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ALTERNATIVE APPROACHES TO PHYSICIAN REIMBURSEMENT UNDER MEDICARE: A SIMULATION

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EXECUTIVE SUMMARY

The study reported here is a continuation of previous CUNY research on payment to physicians under Medicare. The previous study examined the effect of carrier discretionary practices on prevailing fees. The current study was concerned with evaluation of the effect of alternative methods of determining prevailing charges on program outlay, physicians' revenue, and beneficiary out-of-pocket expense.

The payment to physicians under Medicare Part B is governed by the Reasonable Charge Process (RCP) prescribed by laws, the Carriers Manual and other regulations issued by HCFA (Health Care Financing Administration), which took over responsibility for running the program from the Social Security Administration. At the core of the RCP are rules for determining allowed charges - i.e., charges of which the program will pay 80% after the deductible (currently $60 in a benefit year) is satisfied. The allowed charge is currently determined as the lesser of the submitted, customary, and prevailing charges.

After discussion with HCFA, four methods of determining the prevailing were selected for study. The current method using the adjusted prevailing served as the benchmark to which all the other methods were compared. The unadjusted prevailing - the 75th percentile of the distribution of weighted customaries - was included in the study in order to assess the effect of the Economic Index. The single fee - prevailing fee computed without regard to the specialty designation of the physicians - was included in order to see the effect of specialty designation on the three participants in the program: the government, the physicians, and the beneficiaries.

Under ARCS (average reasonable charge, single fee), in addition to customary and prevailing charges (which are used to determine allowed charges under benchmark) the average of allowed charges in a previous period is used to determine the allowed charge on a current claim. While the ARCS is computed without regard to specialty, the prevailing, which is still used in pricing under this method, is computed for each specialty separately. Payment under ARCS was designed to "hold the providers harmless" - i.e., the allowed charges under this method should not be lower than under benchmark.

ARCD (average reasonable charge, dual fee), under which two average reasonable charges are computed - one for board-certified physicians and one for non-board physicians - was included as a method of pricing that would recognize quality differences.

The data source for the simulations is the Queens Medicare history extract file for CY (calendar year) 1976 and 1977. It was obtained from Group Health, Inc., the Part B carrier for the county.

The values for the three first methods (benchmark, unadjusted prevailing, and single fee) were provided by GHI and constitute a part of its reasonable charge process for FSY 1978. The average reasonable charge fees were computed using claims for services performed for FSY 1976 (claims "entered DP" - the GHI computer system - between July 1, 1975 and June 30, 1976). Since the GHI claims record does not include allowed charges, for the computation of both versions of the ARC it was necessary to price all claims for services in FSY 1976, using GHI customary and prevailing screens in effect during FSY 1976.

The effect of the payment methods under study was evaluated using claims for the period July 1 - December 31, 1977. The claims data file does not have the exact date of service; it has the date "entered DP", and this was the basis used by us to select the claims for the test. Each claim for one of the 44 selected procedures was priced under each payment method and the results were compared. The selected procedures account for 67% of the submitted charges and 78% of services in the last period and are in a group of 50 procedures that were designated by HCFA for regular reporting of prevailing charges by carriers.

The study measured the effect of the methods on program outlay, physician revenue, and beneficiary burden. Program outlay is defined as 80% of allowed charges. Since the deductible is not accounted for, this is an overestimate of the cost to the government, which pays 80% of allowed charges only after the deductible has been satisfied. Physician revenue for assigned claims (claims for which providers are paid directly by the Medicare program) consists of the allowed charges for assigned claims. This assumes that the physician collects the deductible and coinsurance from the patient, which may not always be the case. For unassigned claims the physician is assumed to collect his total fee from the beneficiary, and so his revenue equals the submitted charge. Beneficiary burden for assigned claims consists of coinsurance (allowed charge less 80% of submitted charge) and deductible, on the assumption that the physician collects them. For unassigned claims, the burden equals the submitted charge minus 80% of the allowed charge.

The effect of payment method on program outlay was measured by the ratio of the outlay under each method to the outlay that would have occurred had the benchmark method been used. A ratio higher than 100% indicates an increase in outlay, and a ratio lower than 100% indicates a decrease. Specialty assignment profile and aggregate submitted charges are also taken into consideration in evaluating the effect of payment methods on outlay.

In evaluating the effect on physician Medicare revenue, the number of physicians whose revenue increased, decreased or remained unchanged, and the magnitude of the change as compared to benchmark, were computed.

The beneficiaries were also divided into three groups: those whose burden remained the same as it was under benchmark, those whose burden increased and those whose burden decreased. The magnitude of the change in burden was also evaluated.

The results of the analysis showed that program outlay is lowest when single fee is applied as the method of payment. Average reasonable charge causes only a slight increase (about half of a percent) in outlay. Individual physicians are affected differently by changes in the method of payment. Assignment characteristics and the level of aggregate submitted charges do not influence the effect of payment method on outlay.

The Economic Index is effective in holding program costs down, as can be seen from the comparison of outlay under unadjusted prevailing to outlay under benchmark; individual specialties are affected by the index in different ways. The reasons for this involve differences in the composition of expenses based on location and technology of practice and other factors, and differences in the ratio of expenses to gross earnings. Indices that would recognize different classes of physicians based on these factors, or would differentiate among specialties, may be more equitable and effective.

Only single fee and ARCS were evaluated for effect on physician revenue. Under

single fee the revenue of 45% of providers remains the same as under benchmark, for 20% of providers the revenue went up 2% and for 36% it went down 2%, on the average. Non-board physicians were likely to have their revenues increased by about 3%. The same increase was experienced by 45% of GPs. Since specialty fees tend to be higher than GPs' fees and since specialists are more likely to be board-certified, the results are to be expected when prevailing charges are computed without regard to specialty. It is of interest to explore the reasons for higher fees for specialist services. If the service provided under the same procedure code is the same whether the physician is a specialist or GP then there is no reason to have separate screens; even if the services were different the procedure codes could be defined so that the difference would be recognized and this would allow joint screens for all providers of a procedure. GHI and other carriers no doubt have to use carrierwide screens when the number of providers within a specialty is too small to form a prevailing. The single fee would cause a reduction of revenue for some specialists. This reduction may be justified if the higher fees they are commanding are not due to quality of the services they provide but constitute economic rent.

The ARCS was so defined as not to cause a decrease in physician revenue, and it did not. Most physicians would remain at their benchmark level and some would gain a little. Most likely to see an increase in revenue under ARCS are GPs and physicians specializing in internal medicine.

Since revenue under ARCS may be similar to benchmark, when ARCS is compared to single fee the results are the opposite of those observed when single fee was compared to benchmark.

If single fee instead of benchmark were used as the payment method, almost half of the beneficiaries whose claims were included in the test would experience an increase (averaging 17%) in their out-of-pocket expenses, a quarter would experience no change, and a quarter would have a decrease of 14% on the average. The extent to which burden is affected by payment method is directly related to the assignment status of the beneficiary. Those who have no assigned claims at all - about three-quarters of the beneficiaries - were most likely to have an increase in burden. Half of the beneficiaries who had all their claims assigned to providers experienced a decrease in burden and only 16% had an increase.

Under ARCS more than 9% of the beneficiaries experience no change in burden. Other payment methods were not evaluated.

Of the two methods for which effect on outlay, physician revenue, and beneficiary burden was reviewed, one, ARCS, had little effect and would cause no disruption to any of the participants in the system.

The other, single fee, would reduce program cost to the government, and would affect physician revenue only slightly but would substantially increase the out-of-pocket expenses of about half of the beneficiaries. The desirability of shifting costs from government to the elderly in a period of inflation is highly questionable since their income is fixed. Aside from injury to equity, there could be an adverse effect on local markets dependent on the purchases of the elderly.

Since the ARCS does not seem to have a significant effect on any of the participants the cost involved for its installation may not be justified.

INTRODUCTION

The staff report on physicians' fees issued by the Council on Wage and Price Stability in 1978 1/ notes rapid growth in physician fees relative to other consumer prices between 1950 and 1977, accompanied by even more significant increases in consumer outlays for physician services as a result of fee inflation, population growth, and utilization of services. Understandably, physicians' incomes have risen rapidly, at a rate unmatched by any major occupational group, and attained a level four times that of professional and technical workers in 1975.

Fee inflation is thus seen to be a public issue. It is also accompanied by substantial variations in income among specialties, unrelated to supply.

While past practices of organized medicine that restricted or discouraged competition are implicated in current levels of physician fees, attention has been increasingly focused on the influences of methods of payment under insurance since market forces fail to check the behavior of providers when the transactions are heavily underwritten by third parties. In this context, the methods of deriving reasonable charges that can serve as the basis for payment under Medicare play an important role, as they involve a substantial segment of total expenditure for physicians' services in the United States 2/.

The Problem

Medicare, enacted in 1965 as Title XVIII of the Social Security Act, was designed to alleviate the difficulties the elderly face in obtaining health care. The program was divided into two sections; Part A (hospital costs), and Part B, Supplementary Medical Insurance or SMI (physician and other health services). Administration of Medicare was delegated to non-governmental insurance carriers under the general supervision of DHEW. Blue Shield organizations, Group Health, Inc., and commercial corporations share in performing this function for Part B services.

The payment to physicians under Medicare Part B is governed by the Reasonable Charge Process (RCP) prescribed by laws, the Carriers Manual and other regulations issued by HCFA (Health Care Financing Administration), which took over responsibility for running the program from the Social Security Administration. At the core of the RCP are rules for determining allowed charges - i.e., charges of which the program will pay 80% after the deductible (currently $60 in a benefit year) is satisfied. The allowed charge is currently determined as the lesser of the submitted, customary, and prevailing charges.

The customary is the median of the distribution of charges submitted by a given physician for a given procedure within a calendar year; the prevailing charge is

1/ Zachary Y. Dyckman, A Study of Physicians' Fees, Staff Report prepared by the Council on Wage and Price Stability, March 1978.

2/ In FY 1977 Medicare expended $3,975,000,000 out of the $18,282,000,000 spent on physician services from all sources. 95th Cong. 2nd Sess. House of Representatives Comm. Pub. No. 95-160, Abuses in the Sale of Health Insurance to the Elderly in Supplementation of Medicare: A National Scandal, Nov. 28, 1978, p. 19.

the 75th percentile of the distribution of weighted customaries (frequency of performance is used as the weight) adjusted for the Economic Index.

The study explores the effect of several ways of determining the prevailing charges on the cost of the program to the government, the effect on physicians' revenue from Medicare and the out-of-pocket expense to the beneficiary, by simulations using claims submitted in Queens county.

The study reported here is an extension of the simulations done by CUNY under contract #600-76-0145 with HCFA. The earlier study simulated the effect of selected carrier discretionary practices on prevailing fees but did not evaluate the effect on the participants in the Medicare system: the cost of the program to the government, the cost to the beneficiary, and the Medicare revenue of physicians. The current study concentrates on these aspects in evaluating (simulating) the effects of alternative reimbursement methods on the three groups.

The research design is set in the context of the desirability of exploring alternatives to the reasonable charge determination method of setting Medicare fees. The present method is complicated to perform. It is also difficult to hold to a uniform standard because of the many opportunities afforded in a many-stage process for carrier discretion leading to random or non-random inequities affecting both practitioners and their patients. The present method has a quality control component in its recognition of specialist services as a distinct category for price determination but the component is incomplete because the basis of specialty designation is not specified. Moreover, the relation between use of specialists in given circumstances and improved results of care has not been systematically tested. The installation of the Economic Index has posed a direct challenge to the continuation of the RCP because the Index may wipe out the meaning of 75th percentile as the upper bound to allowed charges. CUNY's study of national fee data indicates that this effect had spread far more widely in 1978 than in 1977. A basic problem in Medicare pricing policy is the absence of information about effects on beneficiaries' financial burdens under the different circumstances of utilization that may exist. Residual payments, measured nationally, must be quite substantial even if physicians do not universally collect the copayments to which they have reserved their right, since a high proportion of claims are unassigned and submitted charges do exceed those allowed by Medicare carriers following (each in its own fashion) the Carriers Manual regulations.

Payment Methods Selected

The test methods were selected after discussion with HCFA because of the particular interest in them as possible alternatives to the present system. The benchmark, or the current RCP, of course had to be included so as to provide a common denominator in all the comparisons. The unadjusted prevailing represents the 75th percentile of the weighted distribution of customaries, which used to be the prevailing before the application of the Economic Index was mandated by law. Thus the comparison between the program costs obtained when unadjusted prevailings are used and costs under benchmark provide a measure of the effectiveness of the Economic Index adjustment. (CUNY's previous study showed that the application of the Economic Index will, over time, create a fee schedule in place of the RCP, thus putting in question the need for costly computations needed to create the customary and prevailing charges used in the RCP.)

Under current regulations carriers are encouraged to develop separate prevailing

screens for individual specialties. The number of specialties for which they do so is left to the carrier's discretion. GHI uses all the specialties recognized by HCFA in developing prevailing profiles; other carriers have only one prevailing screen for each procedure, some (for example, Blue Cross/Blue Shield-Greater New York) have only two: general practitioners and specialists. The inclusion of the single fee - a prevailing fee computed without regard to the specialty of the provider - in the test permitted testing of the effect of specialty designation on program outlay, physicians' revenue, and beneficiary burden. (CUNY's earlier study mentioned above evaluated the effect of specialty designation on prevailing fees but did not deal with the effect on all participants in the program.)

The ARCS (average reasonable charge, single fee) is the method in which HCFA was particularly interested. Under ARCS, in addition to customary and prevailing charges (which are used to determine allowed charges under benchmark) the average of allowed charges in a previous period is used to determine the allowed charge on a current claim. While the ARCS is computed without regard to specialty, the prevailing, which is still used in pricing under this method, is computed for each specialty separately. Payment under ARCS was designed to "hold the providers harmless" - i.e., the allowed charges under this method should not be lower than under benchmark.

The rationale for computing separate prevailing screens is that the quality of care provided by specialists is higher. However, since most carriers accept self-designation in determining a physician's specialty this may not be a good measure of quality. Since specialty boards require proficiency in a given field of medicine before providing certification it would seem that board certification would be a better indicator of quality of care than "specialty" per se 3/. ARCD (average reasonable charge, dual fee) under which two average reasonable charges are computed - one for board-certified physicians and one for non-board physicians - was included as a method of pricing that would recognize quality differences. Prior to the computation of ARCD we tested the accuracy of GHI board designation and found that most of the errors were on the side of entering non-board status for a board-certified physician rather than vice versa. (See Appendix.)

RESEARCH DESIGN AND PROCEDURE FOLLOWED

The simulation is designed to provide more concrete information on the altered program outlays, effects on providers, and impacts on beneficiary burden to be expected from certain alternatives to the current method. While this study cannot trace ultimate consequences for quality, supply and demand responses, and other matters of broad interest, it is intended to produce a systematic comparison of certain financial and economic effects of alternative payment systems. Since a common claims data set was used, the effect of the payment basis can be isolated without concern for variation introduced by time periods, geography, and carrier differences - or the methodological diversity of individual investigators.

The data source for the simulations is the Queens Medicare history extract file for CY (calendar year) 1976 and 1977. It was obtained from Group Health, Inc., the Part B carrier for the county.

The entire CY 1976 file was used to compute the prevailing fees under the present method and under four alternative methods. A "pay" program to determine the al-

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3/ This is not to say that specialty boards are a fully satisfactory measure of quality: they do not tell current knowledge or actual performance or guarantee superior outcome. They are, however, more indicative than self-designation.

lowed charge in an individual claim incorporating the pricing result of each simulated method was written. The program selected the lowest of: submitted charge, customary charge, and prevailing. The reason for not using the current GHI program is that the "pay" aspect is integrated with the whole claims processing program.

The five different methods of payment include:

- Benchmark - the method actually used by GHI to pay claims for the period under study. The prevailings are computed for each procedure/specialty/type of service combination based on the 75th percentile of the distribution of weighted customaries, adjusted for the Economic Index and the "no rollback" provision.

- Unadjusted prevailing - the 75th percentile of the distribution of weighted customaries which serves as a base for the benchmark.

- Single prevailing - the carrier-wide prevailing computed without regard to specialty.

- Average reasonable charge, single fee - the average reasonable charge (lowest of submitted, customary, and prevailing) actually determined on CY 1976 data. Computed without regard to specialty.

- Average reasonable charge, dual fee - the average reasonable charge determined on CY 1976 data for board-certified physicians and for non-board physicians separately.

The values for the three first methods: (benchmark, unadjusted prevailing, and single fee) were provided by GHI and constitute a part of its reasonable charge process for FSY 1978. The average reasonable charge fees were computed using claims for services performed for FSY 1976 (claims "entered DP" - the GHI computer system - between July 1, 1975 and June 30, 1976). For the computation of the ARC it was necessary to price all claims for services in FSY 1976 (the GHI claims record does not include allowed charges) using GHI customary and prevailing screens in effect during FSY 1976. The computational formula for ARC is as follows:

$$ARC_p = \left(\sum_{i}^{n} AL_p \right) / n$$

Where:

ARC_p - average reasonable charge for a given procedure

AL_p - allowed charge for that procedure in FSY 1976. Allowed charge = the lowest of submitted, customary, or prevailing. When customary and/or prevailing are not available, the allowed charge is equal to the 50th percentile of the distribution of weighted customaries.

n - number of allowed charges

For the dual ARC the claims of board-certified physicians were used to produce ARC_B and claims of non-board physicians were used to compute ARC_{NB} us-

ing the above formula. (See Appendix for a test of the goodness of the GHI board designation.) It is felt that the use of the fee screen year instead of the calendar year in computation of ARC is preferable since within a single CY two sets of reasonable charges are used, thus distorting the evaluation of the effect of the different payment methods.

In computation of the average reasonable charges, claims which differed by more than two standard deviations from the mean were excluded. The GHI profile development used in computation of customary and prevailing charges applies the same rule for exclusion of extreme values. Also excluded were claims of providers who did not appear on the Provider Master File supplied by GHI.

The effect of the payment methods under study was evaluated using claims for the period July 1 - December 31, 1977. The claims data file does not have the exact date of service; it has the date "entered DP", and this was the basis used by us to select the claims for the test. Each claim for one of the 44 selected procedures was priced under each payment method and the results were compared. The 44 selected procedures are identified in the Appendix. They account for 67% of the submitted charges and 78% of services in the last period and are in a group of 50 procedures that were designated by HCFA for carrier reporting.

The following measures of effect were used in the comparison:

Allowed charge = the lowest of submitted, customary, and prevailing charges

Program outlay = 80% of allowed charge
As the deductible is not accounted for, this is an overestimate to the extent of the deductible.

Physician revenue
- a) for assigned claims = allowed charge
  This assumes that the deductible and coinsurance are collected.
- b) for unassigned claims = submitted charge

Beneficiary burden
- a) for assigned claims = 20% of allowed charge
- b) for unassigned claims = submitted - 80% of allowed charge
  For both a) and b), the deductible is not accounted for; hence burden is underestimated.

Two files were created as a basis for the analysis, the provider file and the beneficiary file. (See record layouts.) The provider file was used in the evaluation of outlay and physician revenue. The beneficiary file was used to evaluate the effect of payment methods on beneficiary burden.

The reasonable charge process determines the allowed charge at the level of the lowest of submitted, customary, or prevailing.

Under ARCS and ARCD the basis used for determining allowed charge was slightly different. It was based on the relationship of the customary to the average reasonable charge, as follows:

$$\text{Allowed} = \text{Submitted if } S < C, P, ARC$$

$$\text{Allowed} = ARC \text{ if } S > ARC < C, P$$

Allowed = Customary if
$ARC < C < P$

Allowed = Prevailing if
$P < C, S, ARC$

Where: S = Submitted charge
C = Customary charge
P = Prevailing charge at the level computed for benchmark
ARC = Average reasonable charge, either single or dual

This method of computing the allowed charge was employed in order to assure that all providers will be "held harmless", i.e., their allowed charges under ARC will not be lower than what they would have been under benchmark.

Changing the payment method would affect the determinant of the allowed charge, i.e., the frequency with which the allowed charge was determined at the level of (no higher than) customary, prevailing, or submitted charge. While "paying" the claims in the simulation both the level and the origin of the allowed charge were added to the record, making possible the evaluation of the difference among the payment methods with regard to the origin of allowed charges.

Another measure used in evaluating the payment methods was the ratio of allowed charges to submitted charges, which provides a measure of the reduction in submitted charges due to each method.

The effect of payment method on program outlay was measured by the ratio of the outlay under each method to the outlay that would have occurred had the benchmark method been used. A ratio higher than 100% indicates an increase in outlay, and a ratio lower than 100% indicates a decrease. Specialty assignment profile and aggregate submitted charges are also taken into consideration in evaluating the effect of payment methods on outlay.

In evaluating the effect on physician Medicare revenue, the number of physicians whose revenue increased, decreased or remained unchanged, and the magnitude of the change as compared to benchmark, were computed. Not all the methods under the study were included in this part of the analysis - only single fee and ARCS, which were the most interesting. These two methods were also the only ones included in an analysis of beneficiary burden, in which the numbers of beneficiaries who were unaffected, those whose burden increased, and those whose burden decreased, and the magnitude of change were compared to benchmark. The assignment characteristics and aggregate submitted charges of the beneficiaries were also taken into consideration.

Some characteristics of providers and beneficiaries in Queens whose claims were included in the test ("entered DP" July 1 - December 31, 1977) are relevant to this study. The assignment rate for our purpose is the ratio of assigned to total submitted charges. Figures on assignment for the 1631 providers in the study indicate a median of 19% for all providers, with general and family practice at 8%, surgical specialties at 22%, medical specialties at 29% and "other" specialties at 41%. (For definitions of specialty groups see Appendix.) Medical and surgical specialists are equally likely to accept assignment for all the Medicare services they provide: about 9% of providers in those groups always accept assignment. GPs are least likely to accept assignment: 37% never accept it and only 3% always do so. About 30% of "other specialties" always accept assignment and an equal number never do so.

The distribution of providers by the level of aggregate submitted charges is also instructive. The median for all physicians is $2,706 for the six months of the test. "Other" specialties have a median of $775, surgical specialties $1,917, GPs $2,321, and medical specialists are highest with $6,863.

Claims of 80,400 beneficiaries are included in the analysis; since providers were not likely to accept assignment, only 21% of beneficiaries had all of their claims assigned; 73% had no assigned claims at all and only 6% had some assigned claims. The median aggregate submitted charges for beneficiaries are $157.00 for the six months of the test; 24.5% of beneficiaries have less than $30.00, which means they are not likely to meet the deductible of $60.00 in the full year of benefits. Eighty-eight percent of the beneficiaries have aggregate submitted charges under $200.00.

RESULTS OF SIMULATION

The results of simulation of the effect of changing payment methods on program outlay, physicians' revenue, and beneficiary burden are presented below. The origin of allowed charges and the ratio of allowed to submitted charges under each method are presented first followed by the effect of payment methods on the measures of interest.

Origin of Allowed Charges

We have examined for each method the determinant of the allowed charge - i.e., which of the three possible sources became the allowed charge. As indicated above, at the time of "paying" the claim both the source (origin) of the allowed charge and its value were added to the record. The results for the whole file were summarized. These indicate that in all the methods considered the allowed charge generally emerges below the submitted charge. The highest proportion of allowed charges at the submitted charge level was 12.1% for ARCD, followed by 11.7% for ARCS. As for the remaining three methods, when unadjusted prevailings were used, the submitted charge became the allowed charge for 6.5% of services; for benchmark and single fee, comparable figures were 5.2% and 5.3% respectively.

The payment methods differ more sharply with regard to the proportion of services allowed at the customary level (this includes the condition when the customary is equal to the prevailing and/or submitted charge). The proportion varies from 81.9% for unadjusted prevailing to 40.4% for ARCD. Benchmark and single fee are similar to each other in this respect with 52.3% and 47.3% respectively.

The prevailing as the limiting factor in determining the value of the allowed charge increased in importance from 11% of services, including those priced at the carrierwide prevailing, for unadjusted prevailing to 46.9% for single and ARCD. For benchmark, the prevailing determined 41.9% of the allowed charges.

Ratio of Allowed Charges to Submitted Charges

The median ratio of allowed to submitted charges (per service) varies from 0.82 for benchmark to 1.00 for the unadjusted prevailing. ARCS and ARCD are close together and similar to benchmark; and the ratio for single is 0.85. The mode for all the methods was 1.00, occurring 31% of the time for single fee and 55.4% for unadjusted. The remaining payment methods were similar with ARCS and

ARCD at 37.5%, and benchmark had 36% of services for which the ratio of allowed to submitted charges equalled 1.00. Thus, in respect to fee reduction, ARCS and ARCD are very similar to benchmark. More than half of the services are priced at 80% or more of the submitted charge under all the methods considered.

Program Outlay by Method of Payment

The effect of method of payment on program outlay was measured by the ratio of outlay under each method to outlay under benchmark. Of the four methods tested, only single fee showed a decrease in program outlay (98.1%). ARCS and ARCD did not have a major effect - only about half a percent, while unadjusted prevailing caused an increase of 8.7% above benchmark. The difference between benchmark and unadjusted prevailing is due to the application of the Economic Index, which appears to be effective in holding costs down.

Board certification status of the provider does not influence outlays when unadjusted, ARCS, and ARCD are used. When single fee is used outlay is reduced to 94.51% of benchmark for board-certified physicians and only to 99.0% for non-board certified MDs. The ratio of outlay under ARCS to outlay under single fee is 106% for board-certified physicians and 101% for the non-board group.

When specialty types are taken into consideration the outlay for GPs is higher than benchmark for all the methods considered - 12.6% under unadjusted prevailing, 10.8% under single fee, and 1.6% and 1.3% for ARCS and ARCD. The other specialty groups affect outlay by less than 1% under ARCS and ARCD, but reduce it under single fee to 91.8% for surgical specialties, 93.4% for "other" specialties and 97.2% for medical specialties. While outlay for each individual specialty was higher under ARCS and ARCD than under benchmark only general practice (01), general surgery (02), and pulmonary diseases (29) have an increase in outlay of 1% or more.

Under single fee outlay went up for GPs (01) by 11.8%, and went down for 12 of the 24 individual specialties. Specialties with most reduced outlays when single fee is compared to benchmark are: dermatology (07) with a ratio of 80.02%, ophthalmology (18) - 81.93%, otolaryngology (04) - 83.70%, neurology (13) - 84.03%, obstetrics (16) - 84.21%, and psychiatry (26) with a ratio of 89.61%. Those that had ratios in the 90s are: pathology (22), physical medicine (25), orthopedic surgery (20), internal medicine (11), radiology (30), and urology (34). Of the twelve specialties that show a ratio of outlay higher than 100% of that under benchmark, eleven vary by less than 1% but GPs (01) show a substantial increase of 11.82%.

All specialties show a higher outlay ratio to benchmark (of 100% or more) when unadjusted prevailings are used; the magnitude varies from a low of 100.6% for urology (34) to a high of 124.9% for orthopedic surgery (20). This suggests that specialties have different rates of fee inflation and their sensitivity to the index varies.

Assignment characteristics and the level of aggregate submitted charges of the individual providers do not alter the effect of payment methods on outlay.

Effect of Payment Method on Physician Revenue

In order to assess the effect of payment method on the revenue of physician providers, they were partitioned into three groups: those whose revenue increased because of the method, those whose revenue declined, and those whose revenue re-

mained unchanged as compared to what it was under benchmark. Two experimental payment methods were evaluated - the single fee and the average reasonable charge, single fee (ARCS).

Since the revenue from unassigned claims equals submitted charges by definition, all the change in revenue observed is due to assigned claims only. For individual physicians, therefore, the effect would depend on their assignment rate.

Under single fee, the revenue of 45% of physicians remained unchanged, the revenue of 20% averages 102.4% of benchmark, and 36% have their revenue reduced to 98.4% of what it was under benchmark. When board certification is taken into account the proportion of those who are not affected remains at 45% for both board and non-board physicians but 8% of board doctors as compared to 23% of non-board doctors have enhanced revenue under single fee.

The extent of increase is also higher for non-board MDs - 2.7% vs. 0.7% for board-certified physicians. Forty-six percent of board-certified physicians would have a revenue averaging 98.3% of benchmark under the single fee method and 32% of non-board doctors would have 98.4% of benchmark: the effect of the method is even more varied when specialty types are considered. Sixty-eight percent of physicians in medical specialties would have their Medicare revenue reduced to an average of 99.1% of that under benchmark, 45% of GPs would have their revenue increased by 3.2%, and 60% of "other" specialties would feel no change in revenue. While for 43% of surgeons there would be no effect on revenue, 41% would see a decrease to 97.2% (on the average) of revenue under benchmark and 15% would experience a small increase (0.6%).

Individual specialties with only a few practitioners are unaffected. This is partially due to the method of determining the reasonable charge by using the carrier-wide (single fee) prevailing when no valid prevailing for a procedure exists. The specialties with the highest proportions of physicians whose revenue would be enhanced are general practice (01) - 46%, general surgery (02) - 39%, orthopedic surgery (20) - 35%, and family practice (08) - 28%. The amount of increase, however, is high only for GPs - 3.4%; for the other specialties it varies from a high of 2.3% for radiology (30) to 0.1% for family practice. The specialties with highest proportions of physicians whose revenue would go down under single fee as compared to benchmark are: neurology (13), ophthalmology (18), dermatology (07), otolaryngology (04), internal medicine (11), urology (34), and orthopedic surgery (20), in which over 50% of physicians were affected. The amount of decrease in revenue varies from 10% for physical medicine (25) to less than 2% for general surgery (02).

Under ARCS 87% of providers would have the same revenue from Medicare as they had under benchmark, and 13% would go up, the average increase being less than 1%. The proportion of physicians whose revenues will be unaffected varies from 78% for GPs to 97% for "other" specialties; 94% of surgeons will not see a change in revenue as compared to benchmark. For those whose revenue will be enhanced only GPs will have an average increase of more than 1%.

Most individual specialties have only a few physicians whose revenue would go up; the only two specialties with substantial number of providers whose revenue will increase are general practice and internal medicine but the average increase for the latter is less than one third of one percent. The physicians most affected are those who always accept assignment, but even of these only 9% (13 physicians) have increased revenue and the increase is only 1.4% on the average. The small numbers of physicians in individual specialties who always accept assignment make further

analysis of revenue by assignment characteristics of physicians of little value.

When physician revenue under ARCS is compared to revenue under single fee results are quite different from those obtained by comparing ARCS to benchmark. Thirty-nine percent of physicians will experience no change in revenue, 42 will have an increase of 1.6% on the average and 18% a decrease of 2.5%. Specialty types are affected differently: 72% of medical specialists will have a revenue higher by 0.9%, on the average, than what they would have had under single fee, 27% will see no change and 1% will have a decrease of 0.2%. Forty-five percent of GPs will have no change of revenue, 41% will lose 3.4% on the average, and 14% will gain 1.9%. Forty-five percent of surgical specialists will gain 2.8% in revenue, 40% will see no change, and 15% will experience a decrease of 0.5%. Board certification status is of some importance to the revenue effect: 42% of board-certified and 38% of non-board doctors will not experience a change in revenue, 49% of board and 40% of non-board doctors will have an increase in revenue averaging under 2%, 8% of board doctors will have a decrease of 0.7% and 21% of non-board doctors will have a decrease of 2.7%.

Among individual specialties only GPs (01), general surgeons (02), and orthopedic surgeons (20) have 30% or more physicians whose revenues will go down under ARCS as compared to single fee, but only GPs' revenue will go down by more than 2%.

Eighty-nine percent of neurologists (13) will have an average increase in revenue of 6.4%. Specialties in which 50% or more of physicians have an increase in revenue are: ophthalmology (18), otolaryngology (04), dermatology (07), internal medicine (11), urology (34), orthopedic surgery (20), physical medicine (25), and pulmonary diseases (29). Dermatologists have the highest rate of increase (8.8%) over revenue under single fee.

Effect of Payment Method on Beneficiary Burden

Of the 80,400 beneficiaries whose claims were included in the simulation 73.3% had no assigned claims at all, 20.7% had all claims assigned and the remainder ranged between 1% and 99%.

The beneficiary burden under all payment methods is dependent on the allowed charge regardless of assignment status but whereas for assigned claims it is limited to the level of 20% of allowed charges, for unassigned claims no such limit exists.

When burden under single fee is compared to burden under benchmark, 47% of beneficiaries saw their out-of-pocket expenses go up by 17%, on the average, for 27% the burden went down by 14%, and 26% of beneficiaries remained unaffected.

The largest group of beneficiaries (three-quarters) had no assigned claims at all. For 55% of them the out-of-pocket expenses went up by 19.3% on the average, 24% experienced no change in burden due to a change to single fee, and 21% even saw their burden reduced by 18%.

Single fee had an opposite effect on beneficiaries who had only assigned claims; 50% of these experienced a decrease of 7.5% on the average in out-of-pocket costs, 34% had no change in costs and 16% had an average increase of 10.5% in burden.

The level of aggregate submitted charges does not play a role in the effect of single fee on beneficiary burden.

The beneficiary burden under ARCS is not very different from that under benchmark. For 92% of the beneficiaries burden is unchanged, for 7% it goes down by 10% on the average, and 1% experience an increase of 5%.

For beneficiaries with no assigned claims 91% see their burden unaffected and the remaining 9% experience an average decrease of 10%. Beneficiaries who have only assigned claims are either unaffected (95%) or have an average increase of 7% in their out-of-pocket expenses.

It is to be expected that when the beneficiary burden under ARCS is compared to single fee most beneficiaries would experience relief. Fifty-one percent have a decrease of 15% on the average, 21% experience no change and 28% have an increase in out-of-pocket expenses of 16%. The effect of the payment method is quite different for the beneficiaries who have all their claims assigned - 54% will have an increase of about 8% in their out-of-pocket expense under ARCS as compared to single fee, 30% will experience no change, and 16% will see a decrease of 10% in their burden.

SUMMARY AND CONCLUSIONS

The allowed charges are determined at the level of submitted charges less frequently than at the customary and prevailing level under all the methods considered; under both average reasonable charge methods 12% of the services were priced at this level, double the proportion of services priced at the level of submitted charges under benchmark, unadjusted prevailing, and single fee.

The customary charge is the most important determinant of allowed charges under unadjusted prevailing and benchmark, whereas the prevailing is a more frequent determinant of the level of allowed charges under single fee; customary and prevailing are of equal importance in determining the allowed charges (about 40% each) under both ARCS and ARCD. The average reasonable charge accounts for an additional 5%.

The actual level of allowed charges, however, is not very far removed from submitted charges - for more than half of the services the allowed charge is more than 80% of submitted charges under all methods.

Program outlay is lowest when single fee is applied as the method of payment. Average reasonable charge causes only a slight increase (about half of a percent) in outlay. Individual physicians are affected differently by changes in the method of payment. Assignment characteristics and the level of aggregate submitted charges do not influence the effect of payment method on outlay.

The Economic Index is effective in holding program costs down, as can be seen from the comparison of outlay under unadjusted prevailing to outlay under benchmark; individual specialties are affected by the index in different ways. The reasons for this involve differences in the composition of expenses based on location and technology of practice and other factors, and differences in the ratio of expenses to gross earnings. Indices that would recognize different classes of physicians based on these factors, or would differentiate among specialties, may be more equitable and effective. Only single fee and ARCS were evaluated for effect on physician revenue. Under single fee the revenue of 45% of providers remains the same as under benchmark, for 20% of providers the revenue went up 2% and for 36% it went down 2%. Non-board physicians were likely to have their revenues increased by about 3%. The same increase was experienced by

45% of GPs. Since specialty fees tend to be higher than GPs' fees and since specialists are more likely to be board-certified, the results are to be expected when prevailing charges are computed without regard to specialty. It is of interest to explore the reasons for higher fees for specialist services. If the service provided under the same procedure code is the same whether the physician is a specialist or GP then there is no reason to have separate screens; even if the services were different the procedure codes could be defined so that the difference would be recognized and this would allow joint screens for all providers of a procedure. GHI and other carriers no doubt have to use carrierwide screens when the number of providers within a specialty is too small to form a prevailing. The single fee would cause a reduction of revenue for some specialists. This reduction may be justified if the higher fees they are commanding are not due to quality of the services they provide but provide economic rent.

The ARCS was so defined as not to cause a decrease in physician revenue, and it did not. Most physicians would remain at their benchmark level and some would gain a little. Most likely to see an increase in revenue under ARCS are GPs and physicians specializing in internal medicine.

Since revenue under ARCS may be similar to benchmark, when ARCS is compared to single fee the results are the opposite of those observed when single fee was compared to benchmark.

Almost half of the beneficiaries whose claims were included in the test would experience an increase of 17% in their out-of-pocket expenses if single fee instead of benchmark were used as the payment method, a quarter would experience no change and a quarter would have a decrease of 14% on the average. The extent to which burden is affected by payment method is directly related to assignment status of the beneficiary. Those who have no assigned claims at all - about three-quarters of the beneficiaries - were most likely to have an increase in burden. Half of the beneficiaries who had all their claims assigned to providers experienced a decrease in burden and only 16% had an increase.

Under ARCS more than 90% of the beneficiaries experience no change in burden. Other payment methods were not evaluated.

Of the two methods for which effect on outlay, physician revenue, and beneficiary burden was reviewed, one, ARCS, had little effect and would cause no disruption to any of the participants in the system.

The other, single fee, would reduce program cost to the government, and would affect physician revenue only slightly but would substantially increase the out-of-pocket expenses of about half of the beneficiaries. The desirability of shifting costs from government to the elderly in a period of inflation is highly questionable since their income is fixed. Aside from injury to equity, there could be an adverse effect on local markets dependent on the purchases of the elderly.

Since the ARCS does not seem to have a significant effect on any of the participants the cost involved for its installation may not be justified.

LEGEND FOR TABLES 7 - 17

Symbol	Explanation
All claims	Assigned plus unassigned claims
B	Benchmark (adjusted prevailing)
U	Unadjusted prevailing
S	Single fee
AS	Average reasonable charge, single fee
AD	Average reasonable charge, dual fee

Tables 7 - 9

Symbol	Explanation
U_B, S_B, AS_B, AS_S, AD_B	Difference between program outlay for the respective payment methods, e.g., U_B is outlay under unadjusted prevailing minus outlay under benchmark
U_TO_B, S_TO_B, AS_TO_B, AS_TO_S, AD_TO_B	Ratios of program outlay under respective methods of payment, e.g., U_TO_B is ratio of outlay under unadjusted prevailing to outlay under benchmark

Tables 10 - 17

Symbol	Explanation
N_UP	Number up - number of individuals whose revenue or burden increases under the test method
PCT_UP	Percent up - percent of individuals whose revenue or burden increases under the test method
B_UP, S_UP, AS_UP, AD_UP	Revenue or burden of above individuals under various methods of payment

LEGEND FOR TABLES 7 - 17 (continued)

Symbol	Explanation
Tables 10 - 17 (continued)	
SB_UP ASB_UP ADB_UP	Ratios of revenue or burden under test method to that under benchmark for above individuals, e.g., SB_UP is the ratio of the value under single fee to the value under benchmark
N_DN	Number down - number of individuals whose revenue or burden decreases under the test method
PCT_DN	Percent down - percent of individuals whose revenue or burden decreases under the test method
B_DN S_DN AS_DN AD_DN	Revenue or burden of above individuals under various methods of payment
SB_DN ASB_DN ADB_DN	Ratios of revenue or burden under test method to that under benchmark for above individuals, e.g., SB_DN is single fee/ benchmark ratio
N_EQ	Number equal - number of individuals whose revenue or burden is the same under both methods being compared
PCT_EQ	Percent equal - percent of individuals whose revenue or burden is the same under both methods being compared
B_EQ S_EQ AS_EQ AD_EQ	Revenue or burden of above individuals under various methods of payment

TABLES

TABLE 1

Distribution of Provider Characteristics by Specialty Type

Assignment Rate* (Percent)	Total Percent	Total Cumulative Percent	General Practice Percent	General Practice Cumulative Percent	Medical Percent	Medical Cumulative Percent	Surgical Percent	Surgical Cumulative Percent	Other Percent	Other Cumulative Percent
0	27.2%	27.2%	36.8%	36.8%	15.8%	15.8%	26.7%	26.7%	30.7%	30.7%
1 - 4	6.7	33.9	7.8	44.6	7.1	22.9	6.1	32.8	3.9	34.6
5 - 9	6.5	40.4	8.4	53.0	5.1	28.0	6.4	39.2	3.9	38.5
10 - 15	6.6	47.0	5.9	58.9	8.4	36.4	7.0	46.2	0.8	39.3
16 - 23	6.6	53.6	8.0	66.9	7.8	44.2	4.1	50.3	7.1	46.4
24 - 30	6.2	59.8	6.5	73.4	6.9	51.1	6.6	56.9	0.8	47.2
31 - 40	6.2	66.0	6.8	80.2	7.1	58.2	5.7	62.6	2.4	49.6
41 - 50	5.7	71.7	4.3	84.5	6.9	65.1	6.3	68.9	4.7	54.3
51 - 89	12.9	84.6	9.0	93.5	15.8	80.9	14.3	83.2	12.6	66.9
90 - 99	6.6	91.2	3.1	96.6	10.2	91.1	7.6	90.8	3.1	70.0
100	8.9	100.0	3.3	99.9	8.9	100.0	9.2	100.0	29.9	99.9
n	1,631		511		450		543		127	
Median Assignment Rate	19%		8%		29%		22%		41%	

*Assigned submitted charges as percent of total submitted charges.

Source: PIPGC775

TABLE -

Distribution of Providers by Level of Aggregate Submitted Charges and Specialty Type

Aggregate Submitted Charges*	Total		General Practice		Medical		Surgical		Other	
	Percent	Cumulative Percent	Percent	Cumulative Percent	Percent	Cumulative Percent	Percent	Cumulative Percent	Percent	Cumulative Percent
Under $1,000	34.9%	34.9%	32.9%	32.9%	22.7%	22.7%	40.0%	40.0%	64.5%	64.5%
$1,000 - 1,999	9.8	44.7	13.5	46.4	4.9	27.6	10.9	50.9	7.9	72.4
$2,000 - 2,999	7.5	52.2	11.2	57.6	5.1	32.7	6.4	57.3	6.3	78.7
$3,000 - 3,999	5.8	58.0	6.7	64.3	6.0	38.7	5.3	62.6	3.9	82.6
$4,000 - 4,999	5.3	63.3	8.0	72.3	4.4	43.1	3.3	65.9	5.5	88.1
$5,000 - 5,999	4.0	67.3	4.5	76.8	3.1	46.2	4.6	70.5	3.1	91.2
$6,000 - 6,999	3.6	70.9	4.1	80.9	4.4	50.6	2.8	73.3	2.4	93.6
$7,000 - 8,999	6.1	77.0	6.3	87.2	8.0	58.6	4.6	77.9	5.5	99.1
$9,000 - 10,999	5.0	82.0	5.3	92.5	6.0	64.6	4.8	82.7	0.8	99.9
$11,000 - 14,999	6.3	88.3	3.7	96.2	10.4	75.0	6.8	89.5		
$15,000 - 20,999	6.0	94.3	3.3	99.5	11.8	86.8	5.2	94.7		
$21,000 - 44,999	5.0	99.3	0.6	100.1	12.0	98.8	4.6	99.3		
$45,000 and over	0.6	99.9			1.1	99.9	0.7	100.0		
n	1,631		511		450		543		127	
Median Aggregate Submitted Charges	$2,706		$2,321		$6,863		$1,917		$775	

* 44 selected procedures

Source: PIPGC853

TABLE 3

Distribution of Beneficiaries by Aggregate Submitted Charges

Aggregate Submitted Charges *	Number	Percent	Cumulative Percent
Under $30	19,733	24.5%	24.5%
$ 30 - 49	16,655	20.7	45.2
$ 50 - 74	12,982	16.1	61.3
$ 75 - 99	8,571	10.7	72.1
$ 100 - 149	8,814	11.0	83.1
$ 150 - 199	3,692	4.6	87.7
$ 200 - 299	3,344	4.6	91.9
$ 300 - 394	1,744	2.2	94.1
$ 400 - 499	1,072	1.5	95.4
$ 500 - 999	2,294	2.9	98.3
$1,000 and over	1,499	1.9	100.0
n	80,400		

Median - $57

* 44 selected procedures

Source: PIPCC854

TABLE 4

Distribution of Payment Origin of Allowed Charges by Method of Payment (Weighted by Number of Services)

Type of Charge Used As Basis of Allowed Charge	Method of Payment (Type of Prevailing Used in Reasonable Charge Process)				
	Benchmark	Unadjusted	Single	ARCS	ARCD
Customary	40.0	54.4	45.2	29.0	28.1
Prevailing	39.6	9.7	46.9	41.9	41.9
Fiftieth percentile	0.5	0.5	0.5	0.5	0.5
Carrier-wide	2.3	1.3	N.A.	4.5*	5.0*
Submitted	5.2	6.5	5.3	11.7	12.1
Prevailing equal to customary	12.3	27.5	2.1	12.3	12.3

*ARC

Source: PIPGC 708, 4/25/79

TABLE 5

Cumulative Frequency Distribution of Number of Services by Ratio of Allowed Charges to Submitted Charges for Each Method of Payment

	Method of Payment (Type of Prevailing Used in Reasonable Charge Process)				
Ratio	Benchmark	Unadjusted	Single	ARCS	ARCD
.00	0.00%	0.00%	0.00%	0.00%	0.00%
.10	0.00	0.00	0.00	0.00	0.00
.20	0.01	0.01	0.01	0.00	0.00
.30	0.10	0.05	0.16	0.09	0.09
.40	0.63	0.34	1.91	0.50	0.50
.50	2.91	1.26	4.63	2.58	2.56
.60	9.84	3.80	12.40	9.51	9.48
.70	18.44	8.58	29.11	16.34	16.33
.80	43.00	28.20	41.43	41.65	41.00
.90	57.63	39.45	54.24	55.29	55.93
1.00	100.00	100.00	100.00	100.00	100.00
Median	.82	1.00	.85	.82	.82
Mode *	1.00 (36.43)	1.00 (55.43)	1.00 (31.02)	1.00 (37.50)	1.00 (37.46

*Numbers in parentheses are percents of distributions represented by mode.

Source: PIPGC696

TABLE 6

Cumulative Frequency Distribution of Claims by Ratio of Allowed Charges to Submitted Charges for Each Method of Payment

	Method of Payment (Type of Prevailing Used in Reasonable Charge Process)				
Ratio	Benchmark	Unadjusted	Single	ARCS	ARCD
.00	0.00	0.00	0.00	0.00	0.00
.10	0.00	0.00	0.00	0.00	0.00
.20	0.01	0.01	0.01	0.00	0.00
.30	0.15	0.06	0.23	0.13	0.13
.40	0.97	0.49	3.18	0.79	0.79
.50	4.20	1.85	7.27	3.75	3.73
.60	13.00	5.41	18.22	12.58	12.56
.70	20.50	10.12	38.86	18.31	18.32
.80	46.91	30.52	48.84	45.46	45.11
.90	57.37	41.24	57.89	55.67	56.18
1.00	100.00	100.00	100.00	100.00	100.00
Median	.82	1.00	.81	.82	.82

Source: PIPCC696

TABLE 7

PROGRAM OUTLAY FOR SELECTED PROCEDURES BY METHOD OF PAYMENT, BY SPECIALTY
ALL SPECIALTIES

7:40 WEDNESDAY, JUNE 6, 1979

NUMBER	B	U	S	AS	AD	U_B	S_B	AS_B	AS_S	AD_B	U_TO_B	S_TO_B	AS_TO_B	AS_TO_S	AD_TO_B
1631	6288114	6835306	6169418	6322742	6321493	547192	-118696	34628	153324	33379	108.70	98.11	100.55	102.49	100.53

PROGRAM OUTLAY FOR SELECTED PROCEDURES BY METHOD OF PAYMENT, BY SPECIALTY TYPE

7:40 WEDNESDAY, JUNE 6, 1979

SPEC_TYP	NUMBER	B	U	S	AS	AD	U_B	S_B	AS_B	AS_S	AD_B	U_TO_B	S_TO_B	AS_TO_B	AS_TO_S	AD_TO_B
GP.	511	1257034	1414919	1392503	1276482	1272929	157885	135469	19448	-116021	15895	112.56	110.78	101.55	91.67	101.26
MED.	450	2901818	3165838	2820707	2910157	2910660	264020	-81111	8339	89450	8842	109.10	97.20	100.29	103.17	100.30
SURG.	543	1989219	2110886	1825359	1995963	1997543	121667	-163860	6744	170604	8324	106.12	91.76	100.34	109.35	100.42
OTHER	127	140043	143663	130848	140140	140361	3620	-9195	97	9292	318	102.58	93.43	100.07	107.10	100.23

PROGRAM OUTLAY FOR SELECTED PROCEDURES BY METHOD OF PAYMENT, BY BOARD CERTIFICATION STATUS

7:40 WEDNESDAY, JUNE 6, 1979

CERT_TYP	NUMBER	B	U	S	AS	AD	U_B	S_B	AS_B	AS_S	AD_B	U_TO_B	S_TO_B	AS_TO_B	AS_TO_S	AD_TO_B
BOARD	377	1824410	1968383	1724242	1828326	1832698	143973	-100168	3916	104084	8288	107.89	94.51	100.21	106.04	100.45
NON_BD.	1254	4463704	4866923	4445176	4494417	4488795	403219	-18528	30713	49241	25091	109.03	99.58	100.69	101.11	100.56

TABLE 7 (continued)

PROGRAM OUTLAY FOR SELECTED PROCEDURES BY METHOD OF PAYMENT, BY SPECIALTY

7:40 WEDNESDAY, JUNE 6, 1979

SPEC	NUMBER	B	U	S	AS	AD	U_B	S_B	AS_B	AS_S	AD_B	U_TO_B	S_TO_B	AS_TO_B	AS_TO_S	AD_TO_B
01	493	1140344	1296548	1275102	1159074	1155616	156204	134758	18730	-116028	15272	113.70	111.82	101.64	90.90	101.34
02	157	459555	511309	461642	464154	464590	51754	2087	4599	2512	5035	111.26	100.45	101.00	100.54	101.10
03	8	5522	5947	5522	5534	5526	425	0	12	12	4	107.70	100.00	100.22	100.22	100.07
04	42	75593	76531	63268	76023	76029	938	-12325	430	12755	436	101.24	83.70	100.57	120.16	100.58
06	17	91610	100996	91610	91892	91847	9386	0	282	282	237	110.25	100.00	100.31	100.31	100.26
07	40	70143	71223	56125	70417	70318	1080	-14018	274	14292	175	101.54	80.02	100.39	125.46	100.25
08	18	116690	118371	117402	117409	117313	1681	712	719	7	623	101.44	100.61	100.62	100.01	100.53
10	4	25208	25905	25208	25230	25233	697	0	22	22	25	102.76	100.00	100.09	100.09	100.10
11	377	2692126	2943797	2625034	2699650	2700340	251671	-67092	7524	74616	8214	109.35	97.51	100.28	102.84	100.31
13	18	30226	30618	25399	30242	30240	392	-4827	16	4843	14	101.30	84.03	100.05	119.07	100.05
14	3	343	425	343	343	343	82	0	0	0	0	123.91	100.00	100.00	100.00	100.00
16	150	50082	53154	42174	50326	50579	3072	-7908	244	8152	497	106.13	84.21	100.49	119.33	100.99
18	85	721711	727918	591280	722418	722660	6207	-130431	707	131138	949	100.86	81.93	100.10	122.18	100.13
20	46	202430	252778	195033	202510	202506	50348	-7397	80	7477	76	124.87	96.35	100.04	103.83	100.04
22	15	16887	17103	15315	16897	16897	216	-1572	10	1582	10	101.28	90.69	100.06	110.33	100.06
24	2	582	696	582	582	582	114	0	0	0	0	119.59	100.00	100.00	100.00	100.00
25	14	11246	11780	10638	11266	11473	534	-608	20	628	227	104.75	94.59	100.18	105.90	102.02
26	26	6596	6910	5911	6639	6653	314	-685	43	728	57	104.76	89.61	100.65	112.32	100.86
28	5	12216	12998	12216	12232	12229	782	0	16	16	13	106.40	100.00	100.13	100.13	100.11
29	4	17209	17970	17209	17434	17397	761	0	225	225	188	104.42	100.00	101.31	101.31	101.09
30	50	74852	77009	73349	74859	74862	2157	-1503	7	1510	10	102.88	97.99	100.01	102.06	100.01
33	13	57144	62933	57144	57168	57169	5789	0	24	24	25	110.13	100.00	100.04	100.04	100.04
34	40	409562	412145	401678	410206	410857	2583	-7884	644	8528	1295	100.63	98.08	100.16	102.12	100.32
49	4	236	244	236	236	236	8	0	0	0	0	103.39	100.00	100.00	100.00	100.00

TABLE 8

PROGRAM OUTLAY FOR SELECTED PROCEDURES BY METHOD OF PAYMENT AND PHYSICIAN ASSIGNMENT CHARACTERISTICS

7:48 WEDNESDAY, JUNE 6, 1979

ASGN	NUMBER	B	U	S	AS	AD	U_B	S_B	AS_B	AS_S	AD_B	U_TO_B	S_TO_B	AS_TO_B	AS_TO_S	AD_TO_B
0	443	442766	481262	441810	445626	445458	38496	-956	2860	3816	2692	108.69	99.78	100.65	100.86	100.61
1-4	110	510845	550417	501533	514548	514575	39572	-9312	3703	13015	3730	107.75	98.18	100.72	102.60	100.73
5-9	106	543021	588129	529578	544974	544734	45108	-13443	1953	15396	1713	108.31	97.52	100.36	102.91	100.32
10-15	107	551319	595277	537403	557634	556782	43958	-13916	6315	20231	5463	107.97	97.48	101.15	103.76	100.99
16-23	107	623474	678662	610744	627123	626813	55188	-12730	3649	16379	3339	108.85	97.96	100.59	102.68	100.54
24-30	101	601092	644218	595610	605797	606642	43126	-5482	4705	10187	5550	107.17	99.09	100.78	101.71	100.92
31-40	101	588202	634553	571874	592150	591539	46351	-16328	3948	20276	3337	107.88	97.22	100.67	103.55	100.57
41-50	93	528661	570557	520571	530362	530431	41896	-8090	1701	9791	1770	107.92	98.47	100.32	101.88	100.33
51-89	211	1143913	1238102	1118607	1148221	1147792	94189	-25306	4308	29614	3879	108.23	97.79	100.38	102.65	100.34
90-99	107	575010	650590	567664	576065	576489	75580	-7346	1055	8401	1479	113.14	98.72	100.18	101.48	100.26
100	145	179813	203539	174022	180244	180237	23726	-5791	431	6222	424	113.19	96.78	100.24	103.58	100.24

TABLE 9

PROGRAM OUTLAY FOR SELECTED PROCEDURES BY METHOD OF PAYMENT AND VALUE OF AGGREGATE SUBMITTED CHARGES

7:48 WEDNESDAY, JUNE 6, 1979

SUBMIT	NUMBER	B	U	S	AS	AD	U_B	S_B	AS_B	AS_S	AD_B	U_TO_B	S_TO_B	AS_TO_B	AS_TO_S	AD_TO_B
0- 999	569	105574	115057	100721	106622	106568	9483	-4853	1048	5901	994	108.98	95.40	100.99	105.86	100.94
1000- 1999	160	148443	159560	146918	150378	150144	11117	-1525	1935	3460	1701	107.49	98.97	101.30	102.36	101.15
2000- 2999	123	193611	212590	194700	195924	196018	18979	1089	2313	1224	2407	109.80	100.56	101.19	100.63	101.24
3000- 3999	95	218959	238218	217499	221937	221190	19259	-1460	2978	4438	2231	108.80	99.33	101.36	102.04	101.02
4000- 4999	86	249817	270328	250642	253121	252651	20511	825	3304	2479	2834	108.21	100.33	101.32	100.99	101.13
5000- 5999	66	226442	248662	228181	229422	229026	22220	1739	2980	1241	2584	109.81	100.77	101.32	100.54	101.14
6000- 6999	59	242786	270250	248053	244607	244310	27464	5267	1821	-3446	1524	111.31	102.17	100.75	98.61	100.63
7000- 8999	100	503596	558223	508241	506894	506963	54627	4645	3298	-1347	3367	110.85	100.92	100.65	99.73	100.67
9000-10999	81	522402	568108	522587	526189	525686	45706	185	3787	3602	3284	108.75	100.04	100.72	100.69	100.63
11000-14999	103	851746	922334	838666	856697	856583	70588	-13080	4951	18031	4837	108.29	98.46	100.58	102.15	100.57
15000-20999	92	1133700	1237158	1112175	1137658	1138298	103458	-21525	3958	25483	4598	109.13	98.10	100.35	102.29	100.41
21000-44999	82	1504437	1614472	1429830	1506658	1507187	110035	-74607	2221	76828	2750	107.31	95.04	100.15	105.37	100.18
45000+	9	386600	420348	371205	386636	386866	33748	-15395	36	15431	266	108.73	96.02	100.01	104.16	100.07

TABLE 10

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS - SINGLE FEE VS. BENCHMARK, BY SPECIALTY
ALL SPECIALTIES
7:41 WEDNESDAY, JUNE 6, 1979

N_TOTAL	B	S	N_UP	PCT_UP	B_UP	S_UP	SB_UP	N_DN	PCT_DN	B_DN	S_DN	SB_DN	N_EQ	PCT_EQ	B_EQ	S_EQ
1631	8923832	8887204	320	20	1875555	1921409	102.445	580	36	5135065	5052583	98.3937	731	45	1913212	1913212

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS - SINGLE FEE VS. BENCHMARK, BY SPECIALTY GROUP
7:41 WEDNESDAY, JUNE 6, 1979

SPEC_TYP	N_TOTAL	B	S	N_UP	PCT_UP	B_UP	S_UP	SB_UP	N_DN	PCT_DN	B_DN	S_DN	SB_DN	N_EQ	PCT_EQ	B_EQ	S_EQ
GP.	511	1889418	1931804	231	45	1316003	1358441	103.225	1	0	1765	1713	97.0538	279	55	571650	571650
MED.	450	4070565	4040600	3	1	18502	18533	100.168	307	68	3370858	3340862	99.1101	140	31	681205	681205
SURG.	543	2775521	2732030	82	15	526744	529868	100.593	225	41	1661651	1615036	97.1947	236	43	587126	587126
OTHER	127	188328	182770	4	3	14306	14567	101.824	47	37	100791	94972	94.2267	76	60	73231	73231

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS - SINGLE FEE VS. BENCHMARK, BY BOARD CERTIFICATION STATUS
7:41 WEDNESDAY, JUNE 6, 1979

CERT_TYP	N_TOTAL	B	S	N_UP	PCT_UP	B_UP	S_UP	SB_UP	N_DN	PCT_DN	B_DN	S_DN	SB_DN	N_EQ	PCT_EQ	B_EQ	S_EQ
BOARD	377	2590141	2561563	31	8	212642	214217	100.741	175	46	1791416	1761263	98.3168	171	45	586083	586083
NON_BD.	1254	6333691	6325641	289	23	1662913	1707192	102.663	405	32	3343649	3291320	98.4350	560	45	1327129	1327129

TABLE 10 (continued)

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS - SINGLE FEE VS. BENCHMARK, BY SPECIALTY

7:41 WEDNESDAY, JUNE 6, 1979

SPEC	N_TOTAL	B	S	N_UP	PCT_UP	B_UP	S_UP	SB_UP	N_DN	PCT_DN	B_DN	S_DN	SB_DN	N_EQ	PCT_EQ	B_EQ	S_EQ
01	493	1729030	1771347	226	46	1236476	1278845	103.427	1	0	1765	1713	97.0538	266	54	490789	490789
02	157	681128	682343	62	39	364621	365955	100.366	11	7	71031	70912	99.8325	84	54	245476	245476
03	8	7112	7112	.	.	.	.	.	.	.	.	.	.	8	100	7112	7112
04	42	109100	105935	.	.	.	.	.	31	74	94317	91152	96.6443	11	26	14783	14783
06	17	127487	127487	.	.	.	.	.	.	.	.	.	.	17	100	127487	127487
07	40	95107	88603	1	3	3767	3774	100.186	31	78	82681	76170	92.1252	8	20	8659	8659
08	18	160388	160457	5	28	79527	79596	100.087	.	.	.	.	.	13	72	80861	80861
10	4	34355	34355	.	.	.	.	.	.	.	.	.	.	4	100	34355	34355
11	377	3784562	3761101	2	1	14735	14759	100.163	276	73	3288177	3264692	99.2858	99	26	481650	481650
13	18	41391	38946	.	.	.	.	.	15	83	40597	38152	93.9774	3	17	794	794
14	3	695	695	.	.	.	.	.	.	.	.	.	.	3	100	695	695
16	150	72774	71170	1	1	1384	1392	100.578	60	40	35896	34284	95.5092	89	59	35494	35494
18	85	965819	933352	1	1	2180	2188	100.367	70	82	911421	878946	96.4369	14	16	52218	52218
20	46	291251	288005	16	35	146024	147770	101.196	26	57	137974	132982	96.3819	4	9	7253	7253
22	15	22320	21230	1	7	6332	6412	101.263	4	27	12445	11275	90.5986	10	67	3543	3543
24	2	739	739	.	.	.	.	.	.	.	.	.	.	2	100	739	739
25	14	15544	15182	.	.	.	.	.	6	43	3645	3283	90.0686	8	57	11899	11899
26	26	9687	9376	1	4	120	122	101.667	7	27	5372	5059	94.1735	18	69	4195	4195
28	5	17735	17735	.	.	.	.	.	.	.	.	.	.	5	100	17735	17735
29	4	21942	21942	.	.	.	.	.	.	.	.	.	.	4	100	21942	21942
30	50	99051	97701	2	4	7854	8033	102.279	15	30	38732	37203	96.0524	33	66	52465	52465
33	13	81261	81261	.	.	.	.	.	.	.	.	.	.	13	100	81261	81261
34	40	555019	550795	2	5	12535	12563	100.223	27	68	411012	406760	98.9655	11	28	131472	131472
49	4	335	335	.	.	.	.	.	.	.	.	.	.	4	100	335	335

TABLE 11

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:42 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY SPECIALTY

ALL SPECIALTIES

N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	B_EQ	AS_EQ
1631	8923832	8935856	213	13	1782013	1794077	100.677	.	.	.	.	.	1418	87	7141819	7141819

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:42 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY SPECIALTY GROUP

SPEC_TYP	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	B_EQ	AS_EQ
GP.	511	1889418	1897503	112	22	585999	594084	101.380	.	.	.	.	.	399	78	1303419	1303419
MED.	450	4070565	4073204	64	14	888425	891064	100.297	.	.	.	.	.	386	86	3182140	3182140
SURG.	543	2775521	2776826	33	6	301764	303069	100.432	.	.	.	.	.	510	94	2473757	2473757
OTHER	127	188328	188363	4	3	5825	5860	100.601	.	.	.	.	.	123	97	182503	182503

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:42 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY BOARD CERTIFICATION STATUS

CERT_TYP	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	B_EQ	AS_EQ
BOARD	377	2590141	2591405	35	9	514052	515316	100.246	.	.	.	.	.	342	91	2076089	2076089
NON_BC.	1254	6333691	6344491	178	14	1267961	1278761	100.852	.	.	.	.	.	1076	86	5065730	5065730

TABLE 11 (continued)

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:42 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY SPECIALTY

SPEC	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	B_EQ	AS_EQ
01	493	1729030	1736542	107	22	546319	553831	101.375	.	.	.	.	.	386	78	1182711	1182711
02	157	681128	681933	14	9	80074	80879	101.005	.	.	.	.	.	143	91	601054	601054
03	8	7112	7113	1	13	670	671	100.149	.	.	.	.	.	7	88	6442	6442
04	42	109100	109237	3	7	5540	5677	102.473	.	.	.	.	.	39	93	103560	103560
06	17	127487	127493	2	12	28656	28662	100.021	.	.	.	.	.	15	88	98831	98831
07	40	95107	95323	2	5	6396	6612	103.377	.	.	.	.	.	38	95	88711	88711
08	18	160388	160961	5	28	39680	40253	101.444	.	.	.	.	.	13	72	120708	120708
10	4	34355	34356	1	25	12666	12667	100.008	.	.	.	.	.	3	75	21689	21689
11	377	3784562	3786815	56	15	820341	822594	100.275	.	.	.	.	.	321	85	2964221	2964221
13	18	41391	41411	1	6	84	104	123.810	.	.	.	.	.	17	94	41307	41307
14	3	695	695	.	.	.	.	.	.	.	.	.	.	3	100	695	695
16	150	72774	72791	3	2	3688	3705	100.461	.	.	.	.	.	147	98	69086	69086
18	85	965819	965953	3	4	30578	30712	100.438	.	.	.	.	.	82	96	935241	935241
20	46	291251	291254	1	2	9595	9598	100.031	.	.	.	.	.	45	98	281656	281656
22	15	22320	22320	.	.	.	.	.	.	.	.	.	.	15	100	22320	22320
24	2	739	739	.	.	.	.	.	.	.	.	.	.	2	100	739	739
25	14	15544	15552	2	14	2406	2414	100.333	.	.	.	.	.	12	86	13138	13138
26	26	9687	9687	.	.	.	.	.	.	.	.	.	.	26	100	9687	9687
28	5	17735	17740	1	20	3560	3565	100.140	.	.	.	.	.	4	80	14175	14175
29	4	21942	22104	2	50	19696	19858	100.823	.	.	.	.	.	2	50	2246	2246
30	50	99051	99058	1	2	3335	3342	100.210	.	.	.	.	.	49	98	95716	95716
33	13	81261	81291	1	8	86	116	134.884	.	.	.	.	.	12	92	81175	81175
34	40	555019	555193	7	18	168643	168817	100.103	.	.	.	.	.	33	83	386376	386376
45	4	335	335	.	.	.	.	.	.	.	.	.	.	4	100	335	335

TABLE 12

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:42 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (DOUBLE FEE) VS. BENCHMARK, BY SPECIALTY

ALL SPECIALTIES

N_TOTAL	B	AD	N_UP	PCT_UP	B_UP	AD_UP	ADB_UP	N_DN	PCT_DN	B_DN	AD_DN	ADB_DN	N_EQ	PCT_EQ	B_EQ	AD_EQ
1631	8923832	8936150	226	14	1969725	1982043	100.625	.	.	.	.	.	1405	86	6954107	6954107

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:42 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (DOUBLE FEE) VS. BENCHMARK, BY SPECIALTY GROUP

SPEC_TYP	N_TOTAL	B	AD	N_UP	PCT_UP	B_UP	AD_UP	ADB_UP	N_DN	PCT_DN	B_DN	AD_DN	ADB_DN	N_EQ	PCT_EQ	B_EQ	AD_EQ
GP.	511	1889418	1896452	108	21	564011	571045	101.247	.	.	.	.	.	403	79	1325407	1325407
MEC.	450	4070565	4073764	68	15	888878	892077	100.360	.	.	.	.	.	382	85	3181687	3181687
SURG.	543	2775521	2777528	46	8	511011	513018	100.393	.	.	.	.	.	497	92	2264510	2264510
OTHER	127	188328	188406	4	3	5825	5903	101.339	.	.	.	.	.	123	97	182503	182503

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:42 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (DOUBLE FEE) VS. BENCHMARK, BY BOARD CERTIFICATION STATUS

CERT_TYP	N_TOTAL	B	AD	N_UP	PCT_UP	B_UP	AD_UP	ADB_UP	N_DN	PCT_DN	B_DN	AD_DN	ADB_DN	N_EQ	PCT_EQ	B_EQ	AD_EQ
BOARD	377	2590141	2593172	57	15	780480	783511	100.388	.	.	.	.	.	320	85	1809661	1809661
NON_BC.	1254	6333691	6342978	169	13	1189245	1198532	100.781	.	.	.	.	.	1085	87	5144446	5144446

TABLE 12 (continued)

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:42 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (DOUBLE FEE) VS. BENCHMARK, BY SPECIALTY

SPEC	N_TOTAL	B	AD	N_UP	PCT_UP	B_UP	AD_UP	ADB_UP	N_DN	PCT_DN	B_DN	AD_DN	ADB_DN	N_EQ	PCT_EQ	B_EQ	AD_EQ
01	493	1729030	1735565	103	21	524331	530866	101.246	.	.	.	.	.	390	79	1204699	1204699
02	157	681128	682404	14	9	89854	91130	101.420	.	.	.	.	.	143	91	591274	591274
03	8	7112	7112	.	.	.	.	.	.	.	.	.	.	8	100	7112	7112
04	42	109100	109232	5	12	15855	15987	100.833	.	.	.	.	.	37	88	93245	93245
06	17	127487	127496	2	12	28656	28665	100.031	.	.	.	.	.	15	88	98831	98831
07	40	95107	95243	2	5	6396	6532	102.126	.	.	.	.	.	38	95	88711	88711
08	18	160388	160887	5	28	39680	40179	101.258	.	.	.	.	.	13	72	120708	120708
10	4	34355	34356	1	25	12666	12667	100.008	.	.	.	.	.	3	75	21689	21689
11	377	3784562	3787470	61	16	821464	824372	100.354	.	.	.	.	.	316	84	2963096	2963098
13	18	41391	41408	1	6	84	101	120.238	.	.	.	.	.	17	94	41307	41307
14	3	695	695	.	.	.	.	.	.	.	.	.	.	3	100	695	695
16	150	72774	72797	3	2	3688	3711	100.624	.	.	.	.	.	147	98	69086	69086
18	85	965819	965983	7	8	93006	93170	100.176	.	.	.	.	.	78	92	872813	872813
20	46	291251	291253	2	4	19495	19497	100.010	.	.	.	.	.	44	96	271756	271756
22	15	22320	22320	.	.	.	.	.	.	.	.	.	.	15	100	22320	22320
24	2	739	739	.	.	.	.	.	.	.	.	.	.	2	100	739	739
25	14	15544	15596	2	14	2406	2458	102.161	.	.	.	.	.	12	86	13138	13138
26	26	9687	9687	.	.	.	.	.	.	.	.	.	.	26	100	9687	9687
28	5	17735	17739	1	20	3560	3564	100.112	.	.	.	.	.	4	80	14175	14175
29	4	21942	22087	2	50	19696	19841	100.736	.	.	.	.	.	2	50	2246	2246
30	50	99051	99060	1	2	3335	3344	100.270	.	.	.	.	.	49	98	95716	95716
33	13	81261	81292	2	15	3286	3317	100.943	.	.	.	.	.	11	85	77975	77975
34	40	555019	555394	12	30	282267	282642	100.133	.	.	.	.	.	28	70	272752	272752
49	4	335	335	.	.	.	.	.	.	.	.	.	.	4	100	335	335

TABLE 13

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:44 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. SINGLE FEE, BY SPECIALTY

ALL SPECIALTIES

N_TOTAL	S	AS	N_UP	PCT_UP	S_UP	AS_UP	ASS_UP	N_DN	PCT_DN	S_DN	AS_DN	ASS_DN	N_EQ	PCT_EQ	S_EQ	AS_EQ
1631	8867204	8935896	692	42	5665426	5758453	101.642	297	18	1772784	1728449	97.4991	642	39	1448994	1448994

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:44 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. SINGLE FEE, BY SPECIALTY GROUP

SPEC_TYP	N_TOTAL	S	AS	N_UP	PCT_UP	S_UP	AS_UP	ASS_UP	N_DN	PCT_DN	S_DN	AS_DN	ASS_DN	N_EQ	PCT_EQ	S_EQ	AS_EQ
GP.	511	1931804	1857503	74	14	353597	360314	101.900	209	41	1215623	1174605	96.6258	228	45	362584	362584
MED.	450	4040600	4073204	324	72	3496291	3528926	100.933	3	1	18533	18502	99.8327	123	27	525776	525776
SURG.	543	2732030	2776826	243	45	1714741	1762562	102.789	81	15	524061	521036	99.4228	219	40	493228	493[illegible]
OTHER	127	182770	188363	51	40	100797	106651	105.808	4	3	14567	14306	98.2083	72	57	67406	67406

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:44 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. SINGLE FEE, BY BOARD CERTIFICATION STATUS

CERT_TYP	N_TOTAL	S	AS	N_UP	PCT_UP	S_UP	AS_UP	ASS_UP	N_DN	PCT_DN	S_DN	AS_DN	ASS_DN	N_EQ	PCT_EQ	S_EQ	AS_EQ
BOARD	377	2561563	2591405	186	49	1842768	1874175	101.704	31	8	214217	212652	99.2694	160	42	504576	504578
NON_BD.	1254	6325641	6344491	506	40	3822658	3884278	101.612	266	21	1558567	1515797	97.2558	482	38	944416	944416

TABLE 13 (continued)

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:44 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. SINGLE FEE, BY SPECIALTY

SPEC	N_TOTAL	S	AS	N_UP	PCT_UP	S_UP	AS_UP	ASS_UP	N_DN	PCT_DN	S_DN	AS_DN	ASS_DN	N_EQ	PCT_EQ	S_EQ	AS_EQ
01	493	1771347	1736542	69	14	313917	320061	101.957	204	41	1136027	1095078	96.3954	220	45	321403	321403
02	157	682343	681933	22	14	131552	132377	100.627	61	39	360148	358913	99.6571	74	47	190643	190643
03	8	7112	7113	1	13	670	671	100.149	.	.	.	.	.	7	88	6442	6442
04	42	105935	109237	34	81	96692	99994	103.415	.	.	.	.	.	8	19	9243	9243
06	17	127487	127493	2	12	28656	28662	100.021	.	.	.	.	.	15	88	98831	98831
07	40	88603	95323	31	78	76170	82897	108.832	1	3	3774	3767	99.8145	8	20	8659	8659
08	18	160457	160961	5	28	39680	40253	101.444	5	28	79596	79527	99.9133	8	44	41181	41181
10	4	34355	34356	1	25	12666	12667	100.008	.	.	.	.	.	3	75	21689	21689
11	377	3761101	3786815	287	76	3358433	3384171	100.766	2	1	14759	14735	99.8374	88	23	387909	387909
13	18	38946	41411	16	89	38236	40701	106.447	.	.	.	.	.	2	11	710	710
14	3	695	695	.	.	.	.	.	.	.	.	.	.	3	100	695	695
16	150	71170	72791	61	41	36875	38504	104.418	1	1	1392	1384	99.4253	88	59	32903	32903
18	85	933352	965953	70	82	878946	911555	103.710	1	1	2188	2180	99.6344	14	16	52218	52218
20	46	288005	291254	26	57	132982	137977	103.756	16	35	147770	146024	98.8184	4	9	7253	7253
22	15	21230	22320	4	27	11275	12445	110.377	1	7	6412	6332	98.7523	10	67	3543	3543
24	2	739	739	.	.	.	.	.	.	.	.	.	.	2	100	739	739
25	14	15182	15552	8	57	5689	6059	106.504	.	.	.	.	.	6	43	9493	9493
26	26	9376	9687	7	27	5059	5372	106.187	1	4	122	120	98.3607	18	69	4195	4195
28	5	17735	17740	1	20	3560	3565	100.140	.	.	.	.	.	4	80	14175	14175
29	4	21942	22104	2	50	19696	19858	100.823	.	.	.	.	.	2	50	2246	2246
30	50	97701	99058	16	32	40538	42074	103.789	2	4	8033	7854	97.7717	32	64	49130	49130
33	13	81261	81291	1	8	86	116	134.884	.	.	.	.	.	12	92	81175	81175
34	40	550795	555193	28	70	434048	438474	101.020	2	5	12563	12535	99.7771	10	25	104184	104184
49	4	335	335	.	.	.	.	.	.	.	.	.	.	4	100	335	335

TABLE 14

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:46 WEDNESDAY, JUNE 6, 1979

AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY PHYSICIAN ASSIGNMENT CHARACTERISTICS

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	443	681517	681517	.	.	.	.	.	.	.	.	.	.	443	100	0	681517	681517
1-4	110	755282	755419	13	12	99498	99635	100.138	.	.	.	.	.	97	88	1	655784	655784
5-9	106	806449	806703	18	17	114883	115137	100.221	.	.	.	.	.	88	83	2	691566	691566
10-15	107	821330	821867	19	18	164990	165527	100.325	.	.	.	.	.	88	82	3	656340	656340
16-23	107	918539	919435	24	22	251079	251975	100.357	.	.	.	.	.	83	78	4	667460	667460
24-30	101	868367	869896	24	24	136488	138017	101.120	.	.	.	.	.	77	76	5	731879	731879
31-40	101	838202	840423	22	22	224439	226660	100.990	.	.	.	.	.	79	78	6	613763	613763
41-50	93	744723	745883	26	28	223422	224582	100.519	.	.	.	.	.	67	72	7	521301	521301
51-69	211	1537796	1541280	42	20	386713	390197	100.901	.	.	.	.	.	169	80	8	1151083	1151083
90-99	107	726634	727946	12	11	142899	144211	100.918	.	.	.	.	.	95	89	9	583735	583735
100	145	224993	225527	13	9	37602	38136	101.420	.	.	.	.	.	132	91	10	187391	187391

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:47 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY PHYSICIAN ASSIGNMENT CHARACTERISTICS

SPEC_TYP=GP.

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	188	264051	264051	.	.	.	.	.	.	.	.	.	.	188	100	0	264051	264051
1-4	40	216054	216149	7	18	40555	40650	100.234	.	.	.	.	.	33	83	1	175499	175499
5-9	43	263861	264061	14	33	58220	58420	100.344	.	.	.	.	.	29	67	2	205641	205641
10-15	30	199667	199803	8	27	41131	41267	100.331	.	.	.	.	.	22	73	3	158536	158536
16-23	41	216919	217384	12	29	62148	62613	100.748	.	.	.	.	.	29	71	4	154771	154771
24-30	33	182263	183518	15	45	73860	75115	101.699	.	.	.	.	.	18	55	5	108403	108403
31-40	35	155657	157513	13	37	82737	84593	102.243	.	.	.	.	.	22	63	6	72920	72920
41-50	22	88905	89784	12	55	53110	53989	101.655	.	.	.	.	.	10	45	7	35795	35795
51-89	46	214592	217093	25	54	147837	150338	101.692	.	.	.	.	.	21	46	8	66755	66755
90-99	16	63362	63634	2	13	13931	14203	101.952	.	.	.	.	.	14	88	9	49431	49431
100	17	24087	24513	4	24	12470	12896	103.416	.	.	.	.	.	13	76	10	11617	11617

SPEC_TYP=MED.

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	71	184823	184823	.	.	.	.	.	.	.	.	.	.	71	100	0	184823	184823
1-4	32	275045	275081	5	16	56352	56388	100.064	.	.	.	.	.	27	84	1	218693	218693
5-9	23	283489	283540	3	13	56008	56059	100.091	.	.	.	.	.	20	87	2	227481	227481
10-15	38	376752	376894	6	16	79188	79330	100.179	.	.	.	.	.	32	84	3	297564	297564
16-23	35	491772	492198	11	31	186545	186971	100.228	.	.	.	.	.	24	69	4	305227	305227
24-30	31	353634	353648	5	16	32824	32838	100.043	.	.	.	.	.	26	84	5	320810	320810
31-40	32	416328	416644	7	22	107891	108207	100.293	.	.	.	.	.	25	78	6	308437	308437
41-50	31	366845	367022	7	23	94022	94199	100.188	.	.	.	.	.	24	77	7	272823	272823
51-89	71	729003	729667	11	15	156923	157587	100.423	.	.	.	.	.	60	85	8	572080	572080
90-99	46	472177	472976	5	11	94167	94966	100.848	.	.	.	.	.	41	89	9	378010	378010
100	40	120697	120711	4	10	24505	24519	100.057	.	.	.	.	.	36	90	10	96192	96192

TABLE 14 (continued)

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:47 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY PHYSICIAN ASSIGNMENT CHARACTERISTICS

SPEC_TYP=SURG.

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	145	209408	209408	.	.	.	.	.	.	.	.	.	.	145	100	0	209408	209408
1-4	33	247210	247216	1	3	2591	2597	100.232	.	.	.	.	.	32	97	1	244619	244619
5-9	35	230812	230815	1	3	655	658	100.458	.	.	.	.	.	34	97	2	230157	230157
10-15	38	244876	245135	5	13	44671	44930	100.580	.	.	.	.	.	33	87	3	200205	200205
16-23	22	191844	191844	.	.	.	.	.	.	.	.	.	.	22	100	4	191844	191844
24-30	36	328242	328502	4	11	29804	30064	100.872	.	.	.	.	.	32	89	5	298438	298438
31-40	31	260822	260871	2	6	33811	33860	100.145	.	.	.	.	.	29	94	6	227011	227011
41-50	34	271206	271310	7	21	76290	76394	100.136	.	.	.	.	.	27	79	7	194916	194916
51-89	78	556718	557037	6	8	81953	82272	100.389	.	.	.	.	.	72	92	8	474765	474765
90-99	41	173424	173656	4	10	31466	31700	100.744	.	.	.	.	.	37	90	9	141958	141958
100	50	60959	61030	3	6	523	594	113.576	.	.	.	.	.	47	94	10	60436	60436

SPEC_TYP=OTHER

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	39	23235	23235	.	.	.	.	.	.	.	.	.	.	39	100	0	23235	23235
1-4	5	16973	16973	.	.	.	.	.	.	.	.	.	.	5	100	1	16973	16973
5-9	5	28287	28287	.	.	.	.	.	.	.	.	.	.	5	100	2	28287	28287
10-15	1	35	35	.	.	.	.	.	.	.	.	.	.	1	100	3	35	35
16-23	9	18004	18009	1	11	2386	2391	100.210	.	.	.	.	.	8	89	4	15618	15618
24-30	1	4228	4228	.	.	.	.	.	.	.	.	.	.	1	100	5	4228	4228
31-40	3	5395	5395	.	.	.	.	.	.	.	.	.	.	3	100	6	5395	5395
41-50	6	17767	17767	.	.	.	.	.	.	.	.	.	.	6	100	7	17767	17767
51-89	16	37483	37483	.	.	.	.	.	.	.	.	.	.	16	100	8	37483	37483
90-99	4	17671	17678	1	25	3335	3342	100.210	.	.	.	.	.	3	75	9	14336	14336
100	38	19250	19273	2	5	104	127	122.115	.	.	.	.	.	36	95	10	19146	19146

TABLE 14 (continued)

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:47 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY PHYSICIAN ASSIGNMENT CHARACTERISTICS

SPEC=01

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	182	238690	238690	.	.	.	.	.	.	.	.	.	.	182	100	0	238690	238690
1-4	39	202159	202254	7	18	40555	40650	100.234	.	.	.	.	.	32	82	1	161604	161604
5-9	41	249440	249640	14	34	58220	58420	100.344	.	.	.	.	.	27	66	2	191220	191220
10-15	29	152749	192885	8	28	41131	41267	100.331	.	.	.	.	.	21	72	3	151618	151618
16-23	40	179900	180365	12	30	62148	62613	100.748	.	.	.	.	.	28	70	4	117752	117752
24-30	32	165461	166716	15	47	73860	75115	101.699	.	.	.	.	.	17	53	5	91601	91601
31-40	34	148951	150717	12	35	76031	77797	102.323	.	.	.	.	.	22	65	6	72920	72920
41-50	22	88905	89784	12	55	53110	53989	101.655	.	.	.	.	.	10	45	7	35795	35795
51-89	41	175326	177344	21	51	114863	116881	101.757	.	.	.	.	.	20	49	8	60463	60463
90-99	16	63362	63634	2	13	13931	14203	101.952	.	.	.	.	.	14	88	9	49431	49431
100	17	24087	24513	4	24	12470	12896	103.416	.	.	.	.	.	13	76	10	11617	11617

SPEC=02

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	33	66447	66447	.	.	.	.	.	.	.	.	.	.	33	100	0	66447	66447
1-4	10	41389	41389	.	.	.	.	.	.	.	.	.	.	10	100	1	41389	41389
5-9	5	23629	23629	.	.	.	.	.	.	.	.	.	.	5	100	2	23629	23629
10-15	11	77479	77494	2	18	16748	16763	100.090	.	.	.	.	.	9	82	3	60731	60731
16-23	8	54330	54330	.	.	.	.	.	.	.	.	.	.	8	100	4	54330	54330
24-30	15	127897	128109	3	20	19641	19853	101.079	.	.	.	.	.	12	80	5	108256	108256
31-40	2	2208	2208	.	.	.	.	.	.	.	.	.	.	2	100	6	2208	2208
41-50	13	106891	106902	2	15	12299	12310	100.089	.	.	.	.	.	11	85	7	94592	94592
51-89	28	109459	109767	4	14	19561	19869	101.575	.	.	.	.	.	24	86	8	89898	89898
90-99	18	58083	58311	2	11	11678	11906	101.952	.	.	.	.	.	16	89	9	46405	46405
100	14	13316	13347	1	7	147	178	121.088	.	.	.	.	.	13	93	10	13169	13169

TABLE 14 (continued)

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:47 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY PHYSICIAN ASSIGNMENT CHARACTERISTICS

SPEC=03

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	5	895	895	.	.	.	.	.	.	.	.	.	.	5	100	0	895	895
24-30	1	670	671	1	100	670	671	100.149	.	.	.	.	.	.	.	5	.	.
90-99	1	5472	5472	.	.	.	.	.	.	.	.	.	.	1	100	9	5472	5472
100	1	75	75	.	.	.	.	.	.	.	.	.	.	1	100	10	75	75

SPEC=04

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	8	9243	9243	.	.	.	.	.	.	.	.	.	.	8	100	0	9243	9243
1-4	8	31412	31412	.	.	.	.	.	.	.	.	.	.	8	100	1	31412	31412
5-9	6	20728	20731	1	17	655	658	100.458	.	.	.	.	.	5	83	2	20073	20073
10-15	3	15652	15776	1	33	4640	4764	102.672	.	.	.	.	.	2	67	3	11012	11012
24-30	1	5156	5156	.	.	.	.	.	.	.	.	.	.	1	100	5	5156	5156
31-40	5	11359	11359	.	.	.	.	.	.	.	.	.	.	5	100	6	11359	11359
41-50	2	455	465	1	50	245	255	104.082	.	.	.	.	.	1	50	7	210	210
51-89	3	7582	7582	.	.	.	.	.	.	.	.	.	.	3	100	8	7582	7582
90-99	3	2783	2783	.	.	.	.	.	.	.	.	.	.	3	100	9	2783	2783
100	3	4730	4730	.	.	.	.	.	.	.	.	.	.	3	100	10	4730	4730

TABLE 14 (continued)

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:47 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY PHYSICIAN ASSIGNMENT CHARACTERISTICS

SPEC=06

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	2	3208	3208	.	.	.	.	.	.	.	.	.	.	2	100	0	3208	3208
1-4	3	12794	12797	1	33	5909	5912	100.051	.	.	.	.	.	2	67	1	6885	6885
10-15	1	4629	4629	.	.	.	.	.	.	.	.	.	.	1	100	3	4629	4629
16-23	1	16765	16765	.	.	.	.	.	.	.	.	.	.	1	100	4	16765	16765
41-50	4	42114	42114	.	.	.	.	.	.	.	.	.	.	4	100	7	42114	42114
51-89	3	24893	24893	.	.	.	.	.	.	.	.	.	.	3	100	8	24893	24893
90-99	1	272	272	.	.	.	.	.	.	.	.	.	.	1	100	9	272	272
100	2	22812	22815	1	50	22747	22750	100.013	.	.	.	.	.	1	50	10	65	65

SPEC=07

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	4	5253	5253	.	.	.	.	.	.	.	.	.	.	4	100	0	5253	5253
1-4	2	9518	9518	.	.	.	.	.	.	.	.	.	.	2	100	1	9518	9518
5-9	2	3460	3460	.	.	.	.	.	.	.	.	.	.	2	100	2	3460	3460
10-15	7	13619	13619	.	.	.	.	.	.	.	.	.	.	7	100	3	13619	13619
16-23	4	15733	15743	1	25	2364	2374	100.423	.	.	.	.	.	3	75	4	13369	13369
24-30	2	2290	2290	.	.	.	.	.	.	.	.	.	.	2	100	5	2290	2290
31-40	1	575	575	.	.	.	.	.	.	.	.	.	.	1	100	6	575	575
41-50	2	17031	17031	.	.	.	.	.	.	.	.	.	.	2	100	7	17031	17031
51-89	8	20468	20674	1	13	4032	4238	105.109	.	.	.	.	.	7	88	8	16436	16436
90-99	3	6126	6126	.	.	.	.	.	.	.	.	.	.	3	100	9	6126	6126
100	5	1034	1034	.	.	.	.	.	.	.	.	.	.	5	100	10	1034	1034

TABLE 14 (continued)

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:47 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY PHYSICIAN ASSIGNMENT CHARACTERISTICS

SPEC=08

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	6	25361	25361	.	.	.	.	.	.	.	.	.	.	6	100	0	25361	25361
1-4	1	13895	13895	.	.	.	.	.	.	.	.	.	.	1	100	1	13895	13895
5-9	2	14421	14421	.	.	.	.	.	.	.	.	.	.	2	100	2	14421	14421
10-15	1	6918	6918	.	.	.	.	.	.	.	.	.	.	1	100	3	6918	6918
16-23	1	37019	37019	.	.	.	.	.	.	.	.	.	.	1	100	4	37019	37019
24-30	1	16802	16802	.	.	.	.	.	.	.	.	.	.	1	100	5	16802	16802
31-40	1	6706	6796	1	100	6706	6796	101.342	.	.	.	.	.	.	.	6	.	.
51-89	5	39266	39749	4	80	32974	33457	101.465	.	.	.	.	.	1	20	8	6292	6292

SPEC=10

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
1-4	3	26410	26411	1	33	12666	12667	100.008	.	.	.	.	.	2	67	1	13744	13744
16-23	1	7945	7945	.	.	.	.	.	.	.	.	.	.	1	100	4	7945	7945

SPEC=11

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	59	175332	175332	.	.	.	.	.	.	.	.	.	.	59	100	0	175332	175332
1-4	24	226323	226355	3	13	37777	37809	100.085	.	.	.	.	.	21	88	1	188546	188546
5-9	21	280029	280080	3	14	56008	56059	100.091	.	.	.	.	.	18	86	2	224021	224021
10-15	30	358504	358646	6	20	79188	79330	100.179	.	.	.	.	.	24	80	3	279316	279316
16-23	29	451329	451745	10	34	184181	184597	100.226	.	.	.	.	.	19	66	4	267148	267148
24-30	28	350674	350687	4	14	32154	32167	100.040	.	.	.	.	.	24	86	5	318520	318520
31-40	31	415753	416069	7	23	107891	108207	100.293	.	.	.	.	.	24	77	6	307862	307862
41-50	24	303827	303843	6	25	90149	90165	100.018	.	.	.	.	.	18	75	7	213678	213678
51-89	59	667819	668276	9	15	137068	137525	100.333	.	.	.	.	.	50	85	8	530751	530751

TABLE 14 (continued)

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:47 WEDNESDAY, JUNE 6, 1979

AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY PHYSICIAN ASSIGNMENT CHARACTERISTICS

SPEC=11

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
90-99	40	458196	458995	5	13	94167	94966	100.848	.	.	.	.	.	35	88	9	364029	364029
100	32	96776	96787	3	9	1758	1769	100.626	.	.	.	.	.	29	91	10	95018	95018

SPEC=13

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
16-23	3	12283	12283	.	.	.	.	.	.	.	.	.	.	3	100	4	12283	12283
24-30	1	4228	4228	.	.	.	.	.	.	.	.	.	.	1	100	5	4228	4228
41-50	4	15687	15687	.	.	.	.	.	.	.	.	.	.	4	100	7	15687	15687
51-89	5	8208	8208	.	.	.	.	.	.	.	.	.	.	5	100	8	8208	8208
100	5	985	1005	1	20	84	104	123.81	.	.	.	.	.	4	80	10	901	901

SPEC=14

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	1	175	175	.	.	.	.	.	.	.	.	.	.	1	100	0	175	175
41-50	1	425	425	.	.	.	.	.	.	.	.	.	.	1	100	7	425	425
51-89	1	95	95	.	.	.	.	.	.	.	.	.	.	1	100	8	95	95

TABLE 14 (continued)

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:47 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY PHYSICIAN ASSIGNMENT CHARACTERISTICS

SPEC=16

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	81	30640	30640	.	.	.	.	.	.	.	.	.	.	81	100	0	30640	30640
1-4	7	12377	12383	1	14	2591	2597	100.232	.	.	.	.	.	6	86	1	9786	9786
5-9	9	5561	5561	.	.	.	.	.	.	.	.	.	.	9	100	2	5561	5561
10-15	10	7746	7746	.	.	.	.	.	.	.	.	.	.	10	100	3	7746	7746
16-23	2	703	703	.	.	.	.	.	.	.	.	.	.	2	100	4	703	703
24-30	6	3963	3963	.	.	.	.	.	.	.	.	.	.	6	100	5	3963	3963
31-40	4	2817	2817	.	.	.	.	.	.	.	.	.	.	4	100	6	2817	2817
41-50	5	1440	1440	.	.	.	.	.	.	.	.	.	.	5	100	7	1440	1440
51-89	10	4895	4696	1	10	807	808	100.124	.	.	.	.	.	9	90	8	4086	4088
90-99	2	731	731	.	.	.	.	.	.	.	.	.	.	2	100	9	731	731
100	14	1901	1911	1	7	290	300	103.448	.	.	.	.	.	13	93	10	1611	1611

SPEC=18

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	14	94913	94913	.	.	.	.	.	.	.	.	.	.	14	100	0	94913	94913
1-4	4	116676	116676	.	.	.	.	.	.	.	.	.	.	4	100	1	116676	116676
5-9	10	131930	131930	.	.	.	.	.	.	.	.	.	.	10	100	2	131930	131930
10-15	7	112748	112868	2	29	23283	23403	100.515	.	.	.	.	.	5	71	3	89465	89465
16-23	6	90219	90219	.	.	.	.	.	.	.	.	.	.	6	100	4	90219	90219
24-30	7	84775	84775	.	.	.	.	.	.	.	.	.	.	7	100	5	84775	84775
31-40	7	100276	100290	1	14	7295	7309	100.192	.	.	.	.	.	6	86	6	92981	92981
41-50	2	18515	18515	.	.	.	.	.	.	.	.	.	.	2	100	7	18515	18515
51-89	12	153042	153042	.	.	.	.	.	.	.	.	.	.	12	100	8	153042	153042
90-99	9	41716	41716	.	.	.	.	.	.	.	.	.	.	9	100	9	41716	41716
100	7	21009	21009	.	.	.	.	.	.	.	.	.	.	7	100	10	21009	21009

TABLE 14 (continued)

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:47 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY PHYSICIAN ASSIGNMENT CHARACTERISTICS

SPEC=20

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	3	6253	6253	.	.	.	.	.	.	.	.	.	.	3	100	0	6253	6253
5-9	2	15722	15722	.	.	.	.	.	.	.	.	.	.	2	100	2	15722	15722
10-15	5	22564	22564	.	.	.	.	.	.	.	.	.	.	5	100	3	22564	22564
16-23	4	38290	38290	.	.	.	.	.	.	.	.	.	.	4	100	4	38290	38290
31-40	5	43672	43672	.	.	.	.	.	.	.	.	.	.	5	100	6	43672	43672
41-50	3	32090	32093	1	33	9595	9598	100.031	.	.	.	.	.	2	67	7	22495	22495
51-89	13	85755	85755	.	.	.	.	.	.	.	.	.	.	13	100	8	85755	85755
90-99	5	33259	33259	.	.	.	.	.	.	.	.	.	.	5	100	9	33259	33259
100	6	13646	13646	.	.	.	.	.	.	.	.	.	.	6	100	10	13646	13646

SPEC=22

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	9	3508	3508	.	.	.	.	.	.	.	.	.	.	9	100	0	3508	3508
10-15	1	35	35	.	.	.	.	.	.	.	.	.	.	1	100	3	35	35
51-89	3	12254	12254	.	.	.	.	.	.	.	.	.	.	3	100	8	12254	12254
90-99	1	6438	6438	.	.	.	.	.	.	.	.	.	.	1	100	9	6438	6438
100	1	85	85	.	.	.	.	.	.	.	.	.	.	1	100	10	85	85

SPEC=24

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
41-50	1	269	269	.	.	.	.	.	.	.	.	.	.	1	100	7	269	269
90-99	1	470	470	.	.	.	.	.	.	.	.	.	.	1	100	9	470	470

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:47 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY PHYSICIAN ASSIGNMENT CHARACTERISTICS

SPEC=25

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	4	9393	9393	.	.	.	.	.	.	.	.	.	.	4	100	0	9393	9393
16-23	2	2976	2981	1	50	2386	2391	100.21	.	.	.	.	.	1	50	4	590	590
41-50	1	150	150	.	.	.	.	.	.	.	.	.	.	1	100	7	150	150
51-89	2	2660	2660	.	.	.	.	.	.	.	.	.	.	2	100	8	2660	2660
100	5	365	368	1	20	20	23	115.00	.	.	.	.	.	4	80	10	345	345

SPEC=26

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	14	2898	2898	.	.	.	.	.	.	.	.	.	.	14	100	0	2898	2898
1-4	1	1792	1792	.	.	.	.	.	.	.	.	.	.	1	100	1	1792	1792
31-40	1	820	820	.	.	.	.	.	.	.	.	.	.	1	100	6	820	820
41-50	1	1930	1930	.	.	.	.	.	.	.	.	.	.	1	100	7	1930	1930
51-89	1	350	350	.	.	.	.	.	.	.	.	.	.	1	100	8	350	350
100	8	1697	1897	.	.	.	.	.	.	.	.	.	.	8	100	10	1897	1897

SPEC=28

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
1-4	2	5059	5059	.	.	.	.	.	.	.	.	.	.	2	100	1	5059	5059
5-9	1	5837	5837	.	.	.	.	.	.	.	.	.	.	1	100	2	5837	5837
24-30	1	3279	3279	.	.	.	.	.	.	.	.	.	.	1	100	5	3279	3279
90-99	1	3560	3565	1	100	3560	3565	100.14	.	.	.	.	.	.	.	9	.	.

TABLE 14 (continued)

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:47 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY PHYSICIAN ASSIGNMENT CHARACTERISTICS

SPEC=29

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	1	135	135	.	.	.	.	.	.	.	.	.	.	1	100	0	135	135
41-50	1	3873	4034	1	100	3873	4034	104.157	.	.	.	.	.	.	.	7	.	.
51-89	1	15823	15824	1	100	15823	15824	100.006	.	.	.	.	.	.	.	8	.	.
90-99	1	2111	2111	.	.	.	.	.	.	.	.	.	.	1	100	9	2111	2111

SPEC=30

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	10	7368	7368	.	.	.	.	.	.	.	.	.	.	10	100	0	7368	7368
1-4	4	15181	15181	.	.	.	.	.	.	.	.	.	.	4	100	1	15181	15181
5-9	5	28287	28287	.	.	.	.	.	.	.	.	.	.	5	100	2	28287	28287
16-23	4	2745	2745	.	.	.	.	.	.	.	.	.	.	4	100	4	2745	2745
31-40	2	4575	4575	.	.	.	.	.	.	.	.	.	.	2	100	6	4575	4575
51-89	5	14011	14011	.	.	.	.	.	.	.	.	.	.	5	100	8	14011	14011
90-99	3	11233	11240	1	33	3335	3342	100.21	.	.	.	.	.	2	67	9	7898	7898
100	17	15651	15651	.	.	.	.	.	.	.	.	.	.	17	100	10	15651	15651

SPEC=33

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
5-9	1	6770	6770	.	.	.	.	.	.	.	.	.	.	1	100	2	6770	6770
10-15	2	8687	8687	.	.	.	.	.	.	.	.	.	.	2	100	3	8687	8687
16-23	1	1220	1220	.	.	.	.	.	.	.	.	.	.	1	100	4	1220	1220
31-40	2	23394	23394	.	.	.	.	.	.	.	.	.	.	2	100	6	23394	23394
51-89	4	40377	40377	.	.	.	.	.	.	.	.	.	.	4	100	8	40377	40377
100	3	813	843	1	33	86	116	134.884	.	.	.	.	.	2	67	10	727	727

TABLE 14 (continued)

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:47 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY PHYSICIAN ASSIGNMENT CHARACTERISTICS

SPEC=34

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	5	1737	1737	.	.	.	.	.	.	.	.	.	.	5	100	0	1737	1737
1-4	2	40297	40297	.	.	.	.	.	.	.	.	.	.	2	100	1	40297	40297
5-9	1	20635	20635	.	.	.	.	.	.	.	.	.	.	1	100	2	20635	20635
16-23	1	7082	7082	.	.	.	.	.	.	.	.	.	.	1	100	4	7082	7082
24-30	6	103172	103220	1	17	10163	10211	100.472	.	.	.	.	.	5	83	5	93009	93009
31-40	6	77096	77131	1	17	26516	26551	100.132	.	.	.	.	.	5	83	6	50580	50580
41-50	7	111121	111201	3	43	54151	54231	100.148	.	.	.	.	.	4	57	7	56970	56970
51-89	7	155513	155523	1	14	61585	61595	100.016	.	.	.	.	.	6	86	8	93928	93928
90-99	2	32822	32823	1	50	16228	16229	100.006	.	.	.	.	.	1	50	9	16594	16594
100	3	5544	5544	.	.	.	.	.	.	.	.	.	.	3	100	10	5544	5544

SPEC=49

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	2	68	68	.	.	.	.	.	.	.	.	.	.	2	100	0	68	68
100	2	267	267	.	.	.	.	.	.	.	.	.	.	2	100	10	267	267

TABLE 15

BENEFICIARY BURDEN FOR SELECTED PROCEDURES FROM ALL CLAIMS - SINGLE FEE VS. BENCHMARK
TOTAL 1:52 THURSDAY, JUNE 21, 1979

N_TOTAL	B	S	N_UP	PCT_UP	B_UP	S_UP	SB_UP	N_DN	PCT_DN	B_DN	S_DN	SB_DN	N_EQ	PCT_EQ	B_EQ	S_EQ
80400	2634495	2715297	37583	47	1134631	1327493	116.977	22047	27	796830	684971	85.962	20770	26	702834	702834

BENEFICIARY BURDEN FOR SELECTED PROCEDURES FROM ALL CLAIMS 1:52 THURSDAY, JUNE 21, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. SINGLE FEE, BY AGGREGATE SUBMITTED CHARGES

RV_CLASS	N_TOTAL	S	AS	N_UP	PCT_UP	S_UP	AS_UP	ASS_UP	N_DN	PCT_DN	S_DN	AS_DN	ASS_DN	N_EQ	PCT_EQ	S_EQ	AS_EQ
0- 29	19733	134007	112669	4639	24	21663	29067	134.178	10092	51	90029	61287	68.0747	5002	25	22315	22315
30- 49	16655	206366	160791	4329	26	37796	48916	129.421	8681	52	135207	98512	72.8601	3645	22	33363	33363
50- 74	12982	255292	229166	3490	27	47591	58798	123.549	7307	56	174581	137247	78.6151	2185	17	33120	33120
75- 99	8571	227636	210785	2504	29	48617	59423	122.227	4799	56	152854	125197	81.9063	1268	15	26165	26165
100-149	6814	315322	298124	2993	34	77458	92604	119.554	4563	52	202458	170114	84.0243	1258	14	35406	35406
150-199	3692	174797	168658	1310	35	45793	54219	118.400	1746	47	104003	89438	85.9956	636	17	25001	25001
200-299	3344	210410	209082	1197	36	62168	73222	117.781	1380	41	106590	94208	88.3835	767	23	41651	41651
300-399	1744	152909	155326	607	35	46603	54714	117.404	681	39	69742	64048	91.8356	456	26	36564	36564
400-499	1072	119799	122326	349	33	36509	42497	116.401	405	38	51690	48230	93.3062	318	30	31599	31599
500-999	2294	393218	399472	632	28	99765	113369	113.636	808	35	159566	152215	95.3931	854	37	133888	133888
1000+	1499	525542	525759	440	29	164235	173508	105.646	540	36	194996	185941	95.3563	519	35	166310	166310

BENEFICIARY BURDEN FOR SELECTED PROCEDURES FROM ALL CLAIMS 1:52 THURSDAY, JUNE 21, 1979
SINGLE FEE VS. BENCHMARK, BY ASSIGNMENT CHARACTERISTICS

ASSIGNED	N_TOTAL	B	S	N_UP	PCT_UP	B_UP	S_UP	SB_UP	N_DN	PCT_DN	B_DN	S_DN	SB_DN	N_EQ	PCT_EQ	B_EQ	S_EQ
0	58957	1819556	1900228	32373	55	887408	1058329	119.261	12229	21	501312	411064	81.9976	14355	24	430835	430835
100	16605	442143	437479	2672	16	73459	81202	110.541	8277	50	165685	153476	92.5207	5656	34	202799	202799

TABLE 16

BENEFICIARY BURDEN FOR SELECTED PROCEDURES FROM ALL CLAIMS 1:52 THURSDAY, JUNE 21, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK

TOTAL

N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	B_EQ	AS_EQ
80400	2634495	2612157	1132	1	44832	47129	105.124	5695	7	250956	226321	90.1835	73573	92	2338707	2338707

BENEFICIARY BURDEN FOR SELECTED PROCEDURES FROM ALL CLAIMS 1:52 THURSDAY, JUNE 21, 1979
SINGLE FEE VS. BENCHMARK, BY AGGREGATE SUBMITTED CHARGES

RV_CLASS	N_TOTAL	B	S	N_UP	PCT_UP	B_UP	S_UP	SB_UP	N_DN	PCT_DN	B_DN	S_DN	SB_DN	N_EQ	PCT_EQ	B_EQ	S_EQ
0- 29	19733	113923	134007	9049	46	55797	83243	149.189	4504	23	28706	21345	74.3573	6180	31	29420	29420
30- 49	16655	182970	206366	7880	47	89635	124174	138.533	4269	26	48869	37726	77.1982	4506	27	44466	44466
50- 74	12982	231719	255292	6806	52	128599	163441	127.094	3453	27	59127	47858	80.9410	2723	21	43993	43993
75- 99	8571	212692	227636	4499	52	117720	143487	121.888	2476	29	59603	48779	81.8398	1596	19	35369	35369
100-149	8814	300682	315322	4265	48	159861	189472	118.523	2964	34	93336	78165	83.7458	1585	18	47685	47685
150-199	3692	170438	174797	1603	43	82722	95439	115.373	1262	34	53659	45301	84.4239	827	22	34057	34057
200-299	3344	211469	210410	1252	37	85832	95794	111.606	1171	35	73568	62547	85.0193	921	28	52069	52069
300-399	1744	156779	152909	596	34	55870	60056	107.492	580	33	53936	45881	85.0656	568	33	46973	46973
400-499	1072	123148	119799	368	34	43674	46322	106.063	344	32	42606	36609	85.9245	360	34	36867	36867
500-999	2294	401230	393218	758	33	143385	148821	103.791	597	26	110322	96874	87.8102	939	41	147524	147524
1000+	1499	529245	525542	507	34	171736	177245	103.208	427	28	173098	163865	94.6776	565	38	184411	184411

BENEFICIARY BURDEN FOR SELECTED PROCEDURES FROM ALL CLAIMS 1:52 THURSDAY, JUNE 21, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY ASSIGNMENT CHARACTERISTICS

ASSIGNED	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	B_EQ	AS_EQ
0	58957	1819556	1797184	.	.	.	.	.	5320	9	218484	196113	89.7608	53637	91	1601071	1601071
100	16605	442143	443846	877	5	25196	26898	106.755	.	.	.	.	.	15728	95	416948	416948

TABLE 17

BENEFICIARY BURDEN FOR SELECTED PROCEDURES FROM ALL CLAIMS 1:52 THURSDAY, JUNE 21, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. SINGLE FEE

TOTAL

N_TOTAL	S	AS	N_UP	PCT_UP	S_UP	AS_UP	ASS_UP	N_DN	PCT_DN	S_DN	AS_DN	ASS_DN	N_EQ	PCT_EQ	S_EQ	AS_EQ
80400	2715297	2612157	22490	28	666198	800338	116.295	41002	51	1441717	1226438	85.0679	16908	21	585382	585382

BENEFICIARY BURDEN FOR SELECTED PROCEDURES FROM ALL CLAIMS 1:52 THURSDAY, JUNE 21, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY AGGREGATE SUBMITTED CHARGES

RV_CLASS	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	B_EQ	AS_EQ
0- 29	19733	113923	112669	145	1	366	420	114.754	1111	6	7314	6006	82.1165	18477	94	106243	106243
30- 49	16655	182970	180791	108	1	665	755	113.534	1098	7	15016	12747	84.8895	15449	93	167289	167289
50- 74	12982	231719	229166	144	1	1394	1513	108.537	969	7	21536	18864	87.5929	11869	91	208789	208789
75- 99	8571	212692	210765	108	1	1514	1628	107.530	644	8	19143	17122	89.4426	7819	91	192036	192036
100-149	8814	300682	298124	144	2	2909	3132	107.666	706	8	30267	27286	90.1510	7964	90	267706	267706
150-199	3692	170438	166658	137	4	3877	4134	106.629	322	9	19264	17227	89.4259	3233	88	147297	147297
200-299	3344	211469	209082	117	3	5270	5601	106.281	321	10	26604	23885	89.7797	2906	87	179595	179595
300-399	1744	156779	155326	64	4	3961	4285	108.180	176	10	20524	18747	91.3418	1504	86	132294	132294
400-499	1072	123148	122326	36	3	3028	3176	104.888	104	10	15603	14633	93.7832	932	87	104517	104517
500-999	2294	401230	399472	89	4	11536	11922	103.346	158	7	34357	32213	93.7596	2047	89	355337	355337
1000+	1499	529245	525759	40	3	10312	10564	102.444	86	6	41328	37590	90.9553	1373	92	477605	477605

BENEFICIARY BURDEN FOR SELECTED PROCEDURES FROM ALL CLAIMS 1:52 THURSDAY, JUNE 21, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. SINGLE FEE, BY ASSIGNMENT CHARACTERISTICS

ASSIGNED	N_TOTAL	S	AS	N_UP	PCT_UP	S_UP	AS_UP	ASS_UP	N_DN	PCT_DN	S_DN	AS_DN	ASS_DN	N_EQ	PCT_EQ	S_EQ	AS_EQ
0	58957	1900226	1797184	11990	20	393457	482089	122.526	35679	61	1161640	969964	83.4995	11288	19	345131	345131
100	16605	437479	443846	8930	54	171204	185232	108.194	2624	16	79272	71611	90.3358	5051	30	187003	187003

APPENDIX A

Specialty Types Used in Study, Based on GHI Specialty Names Used in Medicare Claims Payment

Specialty Type and Specialty	GHI code number
I General practitioner	
General practice	01
Family practice	08
Manipulative therapy (osteopaths only)	12
II Medical specialties	
Allergy	03
Cardiovascular diseases	06
Dermatology	07
Gastroenterology	10
Internal medicine	11
Pediatrics	37
Pulmonary diseases	29
III Surgical specialties	
General surgery	02
Neurological surgery	14
Obstetrics and gynecology	16
Gynecology (osteopaths only)	09
Obstetrics (osteopaths only)	15
Ophthalmology	18
Orthopedic surgery	20
Otolaryngology	04
Otolaryngology (osteopaths only)	17
Plastic surgery	24
Proctology	28
Thoracic surgery	33
Urology	34
Hand surgery	40
IV Other specialties	
Neurology	13
Pathology	22
Physical medicine and rehabilitation	25
Psychiatry	26

Specialty Types Used in Study, Based on GHI Specialty Names Used in Medicare Claims Payment

Specialty Type and Specialty	GHI code number
IV (cont.)	
Radiology	30
Nuclear medicine	36
Geriatrics	38
Nephrology	39
Miscellaneous physician	49
Pathologic anatomy; clinical pathology (osteopaths only)	21
Peripheral vascular diseases or surgery (osteopaths only)	23
Psychiatric neurology (osteopaths only)	27
Roentgenology, radiology (osteopaths only)	31
Radiation therapy (osteopaths only)	32

TABLE A-2

List of Procedures Used in Study

HCFA Code	GHI Code	Description
1	9016	Initial limited office visit, new patient
2	9019	Initial comprehensive office visit, new patient
4	9000	Routine followup brief office visit, established patient
5	9024	Routine followup brief home visit
7	9012	Initial comprehensive hospital visit
8	9005	Routine followup brief hospital visit
10	0470	Radical mastectomy
11	0883	Reduction of fracture, neck of femur
12	1046	Arthrotomy, puncture for aspiration of joint effusion
13	1413	Needle puncture of bursa
15	2183	Thoracentesis
16	2331	Catheterization of heart
17	2335	Insertion of pacemaker
19	3178	Colectomy
20	3261	Appendectomy
21	3311	Sigmoidoscopy
22	3375	Hemorrhoidectomy
23	3515	Cholecystectomy
24	3631	Repair hernia
25	3931	Cystoscopy
26	4031	Dilation of urethra
27	4316	Prostatectomy
28	4321	Transurethral electrosection of prostate
29	4631	Hysterectomy
30	5613	Extraction of lens
31	7100	Chest X-ray
32	7210	X-ray spine
33	7301	X-ray hip
34	7358	X-ray stomach
35	7360	X-ray colon
36	7603	Cobalt
38	8622	Hemoglobin
39	8624	Blood, white cell count
40	8628	Complete blood count

TABLE A-2 (continued)

List of Procedures Used in Study

HCFA Code	GHI Code	Description
41	8652	Cholesterol blood test
42	8681	Hematocrit
43	8708	Prothrombin time test
44	8720	Sedimentation rate
45	8726	Blood sugar
46	8696	BUN, Urea nitrogen
47	8917	Pap test
48	8934	Urinalysis
49	8983	EKG (Electrocardiogram)
50	8990	EEG (Electroencephalogram)

TABLE A-3

Record Layouts for Provider and Beneficiary Files Created for Study

Provider file record layout

Provider number
Specialty
Board certification
Number of assigned claims
Number of assigned services
$ assigned submitted charges
$ assigned allowed charges (under each method)

# of unassigned claims
# of unassigned services
$ unassigned submitted charges
$ unassigned allowed charges (under each method)

# of claims (assigned plus unassigned)
# of services (assigned plus unassigned)
$ submitted charges (assigned plus unassigned)
$ allowed charges (assigned plus unassigned) under each method

Beneficiary file record layout

HIC (Health Insurance Claimant) number
# of assigned claims
# of assigned services
$ assigned submitted charges
$ assigned allowed charges (under each method)

# of unassigned claims
# of unassigned services
$ unassigned submitted charges
$ unassigned allowed charges (under each method)

# of claims (assigned plus unassigned)
# of services (assigned plus unassigned)
# submitted charges (assigned plus unassigned)
# allowed charges (assigned plus unassigned)
$ burden (20% of allowed charges for assigned claims; submitted charges less 80% of allowed charges for unassigned claims) under each method

APPENDIX B

Comparison of Board Designation in GHI Provider File and Medical Directory

The alphabetical listing of 1977 GHI Medicare providers was compared with the listing in the Medical Directory of New York State, 1976-1977. Of the 4,784 physicians listed in the master file, a 5.6% sample (the first 133 physicians and the last 133 physicians) was selected for comparison. These two groups have very similar activity rates; overall, 117 (44%) physicians are active (Table B-1).

Of these 22 (18.8%) are classified as board and 60 (51.3%) as non-board by both GHI and the Directory. However, for 20 physicians, GHI and the Directory did not agree on classification. Sixteen physicians (13.7%) were classified as non-board by GHI and board by the Directory. For 4 physicians (3.4%), the reverse is true. As the GHI listing is more recent than the Directory the certification could have occurred without being included by the Directory. As for the 16 physicians, a total of 15 physicians (12.8%) were not listed in the Directory but were in the GHI list. Of these, 13 (11.1%) were non-board and 2 (1.7%) board. Explanations of the difference include error by GHI or reporting failure by the physician.

TABLE B-1

Distribution of Active Physicians from a Sample of 266 Medicare Physicians in Queens by Board Status, 1976

Designation by Directory

LEGEND
Frequency
Percent Row percent Column percent

	Designation by Group Health, Incorporated		
	Board	Non-Board	Total
	22	16	38
Board	18.8% 57.9 78.6	13.7% 42.1 18.0	32.5%
	4	60	64
Non-Board	3.4% 6.3 14.3	51.3% 93.8 67.4	54.7%
	2	13	15
Not Listed	1.7% 13.3 7.1	11.1% 86.7 14.6	12.8%
Total	28	89	117
	23.9%	76.1%	100.0%

117 active physicians = 44% of sample

Source: GHI Provider Printout, DAMGC118, 11 January 1979; and PIPGC485, 19 May 1978.

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95-P-97200

ALTERNATIVE APPROACHES TO PHYSICIAN REIMBURSEMENT UNDER MEDICARE: A SIMULATION

Final Report to
OPPR, Health Care Financing Administration
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EXECUTIVE SUMMARY

The study reported here is a continuation of previous CUNY research on payment to physicians under Medicare. The previous study examined the effect of carrier discretionary practices on prevailing fees. The current study was concerned with evaluation of the effect of alternative methods of determining prevailing charges on program outlay, physicians' revenue, and beneficiary out-of-pocket expense.

The payment to physicians under Medicare Part B is governed by the Reasonable Charge Process (RCP) prescribed by laws, the Carriers Manual and other regulations issued by HCFA (Health Care Financing Administration), which took over responsibility for running the program from the Social Security Administration. At the core of the RCP are rules for determining allowed charges - i.e., charges of which the program will pay 80% after the deductible (currently $60 in a benefit year) is satisfied. The allowed charge is currently determined as the lesser of the submitted, customary, and prevailing charges.

After discussion with HCFA, four methods of determining the prevailing were selected for study. The current method using the adjusted prevailing served as the benchmark to which all the other methods were compared. The unadjusted prevailing - the 75th percentile of the distribution of weighted customaries - was included in the study in order to assess the effect of the Economic Index. The single fee - prevailing fee computed without regard to the specialty designation of the physicians - was included in order to see the effect of specialty designation on the three participants in the program: the government, the physicians, and the beneficiaries.

Under ARCS (average reasonable charge, single fee), in addition to customary and prevailing charges (which are used to determine allowed charges under benchmark) the average of allowed charges in a previous period is used to determine the allowed charge on a current claim. While the ARCS is computed without regard to specialty, the prevailing, which is still used in pricing under this method, is computed for each specialty separately. Payment under ARCS was designed to "hold the providers harmless" - i.e., the allowed charges under this method should not be lower than under benchmark.

ARCD (average reasonable charge, dual fee), under which two average reasonable charges are computed - one for board-certified physicians and one for non-board physicians - was included as a method of pricing that would recognize quality differences.

The data source for the simulations is the Queens Medicare history extract file for CY (calendar year) 1976 and 1977. It was obtained from Group Health, Inc., the Part B carrier for the county.

The values for the three first methods (benchmark, unadjusted prevailing, and single fee) were provided by GHI and constitute a part of its reasonable charge process for FSY 1978. The average reasonable charge fees were computed using claims for services performed for FSY 1976 (claims "entered DP" - the GHI computer system - between July 1, 1975 and June 30, 1976). Since the GHI claims record does not include allowed charges, for the computation of both versions of the ARC it was necessary to price all claims for services in FSY 1976, using GHI customary and prevailing screens in effect during FSY 1976.

The effect of the payment methods under study was evaluated using claims for the period July 1 - December 31, 1977. The claims data file does not have the exact date of service; it has the date "entered DP", and this was the basis used by us to select the claims for the test. Each claim for one of the 44 selected procedures was priced under each payment method and the results were compared. The selected procedures account for 67% of the submitted charges and 78% of services in the last period and are in a group of 50 procedures that were designated by HCFA for regular reporting of prevailing charges by carriers.

The study measured the effect of the methods on program outlay, physician revenue, and beneficiary burden. Program outlay is defined as 80% of allowed charges. Since the deductible is not accounted for, this is an overestimate of the cost to the government, which pays 80% of allowed charges only after the deductible has been satisfied. Physician revenue for assigned claims (claims for which providers are paid directly by the Medicare program) consists of the allowed charges for assigned claims. This assumes that the physician collects the deductible and coinsurance from the patient, which may not always be the case. For unassigned claims the physician is assumed to collect his total fee from the beneficiary, and so his revenue equals the submitted charge. Beneficiary burden for assigned claims consists of coinsurance (allowed charge less 80% of submitted charge) and deductible, on the assumption that the physician collects them. For unassigned claims, the burden equals the submitted charge minus 80% of the allowed charge.

The effect of payment method on program outlay was measured by the ratio of the outlay under each method to the outlay that would have occurred had the benchmark method been used. A ratio higher than 100% indicates an increase in outlay, and a ratio lower than 100% indicates a decrease. Specialty assignment profile and aggregate submitted charges are also taken into consideration in evaluating the effect of payment methods on outlay.

In evaluating the effect on physician Medicare revenue, the number of physicians whose revenue increased, decreased or remained unchanged, and the magnitude of the change as compared to benchmark, were computed.

The beneficiaries were also divided into three groups: those whose burden remained the same as it was under benchmark, those whose burden increased and those whose burden decreased. The magnitude of the change in burden was also evaluated.

The results of the analysis showed that program outlay is lowest when single fee is applied as the method of payment. Average reasonable charge causes only a slight increase (about half of a percent) in outlay. Individual physicians are affected differently by changes in the method of payment. Assignment characteristics and the level of aggregate submitted charges do not influence the effect of payment method on outlay.

The Economic Index is effective in holding program costs down, as can be seen from the comparison of outlay under unadjusted prevailing to outlay under benchmark; individual specialties are affected by the index in different ways. The reasons for this involve differences in the composition of expenses based on location and technology of practice and other factors, and differences in the ratio of expenses to gross earnings. Indices that would recognize different classes of physicians based on these factors, or would differentiate among specialties, may be more equitable and effective.

Only single fee and ARCS were evaluated for effect on physician revenue. Under

single fee the revenue of 45% of providers remains the same as under benchmark, for 20% of providers the revenue went up 2% and for 36% it went down 2%, on the average. Non-board physicians were likely to have their revenues increased by about 3%. The same increase was experienced by 45% of GPs. Since specialty fees tend to be higher than GPs' fees and since specialists are more likely to be board-certified, the results are to be expected when prevailing charges are computed without regard to specialty. It is of interest to explore the reasons for higher fees for specialist services. If the service provided under the same procedure code is the same whether the physician is a specialist or GP then there is no reason to have separate screens; even if the services were different the procedure codes could be defined so that the difference would be recognized and this would allow joint screens for all providers of a procedure. GHI and other carriers no doubt have to use carrierwide screens when the number of providers within a specialty is too small to form a prevailing. The single fee would cause a reduction of revenue for some specialists. This reduction may be justified if the higher fees they are commanding are not due to quality of the services they provide but constitute economic rent.

The ARCS was so defined as not to cause a decrease in physician revenue, and it did not. Most physicians would remain at their benchmark level and some would gain a little. Most likely to see an increase in revenue under ARCS are GPs and physicians specializing in internal medicine.

Since revenue under ARCS may be similar to benchmark, when ARCS is compared to single fee the results are the opposite of those observed when single fee was compared to benchmark.

If single fee instead of benchmark were used as the payment method, almost half of the beneficiaries whose claims were included in the test would experience an increase (averaging 17%) in their out-of-pocket expenses, a quarter would experience no change, and a quarter would have a decrease of 14% on the average. The extent to which burden is affected by payment method is directly related to the assignment status of the beneficiary. Those who have no assigned claims at all - about three-quarters of the beneficiaries - were most likely to have an increase in burden. Half of the beneficiaries who had all their claims assigned to providers experienced a decrease in burden and only 16% had an increase.

Under ARCS more than 9% of the beneficiaries experience no change in burden. Other payment methods were not evaluated.

Of the two methods for which effect on outlay, physician revenue, and beneficiary burden was reviewed, one, ARCS, had little effect and would cause no disruption to any of the participants in the system.

The other, single fee, would reduce program cost to the government, and would affect physician revenue only slightly but would substantially increase the out-of-pocket expenses of about half of the beneficiaries. The desirability of shifting costs from government to the elderly in a period of inflation is highly questionable since their income is fixed. Aside from injury to equity, there could be an adverse effect on local markets dependent on the purchases of the elderly.

Since the ARCS does not seem to have a significant effect on any of the participants the cost involved for its installation may not be justified.

INTRODUCTION

The staff report on physicians' fees issued by the Council on Wage and Price Stability in 1978 1/ notes rapid growth in physician fees relative to other consumer prices between 1950 and 1977, accompanied by even more significant increases in consumer outlays for physician services as a result of fee inflation, population growth, and utilization of services. Understandably, physicians' incomes have risen rapidly, at a rate unmatched by any major occupational group, and attained a level four times that of professional and technical workers in 1975.

Fee inflation is thus seen to be a public issue. It is also accompanied by substantial variations in income among specialties, unrelated to supply.

While past practices of organized medicine that restricted or discouraged competition are implicated in current levels of physician fees, attention has been increasingly focused on the influences of methods of payment under insurance since market forces fail to check the behavior of providers when the transactions are heavily underwritten by third parties. In this context, the methods of deriving reasonable charges that can serve as the basis for payment under Medicare play an important role, as they involve a substantial segment of total expenditure for physicians' services in the United States 2/.

The Problem

Medicare, enacted in 1965 as Title XVIII of the Social Security Act, was designed to alleviate the difficulties the elderly face in obtaining health care. The program was divided into two sections; Part A (hospital costs), and Part B, Supplementary Medical Insurance or SMI (physician and other health services). Administration of Medicare was delegated to non-governmental insurance carriers under the general supervision of DHEW. Blue Shield organizations, Group Health, Inc., and commercial corporations share in performing this function for Part B services.

The payment to physicians under Medicare Part B is governed by the Reasonable Charge Process (RCP) prescribed by laws, the Carriers Manual and other regulations issued by HCFA (Health Care Financing Administration), which took over responsibility for running the program from the Social Security Administration. At the core of the RCP are rules for determining allowed charges - i.e., charges of which the program will pay 80% after the deductible (currently $60 in a benefit year) is satisfied. The allowed charge is currently determined as the lesser of the submitted, customary, and prevailing charges.

The customary is the median of the distribution of charges submitted by a given physician for a given procedure within a calendar year; the prevailing charge is

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1/ Zachary Y. Dyckman, A Study of Physicians' Fees, Staff Report prepared by the Council on Wage and Price Stability, March 1978.

2/ In FY 1977 Medicare expended $3,975,000,000 out of the $18,282,000,000 spent on physician services from all sources. 95th Cong. 2nd Sess. House of Representatives Comm. Pub. No. 95-160, Abuses in the Sale of Health Insurance to the Elderly in Supplementation of Medicare: A National Scandal, Nov. 28, 1978, p. 19.

the 75th percentile of the distribution of weighted customaries (frequency of performance is used as the weight) adjusted for the Economic Index.

The study explores the effect of several ways of determining the prevailing charges on the cost of the program to the government, the effect on physicians' revenue from Medicare and the out-of-pocket expense to the beneficiary, by simulations using claims submitted in Queens county.

The study reported here is an extension of the simulations done by CUNY under contract #600-76-0145 with HCFA. The earlier study simulated the effect of selected carrier discretionary practices on prevailing fees but did not evaluate the effect on the participants in the Medicare system: the cost of the program to the government, the cost to the beneficiary, and the Medicare revenue of physicians. The current study concentrates on these aspects in evaluating (simulating) the effects of alternative reimbursement methods on the three groups.

The research design is set in the context of the desirability of exploring alternatives to the reasonable charge determination method of setting Medicare fees. The present method is complicated to perform. It is also difficult to hold to a uniform standard because of the many opportunities afforded in a many-stage process for carrier discretion leading to random or non-random inequities affecting both practitioners and their patients. The present method has a quality control component in its recognition of specialist services as a distinct category for price determination but the component is incomplete because the basis of specialty designation is not specified. Moreover, the relation between use of specialists in given circumstances and improved results of care has not been systematically tested. The installation of the Economic Index has posed a direct challenge to the continuation of the RCP because the Index may wipe out the meaning of 75th percentile as the upper bound to allowed charges. CUNY's study of national fee data indicates that this effect had spread far more widely in 1978 than in 1977. A basic problem in Medicare pricing policy is the absence of information about effects on beneficiaries' financial burdens under the different circumstances of utilization that may exist. Residual payments, measured nationally, must be quite substantial even if physicians do not universally collect the copayments to which they have reserved their right, since a high proportion of claims are unassigned and submitted charges do exceed those allowed by Medicare carriers following (each in its own fashion) the Carriers Manual regulations.

Payment Methods Selected

The test methods were selected after discussion with HCFA because of the particular interest in them as possible alternatives to the present system. The benchmark, or the current RCP, of course had to be included so as to provide a common denominator in all the comparisons. The unadjusted prevailing represents the 75th percentile of the weighted distribution of customaries, which used to be the prevailing before the application of the Economic Index was mandated by law. Thus the comparison between the program costs obtained when unadjusted prevailings are used and costs under benchmark provide a measure of the effectiveness of the Economic Index adjustment. (CUNY's previous study showed that the application of the Economic Index will, over time, create a fee schedule in place of the RCP, thus putting in question the need for costly computations needed to create the customary and prevailing charges used in the RCP.)

Under current regulations carriers are encouraged to develop separate prevailing

screens for individual specialties. The number of specialties for which they do so is left to the carrier's discretion. GHI uses all the specialties recognized by HCFA in developing prevailing profiles; other carriers have only one prevailing screen for each procedure, some (for example, Blue Cross/Blue Shield-Greater New York) have only two: general practitioners and specialists. The inclusion of the single fee - a prevailing fee computed without regard to the specialty of the provider - in the test permitted testing of the effect of specialty designation on program outlay, physicians' revenue, and beneficiary burden. (CUNY's earlier study mentioned above evaluated the effect of specialty designation on prevailing fees but did not deal with the effect on all participants in the program.)

The ARCS (average reasonable charge, single fee) is the method in which HCFA was particularly interested. Under ARCS, in addition to customary and prevailing charges (which are used to determine allowed charges under benchmark) the average of allowed charges in a previous period is used to determine the allowed charge on a current claim. While the ARCS is computed without regard to specialty, the prevailing, which is still used in pricing under this method, is computed for each specialty separately. Payment under ARCS was designed to "hold the providers harmless" - i.e., the allowed charges under this method should not be lower than under benchmark.

The rationale for computing separate prevailing screens is that the quality of care provided by specialists is higher. However, since most carriers accept self-designation in determining a physician's specialty this may not be a good measure of quality. Since specialty boards require proficiency in a given field of medicine before providing certification it would seem that board certification would be a better indicator of quality of care than "specialty" per se 3/. ARCD (average reasonable charge, dual fee) under which two average reasonable charges are computed - one for board-certified physicians and one for non-board physicians - was included as a method of pricing that would recognize quality differences. Prior to the computation of ARCD we tested the accuracy of GHI board designation and found that most of the errors were on the side of entering non-board status for a board-certified physician rather than vice versa. (See Appendix.)

RESEARCH DESIGN AND PROCEDURE FOLLOWED

The simulation is designed to provide more concrete information on the altered program outlays, effects on providers, and impacts on beneficiary burden to be expected from certain alternatives to the current method. While this study cannot trace ultimate consequences for quality, supply and demand responses, and other matters of broad interest, it is intended to produce a systematic comparison of certain financial and economic effects of alternative payment systems. Since a common claims data set was used, the effect of the payment basis can be isolated without concern for variation introduced by time periods, geography, and carrier differences - or the methodological diversity of individual investigators.

The data source for the simulations is the Queens Medicare history extract file for CY (calendar year) 1976 and 1977. It was obtained from Group Health, Inc., the Part B carrier for the county.

The entire CY 1976 file was used to compute the prevailing fees under the present method and under four alternative methods. A "pay" program to determine the al-

3/ This is not to say that specialty boards are a fully satisfactory measure of quality: they do not tell current knowledge or actual performance or guarantee superior outcome. They are, however, more indicative than self-designation.

lowed charge in an individual claim incorporating the pricing result of each simulated method was written. The program selected the lowest of: submitted charge, customary charge, and prevailing. The reason for not using the current GHI program is that the "pay" aspect is integrated with the whole claims processing program.

The five different methods of payment include:

- Benchmark - the method actually used by GHI to pay claims for the period under study. The prevailings are computed for each procedure/specialty/type of service combination based on the 75th percentile of the distribution of weighted customaries, adjusted for the Economic Index and the "no rollback" provision.

- Unadjusted prevailing - the 75th percentile of the distribution of weighted customaries which serves as a base for the benchmark.

- Single prevailing - the carrier-wide prevailing computed without regard to specialty.

- Average reasonable charge, single fee - the average reasonable charge (lowest of submitted, customary, and prevailing) actually determined on CY 1976 data. Computed without regard to specialty.

- Average reasonable charge, dual fee - the average reasonable charge determined on CY 1976 data for board-certified physicians and for non-board physicians separately.

The values for the three first methods: (benchmark, unadjusted prevailing, and single fee) were provided by GHI and constitute a part of its reasonable charge process for FSY 1978. The average reasonable charge fees were computed using claims for services performed for FSY 1976 (claims "entered DP" - the GHI computer system - between July 1, 1975 and June 30, 1976). For the computation of the ARC it was necessary to price all claims for services in FSY 1976 (the GHI claims record does not include allowed charges) using GHI customary and prevailing screens in effect during FSY 1976. The computational formula for ARC is as follows:

$$ARC_p = \left(\sum_{i}^{n} AL_p \right) / n$$

Where:

ARC_p - average reasonable charge for a given procedure

AL_p - allowed charge for that procedure in FSY 1976. Allowed charge = the lowest of submitted, customary, or prevailing. When customary and/or prevailing are not available, the allowed charge is equal to the 50th percentile of the distribution of weighted customaries.

n - number of allowed charges

For the dual ARC the claims of board-certified physicians were used to produce ARC_B and claims of non-board physicians were used to compute ARC_{NB} us-

ing the above formula. (See Appendix for a test of the goodness of the GHI board designation.) It is felt that the use of the fee screen year instead of the calendar year in computation of ARC is preferable since within a single CY two sets of reasonable charges are used, thus distorting the evaluation of the effect of the different payment methods.

In computation of the average reasonable charges, claims which differed by more than two standard deviations from the mean were excluded. The GHI profile development used in computation of customary and prevailing charges applies the same rule for exclusion of extreme values. Also excluded were claims of providers who did not appear on the Provider Master File supplied by GHI.

The effect of the payment methods under study was evaluated using claims for the period July 1 - December 31, 1977. The claims data file does not have the exact date of service; it has the date "entered DP", and this was the basis used by us to select the claims for the test. Each claim for one of the 44 selected procedures was priced under each payment method and the results were compared. The 44 selected procedures are identified in the Appendix. They account for 67% of the submitted charges and 78% of services in the last period and are in a group of 50 procedures that were designated by HCFA for carrier reporting.

The following measures of effect were used in the comparison:

Allowed charge = the lowest of submitted, customary, and prevailing charges

Program outlay = 80% of allowed charge
As the deductible is not accounted for, this is an overestimate to the extent of the deductible.

Physician revenue
a) for assigned claims = allowed charge
This assumes that the deductible and coinsurance are collected.
b) for unassigned claims = submitted charge

Beneficiary burden
a) for assigned claims = 20% of allowed charge
b) for unassigned claims = submitted - 80% of allowed charge
For both a) and b), the deductible is not accounted for; hence burden is underestimated.

Two files were created as a basis for the analysis, the provider file and the beneficiary file. (See record layouts.) The provider file was used in the evaluation of outlay and physician revenue. The beneficiary file was used to evaluate the effect of payment methods on beneficiary burden.

The reasonable charge process determines the allowed charge at the level of the lowest of submitted, customary, or prevailing.

Under ARCS and ARCD the basis used for determining allowed charge was slightly different. It was based on the relationship of the customary to the average reasonable charge, as follows:

$$\text{Allowed} = \text{Submitted if } S < C, P, ARC$$

$$\text{Allowed} = ARC \text{ if } S > ARC < C, P$$

Allowed = Customary if
$ARC < C \nless P$

Allowed = Prevailing if
$P < C, S, ARC$

Where: S = Submitted charge
C = Customary charge
P = Prevailing charge at the level computed for benchmark
ARC = Average reasonable charge, either single or dual

This method of computing the allowed charge was employed in order to assure that all providers will be "held harmless", i.e., their allowed charges under ARC will not be lower than what they would have been under benchmark.

Changing the payment method would affect the determinant of the allowed charge, i.e., the frequency with which the allowed charge was determined at the level of (no higher than) customary, prevailing, or submitted charge. While "paying" the claims in the simulation both the level and the origin of the allowed charge were added to the record, making possible the evaluation of the difference among the payment methods with regard to the origin of allowed charges.

Another measure used in evaluating the payment methods was the ratio of allowed charges to submitted charges, which provides a measure of the reduction in submitted charges due to each method.

The effect of payment method on program outlay was measured by the ratio of the outlay under each method to the outlay that would have occurred had the benchmark method been used. A ratio higher than 100% indicates an increase in outlay, and a ratio lower than 100% indicates a decrease. Specialty assignment profile and aggregate submitted charges are also taken into consideration in evaluating the effect of payment methods on outlay.

In evaluating the effect on physician Medicare revenue, the number of physicians whose revenue increased, decreased or remained unchanged, and the magnitude of the change as compared to benchmark, were computed. Not all the methods under the study were included in this part of the analysis - only single fee and ARCS, which were the most interesting. These two methods were also the only ones included in an analysis of beneficiary burden, in which the numbers of beneficiaries who were unaffected, those whose burden increased, and those whose burden decreased, and the magnitude of change were compared to benchmark. The assignment characteristics and aggregate submitted charges of the beneficiaries were also taken into consideration.

Some characteristics of providers and beneficiaries in Queens whose claims were included in the test ("entered DP" July 1 - December 31, 1977) are relevant to this study. The assignment rate for our purpose is the ratio of assigned to total submitted charges. Figures on assignment for the 1631 providers in the study indicate a median of 19% for all providers, with general and family practice at 8%, surgical specialties at 22%, medical specialties at 29% and "other" specialties at 41%. (For definitions of specialty groups see Appendix.) Medical and surgical specialists are equally likely to accept assignment for all the Medicare services they provide: about 9% of providers in those groups always accept assignment. GPs are least likely to accept assignment: 37% never accept it and only 3% always do so. About 30% of "other specialties" always accept assignment and an equal number never do so.

The distribution of providers by the level of aggregate submitted charges is also instructive. The median for all physicians is $2,706 for the six months of the test. "Other" specialties have a median of $775, surgical specialties $1,917, GPs $2,321, and medical specialists are highest with $6,863.

Claims of 80,400 beneficiaries are included in the analysis; since providers were not likely to accept assignment, only 21% of beneficiaries had all of their claims assigned; 73% had no assigned claims at all and only 6% had some assigned claims. The median aggregate submitted charges for beneficiaries are $157.00 for the six months of the test; 24.5% of beneficiaries have less than $30.00, which means they are not likely to meet the deductible of $60.00 in the full year of benefits. Eighty-eight percent of the beneficiaries have aggregate submitted charges under $200.00.

RESULTS OF SIMULATION

The results of simulation of the effect of changing payment methods on program outlay, physicians' revenue, and beneficiary burden are presented below. The origin of allowed charges and the ratio of allowed to submitted charges under each method are presented first followed by the effect of payment methods on the measures of interest.

Origin of Allowed Charges

We have examined for each method the determinant of the allowed charge - i.e., which of the three possible sources became the allowed charge. As indicated above, at the time of "paying" the claim both the source (origin) of the allowed charge and its value were added to the record. The results for the whole file were summarized. These indicate that in all the methods considered the allowed charge generally emerges below the submitted charge. The highest proportion of allowed charges at the submitted charge level was 12.1% for ARCD, followed by 11.7% for ARCS. As for the remaining three methods, when unadjusted prevailings were used, the submitted charge became the allowed charge for 6.5% of services; for benchmark and single fee, comparable figures were 5.2% and 5.3% respectively.

The payment methods differ more sharply with regard to the proportion of services allowed at the customary level (this includes the condition when the customary is equal to the prevailing and/or submitted charge). The proportion varies from 81.9% for unadjusted prevailing to 40.4% for ARCD. Benchmark and single fee are similar to each other in this respect with 52.3% and 47.3% respectively.

The prevailing as the limiting factor in determining the value of the allowed charge increased in importance from 11% of services, including those priced at the carrierwide prevailing, for unadjusted prevailing to 46.9% for single and ARCD. For benchmark, the prevailing determined 41.9% of the allowed charges.

Ratio of Allowed Charges to Submitted Charges

The median ratio of allowed to submitted charges (per service) varies from 0.82 for benchmark to 1.00 for the unadjusted prevailing. ARCS and ARCD are close together and similar to benchmark; and the ratio for single is 0.85. The mode for all the methods was 1.00, occurring 31% of the time for single fee and 55.4% for unadjusted. The remaining payment methods were similar with ARCS and

ARCD at 37.5%, and benchmark had 36% of services for which the ratio of allowed to submitted charges equalled 1.00. Thus, in respect to fee reduction, ARCS and ARCD are very similar to benchmark. More than half of the services are priced at 80% or more of the submitted charge under all the methods considered.

Program Outlay by Method of Payment

The effect of method of payment on program outlay was measured by the ratio of outlay under each method to outlay under benchmark. Of the four methods tested, only single fee showed a decrease in program outlay (98.1%). ARCS and ARCD did not have a major effect - only about half a percent, while unadjusted prevailing caused an increase of 8.7% above benchmark. The difference between benchmark and unadjusted prevailing is due to the application of the Economic Index, which appears to be effective in holding costs down.

Board certification status of the provider does not influence outlays when unadjusted, ARCS, and ARCD are used. When single fee is used outlay is reduced to 94.51% of benchmark for board-certified physicians and only to 99.0% for non-board certified MDs. The ratio of outlay under ARCS to outlay under single fee is 106% for board-certified physicians and 101% for the non-board group.

When specialty types are taken into consideration the outlay for GPs is higher than benchmark for all the methods considered - 12.6% under unadjusted prevailing, 10.8% under single fee, and 1.6% and 1.3% for ARCS and ARCD. The other specialty groups affect outlay by less than 1% under ARCS and ARCD, but reduce it under single fee to 91.8% for surgical specialties, 93.4% for "other" specialties and 97.2% for medical specialties. While outlay for each individual specialty was higher under ARCS and ARCD than under benchmark only general practice (01), general surgery (02), and pulmonary diseases (29) have an increase in outlay of 1% or more.

Under single fee outlay went up for GPs (01) by 11.8%, and went down for 12 of the 24 individual specialties. Specialties with most reduced outlays when single fee is compared to benchmark are: dermatology (07) with a ratio of 80.02%, ophthalmology (18) - 81.93%, otolaryngology (04) - 83.70%, neurology (13) - 84.03%, obstetrics (16) - 84.21%, and psychiatry (26) with a ratio of 89.61%. Those that had ratios in the 90s are: pathology (22), physical medicine (25), orthopedic surgery (20), internal medicine (11), radiology (30), and urology (34). Of the twelve specialties that show a ratio of outlay higher than 100% of that under benchmark, eleven vary by less than 1% but GPs (01) show a substantial increase of 11.82%.

All specialties show a higher outlay ratio to benchmark (of 100% or more) when unadjusted prevailings are used; the magnitude varies from a low of 100.6% for urology (34) to a high of 124.9% for orthopedic surgery (20). This suggests that specialties have different rates of fee inflation and their sensitivity to the index varies.

Assignment characteristics and the level of aggregate submitted charges of the individual providers do not alter the effect of payment methods on outlay.

Effect of Payment Method on Physician Revenue

In order to assess the effect of payment method on the revenue of physician providers, they were partitioned into three groups: those whose revenue increased because of the method, those whose revenue declined, and those whose revenue re-

mained unchanged as compared to what it was under benchmark. Two experimental payment methods were evaluated - the single fee and the average reasonable charge, single fee (ARCS).

Since the revenue from unassigned claims equals submitted charges by definition, all the change in revenue observed is due to assigned claims only. For individual physicians, therefore, the effect would depend on their assignment rate.

Under single fee, the revenue of 45% of physicians remained unchanged, the revenue of 20% averages 102.4% of benchmark, and 36% have their revenue reduced to 98.4% of what it was under benchmark. When board certification is taken into account the proportion of those who are not affected remains at 45% for both board and non-board physicians but 8% of board doctors as compared to 23% of non-board doctors have enhanced revenue under single fee.

The extent of increase is also higher for non-board MDs - 2.7% vs. 0.7% for board-certified physicians. Forty-six percent of board-certified physicians would have a revenue averaging 98.3% of benchmark under the single fee method and 32% of non-board doctors would have 98.4% of benchmark: the effect of the method is even more varied when specialty types are considered. Sixty-eight percent of physicians in medical specialties would have their Medicare revenue reduced to an average of 99.1% of that under benchmark, 45% of GPs would have their revenue increased by 3.2%, and 60% of "other" specialties would feel no change in revenue. While for 43% of surgeons there would be no effect on revenue, 41% would see a decrease to 97.2% (on the average) of revenue under benchmark and 15% would experience a small increase (0.6%).

Individual specialties with only a few practitioners are unaffected. This is partially due to the method of determining the reasonable charge by using the carrier-wide (single fee) prevailing when no valid prevailing for a procedure exists. The specialties with the highest proportions of physicians whose revenue would be enhanced are general practice (01) - 46%, general surgery (02) - 39%, orthopedic surgery (20) - 35%, and family practice (08) - 28%. The amount of increase, however, is high only for GPs - 3.4%; for the other specialties it varies from a high of 2.3% for radiology (30) to 0.1% for family practice. The specialties with highest proportions of physicians whose revenue would go down under single fee as compared to benchmark are: neurology (13), ophthalmology (18), dermatology (07), otolaryngology (04), internal medicine (11), urology (34), and orthopedic surgery (20), in which over 50% of physicians were affected. The amount of decrease in revenue varies from 10% for physical medicine (25) to less than 2% for general surgery (02).

Under ARCS 87% of providers would have the same revenue from Medicare as they had under benchmark, and 13% would go up, the average increase being less than 1%. The proportion of physicians whose revenues will be unaffected varies from 78% for GPs to 97% for "other" specialties; 94% of surgeons will not see a change in revenue as compared to benchmark. For those whose revenue will be enhanced only GPs will have an average increase of more than 1%.

Most individual specialties have only a few physicians whose revenue would go up; the only two specialties with substantial number of providers whose revenue will increase are general practice and internal medicine but the average increase for the latter is less than one third of one percent. The physicians most affected are those who always accept assignment, but even of these only 9% (13 physicians) have increased revenue and the increase is only 1.4% on the average. The small numbers of physicians in individual specialties who always accept assignment make further

analysis of revenue by assignment characteristics of physicians of little value.

When physician revenue under ARCS is compared to revenue under single fee results are quite different from those obtained by comparing ARCS to benchmark. Thirty-nine percent of physicians will experience no change in revenue, 42 will have an increase of 1.6% on the average and 18% a decrease of 2.5%. Specialty types are affected differently: 72% of medical specialists will have a revenue higher by 0.9%, on the average, than what they would have had under single fee, 27% will see no change and 1% will have a decrease of 0.2%. Forty-five percent of GPs will have no change of revenue, 41% will lose 3.4% on the average, and 14% will gain 1.9%. Forty-five percent of surgical specialists will gain 2.8% in revenue, 40% will see no change, and 15% will experience a decrease of 0.5%. Board certification status is of some importance to the revenue effect: 42% of board-certified and 38% of non-board doctors will not experience a change in revenue, 49% of board and 40% of non-board doctors will have an increase in revenue averaging under 2%, 8% of board doctors will have a decrease of 0.7% and 21% of non-board doctors will have a decrease of 2.7%.

Among individual specialties only GPs (01), general surgeons (02), and orthopedic surgeons (20) have 30% or more physicians whose revenues will go down under ARCS as compared to single fee, but only GPs' revenue will go down by more than 2%.

Eighty-nine percent of neurologists (13) will have an average increase in revenue of 6.4%. Specialties in which 50% or more of physicians have an increase in revenue are: ophthalmology (18), otolaryngology (04), dermatology (07), internal medicine (11), urology (34), orthopedic surgery (20), physical medicine (25), and pulmonary diseases (29). Dermatologists have the highest rate of increase (8.8%) over revenue under single fee.

Effect of Payment Method on Beneficiary Burden

Of the 80,400 beneficiaries whose claims were included in the simulation 73.3% had no assigned claims at all, 20.7% had all claims assigned and the remainder ranged between 1% and 99%.

The beneficiary burden under all payment methods is dependent on the allowed charge regardless of assignment status but whereas for assigned claims it is limited to the level of 20% of allowed charges, for unassigned claims no such limit exists.

When burden under single fee is compared to burden under benchmark, 47% of beneficiaries saw their out-of-pocket expenses go up by 17%, on the average, for 27% the burden went down by 14%, and 26% of beneficiaries remained unaffected.

The largest group of beneficiaries (three-quarters) had no assigned claims at all. For 55% of them the out-of-pocket expenses went up by 19.3% on the average, 24% experienced no change in burden due to a change to single fee, and 21% even saw their burden reduced by 18%.

Single fee had an opposite effect on beneficiaries who had only assigned claims; 50% of these experienced a decrease of 7.5% on the average in out-of-pocket costs, 34% had no change in costs and 16% had an average increase of 10.5% in burden.

The level of aggregate submitted charges does not play a role in the effect of single fee on beneficiary burden.

The beneficiary burden under ARCS is not very different from that under benchmark. For 92% of the beneficiaries burden is unchanged, for 7% it goes down by 10% on the average, and 1% experience an increase of 5%.

For beneficiaries with no assigned claims 91% see their burden unaffected and the remaining 9% experience an average decrease of 10%. Beneficiaries who have only assigned claims are either unaffected (95%) or have an average increase of 7% in their out-of-pocket expenses.

It is to be expected that when the beneficiary burden under ARCS is compared to single fee most beneficiaries would experience relief. Fifty-one percent have a decrease of 15% on the average, 21% experience no change and 28% have an increase in out-of-pocket expenses of 16%. The effect of the payment method is quite different for the beneficiaries who have all their claims assigned - 54% will have an increase of about 8% in their out-of-pocket expense under ARCS as compared to single fee, 30% will experience no change, and 16% will see a decrease of 10% in their burden.

SUMMARY AND CONCLUSIONS

The allowed charges are determined at the level of submitted charges less frequently than at the customary and prevailing level under all the methods considered; under both average reasonable charge methods 12% of the services were priced at this level, double the proportion of services priced at the level of submitted charges under benchmark, unadjusted prevailing, and single fee.

The customary charge is the most important determinant of allowed charges under unadjusted prevailing and benchmark, whereas the prevailing is a more frequent determinant of the level of allowed charges under single fee; customary and prevailing are of equal importance in determining the allowed charges (about 40% each) under both ARCS and ARCD. The average reasonable charge accounts for an additional 5%.

The actual level of allowed charges, however, is not very far removed from submitted charges - for more than half of the services the allowed charge is more than 80% of submitted charges under all methods.

Program outlay is lowest when single fee is applied as the method of payment. Average reasonable charge causes only a slight increase (about half of a percent) in outlay. Individual physicians are affected differently by changes in the method of payment. Assignment characteristics and the level of aggregate submitted charges do not influence the effect of payment method on outlay.

The Economic Index is effective in holding program costs down, as can be seen from the comparison of outlay under unadjusted prevailing to outlay under benchmark; individual specialties are affected by the index in different ways. The reasons for this involve differences in the composition of expenses based on location and technology of practice and other factors, and differences in the ratio of expenses to gross earnings. Indices that would recognize different classes of physicians based on these factors, or would differentiate among specialties, may be more equitable and effective. Only single fee and ARCS were evaluated for effect on physician revenue. Under single fee the revenue of 45% of providers remains the same as under benchmark, for 20% of providers the revenue went up 2% and for 36% it went down 2%. Non-board physicians were likely to have their revenues increased by about 3%. The same increase was experienced by

45% of GPs. Since specialty fees tend to be higher than GPs' fees and since specialists are more likely to be board-certified, the results are to be expected when prevailing charges are computed without regard to specialty. It is of interest to explore the reasons for higher fees for specialist services. If the service provided under the same procedure code is the same whether the physician is a specialist or GP then there is no reason to have separate screens; even if the services were different the procedure codes could be defined so that the difference would be recognized and this would allow joint screens for all providers of a procedure. GHI and other carriers no doubt have to use carrierwide screens when the number of providers within a specialty is too small to form a prevailing. The single fee would cause a reduction of revenue for some specialists. This reduction may be justified if the higher fees they are commanding are not due to quality of the services they provide but provide economic rent.

The ARCS was so defined as not to cause a decrease in physician revenue, and it did not. Most physicians would remain at their benchmark level and some would gain a little. Most likely to see an increase in revenue under ARCS are GPs and physicians specializing in internal medicine.

Since revenue under ARCS may be similar to benchmark, when ARCS is compared to single fee the results are the opposite of those observed when single fee was compared to benchmark.

Almost half of the beneficiaries whose claims were included in the test would experience an increase of 17% in their out-of-pocket expenses if single fee instead of benchmark were used as the payment method, a quarter would experience no change and a quarter would have a decrease of 14% on the average. The extent to which burden is affected by payment method is directly related to assignment status of the beneficiary. Those who have no assigned claims at all - about three-quarters of the beneficiaries - were most likely to have an increase in burden. Half of the beneficiaries who had all their claims assigned to providers experienced a decrease in burden and only 16% had an increase.

Under ARCS more than 90% of the beneficiaries experience no change in burden. Other payment methods were not evaluated.

Of the two methods for which effect on outlay, physician revenue, and beneficiary burden was reviewed, one, ARCS, had little effect and would cause no disruption to any of the participants in the system.

The other, single fee, would reduce program cost to the government, and would affect physician revenue only slightly but would substantially increase the out-of-pocket expenses of about half of the beneficiaries. The desirability of shifting costs from government to the elderly in a period of inflation is highly questionable since their income is fixed. Aside from injury to equity, there could be an adverse effect on local markets dependent on the purchases of the elderly.

Since the ARCS does not seem to have a significant effect on any of the participants the cost involved for its installation may not be justified.

LEGEND FOR TABLES 7 - 17

Symbol	Explanation
All claims	Assigned plus unassigned claims
B	Benchmark (adjusted prevailing)
U	Unadjusted prevailing
S	Single fee
AS	Average reasonable charge, single fee
AD	Average reasonable charge, dual fee

Tables 7 - 9

Symbol	Explanation
U_B S_B AS_B AS_S AD_B	Difference between program outlay for the respective payment methods, e.g., U_B is outlay under unadjusted prevailing minus outlay under benchmark
U_TO_B S_TO_B AS_TO_B AS_TO_S AD_TO_B	Ratios of program outlay under respective methods of payment, e.g., U_TO_B is ratio of outlay under unadjusted prevailing to outlay under benchmark

Tables 10 - 17

Symbol	Explanation
N_UP	Number up - number of individuals whose revenue or burden increases under the test method
PCT_UP	Percent up - percent of individuals whose revenue or burden increases under the test method
B_UP S_UP AS_UP AD_UP	Revenue or burden of above individuals under various methods of payment

LEGEND FOR TABLES 7 - 17 (continued)

Symbol	Explanation
Tables 10 - 17 (continued)	
SB_UP, ASB_UP, ADB_UP	Ratios of revenue or burden under test method to that under benchmark for above individuals, e.g., SB_UP is the ratio of the value under single fee to the value under benchmark
N_DN	Number down - number of individuals whose revenue or burden decreases under the test method
PCT_DN	Percent down - percent of individuals whose revenue or burden decreases under the test method
B_DN, S_DN, AS_DN, AD_DN	Revenue or burden of above individuals under various methods of payment
SB_DN, ASB_DN, ADB_DN	Ratios of revenue or burden under test method to that under benchmark for above individuals, e.g., SB_DN is single fee/benchmark ratio
N_EQ	Number equal - number of individuals whose revenue or burden is the same under both methods being compared
PCT_EQ	Percent equal - percent of individuals whose revenue or burden is the same under both methods being compared
B_EQ, S_EQ, AS_EQ, AD_EQ	Revenue or burden of above individuals under various methods of payment

TABLES

TABLE 1

Distribution of Provider Characteristics by Specialty Type

Assignment Rate* (Percent)	Total		General Practice		Medical		Surgical		Other	
	Percent	Cumulative Percent	Percent	Cumulative Percent	Percent	Cumulative Percent	Percent	Cumulative Percent	Percent	Cumulative Percent
0	27.2%	27.2%	36.8%	36.8%	15.8%	15.8%	26.7%	26.7%	30.7%	30.7%
1 - 4	6.7	33.9	7.8	44.6	7.1	22.9	6.1	32.8	3.9	34.6
5 - 9	6.5	40.4	8.4	53.0	5.1	28.0	6.4	39.2	3.9	38.5
10 - 15	6.6	47.0	5.9	58.9	8.4	36.4	7.0	46.2	0.8	39.3
16 - 23	6.6	53.6	8.0	66.9	7.8	44.2	4.1	50.3	7.1	46.4
24 - 30	6.2	59.8	6.5	73.4	6.9	51.1	6.6	56.9	0.8	47.2
31 - 40	6.2	66.0	6.8	80.2	7.1	58.2	5.7	62.6	2.4	49.6
41 - 50	5.7	71.7	4.3	84.5	6.9	65.1	6.3	68.9	4.7	54.3
51 - 89	12.9	84.6	9.0	93.5	15.8	80.9	14.3	83.2	12.6	66.9
90 - 99	6.6	91.2	3.1	96.6	10.2	91.1	7.6	90.8	3.1	70.0
100	8.9	100.0	3.3	99.9	8.9	100.0	9.2	100.0	29.9	99.9
n	1,631		511		450		543		127	
Median Assignment Rate	19%		8%		29%		22%		41%	

*Assigned submitted charges as percent of total submitted charges.

Source: PIPGC775

TABLE 1

Distribution of Providers by Level of Aggregate Submitted Charges and Specialty Type

Aggregate Submitted Charges*	Total		General Practice		Medical		Surgical		Other	
	Percent	Cumulative Percent	Percent	Cumulative Percent	Percent	Cumulative Percent	Percent	Cumulative Percent	Percent	Cumulative Percent
Under $1,000	34.9%	34.9%	32.9%	32.9%	22.7%	22.7%	40.0%	40.0%	64.5%	64.5%
$1,000 - 1,999	9.8	44.7	13.5	46.4	4.9	27.6	10.9	50.9	7.9	72.4
$2,000 - 2,999	7.5	52.2	11.2	57.6	5.1	32.7	6.4	57.3	6.3	78.7
$3,000 - 3,999	5.8	58.0	6.7	64.3	6.0	38.7	5.3	62.6	3.9	82.6
$4,000 - 4,999	5.3	63.3	8.0	72.3	4.4	43.1	3.3	65.9	5.5	88.1
$5,000 - 5,999	4.0	67.3	4.5	76.8	3.1	46.2	4.6	70.5	3.1	91.2
$6,000 - 6,999	3.6	70.9	4.1	80.9	4.4	50.6	2.8	73.3	2.4	93.6
$7,000 - 8,999	6.1	77.0	6.3	87.2	8.0	58.6	4.6	77.9	5.5	99.1
$9,000 - 10,999	5.0	82.0	5.3	92.5	6.0	64.6	4.8	82.7	0.8	99.9
$11,000 - 14,999	6.3	88.3	3.7	96.2	10.4	75.0	6.8	89.5		
$15,000 - 20,999	6.0	94.3	3.3	99.5	11.8	86.8	5.2	94.7		
$21,000 - 44,999	5.0	99.3	0.6	100.1	12.0	98.8	4.6	99.3		
$45,000 and over	0.6	99.9			1.1	99.9	0.7	100.0		
n	1,631		511		450		543		127	
Median Aggregate Submitted Charges	$2,706		$2,321		$6,863		$1,917		$775	

* 44 selected procedures

Source: PIPGC853

TABLE 3

Distribution of Beneficiaries by Aggregate Submitted Charges

Aggregate Submitted Charges *	Number	Percent	Cumulative Percent
Under $30	19,733	24.5%	24.5%
$ 30 - 49	16,655	20.7	45.2
$ 50 - 74	12,982	16.1	61.3
$ 75 - 99	8,571	10.7	72.1
$ 100 - 149	8,814	11.0	83.1
$ 150 - 199	3,692	4.6	87.7
$ 200 - 299	3,344	4.6	91.9
$ 300 - 394	1,744	2.2	94.1
$ 400 - 499	1,072	1.5	95.4
$ 500 - 999	2,294	2.9	98.3
$1,000 and over	1,499	1.9	100.0
n	80,400		

Median - $57

* 44 selected procedures

Source: PIPCC854

TABLE 4

Distribution of Payment Origin of Allowed Charges by Method of Payment (Weighted by Number of Services)

Type of Charge Used As Basis of Allowed Charge	Method of Payment (Type of Prevailing Used in Reasonable Charge Process)				
	Benchmark	Unadjusted	Single	ARCS	ARCD
Customary	40.0	54.4	45.2	29.0	28.1
Prevailing	39.6	9.7	46.9	41.9	41.9
Fiftieth percentile	0.5	0.5	0.5	0.5	0.5
Carrier-wide	2.3	1.3	N.A.	4.5*	5.0*
Submitted	5.2	6.5	5.3	11.7	12.1
Prevailing equal to customary	12.3	27.5	2.1	12.3	12.3

*ARC

Source: PIPGC 708, 4/25/79

TABLE 5

Cumulative Frequency Distribution of Number of Services by Ratio of Allowed Charges to Submitted Charges for Each Method of Payment

	Method of Payment (Type of Prevailing Used in Reasonable Charge Process)				
Ratio	Benchmark	Unadjusted	Single	ARCS	ARCD
.00	0.00%	0.00%	0.00%	0.00%	0.00%
.10	0.00	0.00	0.00	0.00	0.00
.20	0.01	0.01	0.01	0.00	0.00
.30	0.10	0.05	0.16	0.09	0.09
.40	0.63	0.34	1.91	0.50	0.50
.50	2.91	1.26	4.63	2.58	2.56
.60	9.84	3.80	12.40	9.51	9.48
.70	18.44	8.58	29.11	16.34	16.33
.80	43.00	28.20	41.43	41.65	41.00
.90	57.63	39.45	54.24	55.29	55.93
1.00	100.00	100.00	100.00	100.00	100.00
Median	.82	1.00	.85	.82	.82
Mode *	1.00 (36.43)	1.00 (55.43)	1.00 (31.02)	1.00 (37.50)	1.00 (37.46

*Numbers in parentheses are percents of distributions represented by mode.

Source: PIPGC696

TABLE 6

Cumulative Frequency Distribution of Claims by Ratio of Allowed Charges to Submitted Charges for Each Method of Payment

	Method of Payment (Type of Prevailing Used in Reasonable Charge Process)				
Ratio	Benchmark	Unadjusted	Single	ARCS	ARCD
.00	0.00	0.00	0.00	0.00	0.00
.10	0.00	0.00	0.00	0.00	0.00
.20	0.01	0.01	0.01	0.00	0.00
.30	0.15	0.06	0.23	0.13	0.13
.40	0.97	0.49	3.18	0.79	0.79
.50	4.20	1.85	7.27	3.75	3.73
.60	13.00	5.41	18.22	12.58	12.56
.70	20.50	10.12	38.86	18.31	18.32
.80	46.91	30.52	48.84	45.46	45.11
.90	57.37	41.24	57.89	55.67	56.18
1.00	100.00	100.00	100.00	100.00	100.00
Median	.82	1.00	.81	.82	.82

Source: PIPCC696

TABLE 7

PROGRAM OUTLAY FOR SELECTED PROCEDURES BY METHOD OF PAYMENT, BY SPECIALTY
ALL SPECIALTIES
7:40 WEDNESDAY, JUNE 6, 1979

NUMBER	B	U	S	AS	AD	U_B	S_B	AS_B	AS_S	AD_B	U_TO_B	S_TO_B	AS_TO_B	AS_TO_S	AD_TO_B
1631	6288114	6635306	6169418	6322742	6321493	547192	-118696	34628	153324	33379	108.70	98.11	100.55	102.49	100.53

PROGRAM OUTLAY FOR SELECTED PROCEDURES BY METHOD OF PAYMENT, BY SPECIALTY TYPE
7:40 WEDNESDAY, JUNE 6, 1979

SPEC_TYP	NUMBER	B	U	S	AS	AD	U_B	S_B	AS_B	AS_S	AD_B	U_TO_B	S_TO_B	AS_TO_B	AS_TO_S	AD_TO_B
GP.	511	1257034	1414919	1392503	1276482	1272929	157885	135469	19448	-116021	15895	112.56	110.78	101.55	91.67	101.26
MED.	450	2901818	3165838	2820707	2910157	2910660	264020	-81111	8339	89450	8842	109.10	97.20	100.29	103.17	100.30
SURG.	543	1989219	2110886	1825359	1995963	1997543	121667	-163860	6744	170604	8324	106.12	91.76	100.34	109.35	100.42
OTHER	127	140043	143663	130848	140140	140361	3620	-9195	97	9292	318	102.58	93.43	100.07	107.10	100.23

PROGRAM OUTLAY FOR SELECTED PROCEDURES BY METHOD OF PAYMENT, BY BOARD CERTIFICATION STATUS
7:40 WEDNESDAY, JUNE 6, 1979

CERT_TYP	NUMBER	B	U	S	AS	AD	U_B	S_B	AS_B	AS_S	AD_B	U_TO_B	S_TO_B	AS_TO_B	AS_TO_S	AD_TO_B
BOARD	377	1824410	1968383	1724242	1828326	1832698	143973	-100168	3916	104084	8288	107.89	94.51	100.21	106.04	100.45
NON_BD.	1254	4463704	4866923	4445176	4494417	4488795	403219	-18528	30713	49241	25091	109.03	99.58	100.69	101.11	100.56

TABLE 7 (continued)

PROGRAM OUTLAY FOR SELECTED PROCEDURES BY METHOD OF PAYMENT, BY SPECIALTY

7:40 WEDNESDAY, JUNE 6, 1979

SPEC	NUMBER	B	U	S	AS	AD	U_B	S_B	AS_B	AS_S	AD_B	U_TO_B	S_TO_B	AS_TO_B	AS_TO_S	AD_TO_B
01	493	1140344	1296548	1275102	1159074	1155616	156204	134758	18730	-116028	15272	113.70	111.82	101.64	90.90	101.34
02	157	459555	511309	461642	464154	464590	51754	2087	4599	2512	5035	111.26	100.45	101.00	100.54	101.10
03	8	5522	5947	5522	5534	5526	425	0	12	12	4	107.70	100.00	100.22	100.22	100.07
04	42	75593	76531	63268	76023	76029	938	-12325	430	12755	436	101.24	83.70	100.57	120.16	100.58
06	17	91610	100996	91610	91892	91847	9386	0	282	282	237	110.25	100.00	100.31	100.31	100.26
07	40	70143	71223	56125	70417	70318	1080	-14018	274	14292	175	101.54	80.02	100.39	125.46	100.25
08	18	116690	118371	117402	117409	117313	1681	712	719	7	623	101.44	100.61	100.62	100.01	100.53
10	4	25208	25905	25208	25230	25233	697	0	22	22	25	102.76	100.00	100.09	100.09	100.10
11	377	2692126	2943797	2625034	2699650	2700340	251671	-67092	7524	74616	8214	109.35	97.51	100.28	102.84	100.31
13	18	30226	30618	25399	30242	30240	392	-4827	16	4843	14	101.30	84.03	100.05	119.07	100.05
14	3	343	425	343	343	343	82	0	0	0	0	123.91	100.00	100.00	100.00	100.00
16	150	50082	53154	42174	50326	50579	3072	-7908	244	8152	497	106.13	84.21	100.49	119.33	100.99
18	85	721711	727918	591280	722418	722660	6207	-130431	707	131138	949	100.86	81.93	100.10	122.18	100.13
20	46	202430	252778	195033	202510	202506	50348	-7397	80	7477	76	124.87	96.35	100.04	103.83	100.04
22	15	16887	17103	15315	16897	16897	216	-1572	10	1582	10	101.28	90.69	100.06	110.33	100.06
24	2	582	696	582	582	582	114	0	0	0	0	119.59	100.00	100.00	100.00	100.00
25	14	11246	11780	10638	11266	11473	534	-608	20	628	227	104.75	94.59	100.18	105.90	102.02
26	26	6596	6910	5911	6639	6653	314	-685	43	728	57	104.76	89.61	100.65	112.32	100.86
28	5	12216	12998	12216	12232	12229	782	0	16	16	13	106.40	100.00	100.13	100.13	100.11
29	4	17209	17970	17209	17434	17397	761	0	225	225	188	104.42	100.00	101.31	101.31	101.09
30	50	74852	77009	73349	74859	74862	2157	-1503	7	1510	10	102.88	97.99	100.01	102.06	100.01
33	13	57144	62933	57144	57168	57169	5789	0	24	24	25	110.13	100.00	100.04	100.04	100.04
34	40	409562	412145	401678	410206	410857	2583	-7884	644	8528	1295	100.63	98.08	100.16	102.12	100.32
49	4	236	244	236	236	236	8	0	0	0	0	103.39	100.00	100.00	100.00	100.00

TABLE 8

PROGRAM OUTLAY FOR SELECTED PROCEDURES BY METHOD OF PAYMENT AND PHYSICIAN ASSIGNMENT CHARACTERISTICS

7:48 WEDNESDAY, JUNE 6, 1979

ASGN	NUMBER	B	U	S	AS	AD	U_B	S_B	AS_B	AS_S	AD_B	U_TO_B	S_TO_B	AS_TO_B	AS_TO_S	AD_TO_B
0	443	442766	481262	441810	445626	445458	38496	-956	2860	3816	2692	108.69	99.78	100.65	100.86	100.61
1-4	110	510845	550417	501533	514548	514575	39572	-9312	3703	13015	3730	107.75	98.18	100.72	102.60	100.73
5-9	106	543021	588129	529578	544974	544734	45108	-13443	1953	15396	1713	108.31	97.52	100.36	102.91	100.32
10-15	107	551319	595277	537403	557634	556782	43958	-13916	6315	20231	5463	107.97	97.48	101.15	103.76	100.99
16-23	107	623474	678662	610744	627123	626813	55188	-12730	3649	16379	3339	108.85	97.96	100.59	102.68	100.54
24-30	101	601092	644218	595610	605797	606642	43126	-5482	4705	10187	5550	107.17	99.09	100.78	101.71	100.92
31-40	101	588202	634553	571874	592150	591539	46351	-16328	3948	20276	3337	107.88	97.22	100.67	103.55	100.57
41-50	93	528661	570557	520571	530362	530431	41896	-8090	1701	9791	1770	107.92	98.47	100.32	101.88	100.33
51-89	211	1143913	1238102	1118607	1148221	1147792	94189	-25306	4308	29614	3879	108.23	97.79	100.38	102.65	100.34
90-99	107	575010	650590	567664	576065	576489	75580	-7346	1055	8401	1479	113.14	98.72	100.18	101.48	100.26
100	145	179813	203539	174022	180244	180237	23726	-5791	431	6222	424	113.19	96.78	100.24	103.58	100.24

TABLE 9

PROGRAM OUTLAY FOR SELECTED PROCEDURES BY METHOD OF PAYMENT AND VALUE OF AGGREGATE SUBMITTED CHARGES
7:48 WEDNESDAY, JUNE 6, 1979

SUBMIT	NUMBER	B	U	S	AS	AD	U_B	S_B	AS_B	AS_S	AD_B	U_TO_B	S_TO_B	AS_TO_B	AS_TO_S	AD_TO_B
0- 999	569	105574	115057	100721	106622	106568	9483	-4853	1048	5901	994	108.98	95.40	100.99	105.86	100.94
1000- 1999	160	148443	159560	146918	150378	150144	11117	-1525	1935	3460	1701	107.49	98.97	101.30	102.36	101.15
2000- 2999	123	193611	212590	194700	195924	196018	18979	1089	2313	1224	2407	109.80	100.56	101.19	100.63	101.24
3000- 3999	95	218959	238218	217499	221937	221190	19259	-1460	2978	4438	2231	108.80	99.33	101.36	102.04	101.02
4000- 4999	86	249817	270328	250642	253121	252651	20511	825	3304	2479	2834	108.21	100.33	101.32	100.99	101.13
5000- 5999	66	226442	248662	228181	229422	229026	22220	1739	2980	1241	2584	109.81	100.77	101.32	100.54	101.14
6000- 6999	59	242786	270250	248053	244607	244310	27464	5267	1821	-3446	1524	111.31	102.17	100.75	98.61	100.63
7000- 8999	100	503596	558223	508241	506894	506963	54627	4645	3298	-1347	3367	110.85	100.92	100.65	99.73	100.67
9000-10999	81	522402	568108	522587	526189	525686	45706	185	3787	3602	3284	108.75	100.04	100.72	100.69	100.63
11000-14999	103	851746	922334	838666	856697	856583	70588	-13080	4951	18031	4837	108.29	98.46	100.58	102.15	100.57
15000-20999	96	1133700	1237158	1112175	1137658	1138298	103458	-21525	3958	25483	4598	109.13	98.10	100.35	102.29	100.41
21000-44999	82	1504437	1614472	1429830	1506658	1507187	110035	-74607	2221	76828	2750	107.31	95.04	100.15	105.37	100.18
45000+	9	386600	420348	371205	386636	386866	33748	-15395	36	15431	266	108.73	96.02	100.01	104.16	100.07

TABLE 10

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS - SINGLE FEE VS. BENCHMARK, BY SPECIALTY
ALL SPECIALTIES
7:41 WEDNESDAY, JUNE 6, 1979

N_TOTAL	B	S	N_UP	PCT_UP	B_UP	S_UP	SB_UP	N_DN	PCT_DN	B_DN	S_DN	SB_DN	N_EQ	PCT_EQ	B_EQ	S_EQ
1631	8923832	8887204	320	20	1875555	1921409	102.445	580	36	5135065	5052583	98.3937	731	45	1913212	1913212

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS - SINGLE FEE VS. BENCHMARK, BY SPECIALTY GROUP
7:41 WEDNESDAY, JUNE 6, 1979

SPEC_TYP	N_TOTAL	B	S	N_UP	PCT_UP	B_UP	S_UP	SB_UP	N_DN	PCT_DN	B_DN	S_DN	SB_DN	N_EQ	PCT_EQ	B_EQ	S_EQ
GP.	511	1889418	1931804	231	45	1316003	1358441	103.225	1	0	1765	1713	97.0538	279	55	571650	571650
MED.	450	4070565	4040600	3	1	18502	18533	100.168	307	68	3370858	3340862	99.1101	140	31	681205	681205
SURG.	543	2775521	2732030	82	15	526744	529868	100.593	225	41	1661651	1615036	97.1947	236	43	587126	587126
OTHER	127	188328	182770	4	3	14306	14567	101.824	47	37	100791	94972	94.2267	76	60	73231	73231

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS - SINGLE FEE VS. BENCHMARK, BY BOARD CERTIFICATION STATUS
7:41 WEDNESDAY, JUNE 6, 1979

CERT_TYP	N_TOTAL	B	S	N_UP	PCT_UP	B_UP	S_UP	SB_UP	N_DN	PCT_DN	B_DN	S_DN	SB_DN	N_EQ	PCT_EQ	B_EQ	S_EQ
BOARD	377	2590141	2561563	31	8	212642	214217	100.741	175	46	1791416	1761263	98.3168	171	45	586083	586083
NON_BD.	1254	6333691	6325641	289	23	1662913	1707192	102.663	405	32	3343649	3291320	98.4350	560	45	1327129	1327129

TABLE 10 (continued)

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS - SINGLE FEE VS. BENCHMARK, BY SPECIALTY

7:41 WEDNESDAY, JUNE 6, 1979

SPEC	N_TOTAL	B	S	N_UP	PCT_UP	B_UP	S_UP	SB_UP	N_DN	PCT_DN	B_DN	S_DN	SB_DN	N_EQ	PCT_EQ	B_EQ	S_EQ
01	493	1729030	1771347	226	46	1236476	1278845	103.427	1	0	1765	1713	97.0538	266	54	490789	490789
02	157	681128	682343	62	39	364621	365955	100.366	11	7	71031	70912	99.8325	84	54	245476	245476
03	8	7112	7112	.	.	.	.	.	.	.	.	.	.	8	100	7112	7112
04	42	109100	105935	.	.	.	.	.	31	74	94317	91152	96.6443	11	26	14783	14783
06	17	127487	127487	.	.	.	.	.	.	.	.	.	.	17	100	127487	127487
07	40	95107	88603	1	3	3767	3774	100.186	31	78	82681	76170	92.1252	8	20	8659	8659
08	18	160388	160457	5	28	79527	79596	100.087	.	.	.	.	.	13	72	80861	80861
10	4	34355	34355	.	.	.	.	.	.	.	.	.	.	4	100	34355	34355
11	377	3784562	3761101	2	1	14735	14759	100.163	276	73	3288177	3264692	99.2858	99	26	481650	481650
13	18	41391	38946	.	.	.	.	.	15	83	40597	38152	93.9774	3	17	794	794
14	3	695	695	.	.	.	.	.	.	.	.	.	.	3	100	695	695
16	150	72774	71170	1	1	1384	1392	100.578	60	40	35896	34284	95.5092	89	59	35494	35494
18	85	965819	933352	1	1	2180	2188	100.367	70	82	911421	878946	96.4369	14	16	52218	52218
20	46	291251	288005	16	35	146024	147770	101.196	26	57	137974	132982	96.3819	4	9	7253	7253
22	15	22320	21230	1	7	6332	6412	101.263	4	27	12445	11275	90.5986	10	67	3543	3543
24	2	739	739	.	.	.	.	.	.	.	.	.	.	2	100	739	739
25	14	15544	15182	.	.	.	.	.	6	43	3645	3283	90.0686	8	57	11899	11899
26	26	9687	9376	1	4	120	122	101.667	7	27	5372	5059	94.1735	18	69	4195	4195
28	5	17735	17735	.	.	.	.	.	.	.	.	.	.	5	100	17735	17735
29	4	21942	21942	.	.	.	.	.	.	.	.	.	.	4	100	21942	21942
30	50	99051	97701	2	4	7854	8033	102.279	15	30	38732	37203	96.0524	33	66	52465	52465
33	13	81261	81261	.	.	.	.	.	.	.	.	.	.	13	100	81261	81261
34	40	555019	550795	2	5	12535	12563	100.223	27	68	411012	406760	98.9655	11	28	131472	131472
49	4	335	335	.	.	.	.	.	.	.	.	.	.	4	100	335	335

TABLE 11

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:42 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY SPECIALTY

ALL SPECIALTIES

N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	B_EQ	AS_EQ
1631	8923832	8935856	213	13	1782013	1794077	100.677	.	.	.	.	.	1418	87	7141819	7141819

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:42 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY SPECIALTY GROUP

SPEC_TYP	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	B_EQ	AS_EQ
GP.	511	1889418	1897503	112	22	585999	594084	101.380	.	.	.	.	.	399	78	1303419	1303419
MED.	450	4070565	4073204	64	14	888425	891064	100.297	.	.	.	.	.	386	86	3182140	3182140
SURG.	543	2775521	2776826	33	6	301764	303069	100.432	.	.	.	.	.	510	94	2473757	2473757
OTHER	127	188328	188363	4	3	5825	5860	100.601	.	.	.	.	.	123	97	182503	182503

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:42 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY BOARD CERTIFICATION STATUS

CERT_TYP	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	B_EQ	AS_EQ
BOARD	377	2590141	2591405	35	9	514052	515316	100.246	.	.	.	.	.	342	91	2076089	2076089
NON_BC.	1254	6333691	6344491	178	14	1267961	1278761	100.852	.	.	.	.	.	1076	86	5065730	5065730

TABLE 11 (continued)

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:42 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY SPECIALTY

SPEC	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	B_EQ	AS_EQ
01	493	1729030	1736542	107	22	546319	553831	101.375	.	.	.	.	.	386	78	1182711	1182711
02	157	681128	681933	14	9	80074	80879	101.005	.	.	.	.	.	143	91	601054	601054
03	8	7112	7113	1	13	670	671	100.149	.	.	.	.	.	7	88	6442	6442
04	42	109100	109237	3	7	5540	5677	102.473	.	.	.	.	.	39	93	103560	103560
06	17	127487	127493	2	12	28656	28662	100.021	.	.	.	.	.	15	88	98831	98831
07	40	95107	95323	2	5	6396	6612	103.377	.	.	.	.	.	38	95	88711	88711
08	18	160388	160961	5	28	39680	40253	101.444	.	.	.	.	.	13	72	120708	120708
10	4	34355	34356	1	25	12666	12667	100.008	.	.	.	.	.	3	75	21689	21689
11	377	3784562	3786815	56	15	820341	822594	100.275	.	.	.	.	.	321	85	2964221	2964221
13	18	41391	41411	1	6	84	104	123.810	.	.	.	.	.	17	94	41307	41307
14	3	695	695	.	.	.	.	.	.	.	.	.	.	3	100	695	695
16	150	72774	72791	3	2	3688	3705	100.461	.	.	.	.	.	147	98	69086	69086
18	85	965819	965953	3	4	30578	30712	100.438	.	.	.	.	.	82	96	935241	935241
20	46	291251	291254	1	2	9595	9598	100.031	.	.	.	.	.	45	98	281656	281656
22	15	22320	22320	.	.	.	.	.	.	.	.	.	.	15	100	22320	22320
24	2	739	739	.	.	.	.	.	.	.	.	.	.	2	100	739	739
25	14	15544	15552	2	14	2406	2414	100.333	.	.	.	.	.	12	86	13138	13138
26	26	9687	9687	.	.	.	.	.	.	.	.	.	.	26	100	9687	9687
28	5	17735	17740	1	20	3560	3565	100.140	.	.	.	.	.	4	80	14175	14175
29	4	21942	22104	2	50	19696	19858	100.823	.	.	.	.	.	2	50	2246	2246
30	50	99051	99058	1	2	3335	3342	100.210	.	.	.	.	.	49	98	95716	95716
33	13	81261	81291	1	8	86	116	134.884	.	.	.	.	.	12	92	81175	81175
34	40	555019	555193	7	18	168643	168817	100.103	.	.	.	.	.	33	83	386376	386376
49	4	335	335	.	.	.	.	.	.	.	.	.	.	4	100	335	335

TABLE 12

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:42 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (DOUBLE FEE) VS. BENCHMARK, BY SPECIALTY

ALL SPECIALTIES

N_TOTAL	B	AD	N_UP	PCT_UP	B_UP	AD_UP	ADB_UP	N_DN	PCT_DN	B_DN	AD_DN	ADB_DN	N_EQ	PCT_EQ	B_EQ	AD_EQ
1631	8923832	6936150	226	14	1969725	1982043	100.625	.	.	.	.	.	1405	86	6954107	6954107

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:42 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (DOUBLE FEE) VS. BENCHMARK, BY SPECIALTY GROUP

SPEC_TYP	N_TOTAL	B	AD	N_UP	PCT_UP	B_UP	AD_UP	ADB_UP	N_DN	PCT_DN	B_DN	AD_DN	ADB_DN	N_EQ	PCT_EQ	B_EQ	AD_EQ
GP.	511	1889418	1896452	108	21	564011	571045	101.247	.	.	.	.	.	403	79	1325407	1325407
MED.	450	4070565	4073764	68	15	888878	892077	100.360	.	.	.	.	.	382	85	3181687	3181687
SURG.	543	2775521	2777528	46	8	511011	513018	100.393	.	.	.	.	.	497	92	2264510	2264510
OTHER	127	168328	188406	4	3	5825	5903	101.339	.	.	.	.	.	123	97	182503	182503

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:42 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (DOUBLE FEE) VS. BENCHMARK, BY BOARD CERTIFICATION STATUS

CERT_TYP	N_TOTAL	B	AD	N_UP	PCT_UP	B_UP	AD_UP	ADB_UP	N_DN	PCT_DN	B_DN	AD_DN	ADB_DN	N_EQ	PCT_EQ	B_EQ	AD_EQ
BOARD	377	2590141	2593172	57	15	780480	783511	100.388	.	.	.	.	.	320	85	1809661	1809661
NON_BC.	1254	6333691	6342978	169	13	1189245	1198532	100.781	.	.	.	.	.	1085	87	5144446	5144446

TABLE 12 (continued)

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:42 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (DOUBLE FEE) VS. BENCHMARK, BY SPECIALTY

SPEC	N_TOTAL	B	AD	N_UP	PCT_UP	B_UP	AD_UP	ADB_UP	N_DN	PCT_DN	B_DN	AD_DN	ADB_DN	N_EQ	PCT_EQ	B_EQ	AD_EQ
01	453	1729030	1735565	103	21	524331	530866	101.246	.	.	.	.	.	390	79	1204699	1204699
02	157	681128	682404	14	9	89854	91130	101.420	.	.	.	.	.	143	91	591274	591274
03	8	7112	7112	.	.	.	.	.	.	.	.	.	.	8	100	7112	7112
04	42	109100	109232	5	12	15855	15987	100.833	.	.	.	.	.	37	88	93245	93245
06	17	127487	127496	2	12	28656	28665	100.031	.	.	.	.	.	15	88	98831	98831
07	40	95107	95243	2	5	6396	6532	102.126	.	.	.	.	.	38	95	88711	88711
08	18	160388	160887	5	28	39680	40179	101.258	.	.	.	.	.	13	72	120708	120708
10	4	34355	34356	1	25	12666	12667	100.008	.	.	.	.	.	3	75	21689	21689
11	377	3784562	3787470	61	16	821464	824372	100.354	.	.	.	.	.	316	84	2963096	2963098
13	18	41391	41408	1	6	84	101	120.238	.	.	.	.	.	17	94	41307	41307
14	3	695	695	.	.	.	.	.	.	.	.	.	.	3	100	695	695
16	150	72774	72797	3	2	3688	3711	100.624	.	.	.	.	.	147	98	69086	69086
18	85	965819	965983	7	8	93006	93170	100.176	.	.	.	.	.	78	92	872813	872813
20	46	291251	291253	2	4	19495	19497	100.010	.	.	.	.	.	44	96	271756	271756
22	15	22320	22320	.	.	.	.	.	.	.	.	.	.	15	100	22320	22320
24	2	739	739	.	.	.	.	.	.	.	.	.	.	2	100	739	739
25	14	15544	15596	2	14	2406	2458	102.161	.	.	.	.	.	12	86	13138	13138
26	26	9687	9687	.	.	.	.	.	.	.	.	.	.	26	100	9687	9687
28	5	17735	17739	1	20	3560	3564	100.112	.	.	.	.	.	4	80	14175	14175
29	4	21942	22087	2	50	19696	19841	100.736	.	.	.	.	.	2	50	2246	2246
30	50	99051	99060	1	2	3335	3344	100.270	.	.	.	.	.	49	98	95716	95716
33	13	81261	81292	2	15	3286	3317	100.943	.	.	.	.	.	11	85	77975	77975
34	40	555019	555394	12	30	282267	282642	100.133	.	.	.	.	.	28	70	272752	272752
45	4	335	335	.	.	.	.	.	.	.	.	.	.	4	100	335	335

TABLE 13

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:44 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. SINGLE FEE, BY SPECIALTY

ALL SPECIALTIES

N_TOTAL	S	AS	N_UP	PCT_UP	S_UP	AS_UP	ASS_UP	N_DN	PCT_DN	S_DN	AS_DN	ASS_DN	N_EQ	PCT_EQ	S_EQ	AS_EQ
1631	8867204	8935896	692	42	5665426	5758453	101.642	297	18	1772784	1728449	97.4991	642	39	1448994	1448994

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:44 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. SINGLE FEE, BY SPECIALTY GROUP

SPEC_TYP	N_TOTAL	S	AS	N_UP	PCT_UP	S_UP	AS_UP	ASS_UP	N_DN	PCT_DN	S_DN	AS_DN	ASS_DN	N_EQ	PCT_EQ	S_EQ	AS_EQ
GP.	511	1931804	1897503	74	14	353597	360314	101.900	209	41	1215623	1174605	96.6258	228	45	362584	362584
MED.	450	4040600	4073204	324	72	3496291	3528926	100.933	3	1	18533	18502	99.8327	123	27	525776	525776
SURG.	543	2732030	2776826	243	45	1714741	1762562	102.789	81	15	524061	521036	99.4228	219	40	493228	493228
OTHER	127	182770	188363	51	40	100797	106651	105.808	4	3	14567	14306	98.2083	72	57	67406	67406

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:44 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. SINGLE FEE, BY BOARD CERTIFICATION STATUS

CERT_TYP	N_TOTAL	S	AS	N_UP	PCT_UP	S_UP	AS_UP	ASS_UP	N_DN	PCT_DN	S_DN	AS_DN	ASS_DN	N_EQ	PCT_EQ	S_EQ	AS_EQ
BOARD	377	2561563	2591405	186	49	1842768	1874175	101.704	31	8	214217	212652	99.2694	160	42	504578	504578
NON_BD.	1254	6325641	6344491	506	40	3822658	3884278	101.612	266	21	1558567	1515797	97.2558	482	38	944416	944416

TABLE 13 (continued)

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:44 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. SINGLE FEE, BY SPECIALTY

SPEC	N_TOTAL	S	AS	N_UP	PCT_UP	S_UP	AS_UP	ASS_UP	N_DN	PCT_DN	S_DN	AS_DN	ASS_DN	N_EQ	PCT_EQ	S_EQ	AS_EQ
01	493	1771347	1736542	69	14	313917	320061	101.957	204	41	1136027	1095078	96.3954	220	45	321403	321403
02	157	682343	681933	22	14	131552	132377	100.627	61	39	360148	358913	99.6571	74	47	190643	190643
03	8	7112	7113	1	13	670	671	100.149	.	.	.	.	.	7	88	6442	6442
04	42	105935	109237	34	81	96692	99994	103.415	.	.	.	.	.	8	19	9243	9243
06	17	127487	127493	2	12	28656	28662	100.021	.	.	.	.	.	15	88	98831	98831
07	40	88603	95323	31	78	76170	82897	108.832	1	3	3774	3767	99.8145	8	20	8659	8659
08	18	160457	160961	5	28	39680	40253	101.444	5	28	79596	79527	99.9133	8	44	41181	41181
10	4	34355	34356	1	25	12666	12667	100.008	.	.	.	.	.	3	75	21689	21689
11	377	3761101	3786815	287	76	3358433	3384171	100.766	2	1	14759	14735	99.8374	88	23	387909	387909
13	18	38946	41411	16	89	38236	40701	106.447	.	.	.	.	.	2	11	710	710
14	3	695	695	.	.	.	.	.	.	.	.	.	.	3	100	695	695
16	150	71170	72791	61	41	36875	38504	104.418	1	1	1392	1384	99.4253	88	59	32903	32903
18	85	933352	965953	70	82	878946	911555	103.710	1	1	2188	2180	99.6344	14	16	52218	52218
20	46	288005	291254	26	57	132982	137977	103.756	16	35	147770	146024	98.8184	4	9	7253	7253
22	15	21230	22320	4	27	11275	12445	110.377	1	7	6412	6332	98.7523	10	67	3543	3543
24	2	739	739	.	.	.	.	.	.	.	.	.	.	2	100	739	739
25	14	15182	15552	8	57	5689	6059	106.504	.	.	.	.	.	6	43	9493	9493
26	26	9376	9687	7	27	5059	5372	106.187	1	4	122	120	98.3607	18	69	4195	4195
28	5	17735	17740	1	20	3560	3565	100.140	.	.	.	.	.	4	80	14175	14175
29	4	21942	22104	2	50	19696	19858	100.823	.	.	.	.	.	2	50	2246	2246
30	50	97701	99058	16	32	40538	42074	103.789	2	4	8033	7854	97.7717	32	64	49130	49130
33	13	81261	81291	1	8	86	116	134.884	.	.	.	.	.	12	92	81175	81175
34	40	550795	555193	28	70	434048	438474	101.020	2	5	12563	12535	99.7771	10	25	104184	104184
49	4	335	335	.	.	.	.	.	.	.	.	.	.	4	100	335	335

TABLE 14

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS   7:46 WEDNESDAY, JUNE 6, 1979

AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY PHYSICIAN ASSIGNMENT CHARACTERISTICS

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	443	681517	681517	.	.	.	.	.	.	.	.	.	.	443	100	0	681517	681517
1-4	110	755282	755419	13	12	99498	99635	100.138	.	.	.	.	.	97	88	1	655784	655784
5-9	106	806449	806703	18	17	114883	115137	100.221	.	.	.	.	.	88	83	2	691566	691566
10-15	107	821330	821867	19	18	164990	165527	100.325	.	.	.	.	.	88	82	3	656340	656340
16-23	107	918539	919435	24	22	251079	251975	100.357	.	.	.	.	.	83	78	4	667460	667460
24-30	101	868367	869896	24	24	136488	138017	101.120	.	.	.	.	.	77	76	5	731879	731879
31-40	101	838202	840423	22	22	224439	226660	100.990	.	.	.	.	.	79	78	6	613763	613763
41-50	93	744723	745883	26	28	223422	224582	100.519	.	.	.	.	.	67	72	7	521301	521301
51-69	211	1537796	1541280	42	20	386713	390197	100.901	.	.	.	.	.	169	80	8	1151083	1151083
90-99	107	726634	727946	12	11	142899	144211	100.918	.	.	.	.	.	95	89	9	583735	583735
100	145	224993	225527	13	9	37602	38136	101.420	.	.	.	.	.	132	91	10	187391	187391

TABLE 14 (continued)

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:47 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY PHYSICIAN ASSIGNMENT CHARACTERISTICS

SPEC_TYP=GP.

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	188	264051	264051	.	.	.	.	.	.	.	.	.	.	188	100	0	264051	264051
1-4	40	216054	216149	7	18	40555	40650	100.234	.	.	.	.	.	33	83	1	175499	175499
5-9	43	263861	264061	14	33	58220	58420	100.344	.	.	.	.	.	29	67	2	205641	205641
10-15	30	199667	199803	8	27	41131	41267	100.331	.	.	.	.	.	22	73	3	158536	158536
16-23	41	216919	217384	12	29	62148	62613	100.748	.	.	.	.	.	29	71	4	154771	154771
24-30	33	182263	183518	15	45	73860	75115	101.699	.	.	.	.	.	18	55	5	108403	108403
31-40	35	155657	157513	13	37	82737	84593	102.243	.	.	.	.	.	22	63	6	72920	72920
41-50	22	88905	89784	12	55	53110	53989	101.655	.	.	.	.	.	10	45	7	35795	35795
51-89	46	214592	217093	25	54	147837	150338	101.692	.	.	.	.	.	21	46	8	66755	66755
90-99	16	63362	63634	2	13	13931	14203	101.952	.	.	.	.	.	14	88	9	49431	49431
100	17	24087	24513	4	24	12470	12896	103.416	.	.	.	.	.	13	76	10	11617	11617

SPEC_TYP=MED.

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	71	184823	184823	.	.	.	.	.	.	.	.	.	.	71	100	0	184823	184823
1-4	32	275045	275081	5	16	56352	56388	100.064	.	.	.	.	.	27	84	1	218693	218693
5-9	23	283489	283540	3	13	56008	56059	100.091	.	.	.	.	.	20	87	2	227481	227481
10-15	38	376752	376894	6	16	79188	79330	100.179	.	.	.	.	.	32	84	3	297564	297564
16-23	35	491772	492198	11	31	186545	186971	100.228	.	.	.	.	.	24	69	4	305227	305227
24-30	31	353634	353648	5	16	32824	32838	100.043	.	.	.	.	.	26	84	5	320810	320810
31-40	32	416328	416644	7	22	107891	108207	100.293	.	.	.	.	.	25	78	6	308437	308437
41-50	31	366845	367022	7	23	94022	94199	100.188	.	.	.	.	.	24	77	7	272823	272823
51-89	71	729003	729667	11	15	156923	157587	100.423	.	.	.	.	.	60	85	8	572080	572080
90-99	46	472177	472976	5	11	94167	94966	100.848	.	.	.	.	.	41	89	9	378010	378010
100	40	120697	120711	4	10	24505	24519	100.057	.	.	.	.	.	36	90	10	96192	96192

TABLE 14 (continued)

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:47 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY PHYSICIAN ASSIGNMENT CHARACTERISTICS

SPEC_TYP=SURG.

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	145	209408	209408	.	.	.	.	.	.	.	.	.	.	145	100	0	209408	209408
1-4	33	247210	247216	1	3	2591	2597	100.232	.	.	.	.	.	32	97	1	244619	244619
5-9	35	230812	230815	1	3	655	658	100.458	.	.	.	.	.	34	97	2	230157	230157
10-15	38	244876	245135	5	13	44671	44930	100.580	.	.	.	.	.	33	87	3	200205	200205
16-23	22	191844	191844	.	.	.	.	.	.	.	.	.	.	22	100	4	191844	191844
24-30	36	328242	328502	4	11	29804	30064	100.872	.	.	.	.	.	32	89	5	298438	298438
31-40	31	260822	260871	2	6	33811	33860	100.145	.	.	.	.	.	29	94	6	227011	227011
41-50	34	271206	271310	7	21	76290	76394	100.136	.	.	.	.	.	27	79	7	194916	194916
51-89	78	556718	557037	6	8	81953	82272	100.389	.	.	.	.	.	72	92	8	474765	474765
90-99	41	173424	173658	4	10	31466	31700	100.744	.	.	.	.	.	37	90	9	141958	141958
100	50	60959	61030	3	6	523	594	113.576	.	.	.	.	.	47	94	10	60436	60436

SPEC_TYP=OTHER

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	39	23235	23235	.	.	.	.	.	.	.	.	.	.	39	100	0	23235	23235
1-4	5	16973	16973	.	.	.	.	.	.	.	.	.	.	5	100	1	16973	16973
5-9	5	28287	28287	.	.	.	.	.	.	.	.	.	.	5	100	2	28287	28287
10-15	1	35	35	.	.	.	.	.	.	.	.	.	.	1	100	3	35	35
16-23	9	18004	18009	1	11	2386	2391	100.210	.	.	.	.	.	8	89	4	15618	15618
24-30	1	4228	4228	.	.	.	.	.	.	.	.	.	.	1	100	5	4228	4228
31-40	3	5395	5395	.	.	.	.	.	.	.	.	.	.	3	100	6	5395	5395
41-50	6	17767	17767	.	.	.	.	.	.	.	.	.	.	6	100	7	17767	17767
51-89	16	37483	37483	.	.	.	.	.	.	.	.	.	.	16	100	8	37483	37483
90-99	4	17671	17678	1	25	3335	3342	100.210	.	.	.	.	.	3	75	9	14336	14336
100	38	19250	19273	2	5	104	127	122.115	.	.	.	.	.	36	95	10	19146	19146

TABLE 14 (continued)

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:47 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY PHYSICIAN ASSIGNMENT CHARACTERISTICS

SPEC=01

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	182	238690	238690	.	.	.	.	.	.	.	.	.	.	182	100	0	238690	238690
1-4	39	202159	202254	7	18	40555	40650	100.234	.	.	.	.	.	32	82	1	161604	161604
5-9	41	249440	249640	14	34	58220	58420	100.344	.	.	.	.	.	27	66	2	191220	191220
10-15	29	192749	192885	8	28	41131	41267	100.331	.	.	.	.	.	21	72	3	151618	151618
16-23	40	179900	180365	12	30	62148	62613	100.748	.	.	.	.	.	28	70	4	117752	117752
24-30	32	165461	166716	15	47	73860	75115	101.699	.	.	.	.	.	17	53	5	91601	91601
31-40	34	148951	150717	12	35	76031	77797	102.323	.	.	.	.	.	22	65	6	72920	72920
41-50	22	88905	89784	12	55	53110	53989	101.655	.	.	.	.	.	10	45	7	35795	35795
51-89	41	175326	177344	21	51	114863	116881	101.757	.	.	.	.	.	20	49	8	60463	60463
90-99	16	63362	63634	2	13	13931	14203	101.952	.	.	.	.	.	14	88	9	49431	49431
100	17	24087	24513	4	24	12470	12896	103.416	.	.	.	.	.	13	76	10	11617	11617

SPEC=02

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	33	66447	66447	.	.	.	.	.	.	.	.	.	.	33	100	0	66447	66447
1-4	10	41389	41389	.	.	.	.	.	.	.	.	.	.	10	100	1	41389	41389
5-9	5	23629	23629	.	.	.	.	.	.	.	.	.	.	5	100	2	23629	23629
10-15	11	77479	77494	2	18	16748	16763	100.090	.	.	.	.	.	9	82	3	60731	60731
16-23	8	54330	54330	.	.	.	.	.	.	.	.	.	.	8	100	4	54330	54330
24-30	15	127897	128109	3	20	19641	19853	101.079	.	.	.	.	.	12	80	5	108256	108256
31-40	2	2208	2208	.	.	.	.	.	.	.	.	.	.	2	100	6	2208	2208
41-50	13	106891	106902	2	15	12299	12310	100.089	.	.	.	.	.	11	85	7	94592	94592
51-89	28	109459	109767	4	14	19561	19869	101.575	.	.	.	.	.	24	86	8	89898	89898
90-99	18	58083	58311	2	11	11678	11906	101.952	.	.	.	.	.	16	89	9	46405	46405
100	14	13316	13347	1	7	147	178	121.088	.	.	.	.	.	13	93	10	13169	13169

TABLE 14 (continued)

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:47 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY PHYSICIAN ASSIGNMENT CHARACTERISTICS

SPEC=03

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	5	895	895	.	.	.	.	.	.	.	.	.	.	5	100	0	895	895
24-30	1	670	671	1	100	670	671	100.149	.	.	.	.	.	.	.	5	.	.
90-99	1	5472	5472	.	.	.	.	.	.	.	.	.	.	1	100	9	5472	5472
100	1	75	75	.	.	.	.	.	.	.	.	.	.	1	100	10	75	75

SPEC=04

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	8	9243	9243	.	.	.	.	.	.	.	.	.	.	8	100	0	9243	9243
1-4	8	31412	31412	.	.	.	.	.	.	.	.	.	.	8	100	1	31412	31412
5-9	6	20728	20731	1	17	655	658	100.458	.	.	.	.	.	5	83	2	20073	20073
10-15	3	15652	15776	1	33	4640	4764	102.672	.	.	.	.	.	2	67	3	11012	11012
24-30	1	5156	5156	.	.	.	.	.	.	.	.	.	.	1	100	5	5156	5156
31-40	5	11359	11359	.	.	.	.	.	.	.	.	.	.	5	100	6	11359	11359
41-50	2	455	465	1	50	245	255	104.082	.	.	.	.	.	1	50	7	210	210
51-89	3	7582	7582	.	.	.	.	.	.	.	.	.	.	3	100	8	7582	7582
90-99	3	2783	2783	.	.	.	.	.	.	.	.	.	.	3	100	9	2783	2783
100	3	4730	4730	.	.	.	.	.	.	.	.	.	.	3	100	10	4730	4730

TABLE 14 (continued)

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:47 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY PHYSICIAN ASSIGNMENT CHARACTERISTICS

SPEC=06

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	2	3208	3208	.	.	.	.	.	.	.	.	.	.	2	100	0	3208	3208
1-4	3	12794	12797	1	33	5909	5912	100.051	.	.	.	.	.	2	67	1	6885	6885
10-15	1	4629	4629	.	.	.	.	.	.	.	.	.	.	1	100	3	4629	4629
16-23	1	16765	16765	.	.	.	.	.	.	.	.	.	.	1	100	4	16765	16765
41-50	4	42114	42114	.	.	.	.	.	.	.	.	.	.	4	100	7	42114	42114
51-89	3	24893	24893	.	.	.	.	.	.	.	.	.	.	3	100	8	24893	24893
90-99	1	272	272	.	.	.	.	.	.	.	.	.	.	1	100	9	272	272
100	2	22812	22815	1	50	22747	22750	100.013	.	.	.	.	.	1	50	10	65	65

SPEC=07

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	4	5253	5253	.	.	.	.	.	.	.	.	.	.	4	100	0	5253	5253
1-4	2	9518	9518	.	.	.	.	.	.	.	.	.	.	2	100	1	9518	9518
5-9	2	3460	3460	.	.	.	.	.	.	.	.	.	.	2	100	2	3460	3460
10-15	7	13619	13619	.	.	.	.	.	.	.	.	.	.	7	100	3	13619	13619
16-23	4	15733	15743	1	25	2364	2374	100.423	.	.	.	.	.	3	75	4	13369	13369
24-30	2	2290	2290	.	.	.	.	.	.	.	.	.	.	2	100	5	2290	2290
31-40	1	575	575	.	.	.	.	.	.	.	.	.	.	1	100	6	575	575
41-50	2	17031	17031	.	.	.	.	.	.	.	.	.	.	2	100	7	17031	17031
51-89	8	20468	20674	1	13	4032	4238	105.109	.	.	.	.	.	7	88	8	16436	16436
90-99	3	6126	6126	.	.	.	.	.	.	.	.	.	.	3	100	9	6126	6126
100	5	1034	1034	.	.	.	.	.	.	.	.	.	.	5	100	10	1034	1034

TABLE 14 (continued)

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:47 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY PHYSICIAN ASSIGNMENT CHARACTERISTICS

SPEC=08

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	6	25361	25361	.	.	.	.	.	.	.	.	.	.	6	100	0	25361	25361
1-4	1	13895	13895	.	.	.	.	.	.	.	.	.	.	1	100	1	13895	13895
5-9	2	14421	14421	.	.	.	.	.	.	.	.	.	.	2	100	2	14421	14421
10-15	1	6918	6918	.	.	.	.	.	.	.	.	.	.	1	100	3	6918	6918
16-23	1	37019	37019	.	.	.	.	.	.	.	.	.	.	1	100	4	37019	37019
24-30	1	16802	16802	.	.	.	.	.	.	.	.	.	.	1	100	5	16802	16802
31-40	1	6706	6796	1	100	6706	6796	101.342	.	.	.	.	.	.	.	6	.	.
51-89	5	39266	39749	4	80	32974	33457	101.465	.	.	.	.	.	1	20	8	6292	6292

SPEC=10

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
1-4	3	26410	26411	1	33	12666	12667	100.008	.	.	.	.	.	2	67	1	13744	13744
16-23	1	7945	7945	.	.	.	.	.	.	.	.	.	.	1	100	4	7945	7945

SPEC=11

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	59	175332	175332	.	.	.	.	.	.	.	.	.	.	59	100	0	175332	175332
1-4	24	226323	226355	3	13	37777	37809	100.085	.	.	.	.	.	21	88	1	188546	188546
5-9	21	280029	280080	3	14	56008	56059	100.091	.	.	.	.	.	18	86	2	224021	224021
10-15	30	358504	358646	6	20	79188	79330	100.179	.	.	.	.	.	24	80	3	279316	279316
16-23	29	451329	451745	10	34	184181	184597	100.226	.	.	.	.	.	19	66	4	267148	267148
24-30	28	350674	350687	4	14	32154	32167	100.040	.	.	.	.	.	24	86	5	318520	318520
31-40	31	415753	416069	7	23	107891	108207	100.293	.	.	.	.	.	24	77	6	307862	307862
41-50	24	303827	303843	6	25	90149	90165	100.018	.	.	.	.	.	18	75	7	213678	213678
51-89	59	667819	668276	9	15	137068	137525	100.333	.	.	.	.	.	50	85	8	530751	530751

TABLE 14 (continued)

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:47 WEDNESDAY, JUNE 6, 1979

AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY PHYSICIAN ASSIGNMENT CHARACTERISTICS

SPEC=11

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
90-99	40	458196	458995	5	13	94167	94966	100.848	.	.	.	.	.	35	88	9	364029	364029
100	32	96776	96787	3	9	1758	1769	100.626	.	.	.	.	.	29	91	10	95018	95018

SPEC=13

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
16-23	3	12283	12283	.	.	.	.	.	.	.	.	.	.	3	100	4	12283	12283
24-30	1	4228	4228	.	.	.	.	.	.	.	.	.	.	1	100	5	4228	4228
41-50	4	15687	15687	.	.	.	.	.	.	.	.	.	.	4	100	7	15687	15687
51-89	5	8208	8208	.	.	.	.	.	.	.	.	.	.	5	100	8	8208	8208
100	5	985	1005	1	20	84	104	123.81	.	.	.	.	.	4	80	10	901	901

SPEC=14

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	1	175	175	.	.	.	.	.	.	.	.	.	.	1	100	0	175	175
41-50	1	425	425	.	.	.	.	.	.	.	.	.	.	1	100	7	425	425
51-89	1	95	95	.	.	.	.	.	.	.	.	.	.	1	100	8	95	95

TABLE 14 (continued)

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:47 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY PHYSICIAN ASSIGNMENT CHARACTERISTICS

SPEC=16

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	81	30640	30640	.	.	.	.	.	.	.	.	.	.	81	100	0	30640	30640
1-4	7	12377	12383	1	14	2591	2597	100.232	.	.	.	.	.	6	86	1	9786	9786
5-9	9	5561	5561	.	.	.	.	.	.	.	.	.	.	9	100	2	5561	5561
10-15	10	7746	7746	.	.	.	.	.	.	.	.	.	.	10	100	3	7746	7746
16-23	2	703	703	.	.	.	.	.	.	.	.	.	.	2	100	4	703	703
24-30	6	3963	3963	.	.	.	.	.	.	.	.	.	.	6	100	5	3963	3963
31-40	4	2817	2817	.	.	.	.	.	.	.	.	.	.	4	100	6	2817	2817
41-50	5	1440	1440	.	.	.	.	.	.	.	.	.	.	5	100	7	1440	1440
51-89	10	4895	4896	1	10	807	808	100.124	.	.	.	.	.	9	90	8	4086	4088
90-99	2	731	731	.	.	.	.	.	.	.	.	.	.	2	100	9	731	731
100	14	1901	1911	1	7	290	300	103.448	.	.	.	.	.	13	93	10	1611	1611

SPEC=18

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	14	94913	94913	.	.	.	.	.	.	.	.	.	.	14	100	0	94913	94913
1-4	4	116676	116676	.	.	.	.	.	.	.	.	.	.	4	100	1	116676	116676
5-9	10	131930	131930	.	.	.	.	.	.	.	.	.	.	10	100	2	131930	131930
10-15	7	112748	112868	2	29	23283	23403	100.515	.	.	.	.	.	5	71	3	89465	89465
16-23	6	90219	90219	.	.	.	.	.	.	.	.	.	.	6	100	4	90219	90219
24-30	7	84775	84775	.	.	.	.	.	.	.	.	.	.	7	100	5	84775	84775
31-40	7	100276	100290	1	14	7295	7309	100.192	.	.	.	.	.	6	86	6	92981	92981
41-50	2	18515	18515	.	.	.	.	.	.	.	.	.	.	2	100	7	18515	18515
51-89	12	153042	153042	.	.	.	.	.	.	.	.	.	.	12	100	8	153042	153042
90-99	9	41716	41716	.	.	.	.	.	.	.	.	.	.	9	100	9	41716	41716
100	7	21009	21009	.	.	.	.	.	.	.	.	.	.	7	100	10	21009	21009

TABLE 14 (continued)

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:47 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY PHYSICIAN ASSIGNMENT CHARACTERISTICS

SPEC=20

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	3	6253	6253	.	.	.	.	.	.	.	.	.	.	3	100	0	6253	6253
5-9	2	15722	15722	.	.	.	.	.	.	.	.	.	.	2	100	2	15722	15722
10-15	5	22564	22564	.	.	.	.	.	.	.	.	.	.	5	100	3	22564	22564
16-23	4	38290	38290	.	.	.	.	.	.	.	.	.	.	4	100	4	38290	38290
31-40	5	43672	43672	.	.	.	.	.	.	.	.	.	.	5	100	6	43672	43672
41-50	3	32090	32093	1	33	9595	9598	100.031	.	.	.	.	.	2	67	7	22495	22495
51-89	13	85755	85755	.	.	.	.	.	.	.	.	.	.	13	100	8	85755	85755
90-99	5	33259	33259	.	.	.	.	.	.	.	.	.	.	5	100	9	33259	33259
100	6	13646	13646	.	.	.	.	.	.	.	.	.	.	6	100	10	13646	13646

SPEC=22

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	9	3508	3508	.	.	.	.	.	.	.	.	.	.	9	100	0	3508	3508
10-15	1	35	35	.	.	.	.	.	.	.	.	.	.	1	100	3	35	35
51-89	3	12254	12254	.	.	.	.	.	.	.	.	.	.	3	100	8	12254	12254
90-99	1	6438	6438	.	.	.	.	.	.	.	.	.	.	1	100	9	6438	6438
100	1	85	85	.	.	.	.	.	.	.	.	.	.	1	100	10	85	85

SPEC=24

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
41-50	1	269	269	.	.	.	.	.	.	.	.	.	.	1	100	7	269	269
90-99	1	470	470	.	.	.	.	.	.	.	.	.	.	1	100	9	470	470

TABLE 14 (continued)

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:47 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY PHYSICIAN ASSIGNMENT CHARACTERISTICS

SPEC=25

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	4	9393	9393	.	.	.	.	.	.	.	.	.	.	4	100	0	9393	9393
16-23	2	2976	2981	1	50	2386	2391	100.21	.	.	.	.	.	1	50	4	590	590
41-50	1	150	150	.	.	.	.	.	.	.	.	.	.	1	100	7	150	150
51-89	2	2660	2660	.	.	.	.	.	.	.	.	.	.	2	100	8	2660	2660
100	5	365	368	1	20	20	23	115.00	.	.	.	.	.	4	80	10	345	345

SPEC=26

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	14	2898	2898	.	.	.	.	.	.	.	.	.	.	14	100	0	2898	2898
1-4	1	1792	1792	.	.	.	.	.	.	.	.	.	.	1	100	1	1792	1792
31-40	1	820	820	.	.	.	.	.	.	.	.	.	.	1	100	6	820	820
41-50	1	1930	1930	.	.	.	.	.	.	.	.	.	.	1	100	7	1930	1930
51-89	1	350	350	.	.	.	.	.	.	.	.	.	.	1	100	8	350	350
100	8	1897	1897	.	.	.	.	.	.	.	.	.	.	8	100	10	1897	1897

SPEC=28

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
1-4	2	5059	5059	.	.	.	.	.	.	.	.	.	.	2	100	1	5059	5059
5-9	1	5837	5837	.	.	.	.	.	.	.	.	.	.	1	100	2	5837	5837
24-30	1	3279	3279	.	.	.	.	.	.	.	.	.	.	1	100	5	3279	3279
90-99	1	3560	3565	1	100	3560	3565	100.14	.	.	.	.	.	.	.	9	.	.

TABLE 14 (continued)

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:47 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY PHYSICIAN ASSIGNMENT CHARACTERISTICS

SPEC=29

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	1	135	135	.	.	.	.	.	.	.	.	.	.	1	100	0	135	135
41-50	1	3873	4034	1	100	3873	4034	104.157	.	.	.	.	.	.	.	7	.	.
51-89	1	15823	15824	1	100	15823	15824	100.006	.	.	.	.	.	.	.	8	.	.
90-99	1	2111	2111	.	.	.	.	.	.	.	.	.	.	1	100	9	2111	2111

SPEC=30

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	10	7368	7368	.	.	.	.	.	.	.	.	.	.	10	100	0	7368	7368
1-4	4	15181	15181	.	.	.	.	.	.	.	.	.	.	4	100	1	15181	15181
5-9	5	28287	28287	.	.	.	.	.	.	.	.	.	.	5	100	2	28287	28287
16-23	4	2745	2745	.	.	.	.	.	.	.	.	.	.	4	100	4	2745	2745
31-40	2	4575	4575	.	.	.	.	.	.	.	.	.	.	2	100	6	4575	4575
51-89	5	14011	14011	.	.	.	.	.	.	.	.	.	.	5	100	8	14011	14011
90-99	3	11233	11240	1	33	3335	3342	100.21	.	.	.	.	.	2	67	9	7898	7898
100	17	15651	15651	.	.	.	.	.	.	.	.	.	.	17	100	10	15651	15651

SPEC=33

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
5-9	1	6770	6770	.	.	.	.	.	.	.	.	.	.	1	100	2	6770	6770
10-15	2	8687	8687	.	.	.	.	.	.	.	.	.	.	2	100	3	8687	8687
16-23	1	1220	1220	.	.	.	.	.	.	.	.	.	.	1	100	4	1220	1220
31-40	2	23394	23394	.	.	.	.	.	.	.	.	.	.	2	100	6	23394	23394
51-89	4	40377	40377	.	.	.	.	.	.	.	.	.	.	4	100	8	40377	40377
100	3	813	843	1	33	86	116	134.884	.	.	.	.	.	2	67	10	727	727

TABLE 14 (continued)

PHYSICIAN REVENUE FOR SELECTED PROCEDURES FROM ALL CLAIMS 7:47 WEDNESDAY, JUNE 6, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY PHYSICIAN ASSIGNMENT CHARACTERISTICS

SPEC=34

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	5	1737	1737	.	.	.	.	.	.	.	.	.	.	5	100	0	1737	1737
1-4	2	40297	40297	.	.	.	.	.	.	.	.	.	.	2	100	1	40297	40297
5-9	1	20635	20635	.	.	.	.	.	.	.	.	.	.	1	100	2	20635	20635
16-23	1	7082	7082	.	.	.	.	.	.	.	.	.	.	1	100	4	7082	7082
24-30	6	103172	103220	1	17	10163	10211	100.472	.	.	.	.	.	5	83	5	93009	93009
31-40	6	77096	77131	1	17	26516	26551	100.132	.	.	.	.	.	5	83	6	50580	50580
41-50	7	111121	111201	3	43	54151	54231	100.148	.	.	.	.	.	4	57	7	56970	56970
51-89	7	155513	155523	1	14	61585	61595	100.016	.	.	.	.	.	6	86	8	93928	93928
90-99	2	32822	32823	1	50	16228	16229	100.006	.	.	.	.	.	1	50	9	16594	16594
100	3	5544	5544	.	.	.	.	.	.	.	.	.	.	3	100	10	5544	5544

SPEC=49

ASGN	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	ASSIGNED	B_EQ	AS_EQ
0	2	68	68	.	.	.	.	.	.	.	.	.	.	2	100	0	68	68
100	2	267	267	.	.	.	.	.	.	.	.	.	.	2	100	10	267	267

TABLE 15

BENEFICIARY BURDEN FOR SELECTED PROCEDURES FROM ALL CLAIMS - SINGLE FEE VS. BENCHMARK
TOTAL
1:52 THURSDAY, JUNE 21, 1979

N_TOTAL	B	S	N_UP	PCT_UP	B_UP	S_UP	SB_UP	N_DN	PCT_DN	B_DN	S_DN	SB_DN	N_EQ	PCT_EQ	B_EQ	S_EQ
80400	2634495	2715297	37583	47	1134631	1327493	116.977	22047	27	796830	684971	85.962	20770	26	702834	702834

BENEFICIARY BURDEN FOR SELECTED PROCEDURES FROM ALL CLAIMS 1:52 THURSDAY, JUNE 21, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. SINGLE FEE, BY AGGREGATE SUBMITTED CHARGES

RV_CLASS	N_TOTAL	S	AS	N_UP	PCT_UP	S_UP	AS_UP	ASS_UP	N_DN	PCT_DN	S_DN	AS_DN	ASS_DN	N_EQ	PCT_EQ	S_EQ	AS_EQ
0- 29	19733	134007	112669	4639	24	21663	29067	134.178	10092	51	90029	61287	68.0747	5002	25	22315	22315
30- 49	16655	206366	180791	4329	26	37796	48916	129.421	8681	52	135207	98512	72.8601	3645	22	33363	33363
50- 74	12982	255292	229166	3490	27	47591	58798	123.549	7307	56	174581	137247	78.6151	2185	17	33120	33120
75- 99	8571	227636	210785	2504	29	48617	59423	122.227	4799	56	152854	125197	81.9063	1268	15	26165	26165
100-149	8814	315322	298124	2993	34	77458	92604	119.554	4563	52	202458	170114	84.0243	1258	14	35406	35406
150-199	3692	174797	168658	1310	35	45793	54219	118.400	1746	47	104003	89438	85.9956	636	17	25001	25001
200-299	3344	210410	209082	1197	36	62168	73222	117.781	1380	41	106590	94208	88.3835	767	23	41651	41651
300-399	1744	152909	155326	607	35	46603	54714	117.404	681	39	69742	64048	91.8356	456	26	36564	36564
400-499	1072	119799	122326	349	33	36509	42497	116.401	405	38	51690	48230	93.3062	318	30	31599	31599
500-999	2294	393216	399472	632	28	99765	113369	113.636	808	35	159566	152215	95.3931	854	37	133888	133888
1000+	1499	525542	525759	440	29	164235	173508	105.646	540	36	194996	185941	95.3563	519	35	166310	166310

BENEFICIARY BURDEN FOR SELECTED PROCEDURES FROM ALL CLAIMS 1:52 THURSDAY, JUNE 21, 1979
SINGLE FEE VS. BENCHMARK, BY ASSIGNMENT CHARACTERISTICS

ASSIGNED	N_TOTAL	B	S	N_UP	PCT_UP	B_UP	S_UP	SB_UP	N_DN	PCT_DN	B_DN	S_DN	SB_DN	N_EQ	PCT_EQ	B_EQ	S_EQ
0	58957	1819556	1900228	32373	55	887408	1058329	119.261	12229	21	501312	411064	81.9976	14355	24	430835	430835
100	16605	442143	437479	2672	16	73459	81202	110.541	8277	50	165685	153476	92.5207	5656	34	202799	202799

TABLE 16

BENEFICIARY BURDEN FOR SELECTED PROCEDURES FROM ALL CLAIMS 1:52 THURSDAY, JUNE 21, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK

TOTAL

N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	B_EQ	AS_EQ
80400	2634495	2612157	1132	1	44632	47129	105.124	5695	7	250956	226321	90.1835	73573	92	2338707	2338707

BENEFICIARY BURDEN FOR SELECTED PROCEDURES FROM ALL CLAIMS 1:52 THURSDAY, JUNE 21, 1979
SINGLE FEE VS. BENCHMARK, BY AGGREGATE SUBMITTED CHARGES

RV_CLASS	N_TOTAL	B	S	N_UP	PCT_UP	B_UP	S_UP	SB_UP	N_DN	PCT_DN	B_DN	S_DN	SB_DN	N_EQ	PCT_EQ	B_EQ	S_EQ
0- 29	19733	113923	134007	9049	46	55797	83243	149.189	4504	23	28706	21345	74.3573	6180	31	29420	29420
30- 49	16655	182970	206366	7860	47	89635	124174	138.533	4269	26	48869	37726	77.1982	4506	27	44466	44466
50- 74	12982	231719	255292	6806	52	128599	163441	127.094	3453	27	59127	47858	80.9410	2723	21	43993	43993
75- 99	8571	212692	227636	4499	52	117720	143487	121.888	2476	29	59603	48779	81.8398	1596	19	35369	35369
100-149	8814	300682	315322	4265	48	159861	189472	118.523	2964	34	93336	78165	83.7458	1585	18	47685	47685
150-199	3692	170438	174797	1603	43	82722	95439	115.373	1262	34	53659	45301	84.4239	827	22	34057	34057
200-299	3344	211469	210410	1252	37	85832	95794	111.606	1171	35	73568	62547	85.0193	921	28	52069	52069
300-399	1744	156779	152909	596	34	55870	60056	107.492	580	33	53936	45881	85.0656	568	33	46973	46973
400-499	1072	123148	119799	368	34	43674	46322	106.063	344	32	42606	36609	85.9245	360	34	36867	36867
500-999	2294	401230	393218	758	33	143385	148821	103.791	597	26	110322	96874	87.8102	939	41	147524	147524
1000+	1499	529245	525542	507	34	171736	177245	103.208	427	28	173098	163885	94.6776	565	38	184411	184411

BENEFICIARY BURDEN FOR SELECTED PROCEDURES FROM ALL CLAIMS 1:52 THURSDAY, JUNE 21, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY ASSIGNMENT CHARACTERISTICS

ASSIGNED	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	B_EQ	AS_EQ
0	58957	1819556	1797184	.	.	.	.	.	5320	9	218484	196113	89.7608	53637	91	1601071	1601071
100	16605	442143	443846	877	5	25196	26898	106.755	.	.	.	.	.	15728	95	416948	416948

TABLE 17

BENEFICIARY BURDEN FOR SELECTED PROCEDURES FROM ALL CLAIMS 1:52 THURSDAY, JUNE 21, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. SINGLE FEE

TOTAL

N_TOTAL	S	AS	N_UP	PCT_UP	S_UP	AS_UP	ASS_UP	N_DN	PCT_DN	S_DN	AS_DN	ASS_DN	N_EQ	PCT_EQ	S_EQ	AS_EQ
80400	2715297	2612157	22490	28	666198	800338	116.295	41002	51	1441717	1226438	85.0679	16908	21	585382	585382

BENEFICIARY BURDEN FOR SELECTED PROCEDURES FROM ALL CLAIMS 1:52 THURSDAY, JUNE 21, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. BENCHMARK, BY AGGREGATE SUBMITTED CHARGES

RV_CLASS	N_TOTAL	B	AS	N_UP	PCT_UP	B_UP	AS_UP	ASB_UP	N_DN	PCT_DN	B_DN	AS_DN	ASB_DN	N_EQ	PCT_EQ	B_EQ	AS_EQ
0- 29	19733	113923	112669	145	1	366	420	114.754	1111	6	7314	6006	82.1165	18477	94	106243	106243
30- 49	16655	182970	180791	108	1	665	755	113.534	1098	7	15016	12747	84.8895	15449	93	167289	167289
50- 74	12982	231719	229166	144	1	1394	1513	108.537	969	7	21536	18864	87.5929	11869	91	208789	208789
75- 99	8571	212692	210765	108	1	1514	1628	107.530	644	8	19143	17122	89.4426	7819	91	192036	192036
100-149	8814	300882	298124	144	2	2909	3132	107.666	706	8	30267	27286	90.1510	7964	90	267706	267706
150-199	3692	170438	168658	137	4	3877	4134	106.629	322	9	19264	17227	89.4259	3233	88	147297	147297
200-299	3344	211469	209062	117	3	5270	5601	106.281	321	10	26604	23885	89.7797	2906	87	179595	179595
300-399	1744	156779	155326	64	4	3961	4285	108.180	176	10	20524	18747	91.3418	1504	86	132294	132294
400-499	1072	123148	122326	36	3	3028	3176	104.888	104	10	15603	14633	93.7832	932	87	104517	104517
500-999	2294	401230	399472	89	4	11536	11922	103.346	158	7	34357	32213	93.7596	2047	89	355337	355337
1000+	1499	529245	525759	40	3	10312	10564	102.444	86	6	41328	37590	90.9553	1373	92	477605	477605

BENEFICIARY BURDEN FOR SELECTED PROCEDURES FROM ALL CLAIMS 1:52 THURSDAY, JUNE 21, 1979
AVERAGE REASONABLE CHARGE (SINGLE FEE) VS. SINGLE FEE, BY ASSIGNMENT CHARACTERISTICS

ASSIGNED	N_TOTAL	S	AS	N_UP	PCT_UP	S_UP	AS_UP	ASS_UP	N_DN	PCT_DN	S_DN	AS_DN	ASS_DN	N_EQ	PCT_EQ	S_EQ	AS_EQ
0	58957	1900226	1797184	11990	20	393457	482089	122.526	35679	61	1161640	969964	83.4995	11288	19	345131	345131
100	16605	437479	443846	6930	54	171204	185232	106.194	2624	16	79272	71611	90.3358	5051	30	187003	187003

APPENDIX A

Specialty Types Used in Study, Based on GHI Specialty Names Used in Medicare Claims Payment

Specialty Type and Specialty	GHI code number
I General practitioner	
General practice	01
Family practice	08
Manipulative therapy (osteopaths only)	12
II Medical specialties	
Allergy	03
Cardiovascular diseases	06
Dermatology	07
Gastroenterology	10
Internal medicine	11
Pediatrics	37
Pulmonary diseases	29
III Surgical specialties	
General surgery	02
Neurological surgery	14
Obstetrics and gynecology	16
Gynecology (osteopaths only)	09
Obstetrics (osteopaths only)	15
Ophthalmology	18
Orthopedic surgery	20
Otolaryngology	04
Otolaryngology (osteopaths only)	17
Plastic surgery	24
Proctology	28
Thoracic surgery	33
Urology	34
Hand surgery	40
IV Other specialties	
Neurology	13
Pathology	22
Physical medicine and rehabilitation	25
Psychiatry	26

Specialty Types Used in Study, Based on GHI Specialty Names Used in Medicare Claims Payment

Specialty Type and Specialty	GHI code number
IV (cont.)	
Radiology	30
Nuclear medicine	36
Geriatrics	38
Nephrology	39
Miscellaneous physician	49
Pathologic anatomy; clinical pathology (osteopaths only)	21
Peripheral vascular diseases or surgery (osteopaths only)	23
Psychiatric neurology (osteopaths only)	27
Roentgenology, radiology (osteopaths only)	31
Radiation therapy (osteopaths only)	32

TABLE A-2

List of Procedures Used in Study

HCFA Code	GHI Code	Description
1	9016	Initial limited office visit, new patient
2	9019	Initial comprehensive office visit, new patient
4	9000	Routine followup brief office visit, established patient
5	9024	Routine followup brief home visit
7	9012	Initial comprehensive hospital visit
8	9005	Routine followup brief hospital visit
10	0470	Radical mastectomy
11	0883	Reduction of fracture, neck of femur
12	1046	Arthrotomy, puncture for aspiration of joint effusion
13	1413	Needle puncture of bursa
15	2183	Thoracentesis
16	2331	Catheterization of heart
17	2335	Insertion of pacemaker
19	3178	Colectomy
20	3261	Appendectomy
21	3311	Sigmoidoscopy
22	3375	Hemorrhoidectomy
23	3515	Cholecystectomy
24	3631	Repair hernia
25	3931	Cystoscopy
26	4031	Dilation of urethra
27	4316	Prostatectomy
28	4321	Transurethral electrosection of prostate
29	4631	Hysterectomy
30	5613	Extraction of lens
31	7100	Chest X-ray
32	7210	X-ray spine
33	7301	X-ray hip
34	7358	X-ray stomach
35	7360	X-ray colon
36	7603	Cobalt
38	8622	Hemoglobin
39	8624	Blood, white cell count
40	8628	Complete blood count

TABLE A-2 (continued)

List of Procedures Used in Study

HCFA Code	GHI Code	Description
41	8652	Cholesterol blood test
42	8681	Hematocrit
43	8708	Prothrombin time test
44	8720	Sedimentation rate
45	8726	Blood sugar
46	8696	BUN, Urea nitrogen
47	8917	Pap test
48	8934	Urinalysis
49	8983	EKG (Electrocardiogram)
50	8990	EEG (Electroencephalogram)

TABLE A-3

Record Layouts for Provider and Beneficiary Files Created for Study

Provider file record layout

Provider number
Specialty
Board certification
Number of assigned claims
Number of assigned services
$ assigned submitted charges
$ assigned allowed charges (under each method)

# of unassigned claims
# of unassigned services
$ unassigned submitted charges
$ unassigned allowed charges (under each method)

# of claims (assigned plus unassigned)
# of services (assigned plus unassigned)
$ submitted charges (assigned plus unassigned)
$ allowed charges (assigned plus unassigned) under each method

Beneficiary file record layout

HIC (Health Insurance Claimant) number
# of assigned claims
# of assigned services
$ assigned submitted charges
$ assigned allowed charges (under each method)

# of unassigned claims
# of unassigned services
$ unassigned submitted charges
$ unassigned allowed charges (under each method)

# of claims (assigned plus unassigned)
# of services (assigned plus unassigned)
# submitted charges (assigned plus unassigned)
# allowed charges (assigned plus unassigned)
$ burden (20% of allowed charges for assigned claims; submitted charges less 80% of allowed charges for unassigned claims) under each method

APPENDIX B

Comparison of Board Designation in GHI Provider File and Medical Directory

The alphabetical listing of 1977 GHI Medicare providers was compared with the listing in the Medical Directory of New York State, 1976-1977. Of the 4,784 physicians listed in the master file, a 5.6% sample (the first 133 physicians and the last 133 physicians) was selected for comparison. These two groups have very similar activity rates; overall, 117 (44%) physicians are active (Table B-1).

Of these 22 (18.8%) are classified as board and 60 (51.3%) as non-board by both GHI and the Directory. However, for 20 physicians, GHI and the Directory did not agree on classification. Sixteen physicians (13.7%) were classified as non-board by GHI and board by the Directory. For 4 physicians (3.4%), the reverse is true. As the GHI listing is more recent than the Directory the certification could have occurred without being included by the Directory. As for the 16 physicians, a total of 15 physicians (12.8%) were not listed in the Directory but were in the GHI list. Of these, 13 (11.1%) were non-board and 2 (1.7%) board. Explanations of the difference include error by GHI or reporting failure by the physician.

TABLE B-1

Distribution of Active Physicians from a Sample of 266 Medicare Physicians in Queens by Board Status, 1976

Designation by Directory

LEGEND Frequency Percent Row percent Column percent	Designation by Group Health, Incorporated		
	Board	Non-Board	Total
	22	16	38
Board	18.8% 57.9 78.6	13.7% 42.1 18.0	32.5%
	4	60	64
Non-Board	3.4% 6.3 14.3	51.3% 93.8 67.4	54.7%
	2	13	15
Not Listed	1.7% 13.3 7.1	11.1% 86.7 14.6	12.8%
Total	28	89	117
	23.9%	76.1%	100.0%

117 active physicians = 44% of sample

Source: GHI Provider Printout, DAMGC118, 11 January 1979; and PIPGC485, 19 May 1978.

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