Department of Health and Human Services

OFFICE OF INSPECTOR GENERAL

MEDICARE INCENTIVE PAYMENTS IN HEALTH PROFESSIONAL SHORTAGE AREAS

Do They Promote Access to Primary Care?

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EXECUTIVE SUMMARY

PURPOSE

To help determine whether Medicare incentive payments promote the Federal interest in improving access to primary health care in Health Professional Shortage Areas.

BACKGROUND

Ensuring access to primary care physicians is a national concern. The nation suffers from a shortage of primary care physicians, and some geographic areas are particularly underserved. Medical schools, State governments, nonprofit foundations, and the Federal government have responded to these shortfalls by designing programs to increase the supply of primary care physicians, particularly in underserved areas.

Since 1989, physicians who treat Medicare patients in Health Professional Shortage Areas (HPSAs) designated by the Department of Health and Human Services have been entitled to bonus payments. Increasing payments to physicians in underserved areas, it was believed, would have improved access to care in those areas. The current law makes physicians in all HPSAs eligible for bonuses of 10 percent of the amount paid for services. Spending for the Medicare incentive payment program has been increasing rapidly and reached $68 million in 1992.

In theory, the bonus payments act as incentives to attract new physicians to underserved areas and to discourage physicians in those areas from leaving. But studies have raised questions about whether the incentives have any effect on physicians' decisions to remain in or move to an underserved area.

This study focuses on the effectiveness of Medicare's HPSA incentive payment program as part of the larger Federal effort to improve access to primary care. We recognize that the incentive program's authorizing legislation mandates payments to both specialists and primary care physicians in HPSAs. The widespread concern about shortages of primary care physicians, however, prompted us to examine how well the incentive payment program addresses that problem.

Our findings are based on a survey of 497 physicians who recently received Medicare incentive payments and on a review of legislative history, regulations, and literature.

FINDINGS

A substantial amount of the Medicare incentive money has gone to physicians who provide little or no primary care.

Forty-five percent ($31 million) of the Medicare incentive money distributed in 1992 went to physicians who, according to Federal definitions, are not primary care providers.

According to their own estimates, 74 percent of the specialists who received bonuses spend less than half of their time providing primary care services, and 45 percent provide primary care services less than 10 percent of the time.

Fourteen percent ($10 million) of the 1992 incentive money went to urban, hospital-based specialists.

These physicians spend, on average, just 15 percent of their time delivering what they consider to be primary care. Because urban hospitals are attractive to specialists, providing incentives for specialists to practice there seems unnecessary and inconsistent with Federal priorities.

Among primary care physicians, Medicare incentive payments rarely have a significant effect on practice location decisions.

Primary care physicians who received Medicare incentive payments rate them, on average, only slightly to moderately important in their location decisions.

Only 30 percent rated the bonus payments as extremely or very important. Thirty-two percent rated them not at all important.

Many physicians received only a small amount of Medicare incentive money in 1992.

The median incentive payment for 1992 for primary care physicians in rural HPSAs was just $869, and for primary care physicians in urban HPSAs, $1,239.

Practice location determinants are often nonmonetary, according to interviewed physicians and published literature.

Net income can be less influential in attracting physicians to communities than factors such as original hometown, climate, cultural activities, and the availability of medical facilities and colleagues.

RECOMMENDATIONS

In our draft report, we presented three options to address our findings: 1) eliminate the incentive payment program, 2) modify the program to target it more effectively to primary care, or 3) channel funds from the program to new or existing mechanisms for improving access to primary care. Since we produced our draft report, the President has proposed changing the program to provide larger incentives and to eliminate incentives for specialty services in urban areas in his Health Security Act. That proposal meets the objective laid out in our second option. Since the Health Care Financing Administration (HCFA) also concurred with this option and spoke of the President's proposal as addressing the program's deficiencies, we have altered our recommendation to include only the second option from our draft report.

The Health Care Financing Administration should seek to modify the Medicare incentive payment program to target it more effectively to primary care.

Modifying the Medicare incentive payment program would allow the payments to be better targeted toward primary care physicians and would create stronger incentives.

COMMENTS ON OUR DRAFT REPORT

We shared our draft report with and solicited comments from the Health Care Financing Administration (HCFA), the Public Health Service, the Assistant Secretary for Planning and Evaluation (ASPE), the Assistant Secretary for Management and Budget, the Assistant Secretary for Legislation, and the Physician Payment Review Commission. We received comments from HCFA and ASPE. We reproduce these comments and provide detailed responses to each in appendix B.

We are pleased that HCFA concurred with our recommendation and after considering the options we presented in our draft report elected to seek to modify the Medicare incentive payment program to target it more effectively to primary care. We have eliminated the other options we initially presented. We have addressed HCFA's technical comments as necessary.

We are pleased that ASPE concurred with our recommendation and found our methodology sound. We have clarified our presentation as necessary to address ASPE's concerns. We do not wish to propose the option to modify the HPSA designation as ASPE suggests. The HPSA designation is also used for other purposes, e.g., for placement of National Health Service Corps providers. Thus the ramifications of modifying the HPSA designation go beyond the scope of this report.

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INTRODUCTION

PURPOSE

To help determine whether Medicare incentive payments promote the Federal interest in improving access to primary health care in Health Professional Shortage Areas.

BACKGROUND

Ensuring access to primary care physicians is a national concern. By detecting and treating problems early, and by making proper referrals to specialists when necessary, primary care physicians can improve the health status of their patients while reducing total health care expenditures.[1] (Primary care physicians are defined here and in most other discussions as doctors in the fields of general or family medicine, general internal medicine, pediatrics, and obstetrics/gynecology.[2]) Given the promise of better health at lower cost, primary care physicians naturally play prominent roles in plans for State-level and national health care reform.[3]

The nation suffers from a shortage of primary care physicians, however, and some geographic areas are particularly underserved.[4] Medical schools, State governments, and nonprofit foundations have responded to these shortfalls by designing programs to encourage more medical school students and graduates to choose primary care as their field of practice and to locate their practices in traditionally underserved areas.

The Federal government, through the Department of Health and Human Services (HHS), has also signaled its desire to improve access to primary care. The National Health Service Corps, Area Health Education Centers, Community and Migrant Health Centers, and Primary Care Cooperative Agreements are among the major programs operated with this goal in mind.

To target support for primary care where the support is most needed, HHS defined and identified Health Professional Shortage Areas (HPSAs).[5] These are counties, census tracts, or other geographic areas where the ratio of population to primary care physicians is at least 3,000 to 1.[6] The original purpose of defining HPSAs was to create a list of possible placement sites for physicians obligated to serve in the National Health Service Corps.[7] Since 1989, however, HPSAs have had an additional meaning. Physicians who treat Medicare patients in those areas are now entitled to bonus payments. The payments comprise a percentage of what the physicians otherwise receive through Medicare Part B reimbursement policies.

The Medicare bonus payments, as first conceived, were intended to address low prevailing payment rates to primary care physicians in underserved, rural areas. Increasing the payments, it was believed, would have improved access to care in those areas. In its version of the Omnibus Reconciliation Act of 1987, the House of Representatives proposed that the bonuses go only to primary care physicians in rural

areas with the most severe shortages. It set the bonus rate at 10 percent.[8] But the bill was modified as it went through the Senate and Conference Committee. The final law made both primary care physicians and specialists eligible, authorized payments for rural physicians starting in 1989 and for urban physicians starting in 1991, and reduced the bonuses to 5 percent of the amount paid for services.[9] Two years later, the House of Representatives passed legislation that would have restricted the payments to primary care physicians.[10] This amendment, however, did not become law. Instead, Congress raised the bonuses from 5 to 10 percent and conferred eligibility on all physicians in all HPSAs--not just those with the most severe shortages.[11]

With these amendments and increasing awareness of the incentive payment program, spending and participation rapidly expanded. In calendar year (CY) 1989, the payments totaled $2 million and went to about 4,000 providers.[12] In CY 1992, they totaled $68 million, distributed among nearly 22,000 providers.[13] The bonuses can be expected to continue rising in future years along with the rest of the Medicare program expenditures. Because they are tied to Medicare Part B payments, they do not need to be reauthorized and appropriated each year, and they currently cannot be capped.

In theory, the bonus payments act as incentives to attract new physicians to underserved areas and to discourage physicians in those areas from leaving.[14] But studies by the Physician Payment Review Commission (PPRC) and by the Congressional Office of Technology Assessment (OTA) have raised questions about the efficacy of the incentive payment program.[15] In particular, both expressed uncertainty about whether incentives have any effect on physicians' decisions to remain in or move to an underserved area.

This study examines the efficacy of Medicare's HPSA incentive payment program as part of the larger Federal effort to improve access to primary care. We recognize that the program is currently designed to encourage *all* physicians--primary care and specialty alike--to practice in HPSAs. It could be argued that it is also intended to encourage physicians in HPSAs to include more Medicare patients in their patient mixes than they otherwise would. Nevertheless, we focus on the payments' role in improving access for the general population in shortage areas to primary care physicians, and we do so for three reasons.

First, it is clear that the current administration plans to increase support for primary care while limiting support for specialty care.[16] Second, the administration's efforts to reform the health care system involve all Americans, not just Medicare enrollees. Third, although both primary care and specialty physicians are eligible for incentive payments, the program is inextricably linked to the availability of primary care. That is because an area's status as a HPSA depends entirely on the representation of primary care physicians within that area, and not at all on the representation of specialists.

If the Medicare incentive payment program is to be effective and efficient in improving access to primary care in underserved areas, it will have to satisfy two conditions. First, it must direct its resources to physicians who provide primary care. Second, the payments must be an important factor in influencing these physicians to establish or maintain practices in underserved areas. To determine whether these conditions are being satisfied, we surveyed recent recipients of Medicare incentive payments. We learned what types of physicians are receiving payments, where they are practicing, and how important the payments are in their practice location decisions.

METHODOLOGY

We selected a random sample of 497 physicians from the records of 10 Medicare carriers. These physicians, according to carrier records, received Medicare incentive payments for the quarter ending December 31, 1992.[17] Each was mailed a questionnaire, and 405 (81.5 percent) responded. From the carriers, we obtained payment histories and other information for all 497 physicians. We also conducted telephone interviews with 33 physicians. To supplement the information obtained through this survey, we reviewed literature on the subject of access to primary care in underserved areas. Details of our methodology appear in appendix A.

We conducted this inspection in accordance with the *Quality Standards for Inspections* issued by the President's Council on Integrity and Efficiency.

SCOPE

This report focuses on Medicare incentive payments for which only physicians are eligible. Physicians include doctors of medicine, osteopathy, podiatry, and optometry. Therefore, our discussion of primary care includes only physicians and not providers such as nurse practitioners, physician assistants, and other nonphysician providers. The role that these providers can play in improving access to primary care is discussed in our May 1993 inspection report, "Enhancing the Utilization of Nonphysician Health Care Providers" (OEI-01-90-02070).

FINDINGS

A SUBSTANTIAL AMOUNT OF THE MEDICARE INCENTIVE MONEY HAS GONE TO PHYSICIANS WHO PROVIDE LITTLE OR NO PRIMARY CARE.

Forty-five percent of the Medicare incentive money distributed in 1992 went to physicians who, according to Federal definitions, are not primary care providers.

Half (50 percent) of the providers who received HPSA incentive payments in late 1992 are specialists, and they received about half of the money distributed that year (45 percent), or about $30.5 million.* The percentage of incentive money going to specialists was greater in urban areas (54 percent) than in rural areas (35 percent).[18]

Incentive payments made to specialists could still help improve access to primary care if the specialists were providing primary care, but this is not generally the case. According to their own estimates, 75 percent of specialists spend less than half their time providing primary care services.[19] Forty-five percent spend less than 10 percent of their time on primary care. In contrast, 97 percent of primary care physicians spend half their time or more delivering primary care, and 76 percent spend at least 90 percent of their time on primary care.

Physicians who spend less than 10 percent of their time on primary care received one quarter (26 percent) of the incentive money in 1992. Physicians who spend 90 percent or more received 44 percent.

Fourteen percent of the 1992 incentive money went to urban, hospital-based specialists.

Although they are designated as areas with too few physicians, HPSAs can contain large and prestigious hospitals. Institutions such as Brigham and Women's Hospital in Boston, Mt. Sinai Medical Center in Cleveland, and Buffalo General Hospital are located in HPSAs. This is because HPSA designations are made completely without reference to the presence of either health care facilities or physicians not in primary care fields.

These hospitals' facilities, prestige, and large-city locations make them attractive to specialists who practice primarily in hospitals. For these physicians, Medicare bonus payments seem to be more of a windfall than an incentive. Increasing payments to physicians who provide specialty services in hospitals alongside hundreds of other specialists seems inconsistent with efforts to encourage physicians to provide primary care in areas with few other doctors.

*We provide confidence intervals for our estimates in appendix A.

Furthermore, urban hospitals, because of their reputations and convenient locations, attract patients from wide areas. Therefore, many of the people treated by physicians who practice in urban HPSA hospitals probably do not even live in HPSAs themselves. The law does not require that the patients of physicians receiving Medicare incentive payments be residents of HPSAs, or that HCFA record whether or not these patients live in HPSAs.

In extreme examples, neither the patients nor the physicians spend most of their time in HPSAs. One of the physicians in our sample has a private practice in a wealthy New Jersey suburb. On rare occasions, when his patients require services unavailable in the suburban hospital, he will admit them to Cooper Hospital in nearby Camden. Cooper Hospital, a 400-plus bed, university-affiliated institution, is in an urban HPSA. For the services he provided to his suburban patients in Camden, this physician received, consistent with Federal law, $1,500 in incentive payments in 1992.

The HPSA incentive program paid approximately $9.4 million in 1992 to specialists who spend most of their time when they are in HPSAs providing services in hospitals. These physicians spend, on average, just 15 percent of their time delivering what they consider to be primary care. Thirty-seven percent of them provide no primary care at all.

Furthermore, incentive payments to urban, hospital-based specialists are higher on average than payments to other physicians. Urban, hospital-based specialists received median payments for 1992 of $1,425, compared to $656 for all incentive payment recipients. Although it can be argued that the general lack of physicians in rural areas[20] justifies paying bonuses to specialists in rural hospitals, paying higher-than-average incentive payments to urban, hospital-based specialists seems inappropriate.

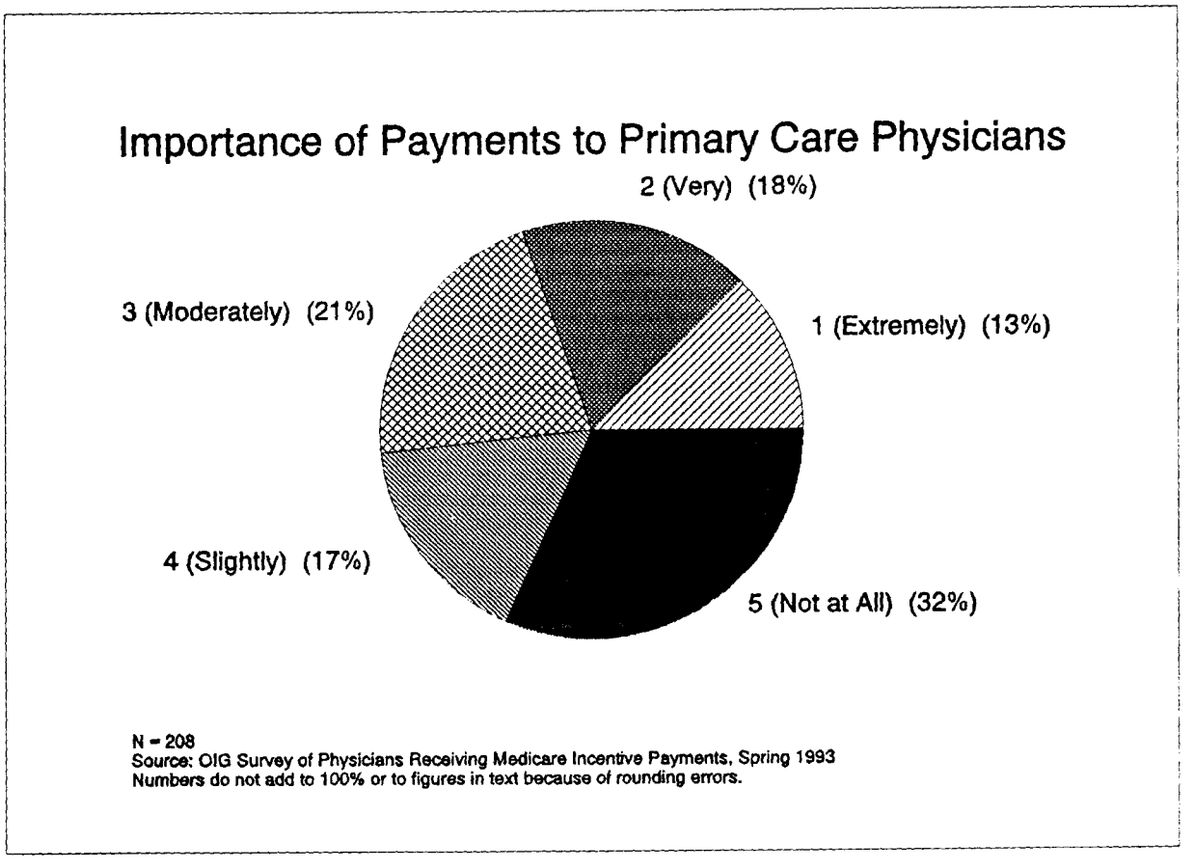
AMONG PRIMARY CARE PHYSICIANS, MEDICARE INCENTIVE PAYMENTS RARELY HAVE A SIGNIFICANT EFFECT ON PRACTICE LOCATION DECISIONS.

We established in the previous section that much of the Medicare incentive money goes to physicians who provide little or no primary care. We turn next to the question of whether money that *does* reach primary care physicians is effective in encouraging them to practice in underserved areas. Statistics presented in this section are taken from the responses of the 262 physicians in our sample who meet the Federal definition of primary care physicians (see the Introduction). Because we realize that some specialists provide primary care, we tested an alternative definition of primary care physicians. We conducted the same analyses for the group of physicians in our sample who say they spend at least half their time delivering primary care. The results of those analyses were very similar to the ones presented below.

Primary care physicians who received Medicare incentive payments rate them, on average, slightly to moderately important in their location decisions.

We asked incentive payment recipients, "How important are the bonus payments in your decisions about where to practice?" They recorded their answers on a 5-point scale, as shown in figure 1 below. Only 30 percent rated the bonus payments as extremely or very important.

Figure 1



The mean rating was 3.37, which falls between slightly and moderately important.

The numbers presented above probably exaggerate somewhat the true importance of the incentive payments. Several of the physicians who rated the payments at least slightly important also indicated that they were unaware, prior to receiving our questionnaire, that Medicare offered incentive payments to physicians in HPSAs.[21] It seems unlikely that these physicians could truly attach any importance to the payments without knowing of their existence. Also, when we interviewed physicians about the written responses they provided to us, they frequently indicated that they had overstated the importance of the incentive payments.

A study commissioned by HCFA predicted that bonus payments would be more effective in retaining physicians who already practice in HPSAs than in attracting new physicians to HPSAs.[22] Yet primary care physicians who have practiced in their current locations since before the incentive payments began found the payments *less* important (mean rating = 3.54) to their decisions than did their counterparts who arrived since the payments started (mean rating = 3.05). Physicians with previously established practices represent 65 percent of our primary care subsample, and the average length of practice among all primary care physicians is 11 years.

Many physicians received only a small amount of Medicare incentive money in 1992.

The mean 1992 incentive payment for physicians in our sample was $2,375. But the mean is inflated by a relatively small number of large payments. (For example, 13 primary care physicians in our sample had payments in 1992 of $10,000 or more.) The median incentive payments for 1992 for primary care physicians in rural HPSAs was just $869, and for primary care physicians in urban HPSAs, $1,239. These payments seem insignificant in comparison with physicians' average incomes[23] and therefore are unlikely to have major effects on physicians' location decisions.

The larger the total annual incentive payments, the more important the payments are rated.[24] The median amount paid to physicians who rated the payments extremely, very, or moderately important was $1,572 (mean $3,832); for physicians rating the payments slightly or not at all important, the median payment was $801 (mean $1,723).

Higher payment amounts are also associated with increased awareness of the program. Physicians who had been aware, before receiving our questionnaire, that Medicare offered Medicare incentive payments received a median payment of $1,461. Physicians who had not been aware received a median payment of $410.

Practice location determinants are often nonmonetary, according to interviewed physicians and published literature.

The apparently low importance attached to incentive payments by physicians in our sample is consistent with prior research on location decisions. According to research reviewed by the HCFA-commissioned study, net income can be less influential in attracting physicians to communities than factors such as original hometown, climate, cultural activities, and the availability of medical facilities and colleagues.[25] Such factors are also more important than income in physicians' decisions to stay or leave rural areas.[26]

The importance of social and cultural factors was reinforced in conversations with the 14 primary care physicians in our telephone interview subsample. The reasons they mentioned for choosing their current practice location included presence of family, site of training, and need for physicians in their areas. None indicated that they would stop practicing in their HPSAs if the incentive payments were discontinued.

RECOMMENDATIONS

In our draft report, we presented three options to address our findings: 1) eliminate the incentive payment program, 2) modify the program to target it more effectively to primary care, or 3) channel funds from the program to new or existing mechanisms for improving access to primary care. Since we produced our draft report, the President has proposed the Health Security Act. As part of that proposal, the Medicare incentive payment program would be changed to provide twenty percent bonuses to physicians providing services in HPSAs and would eliminate bonuses for specialty services in urban areas. The increase in the size of the payments could make them more effective incentives. The elimination of incentives for specialty services in urban areas could more effectively target the program to primary care. Because HCFA concurred with this option and spoke of the President's proposal as addressing the program's deficiencies, we have altered our recommendation to include only the second option from our draft report.

The Health Care Financing Administration (HCFA) should seek to modify the Medicare incentive payment program to target it more effectively to primary care.

As we noted in the background section, the current statute authorizes Medicare incentive payments to both specialists and primary care physicians in HPSAs. However, current Federal priorities call for budgetary restraint and emphasis on primary care. Meanwhile, Medicare's HPSA incentive payment program is directing millions of dollars to providers of specialty care. The money that it *does* provide to primary care physicians seems to have only slight importance in their decisions to practice in underserved areas. Thus, the program appears inconsistent with current Federal interests.

The incentive program as currently designed has two fundamental flaws that limit its effectiveness in enhancing access to primary care. Bonuses are being given to many physicians who are not providing primary care, and they are not strong influences on physicians' locations decisions. These flaws suggest that (1) the payments should be targeted more specifically, and (2) they should be modified to create stronger incentives. Because higher payments seem to have more influence on physicians, the program might be more effective if the payments were increased. Payments to some physicians could be increased without adding to overall expenditures if payments were withdrawn from other physicians.

One option for increasing payments is to raise the bonus percentage. The bonus could be set, for example, to 15 or 20 percent of standard Part B payments. There are many options for limiting payments in order to offset payment increases. One would be to confer eligibility on only those physicians in HPSAs who were recognized by HCFA as primary care providers. Another would be to make all physicians in HPSAs eligible, but to provide incentive payments only when they provided what HCFA considered to be primary care services. A third would be for HCFA to identify

Medicare enrollees who reside in HPSAs and to allow incentive payments for physicians only when they treat HPSA residents.

COMMENTS ON THE DRAFT REPORT

We shared our draft report with and solicited comments from the Health Care Financing Administration (HCFA), the Public Health Service, the Assistant Secretary for Planning and Evaluation (ASPE), the Assistant Secretary for Management and Budget, the Assistant Secretary for Legislation, and the Physician Payment Review Commission. We received comments on our draft report from the Health Care Financing Administration (HCFA) and the Assistant Secretary for Planning and Evaluation (ASPE). We reproduce these comments and provide detailed responses to each in Appendix B.

We are pleased that HCFA concurred with our recommendation and after considering the options we presented in our draft report elected to seek to modify the Medicare incentive payment program to target it more effectively to primary care. Because they selected this option and because the President's Health Security Act includes a proposal to make improvements to the program, we have eliminated the other options we initially presented. We have addressed HCFA's technical comments as necessary.

We are pleased that ASPE concurred with our recommendation and found our methodology sound. We have eliminated the option about which ASPE had concerns, for the reasons noted above. We do not wish to propose the option to modify the HPSA designation as ASPE suggests, because the HPSA designation is used for other purposes. We note that our Management Advisory Report "Design Flaws in the Medicare Incentive Payment Program," (OEI-01-93-00051), issued in June 1994, discusses this issue. We have clarified our presentation as necessary to address ASPE's other concerns.

APPENDIX A

METHODOLOGY

Our sources for this report included: (1) responses to a mail survey of a sample of HPSA incentive payment recipients, (2) information about those recipients supplied by Medicare carriers, (3) telephone interviews with a subsample of incentive payment recipients, and (4) a review of written material including laws, committee reports, regulations, HHS memoranda, and periodical literature. In this appendix we describe each of our data collection techniques and explain the analyses we performed.

MAIL SURVEY

To select a representative sample of incentive payment recipients, we obtained from the Health Care Financing Administration (HCFA) a list showing the distribution of incentive payments for the quarter ending September 30, 1992. The list showed, for each of the 58 Medicare carriers, the total amount paid in Medicare incentives for that quarter and the total number of physicians receiving incentive payments. We excluded from that list the carrier for the Railroad Retirement Board (RRB), to avoid duplicate counting of physicians who submit claims to both that carrier and the carrier in their home State.

Subsequently, we employed a two-stage Rao-Hartly-Cochran sampling technique[27] to randomly select ten carriers and approximately 50 physicians* within each carrier for a total of about 500 physicians. At the first stage, we used the software Rats/Stats from the DHHS Office of Inspector General, Office of Audit Services, to randomly assign the 57 carriers into 10 groups. This produced three groups of five carriers and seven groups of six carriers from which the software selected a carrier with probability proportional to size. Size was measured by the number of HPSA physicians in the carrier according to the list provided by HCFA. The ten carriers and their probability of selection appear in the table below.

*When we selected our sample from the carriers, we did not know whether the sample would consist entirely of physicians, even though only providers of physicians' services are eligible for incentive payments. When reviewing a sample of 1991 Medicare claims associated with HPSA bonus payments, we discovered a number of claims which used provider specialty codes reserved for nonphysicians, such as laboratories and medical equipment suppliers. As it turned out, however, all but one of the providers in our sample were either physicians--doctors of medicine, osteopathy, podiatry, and optometry--or facilities employing physicians. The one exception was a physician assistant. For clarity's sake, we refer to all sampled providers as physicians.

State (Carrier)	Number of Bonus-Receiving Physicians in Group[a]	Number of Bonus-Receiving Physicians in Carrier	Probability of Selection Within Group	Probability of Selection Overall
Alabama (Blue Shield)	2,796	834	29.8%	4.0%
Georgia (Aetna)	4,061	1,340	33.0%	6.4%
Idaho (Equitable)	799	71	8.9%	0.3%
Indiana (AdminaStar Federal)	2,581	317	12.3%	1.5%
New Jersey (Penn. Blue Shield)	1,584	987	62.3%	4.7%
Western New York (Blue Shield)	1,921	895	46.6%	4.3%
Ohio (Nationwide)	2,011	1,007	50.0%	4.8%
Puerto Rico (SSS)	1,259	706	56.1%	3.4%
Texas (Blue Shield)	2,246	1,145	51.0%	5.5%
West Virginia (Nationwide-Ohio)	1,727	436	25.2%	2.1%

[a]For quarter ending September 30, 1992.

Within each sampled carrier, we used simple random sampling to select physicians. Each carrier provided a hard copy computer listing of every provider number for which it issued a HPSA bonus check for the quarter ending December 31, 1992. (We used fourth quarter records to select physicians even though we use third quarter records to select carriers, because we wanted the most recent information on physicians available, and that data was not available when we selected carriers. We do not believe that this switch adversely affects our ability to generalize.) We used systematic sampling to obtain the sample manually. Beginning with a random start, we selected every nth provider number (n depended on the number of physicians for each carrier) to obtain approximately 50 provider numbers within a carrier. We did not get exactly 50 in each carrier due to rounding of the skip interval calculated to sample the physicians and because some physicians had multiple provider numbers. The table below shows, by carrier, the universe, sample sizes, and response rate of physicians.

Carrier	Universe[a] [b]	Sample Size[b]	Useable Responses	Response Rate (%)
Alabama	735	42	34	81
Georgia	1,108	50	37	74
Idaho	73	47	44	94
Indiana	320	53	44	83
New Jersey	917	51	45	88
Western New York	863	51	46	90
Ohio	954	50	36	72
Puerto Rico	458	51	33	65
Texas	1,066	50	44	88
West Virginia	414	52	42	81
Total	6,908	497	405	82

[a]For quarter ending December 31, 1992.
[b]Universe and sample sizes reflect adjustments to exclude 11 physicians originally selected but later determined by the carriers to be ineligible for the incentive payments they received. Seven of these physicians were in Alabama, and there was one each in Georgia, Idaho, New York, and West Virginia.

Most of the provider numbers selected corresponded to individual physicians. When they corresponded instead to a group practice, clinic, hospital, or other multiple-physician setting, we telephoned the provider and obtained the names of physicians within the group or institution at random.

We mailed a questionnaire and cover letter to each selected physician between March 16 and April 6, 1993. We sent a follow-up letter and replacement questionnaire to nonrespondents on April 16. The questionnaire is reproduced at the end of this appendix, along with unweighted response frequencies.

We accepted replies to our survey until June 11, 1993. The response rates we achieved are displayed in the table above.

INFORMATION FROM CARRIERS

From each of the 10 carriers in our sample, we requested the following information for each of the physicians selected by random sampling: specialty, total amount paid by Medicare *excluding* HPSA incentive payments for CYs 1988-1992, total urban HPSA incentive payments for calendar years 1991-1992, total rural HPSA incentive

payments for CYs 1989-1992, and whether the carrier had information indicating that the physician was determined ineligible to receive HPSA payments claimed for the fourth quarter of CY 1992 (the quarter from which our sample was drawn; if the carrier did have such information, the physician was excluded from our sample).

We received only partial information from each of the carriers. We did not receive sufficient information to analyze total payments or bonuses to physicians prior to 1992. For timeliness's sake, we did not conduct tests to determine the validity of this computer-based data. We believe, however, that the data are adequate for the analyses necessary for the objectives of this study.

TELEPHONE INTERVIEWS

The purposes of our telephone interviews were to achieve a better understanding of physicians' experiences with the incentive payment program and to compare respondents to nonrespondents. We selected two groups of physicians for interviews. The first was a sample of 38 physicians selected at random from the group of respondents as of April 20, 1993. The second was a sample of 32 physicians selected at random from the group of nonrespondents as of May 10, 1993. We were able to complete interviews with 25 physicians in the first group and 8 physicians in the second group. (We excluded Puerto Rican physicians from both groups before sampling because we did not want potential language problems to confound our interpretations of physicians' responses.)

DOCUMENT AND LITERATURE REVIEW

The written materials we reviewed included the following:

- Bills introduced during the 100th through 103rd Congresses;
- Regulations published by the Health Care Financing Administration (HCFA) and Public Health Service (PHS);
- Memoranda from HCFA and the Office of Inspector General's Office of Investigations and Office of Audit Services;
- Articles on access to primary care and physician reimbursement published in medical journals and weekly newspapers.

ANALYSIS OF QUESTIONNAIRE AND CARRIER DATA

Weighting of responses

The responses were weighted in accordance with the Rao-Hartley-Cochran sampling method. This allowed us to make projections to the universe from which the sample was drawn, *i.e.,* recipients of incentive payments nationwide.

Categorization of incentive payment recipients into specialists and primary care physicians

The generally accepted definition of primary care physicians includes general and family practitioners, internists, pediatricians, and obstetrician/gynecologists. But not all physicians in these specialties deliver primary care, and physicians in other specialties may deliver a good deal of primary care. Furthermore, physicians' specialties can be self-designated and may change over time. The Medicare carriers' records of physicians' specialties are not always accurate.

With these difficulties in mind, we did our best to sort the physicians in our sample into primary care physicians and specialists. We categorized a physician as a primary care physician if both of the following conditions were met: (1) either the carrier's records or the physician's questionnaire response showed the physician's field as one of the five mentioned in the preceding paragraph; and (2) the physician did *not* answer "No" to the question, "Do you consider yourself to be a primary care physician?"

By allowing either the carrier's records or the physician's responses to identify primary care physicians, we avoided mischaracterizing physicians as specialists. For example, carrier records might show "internal medicine" for a physician who considered herself to practice "geriatrics," or carrier records might show "clinic" when the physician we chose within the clinic might be a family practitioner. In both of these cases, our method would include the physicians as primary care physicians *unless* the physicians indicated that they were not so.

As a check on this assignment procedure, we also divided physicians in our sample into primary care physicians and specialists based on the amount of time they reported spending on what they considered to be primary care services. We arbitrarily selected 50 percent of the physicians' time as the dividing line between the two groups. The analyses we conducted using this definition showed essentially the same results as those using the definition explained in the two preceding paragraphs.

Calculation of individual bonuses

The amounts paid to physicians in our sample as incentives come from carriers' records. We had to make adjustments to some of the figures provided by carriers because they represented payments made to groups of physicians, such as group practices or clinics, rather than to individual physicians.

To compensate, we divided the total incentive amount paid by the number of physicians per provider number, as reported by respondents. So if the carrier showed an incentive payment of $20,000 to a group practice and the physician we chose from within that group indicated that the group contained 20 physicians, we set the amount paid equal to $1,000. If the provider number did not correspond to an individual physician and the physician we selected from that provider did not indicate the

number of physicians using that provider number, we considered the incentive amount to be missing and excluded it from analysis.

Sample sizes for statistics presented

Some of the statistics presented in the report apply to our entire sample of 497 physicians, whereas others apply only to the set of physicians who responded to our mail survey and answered a particular question. Statistics involving only the physicians' incentive payment amounts, specialties, and urban or rural location apply to the entire sample; we were able to get complete data on these information categories from the carriers. Statistics involving other information, such as amount of time spent delivering primary care, practice setting within a HPSA, length of stay in a HPSA, and importance assigned to incentive payments, apply to the set of physicians providing the information in question.

ESTIMATES AND CONFIDENCE INTERVALS

The statistics presented in the report represent our best estimates. For each statistic--other than median payment amounts and proportions of respondents choosing individual importance scale points--we also computed 90 percent confidence intervals, as shown in the table below:

Statistic		
	Point Estimate	**90% Confidence Interval**
Proportion of incentive recipients who are specialists		
	49.8%	44.7% - 54.9%
Proportion of incentive money that went to specialists		
	45.4%	34.1% - 56.7%
Proportion of incentive money that went to specialists in urban areas		
	53.5%	35.2% - 71.8%
Proportion of incentive money that went to specialists in rural areas		
	35.2%	22.0% - 48.4%
Proportion of specialists who spend less than half their time on primary care		
	74.1%	67.1% - 81.1%
Proportion of specialists who spend less than 10% of their time on primary care		
	44.5%	33.2% - 55.8%
Proportion of primary care physicians who spend at least half their time on primary care		
	97.0%	94.9% - 99.1%

(continued)

Statistic		
	Point Estimate	**90% Confidence Interval**
Proportion of primary care physicians who spend at least 90% of their time on primary care		
	77.5%	71.9% - 83.1%
Proportion of incentive money that went to physicians spending less than 10% of their time on primary care		
	25.7%	9.6% - 41.8%
Proportion of incentive money that went to physicians spending at least 90% of their time on primary care		
	43.8%	32.3% - 55.3%
Proportion of incentive money that went to urban, hospital-based specialists		
	13.8%	3.8% - 23.8%
Proportion of time spent on primary care by urban, hospital-based specialists		
	15.3%	6.4% - 24.2%
Proportion of urban, hospital-based specialists who provide no primary care		
	37.1%	26.7% - 47.5%
Mean importance rating of primary care physicians (PCPs)		
	3.37	3.23 - 3.54
Mean importance rating for PCPs with previously established practices		
	3.54	3.35 - 3.73
Mean importance rating for PCPs with new practices		
	3.05	2.82 - 3.28
Proportion of PCPs with previously established practices		
	64.7%	56.8% - 72.6%
Mean length of practice in current location for PCPs (in years)		
	10.5	8.8 - 12.2
Mean incentive payment to PCPs		
	$2,375	$1,777 - $2,973
Mean incentive payment to PCPs with high importance ratings		
	$3,832	$2,610 - $5,054
Mean incentive payment to PCPs with low importance ratings		
	$1,723	$1,102 - $2,344

QUESTIONNAIRE

Following are the questions asked of physicians in our survey, along with unweighted frequencies and means of their responses:

Which of the following best describes you? (If you bill Medicare using more than one provider number, answer with respect to the provider number printed on the [questionnaire].)

	Frequency	Percentage
Physician (Solo Practice)	220	55.6
Physician (Group Practice)	136	34.3
Supplier	11	2.8
Institution	5	1.3
Laboratory	1	0.3
Other	23	5.8
Total	396	100.0

If you circled group practice, how many physicians are in your group?

N	Mean	Standard Deviation	Minimum	Maximum
352	3.5	8.4	1	85

Note: We assigned the number 1 to physicians who circled "Physician (Solo Practice)."

What is your principal specialty?

	Frequency	Percentage
Family Practice	101	24.9
Internal Medicine	62	15.3
General Practice	47	11.6
General Surgery	31	7.7
Diagnostic Radiology	19	4.7
Podiatry	18	4.4
Cardiology	16	4.0
Optometry	14	3.5
Ophthalmology	10	2.5
Orthopedic Surgery	9	2.2
Obstetrics/Gynecology	8	2.0
Anesthesiology	7	1.7
Urology	7	1.7
Psychiatry	6	1.5
Chiropractic	6	1.5
Emergency Medicine	5	1.2
Otolaryngology	4	1.0
Gastroenterology	4	1.0
Pathology	4	1.0
Physical Medicine	4	1.0
Neurology	3	0.7
Dermatology, Pulmonary Disease, Nephrology, Rheumatology, Hematology/Oncology, and Medical Oncology	2 each	3.0 total
Neurosurgery, Plastic Surgery, Geriatrics, Vascular Surgery, Hematology, Radiation Oncology, Physician Assistant, and Other	1 each	2.0 total
Total	405	100

Are you board eligible or board certified in that specialty?

	Frequency	Percentage
Yes	329	82.7
No	69	17.3
Total	398	100.0

Do you consider yourself to be a primary care physician?

	Frequency	Percentage
Yes	281	70.6
No	117	29.4
Total	398	100.0

About what percentage of your patient-care hours do you spend delivering what you consider to be primary care?

N	Mean	Standard Deviation	Minimum	Maximum
373	62.1	41.6	0	100

In what year were you born?

N	Mean	Standard Deviation	Minimum	Maximum
392	1946	10.5	1915	1966

Have you ever been a member of the National Health Service Corps?

	Frequency	Percentage
Yes	21	5.4
No	367	94.6
Total	388	100.0

About what percentage of your patients are insured by Medicare?

N	Mean	Standard Deviation	Minimum	Maximum
369	41.2	20.8	3	98

Do you accept patients on Medicaid? (Note: excludes physicians from Puerto Rico, which has an unusual Medicaid program.)

	Frequency	Percentage
Yes	349	94.1
No	22	5.9
Total	371	100.0

If yes, about what percentage of your patients are insured by Medicaid? (See note to previous question.)

N	Mean	Standard Deviation	Minimum	Maximum
327	19.4	16.7	0	90

Do you accept patients without health insurance?

	Frequency	Percentage
Yes	393	97.5
No	10	2.5
Total	403	100.0

If yes, about what percentage of your patients are uninsured?

N	Mean	Standard Deviation	Minimum	Maximum
346	13.7	12.4	0	75

Were you aware, before receiving this survey, that Medicare offered incentive payments for selected services provided within HPSAs?

	Frequency	Percentage
Yes	305	75.9
No	97	24.1
Total	402	100.0

Were you aware, before receiving this survey, that you recently received an incentive payment from Medicare?

	Frequency	Percentage
Yes	286	71.9
No	112	28.1
Total	398	100.0

How many years have you practiced within the boundaries of a HPSA? (If you practiced there before the area was designated as a HPSA, include those years. If you practice in more than one HPSA, answer with respect to the HPSA in which you have practiced the longest.)

N	Mean	Standard Deviation	Minimum	Maximum
376	10.6	9.4	0	42

In 1992, about what percentage of your working hours did you spend within a HPSA?

N	Mean	Standard Deviation	Minimum	Maximum
362	70.7	37.4	0	100

Within the HPSA(s) where you practice, in which of the following settings do you spend most of your working hours?

	Frequency	Percentage
Private Office	215	54.7
Hospital	87	22.1
Clinic	40	10.2
Nursing Facility	4	1.0
Other	13	3.3
More Than One Response	34	8.7
Total	393	100.0

About what percentage of your total *1992 revenues (Medicare and non-Medicare) did the HPSA-related incentive payments constitute?*

We discarded this question, because a large number of respondents either did not know or gave figures higher than 10 percent. Ten percent is the maximum possible response to this question, and that number would only apply to physicians whose income came entirely from Medicare.

How important are the bonus payments in your decisions about where to practice?

	Frequency	Percentage
Extremely (1)	39	10.0
Very (2)	63	16.1
Moderately (3)	78	19.9
Slightly (4)	77	19.7
Not at All (5)	134	34.3
Total	391	100.0

N	Mean	Standard Deviation	Minimum	Maximum
391	3.5	1.4	1	5

In answering questions 1 through 7, please consider your entire practice, i.e., all locations and all patients.

1 Which of the following best describes you? *(Circle one. If you bill Medicare using more than one provider number, answer with respect to the provider number printed on the reverse side of the page.)*

Physician (Solo Practice) Supplier Institution Laboratory

Physician (Group Practice) Other (*Specify*_____)

1.1 If you circled group practice, how many physicians are in your group? _____

2 What is your principal specialty? _____

2.1 Are you board eligible or board certified in that specialty? YES NO

2.2 Do you consider yourself to be a primary care physician? YES NO

2.3 About what percentage of your patient-care hours do you spend delivering what you consider to be primary care? _____

3 In what year were you born? _____

4 Have you ever been a member of the National Health Service Corps? YES NO

5 About what percentage of your patients are insured by Medicare? _____

6 Do you accept patients on Medicaid? YES NO

6.1 *IF YES,* about what percentage of your patients are insured by Medicaid? _____

7 Do you accept patients without health insurance? YES NO

7.1 *IF YES,* about what percentage of your patients are uninsured? _____

In answering questions 8 through 14, please direct your attention to the work you have done in a Health Professional Shortage Area (HPSA).

8 Were you aware, before receiving this survey, that Medicare offered incentive payments for selected services provided within HPSAs? YES NO

9 Were you aware, before receiving this survey, that you recently received an incentive payment from Medicare? YES NO

10 How many years have you practiced within the boundaries of a HPSA? *(If you practiced there before the area was designated as a HPSA, include those years. If you practice in more than one HPSA, answer with respect to the HPSA in which you have practiced the longest.)* _____

11 In 1992, about what percentage of your working hours did you spend within a HPSA? _____

12 Within the HPSA(s) where you practice, in which of the following settings do you spend *most* of your working hours? *(Circle one. If you no longer practice in a HPSA, answer with respect to the HPSA where you most recently practiced.)*

Private Office Nursing Facility Hospital Clinic Other (*Specify*_____)

13 About what percentage of your *total* 1992 revenues (Medicare and non-Medicare) did the HPSA-related incentive payments constitute? _____

14 How important are the bonus payments in your decisions about where to practice? *(Circle one.)*

1	2	3	4	5
Extremely important	Very important	Moderately important	Slightly important	Not at all important

Thank you. Please sign the reverse side of this form, fold, tape, and return.

Health Professional Shortage Area Study
Telephone Interview Questions for Physicians who Responded to Mail Survey

Name of Respondent:
Control Number of Respondent (State and Number):
Telephone Number:
Date of Interview:
Name of Interviewer:

You've been practicing in your current location for ____ years, is that right?

YES NO (If no, give correct answer: ____)

Are you in a rural or an urban setting? *(An area is rural if it is NOT in a Metropolitan Statistical Area)*

RURAL URBAN DON'T KNOW

Where did you practice before moved to your current location? *(If not a familiar location, probe to find out if it was a rural or urban setting.)*

What brought you to your current location?

Do you have any plans to move to another location in the near future? If so, where, and why will you be moving?

How would you describe the availability of primary health care services in your area?

How would you describe the availability of specialty health care services in your area?

How far is the nearest _____ *(respondent's specialty)* from your office?

How did you hear about the Medicare incentive payment program? *(If they were recently in another location, were they receiving incentive payments there?)*

(Ask next 2 questions only if they've been practicing in the HPSA 4 years or less) To what extent were the incentive payments a factor in encouraging to you practice in an underserved area?

If the payments had not been offered, would you still have chosen to practice there?

To what extent are the payments a factor in your decision to keep practicing in your area?

If the payments were no longer offered, would you move?

Are there approaches other than bonus payments that the Federal Government could take to increase access to needed medical care for residents of underserved areas? (*Probe for both monetary and nonmonetary approaches.)*

Do you have anything else to add?

APPENDIX B

DETAILED COMMENTS ON THE DRAFT REPORT AND OIG RESPONSE TO THE COMMENTS

In this appendix, we present in full the comments on the draft report offered by the Health Care Financing Administration (HCFA) and the Assistant Secretary for Planning and Evaluation (ASPE). We also present our response to each set of comments.

DEPARTMENT OF HEALTH & HUMAN SERVICES

Health Care
Financing Administration

Memorandum

Date MAR 7 1994

From Bruce C. Vladeck
Administrator

Subject Office of Inspector General (OIG) Draft Reports: "Medicare Incentive Payments in Health Professional Shortage Areas," (OEI-01-93-00050) and "Design Flaws in the Medicare Incentive Payment Program" (OEI-01-93-00051)

To June Gibbs Brown
Inspector General

We reviewed the above-referenced final reports in which OIG provided the results of its review on payments being made to physicians under the Medicare Incentive Payments program.

The Health Care Financing Administration (HCFA) concurs with the second recommendation. However, we do not concur with the first recommendation and are not able to comment on the third recommendation because of a lack of specificity in the OIG proposals and because of the potential impact of proposed changes in the Health Security Act. Our specific comments are attached.

Thank you for the opportunity to review and comment on this report. Our detailed comments on the findings and recommendations contained in the report are attached for your consideration. Please advise us if you would like to discuss our comments at your earliest convenience.

Attachment

Health Care Financing Administration's (HCFA) Comments
on Office of Inspector General (OIG) Draft Reports:
"Medicare Incentive Payments in Health Professional Shortage Areas"
(OEI-01-93-00050) and "Design Flaws in the Medicare
Incentive Payment Program" (OEI-01-93-00051)

Recommendation 1

HCFA should seek to eliminate the Medicare incentive payments entirely.

HCFA Response

We do not concur. OIG stated in their report that two-thirds of primary care physicians indicated that the payments range from slightly to extremely important. One-third of primary care physicians indicated that the payments are very important to their practice location decisions. In light of these findings and absent a definitive evaluation of how important the payments are to physicians in their practice location decisions, HCFA believes it is premature to recommend eliminating the program. We believe that elimination of the program would cast aside this useful mechanism for providing better access to medical care for beneficiaries in underserved areas.

Recommendation 2

HCFA should modify the Medicare incentive payment program to target it more effectively to primary care.

HCFA Response

We concur. However, the OIG study appears to be based on the premise that the intent of the incentive payment program is to improve beneficiary access to primary care services. While we would agree that legislative history points to the House of Representatives' intent to limit the bonus to primary care services, this restriction was not adopted by the Senate or the Conferees. In addition, there may be access-to-care problems for specialist services in rural health professional shortages areas (HPSAs). Therefore, we do not want to target the bonus payment exclusively to primary care.

We believe that Congress clearly intended to increase beneficiary access to health care in HPSAs. We also recognize that since the overwhelming percentage of specialists practice in urban areas, an access-to-care problem does not likely exist for access to specialists in urban areas. For example, although a number of prestigious hospitals are located in urban HPSAs, many patients who are treated at such hospitals are affluent and travel to those facilities seeking the finest specialty care. These patients do not have access problems. As a result, a very large share of incentive payments made to specialists affiliated with those hospitals reflects services

furnished to beneficiaries who live outside the HPSA. We believe that making incentive payments to specialists in urban HPSAs is an unnecessary expenditure for the trust fund.

The President's Health Security Act contains a proposal to limit bonus payments in urban HPSAs to primary care services. The savings would be used to increase the incentive payments for primary care services in both urban and rural HPSAs from 10 to 20 percent. The expectation is that a 20 percent bonus would be more significant in encouraging the provision of primary care services.

Recommendation 3

HCFA should channel funds from the Medicare incentive program for new or existing mechanisms for improving access to primary care.

HCFA Response

We believe that OIG's proposals to rechannel savings from shrinking the incentive payment program to Medicaid or a fixed bonus program are not sufficiently developed for us to comment on at this time. We agree with OIG noted in its report, it is too early in the history of this program for an evaluation of its effectiveness. If the two fundamental flaws identified by OIG were allowed to continue, we would agree that alternative approaches could be considered for the long term. However, we believe that the aforementioned legislative proposal, which will limit incentive payments in urban areas to primary care services and raise incentive payments in both urban and rural areas, will correct those deficiencies.

TECHNICAL COMMENTS

OIG should include a copy of both the written survey and telephone interview instruments in its report. There was a reference to contradictions between responses gathered in interviews and the survey questionnaires. The opportunity to review both instruments might be helpful to our understanding of the mixed responses.

We question whether the sample of 497 physicians out of the 22,000 physicians receiving HPSA payments is representative of the nation. It appears that a skip-interval random sampling method was used to select the physicians for the survey. This method is satisfactory if a representative sample is drawn. However, if the sample is not representative, a stratified sample would produce a more representative population. OIG should include more data on the socio-economic characteristics of the physician population selected for review. Suggested additional descriptive characteristics include the proportion of urban to rural physician responses and the volume of services the physicians provide for which incentive payments were made.

OIG RESPONSE TO HCFA COMMENTS

We are pleased that HCFA concurs with our second option to modify the incentive payment program to target it more effectively to primary care. The President's Health Security Act proposal to alter the program could, by increasing the size of the incentive payment, make it a more effective incentive. Also by eliminating incentive payments made for specialty services in urban areas, some of the least well-targeted payments could be eliminated. While we acknowledge that shortages of specialists likely are occurring in rural areas, we note our concern that the criteria for designating HPSAs do not include shortages of specialty services. Furthermore, given limited resources and the well-articulated priorities of the current Administration to increase access to primary care, targeting the program more towards primary care may be more crucial than targeting specialty care services. Nonetheless, we consider the proposal to be meeting the objective laid out by the option.

We have eliminated from our recommendation the first option (elimination of the program) and the third option (rechanneling funds from the program). We note that our initial intention was to present them as options; we are pleased that HCFA considered them and commented on them.

We agree that including the written survey instrument and the telephone interview instrument could be instructive to readers. We have included them in appendix A.

We do not share HCFA's concern with our sample selection. As noted in appendix A, we used a well-accepted method (Rao-Hartley-Cochran) for sampling in the first stage carrier selection; we used skip-interval random sampling to select physicians within each carrier. No unexpected bias was introduced by using this method in combination with the appropriate weighting methods. Furthermore, we present confidence intervals for each statistic we used. This allows the reader to determine the precision of our estimates based on the sample.

OCT 28 1993

TO: Bryan B. Mitchell
Principal Deputy Inspector General

FROM: Assistant Secretary for
Planning and Evaluation

SUBJECT: Reports on Medicare Incentive Payment Program --
Concurrence with Comment

This pair of reports examines the Medicare Incentive Payments Program, which provides bonus payments to both primary care and specialty care physicians who work in Health Professional Shortage Areas (HPSAs). The first report evaluates the success of this program in improving access to primary care physicians, and the second seeks to identify design flaws inherent to the program. Our comments relate exclusively to the first report.

From a methodological standpoint, we found this study sound. Still, we believe that at times both its presentation and its conclusions are inadvertently misleading. For example:

- A major finding, highlighted on page 4 and in the Executive Summary, is that about half of the $68 million of bonuses paid in 1992 went to specialists rather than primary care physicians. This statement gives the impression this entire amount was spent for specialty care services. Within the text of the report, however, it is stated that specialists in HPSAs provide a significant amount of primary care services; therefore, the percentage of funds spent for specialty services is substantially less. We feel this fact is crucial to an evaluation of the program's impact on primary care access. Therefore, we suggest that OIG calculate the percentage of funds paid for specialty <u>care</u> services, and that it present this figure as prominently as the percentage paid to specialists.

- When asked how important Medicare bonus payments were in their locational decision, 52 percent of primary care physicians rated them as "moderately to extremely important", while only 32 percent of them rated the payments as "not at all" important. Based on these figures, OIG concludes that "Medicare incentive payments apparently have <u>little effect</u>

on practice location decisions." Considering that over half of physicians surveyed rated the payments as at least moderately important, the wording of OIG's conclusion seems misleading, perhaps even inaccurate.

The first of the report's two recommendations is to eliminate the incentive payment program entirely. We are not certain that the evidence justifies so strong a recommendation, for two reasons:

- First, as discussed above, we feel the evidence against the program is less compelling than some of the highlighted findings suggest.

- Second, the report evaluates the program against a standard different from the one it was designed to achieve. The original legislation explicitly made both primary care doctors and specialists eligible for bonuses; the OIG study, however, focuses on only primary care, and criticizes the program for providing bonuses for specialty care.

OIG does acknowledge this difference in goals at the beginning of the report. However, given the important perspective which this information gives on the report's recommendations, we feel it should be further emphasized. Therefore, if OIG continues to recommend that the incentive program be eliminated, we suggest that the difference in goals be explicitly noted both in the Executive Summary and immediately before the recommendations. Also, regardless of what recommendations are offered, OIG should explicitly state that it views the original legislative goal to be inappropriate, and describe the reasons why it feels change is warranted.

Finally, we suggest that OIG include an additional option in its list of recommendations. The report indicates that 14 percent of bonuses currently go to specialists in large, prestigious hospitals located in inner cities. These physicians receive bonuses because HPSA designations are based only on the number of primary care physicians in an area, not the number of health care facilities or specialists. To ensure that bonuses are targeted to those areas most in need, OIG should recommend that PHS modify its method for designating HPSAs to consider all types of providers in an area.

David T. Ellwood

Prepared by: C. Prentice 690-7994

OIG RESPONSE TO ASPE COMMENTS

The ASPE concurred with our recommendation, but expressed concern about the first option to eliminate the program and suggested a fourth option to modify the methods by which HPSAs are designated. We have eliminated the first option (as well as the third option) as a result of HCFA's response and the Health Security Act proposal. As far as the methods of designating HPSAs are concerned, we discuss problems with using HPSA designations for incentives on specialty services in a separate report on this issue ("Design Flaws in the Medicare Incentive Payments Program" OEI-01-93-00051). We believe it would not be prudent to change the HPSA designations for the purposes of this program since it is not the only program that uses HPSA designations. The National Health Service Corps program, for example, also uses them. Thus, the ramifications of modifying the HPSA designation are beyond the scope of this report.

We are pleased that ASPE found our study methodologically sound. The ASPE raised concerns about presentation and conclusions. We made some clarifications in response to these concerns. In response to ASPE's proposal that we include information about specialty care services and display it prominently, we have included information we have from the Physician Payment Review Commission on the subject. We have not, however, displayed it prominently for the following reasons: 1) we already give prominence to analysis that clarifies that not all money going to specialists is spent on specialty services and 2) since specialty services are much more expensive on average than primary care services, the percentage of incentive payments spent on specialty services will be much higher than the actual percentage of time spend providing specialty services (and therefore is not an accurate indicator of relative availability of specialty services in comparison to primary care services).

We agree that our statement that incentive payments apparently have little effect on practice location decisions may have been too strongly stated. We have clarified the statement. We have also clarified our discussion about what we learned from our interviews with physicians about the importance ratings. We do note, however, that the importance ratings were only one of three pieces of evidence we cited to make the finding statement.

APPENDIX C

NOTES

1. Barbara Starfield and Lisa Simpson, "Primary Care as Part of US Health Services Reform," *Journal of the American Medical Association* 269 (June 23/30, 1993) 24: pp. 3136-39; W. Pete Welch et al., "Geographic Variation in Expenditures for Physicians' Services in the United States," *New England Journal of Medicine* 328 (March 4, 1993) 9: pp. 621-27.

2. 42 C.F.R. 5 (Appendix A), Sec. I.B.3.(a).

3. State-level: "'State of the States,' 1993: Reform of the Health Care System Remains an Imperative," *State Health Notes - Special Issue*, March 15, 1993, pp. 6-8.

   National: Bill Clinton, "The Clinton Health Care Plan," *New England Journal of Medicine 327* (September 10, 1992) 11: pp. 804-7.

4. Robert M. Politzer et al., "Primary Care Physician Supply and the Medically Underserved: A Status Report and Recommendations," *Journal of the American Medical Association* 266 (July 3, 1991) 1: pp. 104-109; Steven A. Schroeder and Lewis G. Sandy, "Specialty Distribution of U.S. Physicians--The Invisible Driver of Health Care Costs," *New England Journal of Medicine* (April 1, 1993) 13: pp. 961-963.

5. Health Professional Shortage Areas (HPSAs) were originally known as Health Manpower Shortage Areas (HMSAs).

6. The criteria for HPSA designation are contained in 42 C.F.R. 5. There are also areas designated as HPSAs for dentists, psychiatrists, and other caregivers rather than for primary care physicians, but this report does not address those HPSAs. Medicare incentive payments apply only to HPSAs designated with respect to primary care physicians.

7. Health Policy Research Consortium, *Medicare Bonus Payments to Physicians in Health Manpower Shortage Areas: Final Report*, Cooperative Agreement No. 18-C-98526/1-05, report prepared for Health Care Financing Administration, April 1989, pp. 1:2-4.

8. H.R. Rep. No. 391(I), 100th Cong., pp. 389-90. See also H.R. 3188, 100th Congress.

9. Omnibus Budget Reconciliation Act of 1987 (P.L. 100-203), Sec. 4043.

10. H. R. Conf. Rep. No. 386, 101st Cong., p. 754.

11. Omnibus Budget Reconciliation Act of 1989 (P.L. 101-239), Sec. 6102(c). Current law regarding the extra payments is contained in Section 1833 of the Social Security Act (42 U.S.C.A. 1395l(m)).

12. Physician Payment Review Commission, *Annual Report 1992*, p. 129.

13. Memorandum and attachments from Edward A. King, Health Care Financing Administration, to Stewart Streimer, Health Care Financing Administration, February 22, 1993. The 22,000 figure excludes physicians reported by the Railroad Retirement Board carrier, because most if not all of those physicians are also reported by the carriers in the physicians' own States.

14. Health Policy Research Consortium, p. 1:1.

15. Physician Payment Review Commission, *Annual Report 1992*, pp. 127-132 and Congress of the United States, Office of Technology Assessment, *Heath Care in Rural America*, September 1990, pp. 350-351.

16. U.S. Department of Health and Human Services, *The Fiscal Year 1994 Budget*, April 8, 1993, pp. 3, 15, 41; and Statement of Donna E. Shalala, Secretary of Health and Human Services, Before the Committee on Finance, United States Senate, April 1, 1993, pp. 2, 4.

17. HPSA bonus payments are made quarterly, but need not correspond exactly to services provided in the preceding quarter. In other words, retroactive claims for bonuses are permitted.

18. The Physician Payment Review Commission did an analysis of incentive payments for its 1994 annual report to Congress. It found that in the first two quarters of 1992, 66 percent of incentive payments were made for specialty service payments. Because specialty services generally are more expensive than primary care services, this supports our finding that half of the physicians receiving incentive payments were specialists.

19. This statistic and several others are based on the responses of physicians who answered our questionnaire, not the total sample of 497 physicians. See appendix A for a discussion of which statistics are based on data about respondents rather than the entire sample.

20. Office of Technology Assessment, 1990, p. 8.

21. Fifty-three (25 percent) of the 213 primary care physicians responding to the question said they were unaware before receiving our questionnaire that Medicare offered incentive payments. Thirty-two (60 percent) of these 53 rated the payments at least slightly important, and 6 rated them extremely important.

22. Health Policy Research Consortium, p. 3:14.

23. The median net income for physicians, after expenses and before taxes, was $139,000 in 1991, according to the American Medical Association Socioeconomic Monitoring System 1992 core survey of nonfederal patient care physicians excluding residents, December 1992. The median income for general and family practitioners was $98,000; for internists, $125,000; and for obstetricians/gynecologists, $200,000.

24. The weighted correlation coefficient is -0.25 ($p < .001$), indicating a significant relationship between high incentive payments and low numbers on ratings.

25. Health Policy Research Consortium, pp. 3:5-9.

26. Health Policy Research Consortium, pp. 3:11.

27. William G. Cochran, *Sampling Techniques* (3rd Ed.), New York: John Wiley & Sons, 1977, p. 266.