Physician Incomes Under An All-Payer Fee Schedule
by Christopher Hogan

Abstract: This DataWatch estimates physicians’ net incomes under various scenarios for universal adoption of the Medicare fee schedule. American Medical Association (AMA) data on physicians’ gross incomes by payer are adjusted for differences in fees across Medicare, Medicaid, and private payers. Net income (gross income net of practice costs) is shown under several alternatives. Average net incomes would range from roughly $100,000 to $200,000, depending on specialty and the particular assumptions used. General practitioners’ incomes would typically rise, and income differences across specialties would be narrowed significantly. The Medicare fee schedule, as intended, would increase incomes of primary care physicians relative to specialists.

A primary goal of Medicare’s physician payment reforms is to create an economically neutral fee schedule, one that rewards all work equally. To develop such a fee schedule, the Health Care Financing Administration (HCFA) refined and expanded the estimates developed by William Hsiao and colleagues of the work required to perform individual medical and surgical services.¹ The resulting Medicare fee schedule increases payments for evaluation and management services and decreases payments for tests and procedures relative to historical payment levels. The expected effect of this is to raise Medicare payments per service to primary care specialties such as general practice, family practice, and general internal medicine and to lower payments per service for most other specialties.²

Although the expected impact on each specialty’s Medicare revenues is known, a broader question remains: What would happen to physician incomes under universal adoption of the Medicare fee schedule rates? The answer to this question has a bearing on several important issues, including the feasibility of an all-payer system based on the Medicare rates, as well as the fairness of current Medicare reimbursements and the need for further refinement of the fee schedule itself.

A recent study suggests that universal use of the Medicare fee schedule would have the perverse impact of dramatically lowering incomes for family practitioners and increasing the disparity of incomes across specialties.³

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That study, however, extrapolated income from a single service per specialty, ignoring the current service and payer mix that actually generates physicians’ gross incomes.

This DataWatch takes a simple approach to estimating incomes that captures current (1991) payer and service differences across specialties. The analysis begins with 1991 gross practice revenues by payer. The revenue stream for each payer is then increased or decreased based on a comparison of the payer’s 1991 fees with the 1992 Medicare fee schedule. Subtracting practice costs from this new revenue estimate generates net income under universal use of the Medicare fee schedule.

Although the underlying data and assumptions are by necessity inexact, examination of a wide variety of scenarios shows that the qualitative characteristics of the resulting income distribution are quite robust. If all payers were to adopt the Medicare rates, family practitioners would be likely to see either no change or modest increases in income. Procedurally oriented specialists, however, would see modest to steep declines in income. The Medicare fee schedule, as intended, would significantly narrow the earnings differential between primary care and other specialties.

**Study methods.** Six specialties were chosen for this analysis: three surgical and three nonsurgical. These specialties were chosen both because they demonstrate a range of revenue impacts and because information for these specialties was easily matched across the data sources used. These specialties account for just under half of physician outlays from all payers and roughly 65 percent of physician outlays in the Medicare program.

Gross income by source of payment, practice costs, and net income for each specialty are taken from the American Medical Association’s (AMA’s) Socioeconomic Monitoring System (SMS). Total gross income, costs, and net income are for 1991. Revenue shares by payer are for 1992, the first year such data were available. Revenue shares are assumed to change slowly enough that these data should approximate the average revenue contributions of the payers in 1991.

It is not possible to compare the Medicare fee schedule to other payers’ fees directly for each specialty. Medicare claims record the physician’s specialty, but no national payment data for other payers could be found that contained reliable specialty information. Because of this, the revenue impact for each specialty was approximated in two steps, adjusting first for differences across payers, then for differences across specialties.

First, gross revenue from each payer was increased or decreased to reflect the average fee levels of payers relative to Medicare. Medicaid revenues were increased by 52 percent based on a recent survey of Medicaid payment levels. Blue Cross/Blue Shield and other insurance revenues were reduced by 35 percent based on analysis of a sample of private-sector claims gath-
Revenues obtained directly from patients (copayments and self-pay) were adjusted by the average change in revenues from all other sources, as if all payments directly from patients were the result of a uniform copayment.

Second, each specialty’s gross revenues were increased or decreased based on the estimated impact of the Medicare fee schedule on that specialty’s Medicare payments. The effect of moving from 1991 fees to the full fee schedule (at the 1992 conversion factor) is taken from HCFA estimates. The HCFA estimate is the change in the average fee per service, including the 6.5 percent fee reduction for “baseline adjustment” but ignoring the fee update between 1991 and 1992. In effect, this analysis freezes the volume and quantity of care at 1991 levels but nevertheless includes HCFA’s 6.5 percent baseline adjustment in all subsequent calculations. This should provide conservative (pessimistic) estimates of physician incomes under all subsequent scenarios.

Gross income under the Medicare fee schedule is the sum of the revenues from the five payment sources. Practice costs for each specialty were taken from the data source as the original gross income data. Net income is gross income less practice costs.

Results And Alternative Scenarios

The calculations outlined above result in estimated net incomes that differ significantly from current levels. In the baseline scenario, with no further assumptions about costs or revenues, family/general practice and internal medicine physicians would be at the top of an income distribution that ranged from roughly $110,000 to $150,000 (Exhibit 1). This high primary care income is principally the result of three factors. First, as expected, the Medicare fee schedule moves gross revenues toward the services that these practitioners provide. Second, practice costs were assumed to be fixed in dollar terms, so that percentage changes in gross income are leveraged by roughly a factor of two when translated into changes in net income. Finally, these providers reported a high reliance on Medicaid income, and the movement of Medicaid fees up to Medicare levels provides a significant boost to gross revenues.

The remaining scenarios in Exhibit 1 demonstrate that changes in practice costs could diminish the changes in net income. In cross-sectional data, specialties with the highest gross incomes have the highest practice costs, suggesting that costs might change in response to changes in revenues. When the percentage change in costs is assumed to equal half of the percentage change in gross revenues (50 percent elasticity), family practice physicians are in the middle of an income distribution that ranges from...
roughly $140,000 to $160,000. When the percentage change in costs is assumed to equal the percentage change in revenues (100 percent elasticity), family practitioners are at the bottom of an income distribution ranging from roughly $140,000 to $200,000.

A second set of alternative scenarios examines assumptions regarding revenues (Exhibit 2). (Costs are assumed to be fixed in dollar terms, as in the baseline scenario.) The first scenario here produces the lowest incomes: All payers adopt the Medicare rates except for Medicaid, for which payments are left unchanged. Incomes in this case range from $100,000 to $130,000, with family practice and internal medicine physicians near the top of the distribution. The second scenario is more optimistic in its revenue projections: All payers use the Medicare rates, but half of revenue losses from commercially insured patients are recouped through increased

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Exhibit 1

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Actual 1991 income</th>
<th>Baseline scenario (no change in costs)</th>
<th>50 percent cost elasticity</th>
<th>100 percent cost elasticity</th>
</tr>
</thead>
<tbody>
<tr>
<td>General surgery</td>
<td>$208</td>
<td>$117 (-44%)</td>
<td>$137 (-34%)</td>
<td>$156 (-25%)</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>258</td>
<td>109 (-58)</td>
<td>148 (-43)</td>
<td>188 (-27)</td>
</tr>
<tr>
<td>Orthopedic surgery</td>
<td>278</td>
<td>129 (-54)</td>
<td>162 (-42)</td>
<td>196 (-30)</td>
</tr>
<tr>
<td>Family practice</td>
<td>124</td>
<td>155 (25)</td>
<td>147 (18)</td>
<td>138 (11)</td>
</tr>
<tr>
<td>Internal medicine</td>
<td>172</td>
<td>150 (-13)</td>
<td>155 (-10)</td>
<td>160 (-7)</td>
</tr>
<tr>
<td>Cardiovascular disease</td>
<td>226</td>
<td>111 (-51)</td>
<td>137 (-39)</td>
<td>164 (-28)</td>
</tr>
</tbody>
</table>

Note: See text for complete descriptions of scenarios.

Exhibit 2

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Actual 1991 income</th>
<th>Medicaid fees unchanged</th>
<th>Increased billing to commercially insured by payer</th>
</tr>
</thead>
<tbody>
<tr>
<td>General surgery</td>
<td>$208</td>
<td>$107 (-48%)</td>
<td>$138 (-33%)</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>258</td>
<td>99 (-62)</td>
<td>131 (-49)</td>
</tr>
<tr>
<td>Orthopedic surgery</td>
<td>278</td>
<td>119 (-57)</td>
<td>171 (-38)</td>
</tr>
<tr>
<td>Family practice</td>
<td>124</td>
<td>122 (-2)</td>
<td>162 (-6)</td>
</tr>
<tr>
<td>Internal medicine</td>
<td>172</td>
<td>134 (-22)</td>
<td>162 (-6)</td>
</tr>
<tr>
<td>Cardiovascular disease</td>
<td>226</td>
<td>106 (-53)</td>
<td>132 (-42)</td>
</tr>
</tbody>
</table>

Note: See text for complete descriptions of scenarios.
balance billing. (Blue Shield plans were assumed to limit balance billing through participation arrangements with providers.) Here, family practice and internal medicine are near the high end of an income distribution that runs from roughly $130,000 to $170,000. Finally, each payer could adopt the Medicare fee schedule in a roughly budget-neutral manner: Only redistributions by the resource-based relative value scale (RBRVS) are calculated, and the only overall revenue loss comes from the 6.5 percent baseline adjustment. Revenues are correspondingly higher across the board: Family practice and internal medicine physicians would earn roughly $190,000, second only to orthopedic surgeons at $220,000.

Discussion

The conclusions to be drawn from this analysis are not derived from any particular estimate of income gains or losses, but from the qualitative characteristics of the income distribution demonstrated by all of the scenarios. In each case primary care physicians would earn about as much as or more than they currently earn, while medical and surgical specialists would earn slightly to significantly less than they currently earn. These qualitative findings were robust to a number of significant variations in assumptions about costs and revenues.

Just a few examples demonstrate the sort of uncertainty that surrounds both the data and the assumptions used. First, Medicare fees were assumed to average 65 percent of private insurers’ fees based on a study of one private payer database, but a recent study of submitted charges pegs this figure at 76 percent. Clearly, the latter number would significantly raise income estimates. Second, the average proportion of revenue from Medicaid is reported at just under 10 percent, while analysis of program outlays suggests that this figure should be closer to 4 percent. Misreporting of Medicaid shares suggests that there may be significant uncertainty in the reported revenue shares for other payers as well. Lower initial reliance on Medicaid would reduce final incomes under most of the scenarios. Finally, service mix, payer mix, and total volume of care were assumed to be unchanged from 1991 levels.

The two-step approximation of the fee schedule impact by specialty also adds a measure of uncertainty. The revenue impact of moving to the Medicare rates was estimated by first raising or lowering each payer’s fees to the Medicare level (on average), then assuming that the redistributions seen within the Medicare program would apply equally to all payers. The average fee level may, however, obscure important variations by type of procedure. In a national sample of 1991 data from Blue Shield plans, Medicare fees averaged 73 percent of Blue Shield fees, but that ratio ranged
from 69 percent for lab tests to 82 percent for cataract surgery.\textsuperscript{12} In addition, for a given specialty, the Medicare case-mix may not be a good proxy for the case-mix of non-Medicare patients. Lacking good non-Medicare specialty data, this is difficult to quantify. It seems reasonable, however, that the mix of visit and procedural services would be qualitatively similar across payers, that is, that general practitioners would largely provide visits and surgeons and that medical specialists would largely provide procedures to both the Medicare and non-Medicare populations. The best that can be said is that the likely error made in this approximation is smaller than the redistributions that occur, leaving the results qualitatively unchanged.

These are clearly ballpark estimates and should be viewed in that light. But even a ballpark estimate is good enough to show that predictions of dire and perverse income redistributions under the Medicare fee schedule appear to be unfounded. Estimates under diverse sets of assumptions show that Medicare rates are high enough to generate significant net incomes after covering overhead costs and that the disparities in income across specialties would be narrowed significantly from current levels.

This is not to say that either the current fee structure or the level of Medicare fees are the ideal starting points for an all-payer system. Payments for overhead costs are still based on historical charge data and continue to favor proceduralists over primary care physicians.\textsuperscript{13} In addition, universal use of the Medicare fees would significantly lower average physician incomes, possibly risking disruption of service delivery or the supply of health professionals.

The only conclusion here is that the Medicare fee schedule moves payment and incomes in the direction originally intended, favoring primary care physicians relative to specialists. That result seems uncontroversial, given that the fee schedule raises fees for visits and reduces them for most tests and procedures. Further debate should not center on whether the fee schedule moves revenues in the intended direction, but rather on how large those movements are and whether the shifts in revenues will have desirable or undesirable impacts on physician supply, practice patterns, and access to care.

The views expressed here are not necessarily those of the Physician Payment Review Commission.
NOTES


5. This appears to be the case for Medicare’s share of revenues based on a comparison of 1991 and 1992 AMA Socioeconomic Monitoring System (SMS) data.


7. PPRC, Optional Payment Rates for Physicians: An Analysis of Section 402 of H.R. 3626 (Washington: PPRC, March 1992). The Medstat data overweight large employers and the Midwest, and contain an unknown mix of Blue Shield and commercial insurance claims. The estimated 35 percent difference between average private (Blue Shield and commercial) fees and Medicare rates is subject to significant uncertainty.

8. HCFA, “Medicare Program.” These estimates are the impact on payments per service for the fully implemented fee schedule, ignoring the transition rules that will affect actual payment rates until 1996.

9. Each payer’s fees were set 6.5 percent below the budget-neutral level for that payer. Inclusion of the 6.5 percent baseline adjustment for each payer should again result in conservative (low) income estimates.


11. In 1990 Medicaid spending for physician services amounted to $4 billion, compared with $28 billion under Medicare. If the Medicare revenue share is correct, this implies that the Medicaid share should be less than 4 percent.
