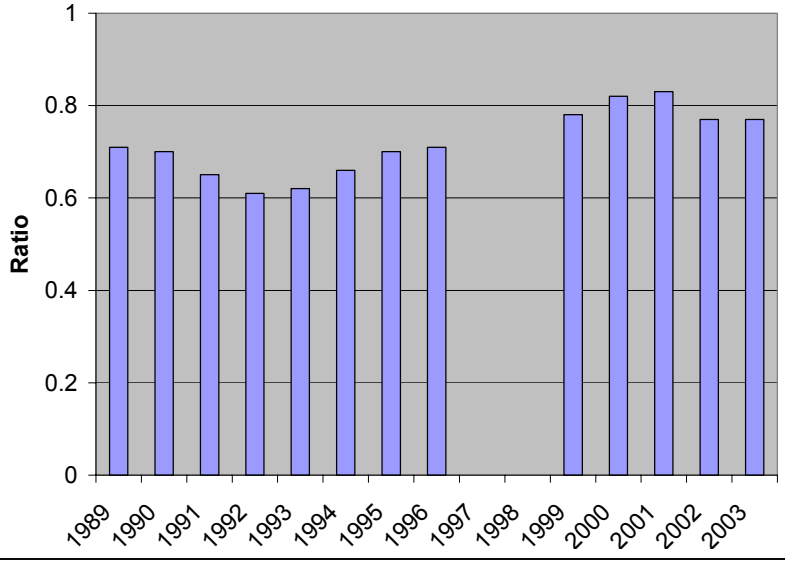
| **Table 3: Projecting the Medicare-to-Private Fee Ratio, 2001-2003** | | | | |
|---|---|---|---|---|
| | Assumed Annual Private Fee Inflation | | | |
| | **0%** | **1%** | **2%** | **3%** |
| Medicare % of Private 2001 | 83% | 83% | 83% | 83% |
| Medicare % of Private 2002 | 79% | 78% | 77% | 77% |
| Medicare % of Private 2003 | 80% | 78% | 77% | 75% |
| | | | | |

## 4 DISCUSSION AND FURTHER WORK

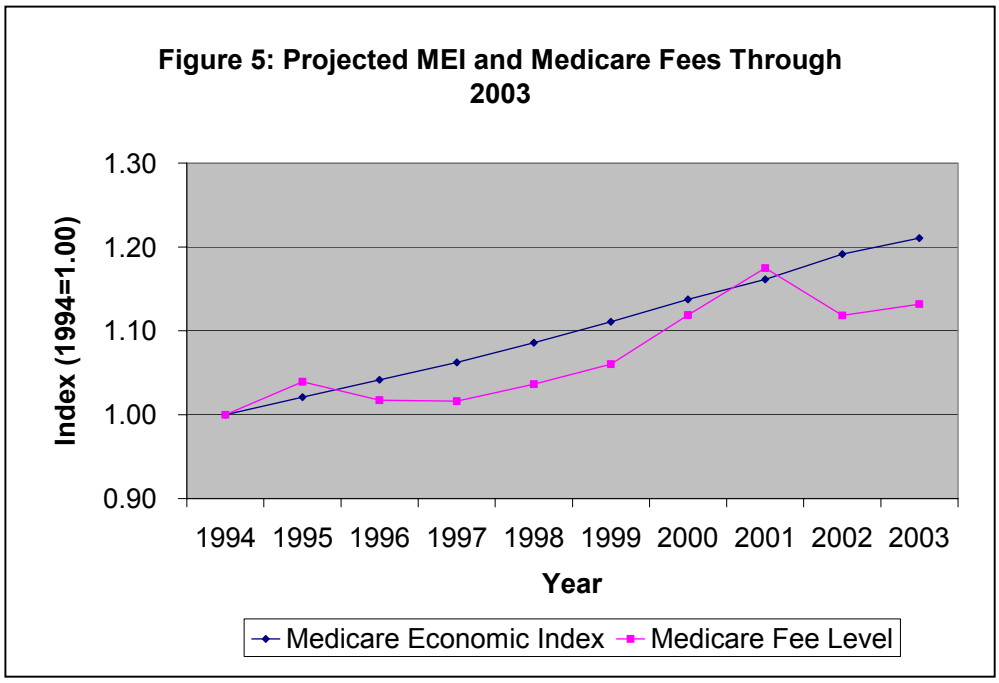
Placing current and proposed Medicare fee reductions into context may require balancing two different views of the current and future level of fees. One can compare the projected fee levels either to the growth in private fees, or to some measure of the growth in physicians' input prices or costs.

In a relative sense – compared to typical private rates – projected Medicare fees through 2003 are not out of line with historical norms. Even with the substantial 2002 reduction, the ratio of Medicare to private fees will be above the lows seen around the time of the 1992 introduction of the Medicare fee schedule, assuming private fee inflation of 2 percent per year from 2001 forward (Figure 4). Thus, by that standard, the fee levels in 2003 will not be unprecedented.

**Figure 4: Projected Ratio of Medicare to Average Private Insurer Physician Fees, 1989-2003**




On the other hand, changes in Medicare fees might also be reasonably compared to some absolute standard, such as the change in physicians' per-unit practice costs as measured by the Medicare Economic Index. By that standard, 2002 marks the start of an ongoing divergence between physicians' cost growth and Medicare payment growth (Figure 5). While Medicare fee increases have fallen below the rate of cost growth in the past, they have not fallen quite so far, so fast, in the recent past (Figure 5). By that standard, there may be more potential cause for concern regarding proposed future fee reductions.




Additional work in this area might focus on two additional pieces of information. First, the data here should be reconciled against official federal sources of price information, including the physician fee component of the producer price index (PPI). Initial analysis suggested some discrepancy between price trends as measured from the claims, and all-payer price trends as captured by the physician fee component of the PPI.

Second, beneath this single national estimate there is substantial regional and local variation in the Medicare-to-private fee ratio. For example, based on site visits in a dozen communities nationwide, typical private physician payment rates are reported to be below the Medicare level in Miami, but substantially above the Medicare level in Boston (Ginsburg 2002). We hope to use these claims databases, combined with employer-based surveys showing fraction of employees by type of plan, to provide estimates of the variation in the Medicare-to-private fee ratio across small geographic areas.

## REFERENCES


Cunningham, P., *Mounting Pressures: Physicians Serving Medicaid Patients and the Uninsured, 1997-2001*, Tracking Report No. 6, Center for Studying Health System Change, Washington, D.C., December 2002.

Gabel, J, L Levitt, et al., "Job-Based Health Benefits in 2002: Some Important Trends", *Health Affairs* 21:5 (September/October 2002), pp 143-151.

Ginsburg, PB, "Statement of Paul B. Ginsburg, Ph.D., President of the Center for Studying Health System Change," Testimony Before the Subcommittee on Health of the House Committee on Ways and Means Hearing on Medicare Physician Payment, February 28, 2002.

Milliman USA, *2001 HMO Intercompany Rate Survey* (October 8, 2001).

Physician Payment Review Commission, *Annual Report to Congress 1996* (Washington, DC: 1996).

Physician Payment Review Commission, *Annual Report to Congress 1995* (Washington, DC: 1995).

Physician Payment Review Commission, *Annual Report to Congress 1992* (Washington, DC: 1992).

Shoenman, JA, Cheng CM, *Results of the Medicare Payment Advisory Commission's 1999 Survey of Physicians about the Medicare Program*, Final Report (Bethesda, MD: Project Hope Center for Health Affairs, September 1999).

Shoenman, JA, Feldman JJ, *Results of the Medicare Payment Advisory Commission's 2002 Survey of Physicians about the Medicare Program*, Final Report (Bethesda, MD: Project Hope Center for Health Affairs, December 2002).

Trude, S, Ginsburg PH, *Growing Physician Access Problems Complicate Medicare Payment Debate*, Issue Brief No. 55, Center for Studying Health System Change, Washington, D.C., September 2002.