3831.1

Contract No.: 500-87-0028(13)
Contract Amount: $730,929
MPR Reference No.: 7876-500

# BLUE CROSS MD BLUE SHIELD OF ARIZONA
# MEDICARE PHYSICIAN PPO
# DEMONSTRATION STATUS REPORT

August 8, 1990

**Authors:**

Lyle Nelson
Gary Swearingen
Merrile Sing
Elizabeth Quinn

Prepared for:

Office of Demonstrations and Evaluations
Department of Health and Human Services
Health Care Financing Administration
2302 Oak Meadows Building
6325 Security Boulevard
Baltimore, Maryland 21207

Project Officer:
Vic McVicker

**Prepared by:**

Mathematica Policy Research, Inc.
600 Maryland Avenue, S.W.
suite 550
Washington, D.C. 20024

Project Director:
Harold Beebout

## ACKNOWLEDGEMENTS

This report could not have been written without the cooperation and assistance of Blue Cross and Blue Shield of Arizona. They graciously answered our many questions both in the site visits and in our subsequent telephone conversations. Blue Cross and Blue Shield of Arizona is participating in the Medicare PPO demonstration project without government compensation for their research and demonstration activities. Hence, their assistance is particularly appreciated. We also wish to thank the representatives of industry, government, and other organizations we contacted for their comments and information. The thorough editing of the American Writing Corporation and the careful word processing of Chiquita Payne, Sharon Clark, Sheana Thomas and Robert Skinner contributed greatly to the quality, appearance, and timely production of this report.

## CONTENTS

CONTENTS (continued)

## TABLES

# EXECUTIVE SUMMARY

The U.S. health care market has been characterized for two decades by rapidly rising costs. T&is experience has created interest in reducing costs through the promotion of competition among providers and insurers. Preferred Provider Organizations (PPOs) are a recent innovation designed to decrease health care costs by managing the utilization of services, while encouraging competition by increasing health care options. The basic objective of the PPO is to reduce costs and premiums through a network of cost-effective providers. Patients are channeled to these providers through financial incentives such as reduced deductibles or coinsurance. PPOs feature some of the cost containment features of health maintenance organizations (HMOs), but with greater freedom of choice of providers.

The rapid growth of PPOs in the private sector and the widespread expectation that PPOs can exert downward pressure on health care expenditures have prompted interest in potential applications to the Medicare program. To assess the feasibility of the Medicare PPO concept, the Health Care Financing Administration awarded a contract to Mathematica Policy Research to evaluate a pilot Medicare physician PPO demonstration. Two of the five PPOs selected for the demonstration are now operational; in this report we describe one of those PPOs, Blue Cross and Blue Shield of Arizona (BCBS/AZ), which offers a PPO linked with a Medicare supplemental insurance (or Medigap) plan Our description of the BCBS/AZ Medigap PPO focuses on the benefit package offered; incentives for beneficiaries to enroll and choose network providers; marketing approaches and early success in attracting enrollees; the criteria and process for selecting network providers; and utilization review and quality assurance programs. We also give a preliminary assessment of whether the Medigap PPO model developed by BCBS/AZ would be a viable product nationally, assess its likely effectiveness in containing costs, and identify government actions that would make the Medigap PPO model more likely to become a viable option.

## THE BLUE CROSS AND BLUE SHIELD OF ARIZONA MODEL

In the late 1980s BCBS/AZ viewed a Medigap PPO as a way to increase its market share and be more competitive in the Medigap industry. Offering a Medigap PPO product was a relatively low-cost and natural step for the company as they already offered both a private sector PPO and a standard Medigap plan. An existing provider network and established utilization review and quality assurance programs were available through its private sector PPO, and the company was already experienced dealing with the Medicare population through its standard Medigap plan BCBS/AZ currently offers its Medigap PPO in the two most populous Arizona counties, Maricopa and Pima. The Arizona market overall is quite experienced with managed care products in the private sector, and in recent years has experienced a proliferation of PPOs and an influx of enrollees from indemnity plans into PPOs.

A major challenge in the Medicare context, where the range of available incentives is limited and established relationships with a current physician are often strong, is designing an economically viable Medigap PPO product that will attract enrollees and encourage them to use network providers. The main incentive offered to attract enrollees to BCBS/AZ's Medigap PPO

is a lower premium (approximately 30% less) than that of the standard Medigap plan; also additional services are covered such as vision and hearing care. Unlike enrollees of the standard Medigap plan, enrollees of the PPO are offered financial incentives to select providers from a specified network The incentive to obtain physician services within the network is that network physicians have agreed to accept Medicare approved charges as payment in full; if enrollees obtain care outside the network from a physician who does not accept assignment, enrollees are not covered for any charges above the Medicare approved charge. The incentive to obtain hospital care within the network is that the plan fully covers the Part A deductible only if care is received at a network hospital; the deductible is not covered if care is received at a non-network hospital, except in the case of an accident or medical emergency.

The BCBS/AZ Medigap PPO tries to generate cost savings through more conservative treatment patterns of their network providers and lower costs of these providers. BCBS/AZ emphasizes careful selection of network physicians and physician profiling in containing costs; to that end, a database on physician activity is maintained, utilization patterns and quality measures are closely scrutinized, financial parameters are established for each specialty with penalties for outliers, and physicians with large and uncorrected deviations from the norm are dropped from the network The incentives for physicians to join the PPO network include the potential for increased patient volume, and the direct payment of claims; those incentives are sufficient to maintain the network and a waiting list of providers in all specialties. In their private sector PPO BCBS/AZ performs other utilization review activities through the facilities review and evaluation (F.R.E.) program, such as random retrospective review, mandatory second opinions for selected surgeries, and prior authorization for hospital admissions, in addition to physician profiling. The F.R.E. program is not, however, part of the Medicare PPO utilization review program.

The introduction of managed care involving utilization review and selection of physicians with conservative practice patterns has raised concerns regarding the quality of care provided by PPOs. Therefore, quality assurance monitoring activities are an important component of all the demonstration PPOs, including BCBS/AZ. A key component of BCBS/AZ's quality assurance program is the medical office review and evaluation (M.O.R.E.) program, which consists of in-office reviews of facilities and procedures. BCBS/AZ's quality assurance and utilization review programs are in addition to the quality and utilization review functions performed by the Medicare program carriers, fiscal intermediaries, and peer review organizations.

## EARLY EXPERIENCE OF BCBS/AZ

Enrollment in BCBS/AZ's Medigap PPO climbed from 836 at the end of 1989 to 5,443 in April 1990. BCBS/AZ attributes this influx of enrollees to the price difference between its standard Medigap plan and its Medigap PPO; this differential increased significantly in early 1990 when, along with much of the rest of the Medigap industry, BCBS/AZ raised the premium for its standard Medigap plan due to repeal of the Medicare Catastrophic Coverage Act and trends in the cost of claims while increasing the Senior Preferred premium by a much smaller amount. It is likely that most of the beneficiaries who enrolled in the Medigap PPO in early 1990 switched from BCBS/AZ's standard Medigap plan, since the Medigap PPO was not being widely marketed to other beneficiaries during that period.

BCBS/AZ has drawn the physicians for its Senior Preferred network from the network for its existing commercial PPO, Preferred Care. Statewide BCBS/AZ has 2,600 providers in its

Preferred Care network In Maricopa County about one out of ten physicians are in the Senior Preferred Network and in Pima County the number is about one out of five. Some specialties are not relevant for the elderly and that is part of the explanation for why the ratio of Senior Preferred physicians is not larger. BCBS/AZ reports that there is a waiting list of physicians anxious to join the PPO network in most specialties. Senior Preferred has 15 hospitals in its network representing between a quarter and a third of all the hospitals in the two counties.

Data is not yet available on the proportion of care obtained within-network by current enrollees. Analysis of within-network utilization will be included in the Preliminary Evaluation Report scheduled for completion in early Summer 1991.

## IMPLICATIONS FOR REPLICATING THE BCBS/AZ MODEL

The BCBS/AZ model offers several important advantages as an approach to introducing a PPO option under Medicare. First, it relies on private sector innovation to develop and implement the PPO, with minimal government involvement. Second, it incorporates the PPO into an existing product (Medigap insurance) which most Medicare beneficiaries currently purchase. Third, the model does not impose additional administrative burdens on the carriers or intermediaries, since the incentives used to channel enrollees to network providers do not involve any changes in the basic Medicare benefit structure.

The viability and effectiveness of the BCBS/AZ Medigap PPO will be evaluated in future analyses to be conducted under this evaluation contract. These analyses will investigate whether there is biased selection in enrollment into the PPO and the impact of the PPO on the use and cost of services provided to Medicare beneficiaries-that is, whether the PPO is achieving net cost savings to both BCBS/AZ and HCFA. A preliminary assessment of the viability and effectiveness of the model is provided in this report based on information obtained from interviews with BCBS/AZ management, interviews with knowledgeable industry and government representatives, prior research findings, and data on recent and projected trends in the health care market.

Currently there is interest on the part of the insurance industry in Medigap PPOs; in addition to BCBS/AZ, there are at least five additional Blue Cross and Blue Shield PPO-based Medigap plans in operation. Blue Cross and Blue Shield plans have 40 percent of the Medigap market, and commercial insurance companies have virtually all the rest. Industry representatives indicate that the firms most likely to develop and operate a Medigap PPO plan are insurance companies or health service corporations that currently offer either PPO products (because they already have a network in place), or standard Medigap plans (because they have experience dealing with the Medicare population), or both. They speculate that firms with operational private-sector PPOs will have the lowest costs to start up a Medigap PPO.

The Blue Cross and Blue Shield representatives interviewed for this report were more positive in their assessment of the current viability of Medigap PPOs than were the representatives of commercial insurance companies, although both identified several impediments to the expansion of Medigap PPOs. The major commercial Medigap insurers are not interested in developing Medigap PPOs unless some of the major concerns they cited are addressed. The concerns cited by both commercial insurers and Blue Cross and Blue Shield representatives include enrollment incentives, within-network utilization, regulation, and other concerns.

Enrollment incentives.

A central issue in a PPO's success is the set of incentives developed to encourage enrollment in the PPO. The two major types of incentives that could be offered for enrollment include: (1) a lower premium than that charged by other Medigap plans for comparable benefits, and (2) coverage for additional services not offered by other comparably-priced plans. BCBS/AZ offers both incentives in its Medigap PPO plan. The early experience of BCBS/AZ indicates that the first of these incentives, a lower premium, is the preeminent factor in getting beneficiaries to-join a PPO.

The potential market for Medigap PPOs is Medicare beneficiaries (1) currently enrolled in a traditional Medigap plan, (2) not currently enrolled in a Medigap plan, or (3) enrolled in a Medicare HMO. Medigap PPOs are most likely to appeal to less affluent beneficiaries, since the primary benefit is a lower premium However, some beneficiaries may be unfamiliar or uncomfortable with the concept of a network may have a strong attachment to a physician outside the network, or may be concerned about utilization review being a barrier to care In genera& beneficiaries will enroll if they perceive that the benefits of coverage outweigh the costs.

Within-network utilization.

A PPO's ability to control costs will depend on enrollees using network providers. Medigap PPOs currently are limited in the extent to which they can impose penalties for out-of-network use. Requiring network physicians to accept Medicare assignment, and providing no coverage for balance billing when non-network physicians are used are the primary financial incentives currently available for influencing enrollees' choices of providers. However, that incentive is weak in states with relatively high assignment rates, and will be further weakened by the implementation of recent federal legislation limiting the extent to which physicians can balance-bill patients. Furthermore, prior research findings show that most Medicare beneficiaries are reluctant to switch physicians to obtain care on an assigned basis.

Laws and regulations.

These weak incentives for within-network utilization would be strengthened if federal regulations were amended to allow PPOs to cover less than the full 20 percent Part B coinsurance when enrollees use out-of-network physicians. Medigap insurance is regulated by the states, which are required to have regulatory standards that meet or exceed the minimum standards contained in the federal model regulations developed by the National Association of Insurance Commissioners (NAIC). These standards require Medigap insurers to cover the full 20 percent coinsurance on Part B claims, thus limiting the extent to which Medicare beneficiaries can be penalized for out-of-network use.

Other industry concerns.

Industry representatives cited other potential impediments to the development of Medigap PPOs including:

- The financial viability of Medigap PPOs is unclear, since the major portion of the savings generated by the PPO's cost containment

procedures will accrue to the Medicare program rather than the Medigap insurer. Since the Medigap insurer's costs for Medicare covered services consist of deductibles and coinsurance, the reduction in Medigap payments may not be sufficient to offset the costs of developing, marketing, and administering the PPO.

- Medigap PPOs are less likely than PPOs in the private sector to obtain discounts from providers because the Medicare program has already implemented policies to control prices-most notably, the prospective payment system for hospitals, the physician fee freeze, and the incentives for physicians to accept assignment.

- Commercial insurers expressed doubts about the abiity to implement effective utilization control procedures given the fragmented nature of Medicare operations--i.e., the separate responsibilities of the carriers, intermediaries, and PROs. The differences between Part A and Part B claims data, and the complexity of merging these data to monitor resource use during an entire episode of care, is viewed as an impediment to implementing effective utilization management

- It may be difficult to educate Medicare beneficiaries about Medigap PPOs, since many Medicare beneficiaries are not well-informed about their Medicare and Medigap benefits, and the PPO concept is difficult to understand. The lack of success to date in educating beneficiaries about the Participating Physician Program (PAR) underscores the challenge of educating beneficiaries about the PPO concept in general. Marketing materials would have to be carefully considered to ensure that beneficiaries make informed choices about enrollment in Medigap PPOs and fully understand the penalties for out-of-network use.

## ACTIONS ENCOURAGED BY INDUSTRY

Representatives of the industry suggest a number of ways HCFA could encourage the development of Medigap PPOs. These include: (1) providing the Medigap insurer with easier, cheaper access to the claims data required for utilization management and quality assurance, (2) clarifying whether Medigap PPOs are allowed to negotiate with hospitals to obtain waivers or reductions in deductibles and coinsurance, (3) modifying the NAIC model regulations to give Medigap PPOs greater abiity to penalize enrollees for receiving care outside the network, and (4) recognizing that most of the savings will accrue to the government by (a) covering a portion of the Medigap PPO's administrative costs, and (b) paying more than 80 percent of allowed charges when enrollees obtain care from a network physician. In addition, some insurers have expressed potential interest in a risk-sharing arrangement with HCFA, in which a greater share of any savings or losses generated would accrue to the Medigap PPO.

## CONCLUSIONS

The BCBS/AZ model offers some important potential advantages as an approach to introducing a PPO option under Medicare. Whether this model wig prove to be a viable and effective approach to cost containment is an issue to be investigated in future studies to be conducted under this evaluation contract. Our preliminary assessment is that there are currently some important impediments limiting the development and effectiveness of Medigap PPOs. If the government wishes to encourage the growth and development of Medigap PPOs, it should take several actions to address these impediments. First, the government should facilitate Medigap PPOs' access to the detailed claims data required for utilization management and quality assurance activities, and perhaps provide the data at a lower cost. The government should also clarify whether Medigap PPOs are allowed to negotiate with hospitals to obtain waivers or reductions of deductibles and coinsurance, since the industry representatives we interviewed are unsure of whether this is permitted under current Medicare regulations. Such arrangements with hospitals would allow Medigap PPOs to reduce their claims costs, thus enhancing their ability to reduce premiums or offer additional incentives to attract enrollees. In addition, the government should act to give Medigap PPOs greater ability to channel enrollees to network physicians, since this is critical to cost containment. The most effective approach would be to modify the NAIC model regulations to permit Medigap PPOs to cover less than the full 20 percent coinsurance when enrollees receive physician services outside the network

## FUTURE RESEARCH

The evaluation of the Medicare Physician Preferred Provider Organization Demonstration is still in its early stages. The next report produced will be the first Status Report for CAPP CARE, CareMark, HealthLink, and Family Health Plan. The schedule of the future analyses is as follows:

| Research Area | Date |
|---|---|
| Status of the demonstration sites | Semi-annually (August and January) |
| Implementation of the demonstration | Late summer 1990, winter 1991 |
| Beneficiary choice and biased selection in enrollment | Early summer 1991, winter 1992 |
| Impact on the use and cost of services | Early summer 1991, winter 1992 |
| Feasibility of PPOs for Medicare | Winter 1992 |
| Summary of research Endings | Winter 1992 |

Those analyses with two dates have preliminary and final components.

# I. INTRODUCTION

## A. THE PPO CONCEPT AND MEDICARE APPLICATIONS

Preferred Provider Organizations (PPOs) are an innovative approach to the organization and financing of health care that have proliferated in recent years because of their perceived potential for cost containment. A PPO is created through a set of contractual arrangements between an insurer and a group of health care providers. The basic objective is to create a network of cost-effective providers and channel patients to these providers through financial incentives such as reduced deductibles or coinsurance. PPOs differ in their approach to wntrolling costs, but commonly used approaches include selective contracting with low-cost providers, negotiating price discounts with providers, and applying utilization control mechanisms within the network The primary incentive for providers to participate in a PPO is the potential for increased patient volume.

PPOs combine some of the cost containment features of health maintenance organizations (HMOs) with the features of traditional fee-for-service insurance plans. Like HMOs, PPOs try to control costs through selective contracting with cost-effective providers and, in most cases, through utilization management. PPOs offer more freedom of choice than HMOs, however, because PPOs provide coverage for services received outside the network, although enrollees pay a higher share of costs for using out-of-network services. Unlike HMO enrollees, PPO enrollees are not locked in" to network providers. PPOs also differ from HMOs in their provider reimbursement arrangements. Physician capitation and other forms of provider risk-sharing are now common in the HMO industry, but rare among PPOs, which typically pay physicians on a discounted fee-for-service basis.

During the initial stages of PPO development in the early 1980s, PPOs sought to control costs primarily by getting price discounts from providers. But price discounts alone did not yield

the expected level of cost savings, so most PPOs now employ utilization management procedures to control the volume of service use (Roland 1987). The utilization management programs of most PPOs concentrate on reducing unnecessary or inappropriate hospital care. A survey of PPOs conducted by the American Managed Care and Review Association (AMCRA) in 1989 found that 97 percent of responding PPOs require preadmission certification for nonemergency inpatient care, 94 percent employ concurrent review, 85 percent employ retrospective review of inpatient stays, and 74 percent require second opinions for surgery (AMCRA 1990).

The number of operational PPOs in the U.S. increased dramatically in the 1980s, from 25 in 1981 to 802 as of January 1, 1990 (AMCRA 1990). The earliest PPOs were sponsored primarily by providers, including hospitals, physicians, and joint ventures between hospitals and physicians. Provider-sponsored PPOs market their services to payers such as insurers or self-insured employers, offering to discount their services or submit to utilization management in return for an expected increase in patient volume. In recent years, PPO sponsorship by commercial insurance companies and Blue Cross and Blue Shield plans has increased substantially. In 1989, nearly 40 percent of all PPOs were sponsored by commercial insurers or Blue Cross/Blue Shield plans, 32 percent by providers, and the rest by a variety of entities such as private investors, third-party administrators, HMOs, and self-insured employers (AMCRA 1990).[1]

The rapid growth of PPOs in the private sector reflects the widespread belief among insurers and employers that PPOs are a potentially effective means of cost containment. PPOs are a recent innovation in the health care market, however, so there is little evidence about their effects on health care costs, the quality of care, or patient satisfaction. Previous studies have found that hospital use and total medical spending are reduced by utilization management in conventional fee-for-service insurance plans (Feldstein et al. 1988, Wickizer et al. 1989, and

[1]The PPOs classified as being sponsored by commercial insurers and the "Blues" include some that are joint ventures with utilization management companies and providers.

Institute of Medicine 1989) and in the managed care environment of HMOs (Manning et al. 1984, Luft 1981). Since PPOs typically seek to channel patients into managed care, these findings lend support to the expectation that PPOs will reduce costs. But the effectiveness of a given PPO is likely to depend heavily on the benefit design and the extent to which it induces patients to select providers from within the PPO network

The growth of PPOs in the private sector and the widespread expectation that PPOs will prove to be an effective cost-containment mechanism have prompted interest in potential applications to the Medicare program. In the spring of 1988, the Health Care Fmancing Administration (HCFA) announced its intention to design and implement a demonstration to test the feasibility and desirability of including a PPO option under Medicare. The announcement of the planned demonstration was mailed to all operational PPOs in the United States in June 1988, and 116 PPOs submitted preapplication forms expressing potential interest?. Twenty of these PPOs were subsequently invited to submit formal applications and in January 1989 HCFA announced the selection of five PPOs to participate in the demonstration.

Two of the five PPOs selected for the demonstration are now operational: Blue Cross and Blue Shield of Arizona (BCBS/AZ), and CAPP CARE in Orange County, California Of the remaining three demonstrations, Northwest Managed Health Care (CareMark) in Portland, Oregon, and HealthLink in St. Louis, Missouri will not become operational, while there is still hope for Family Health Plan in Minneapolis, Minnesota BCBS/AZ, the subject of this report, has implemented a PPO linked with a Medicare supplemental insurance, or Medigap, plan. CAPP CARE has implemented a very different PPO model, not linked to Medigap insurance. The CAPP CARE demonstration is a nonenrollment model PPO, that is, CAPP CARE does not enroll beneficiaries but applies utilization management procedures whenever beneficiaries obtain

[2]Operational PPOs were identified from the Directory of Operational PPOs published by the American Association of Preferred Provider Organizations (AAPPO) for 1987.

care from a network physician The CAPP CARE demonstration will be described in a future report analogous to this one.

## B. OVERVIEW OF BCBS/AZ'S MEDIGAP PPO

BCBS/AZ has introduced a Medicare PPO linked with a Medigap insurance plan in two metropolitan counties in Arizona. Enrollees in this plan receive the additional financial protection provided by Medigap insurance but, unlike enrollees of standard Medigap plans, have financial incentives to select providers from within a specified network To attract enrollees to its Medigap PPO, BCBS/AZ charges a lower premium than it charges for its standard Medigap plan and provides coverage for additional services such as vision and hearing care.

The Medigap PPO provides incentives for enrollees to use network providers by requiring network physicians to accept assignment. Thus, enrollees are assured that they will not be charged more than the Medicare-approved amount when they obtain physician services within the network If they obtain care outside the network from a physician who does not accept assignment, enrollees are not covered for any charges above the Medicare-approved charge. In either case, the Medigap plan pays the 20-percent coinsurance on Part B claims once the patient has met the Part B deductible.[3] The Medigap PPO also provides incentives for enrollees to use network hospitals by covering the Part A deductible only if care is received at a network hospital; the deductible is covered for care received at non-network hospitals only in the case of an accident or medical emergency.

The BCBS/AZ model offers several important advantages as an approach to introducing a PPO option under Medicare. First, it relies on private sector innovation to develop and implement the PPO, with minimal government involvement. Second, it incorporates the PPO

[3] This is required by the model regulations for Medigap insurance developed by the National Association of Insurance Commissioners (NAIC).

into an existing product (Medigap insurance) which most Medicare beneficiaries currently purchase. Third, the model does not impose additional administrative burdens on the carriers or intermediaries, since the incentives used to channel enrollees to network providers do not involve any changes in the basic Medicare benefit structure. Whether this model will prove to be a viable and effective approach to cost containment is an issue to be investigated in future studies to be conducted under this evaluation contract.

## C. OBJECTIVES OF THIS REPORT

This report has two major objectives. The first is to provide a detailed description of the Medigap PPO developed by BCBS/AZ and to describe its early operational experience. To provide a context for interpreting the development and experience of this PPO, we begin with an overview of BCBS/AZ and its market area, its history, its experience with the PPO concept in the private sector, and its reasons for developing a Medigap PPO. Our description of the Medigap PPO developed by BCBS/AZ examines the following major topics:

- Design of the benefit package, including the incentives to enroll and to use network providers
- Marketing approaches
- The criteria and process for selecting network providers
- Utilization management procedures
- Quality assurance procedures

We also report on the Medigap PPO's early operational experience in each of these areas. Our analysis is based primarily on information obtained through onsite interviews and telephone followups with BCBS/AZ management.

The second major objective of this report is to give a preliminary assessment of whether the Medigap PPO model developed by BCBS/AZ would be a viable product nationally, to assess

its likely effectiveness in containing costs, and to identify government actions that would make it more viable and effective We first examine these issues from the perspective of the insurance and managed care industry, identifying potential entrants to the Medigap PPO market, current incentives to develop a Medigap PPO, and additional incentives that could be offered through government action. We then examine the feasibility and potential effectiveness of tbe Medigap PPO model in greater detail, focusing on (1) potential incentives for beneficiaries to enroll in a Medigap PPO and to use network providers, once enrolled; (2) incentives for providers to participate in the PPO network; and (3) how effectively Medigap PPOs could contain costs. This analysis draws on information from a variety of sources, including interviews with knowledgeable industry and government representatives, prior research findings, and data on recent and projected trends in the health care market.

This report has been prepared in the early stages of a 42-month evaluation of the Medicare PPO Demonstration by Mathematica Policy Research, Inc. The evaluation is to conclude in December 1992. Our conclusions about the viability and effectiveness of the Medigap PPO model developed by BCBS/AZ are therefore preliminary. Subsequent issues to be analyzed under the evaluation include the implementation and operational experience of the demonstration PPOs, beneficiary choice and biased selection, and the impacts of the demonstration PPOs on the use and costs of services. The research design for the evaluation is described in Langwell et al. (1990).

## D. ORGANIZATION OF THIS REPORT

The rest of this report is in three chapters. Chapter II describes the BCBS/AZ's Medigap PPO and its early operational experience. Chapter III provides an assessment of the viability of the Medigap PPO model and its potential effects on health care costs and identifies government actions that would make the model more viable and effective. Chapter IV summarizes the

report's main conclusions and provides an overview of the remaining research activities under the evaluation.

## II. THE BCBS/AZ PPO DEMONSTRATION

### A. BACKGROUND

As with any competitive product, BCBS/AZ's Medigap PPO (Senior Preferred) depends for its viability on the nature of the local market. Senior Preferred's success will depend on the number of Medicare beneficiaries in the market area, their relative wealth, their use and cost of services (and whether for example, there is room to reduce costs by managing care), preferences about freedom of choice in providers, and attitudes toward managed care. The competitive nature of the market is also a consideration. The majority of Medicare beneficiaries already subscribe to one or more Medigap policies, so it is evident that they want the security of such products. The question is whether enough beneficiaries will switch to a lower-cost Medigap PPO plan If the answer is yes, there is an incentive for an insurer to spend the time and money required to set up and market a managed-care product. In this section we discuss the market area where BCBS/AZ is offering Senior Preferred: Maricopa and Pima counties.

#### 1. The Market Area

The Medicare market in the demonstration area is sizable. Maricopa county, which includes the Phoenix metropolitan area, has a total population of about 1.9 million, of whom 237,000 (or 12.5 percent) are Medicare beneficiaries.[4] Pima county includes the Tucson metropolitan area; it has a total population of about 602,000, of whom 82,000 (or 13.6 percent) are 'Medicare beneficiaries.

Medicare reimbursements are higher on average in Maricopa county than in Pima county, and the average in each is higher than for all U.S. metropolitan counties. The average Part A

---

'Data in this section are from the Bureau of Health Professions Area 'Resource Pile (ARF). Most of the data are for 1986. A table comparing Mariwpa county, Pima county, and all metropolitan counties is attached as Appendix A

reimbursement in Maricopa county in 1986 was $1,640, which is 9 percent higher than the average in Pima county ($1,504) and 13 percent higher than the average for all metropolitan wunties ($1,450). Hospital admission rates for the Medicare population in the two counties are somewhat higher than the average for all metropolitan wunties, by 4 percent in Mariwpa county and by 11 percent in Pima county.. The average Part B reimbursement in Maricopa county in 1986 was $912, or 6 percent higher than the average in Pima county ($859) and 20 percent higher than the average for all metropolitan counties (S758). These differences in average Part B reimbursements largely reflect differences between the counties in prevailing charges; the Medicare prevailing charge index for Maricopa county is 7 percent higher than for Pima county and 16 percent higher than for all metropolitan counties.[5] The high reimbursement and hospital use levels in the two demonstration counties indicate a high potential for cost savings from managed care.

Residents of Mariwpa county have higher incomes on average than those of Pima county. The per capita income in Mariwpa county in 1986 was $15,294, or 12 percent higher than the average for all metropolitan wunties ($13,626). The per capita income in Pima county was $13,401, slightly below the national average. These data reflect averages for all age groups, but BCBS/AZ management report that incomes are also higher in Mariwpa county among the Medicare population. Thus, on average, residents of Pima county may be more receptive to Senior Preferred than those in Mariwpa county, since the primary incentive to enroll is the lower premium_

Overall, the Arizona market is experienced with managed care, but largely as a private-sector product. According to AMCRA (1990), as of January 1, 1990, 600,000 Arizonans will have

[5]The Medicare Prevailing Charges Index is an indexed sum of the charges for selected medical procedures for specialists and general practitioners combined. The procedures selected are those that make up the top 85 percent of expenditures nationally.

the PPO option available.[6] Together with 589,871 HMO enrollees that makes up 33 percent of the state population-slightly more than the 30 percent in managed care nationally. PPOs continue to thrive in Arizona. Currently 29 PPOs are operating in Arizona; only six states have more. Many non-PPO health plans have responded to the popularity of PPOs by adding a PPO option to their existing plans. HMOs have more of a mixed record in Arizona. In recent years there were 22 HMOs; now there are 11 and the number is expected to decrease to 5 or 6 (Lockhart 1990). The HMOs that are left are the largest and most stable. Thus, the Arizona private sector market is quite receptive to managed care, and particularly to the freedom of choice offered by PPOs. This does not guarantee success in the Medicare market. The Medicare market in general is much different from the market for the under-65 population. But the success of FHP, a Medicare HMO, indicates that at least part of the Medicare market is receptive to managed care. This is further demonstrated by BCBS/AZ's recent influx of enrollees.

## 2. BCBS/AZ's Competition in the Medicare Market

BCBS/AZ began offering a PPO to its private sector clients in 1983 when Preferred Care was placed on the Arizona market. During Preferred Care's first 18 months use of services increased, much of which was attributed to overutilization by providers. BCBS/AZ reorganized its PPO and completely recredentialled the provider network, expelling overusers and renewing its emphasis on physician selection and profiling. This experience left a lean provider network that turned Preferred Care into a successful PPO in a highly competitive private-sector managed care market. This also provided a firm base on which to launch Senior Preferred. With the Preferred Care provider panel already in place, the costs involved in drawing a subset for Senior Preferred were low, creating a potential for savings in Medicare claims costs with relatively little

[6] This figure includes (1) individuals whose employers have incorporated a PPO into the company's existing insurance plan, and who thus do not face an enrollment choice, and (2) individuals who have explicitly chosen a PPO as a separate insurance plan.

investment. BCBS/AZ's startup costs for Senior Preferred were $240,000, which, given the current enrollment of 5,443, comes to $44 per enrollee. Startup costs for Preferred Care were described as "massive."[1] Operational costs for Senior Preferred were $230,000 in 1989. For BCBS/AZ's standard Medigap product, Senior Security, operating costs were $6 million with its 22,483 enrollment

In the Medicare market, BCBS/AZ has major competition from three organizations: two Medigap insurers, AARP and CIGNA, and one HMO, FHP. AARP's Medigap product currently has a 19-percent market share, CIGNA is close behind with 15 percent, and BCBS/AZ has an 11- percent market share (BCBS 1989). Currently two HMOs with Medicare enrollees operate in the Phoenix area--FHP, Inc. and Humana Health Plan. FHP, with its statewide enrollment of 29,249 provides services for about 10 percent of the Medicare population in Maricopa county. Humana has an insignificant 57 enrollees (HCFA 1990). FHP differs from the Medigap plans in that it charges no premium for enrollees, requires copayments for Medicare services, and offers less freedom of choice in providers.

In the late 1980s, the BCBS/AZ management saw that its position in the Medigap insurance market was threatened with the average age of Senior Security enrollees getting progressively older, and thus incurring higher claims costs. It saw the lower premiums possible through a PPO-as a result of more efficient use of services and lower claims costs-as a way to increase BCBS/AZ's market share and improve their competitive position in the Medigap industry. As a successful insurer BCBS/AZ is able to commit the resources needed to implement a new product such as Senior Preferred, although the major investment required in setting up a provider network had already been made with Preferred Care. By investing in a Medigap model PPO BCBS/AZ hopes to gain from its investment in two areas. First, entirely new subscribers

[1]Financial information was not available from BCBS/AZ on Preferred Care.

will be added to its membership, whether from other Medigap insurers or from the population not previously covered by a Medigap policy. Second, it can gain beneficiaries who "roll over" into the PPO from Senior Security. With this group, BCBS/AZ will increase net revenues if the savings from reduced claims costs more than offset the foregone revenues associated with reduced premiums and the cost of additional covered services. Gains will also come from premiums of Senior Preferred subscribers who would have left Senior Security to purchase a less costly Medigap product from BCBS/AZ's competitors.

These reasons were enough of an incentive for BCBS/AZ to introduce Senior Preferred into the Phoenix market without formal support from HCFA BCBS/AZ does not advertise that it is a Medicare PPO demonstration site in its marketing campaigns and is not receiving financial support from HCFA So its incentives to be part of the Medicare PPO demonstration are not founded on Federal subsidies in the form of administrative costs or support for the Senior Preferred product. Instead, BCBS/AZ wants to generate empirical evidence to prove its proposition that the PPO model is a credible alternative for Medicare beneficiaries and that a radical departure from the traditional fee-for-service health care system is not necessary to control utilization of physician services. The company also hopes to increase its credibility with HCFA so that it can influence future changes in the Medicare program including changes related to PPOs.

BCBS/AZ's ability to put Senior Preferred on the market was aided by the supply of physicians in the two demonstration counties. Maricopa county has 2.15 active physicians (MDs and DOs) for each 1,000 persons while Pima county has 275 active physicians per 1,000. These figures are both greatly above the mean for all metropolitan counties-l.66 active physicians per 1,000 persons (ARF). And statewide figures suggest that Arizona's physicians are as receptive to managed care as physicians in other areas; 47 percent of them have contracted with a PPO and/or an HMO, which is equal to the nationwide percentage (AMCRA 1990). On the other

hand Arizona physicians are less likely to accept Medicare assignment than the national average. 'The Medicare assignment rate (56.4 percent of covered charges in 1987) was much lower in Arizona than in the nation as a whole (72.6 percent) (PPRC 1988). That low assignment rate may make tbe Senior Preferred benefits package, witb its guarantee of no balance billing by network providers, more attractive to beneficiaries.[8]

## B. EARLY EXPERIENCE WITH THE BCBS PPO MODEL

Senior Preferred is a Medicare supplemental insurance, or Medigap, product. It covers the portions of Part A and Part B medical expenses not covered by Medicare-including tbe hospital deductible and Part B coinsurance. Senior Preferred is regarded as a standard Medicare supplemental insurance product by the state of Arizona's Insurance Department, which for regulatory purposes classifies it and other Medigap products as an indemnity product- The operational difference between Senior Preferred and standard Medigap products is that the Senior Preferred benefits package is structured to direct beneficiaries toward a group of carefully selected providers. Use of this panel of providers is expected to reduce health care costs while maintaining the quality of care for beneficiaries.

### 1. Attracting Enrollees

Much of the early discussion of the viability of PPOs for the Medicare market focused on providing adequate incentives for beneficiaries to enroll. Many members of tbe PPO technical advisory panel assembled to provide insight into setting up a Medicare PPO were skeptical about enrollment incentives. They felt that the proposed incentives-such as lowering the coinsurance rate when PPO physicians were used and waiver of the Part B deductible-were not strong enough incentives to entice beneficiaries to give up total freedom of choice. BCBS/AZ has

[8]Balance billing occurs when physicians charge more than tbe Medicare-approved amount and bills the beneficiary for the difference

developed enrollment incentives that center on an important, tangible factor to Medicare beneficiaries--a lower Medigap premium. This section describes BCBS/AZ's benefit package, its history marketing this product, and its early success with enrollment.

a. Benefit Design

The benefit package BCBS/AZ developed for its Senior, Preferred Medigap product is designed to achieve two objectives: to encourage Medicare beneficiaries (1) to enroll in the plan and (2) once enrolled, to obtain medical care within the PPO network Table IL1 compares the benefit packages for Senior Preferred and Senior Security. The primary incentive for enrolling in Senior Preferred is to get the financial protection of Medigap insurance at a lower premium than other Medigap plans, including Senior Security, for comparable coverage.[9] As Table IL1 shows the monthly premium for Senior Preferred is about 30 percent lower than the premium for Senior Security for the three age groups for which premiums are determined.

Because it is based on a Medigap product, the benefits package BCBS/AZ offers for its Medicare PPO is more substantial than the benefits packages proposed by the other PPO demonstrations and the package HCFA expected to be proposed in the design phase of the demonstration. CAPP CARE's nonenrollment PPO guarantees that the Medicare-approved amount will be charged to beneficiaries, while the other three sites have considered variations of the Part B deductible and coinsurance rates to attract beneficiaries. These incentives do not provide the level of protection against out-of-pocket costs that BCBS/AZ's product does. However, there is little or no cost to the beneficiary in the other demonstration PPOs. The BCBS/AZ benefits include:

[9]CIGNA and AARP offer basic Medigap policies-covering hospital deductibles and copayments and 20% of Medicare-approved charges-at monthly rates of $42 and $40.50 respectively. More comprehensive products which cover such expenses as vision and hearing exams and balance bill protection are $67 for CIGNA and $74.95 and $97.50 for AARP. CIGNA and AARP do not vary their rates for different age groups.

TABLE II.1

COMPARISON OF BENEFITS

| | Senior Security | Senior Preferred |
|---|---|---|
| Premium | | |
| Age 65-69 | $68.70 | $48.50 |
| Age 70-79 | $86.60 | $59.40 |
| Age SO+ | $96.20 | $6530 |
| Part A deductible | Pays the Part A deductible at any hospital. | Covers the Part A deductiile at any network hospital. Pays the-deductible at a non-network hospital only in the case of medical emergency or accident. |
| Hospital coinsurance | Pays the hosital coinsurance on stays over 60 days. | Pays the hospital coinsurance on stays over 60 days. |
| Part B deductible | Does not pay the Part B deductible. | Does not pay the Part B deductiile. |
| Part B coinsurance | Pays 20% of the approved charge. Also pays 20% of balance if the physician doesn't accept assignment. | Pays 20% of the approved charge. Since all network physicians accept Medicare-approved charges as payment in full, enrollees are not billed for the balance if they stay within the network |
| Provider choice | No restrictions. | No restrictions (see out-of-plan use). |
| Penalty for out-of-plan use | Not applicable. | Beneficiary liable for amounts over Part B Medicare-allowable and for the Part A deductible for non-emergencies. |
| Other benefits | None. | Vision: exam and discounts. Hearing: exam and discounts. Drugs: mail-order discounts. Biodyne lifestyle counseling. |

- No deductible when Senior Preferred hospitals (or other hospitals in the case of medical emergency or accident) are used.
- No out-of-pocket costs when Senior Preferred physicians are used, after the Part B deductible has been met.
- Liability only for amounts over Me&care-approved charges when non-Senior-Preferred physicians are used Additional benefits include hearing and vision exams; discounts on eyewear, hearing aids and batteries, and mail order drugs; lifestyle counseling; and counseling for mental and nervous conditions.

The Senior Preferred benefits package extends the coverage Medicare provides yet is similar to the package Senior Security offers. For hospital stays, Senior Preferred covers the $592 Medicare deductible when PPO hospitals are used and pays the coinsurance on long hospital stays (over 60 days). Under Senior Security this deductible is covered in full at any hospital, as is the extended-stay coinsurance. The beneficiary's responsibility for the Part A deductible serves as a major incentive to stay within the network for hospital services and to choose a physician with staff privileges at a Senior Preferred hospital (an incentive to use a network physician).

For Part B services, the PPO picks up the coinsurance of 20 percent of Medicare-approved charges. Beneficiaries incur no out&f-pocket costs when they use PPO providers, except for the initial $75 Part B deductible, because all PPO providers agree to accept Medicare-allowable charges as payment in full. When non-Senior-Preferred providers are used, the beneficiary incurs out-of-pocket costs when the provider charges more than the Medicare-approved amount. In that case, the beneficiary is Liable for the balance of the charges. By contrast, Senior Security pays either 20 percent of approved charges, if the physician accepts Medicare assignment, or 20 percent of billed charges if the physician does not accept the approved charge as payment in full--thus reducing the beneficiary's out-of-pocket costs when a provider's charges are above the Medicare-approved level.

These benefits are substantial compared to standard Medicare. 'Ibis, combined with the relatively low Senior Preferred premium, may be enough to entice many beneficiaries into the PPO from other Medigap products and from non-Medigap subscriirs who want the security of a Medigap policy without the high cost. They do not provide strong incentives to keep beneficiaries in the network, however, as BCBS/AZ also covers the costs of claims up to the Medicare-approved charge when beneficiaries see out-of-network physicians. The use of PPO physicians will result in savings to the **beneficiaries who currently incur** out-of-pocket costs. But the savings from switching to Senior Preferred from Senior Security is at least $240 per year, which is much higher than estimated savings from no-balance billing**, so beneficiaries who switch products but not physicians will still pay much less than they would under Senior Security. If the non-network physician does not have staff privileges at a PPO hospital, however, the beneficiary would be liable for the Part A deductible, and thus incur substantially higher out-of-pocket costs. Network physicians also send claims directly to the Medicare carrier so the beneficiary does not have to file claims (although Medicare physician payment reforms may require this of all physicians so it will not be an incentive in the future).

b. Marketing

In addition to the benefits of a Medigap PPO product in terms of reduced premiums and other cost savings, a well designed marketing effort is critical in convincing Medicare beneficiaries to enroll in a Medigap PPO plan. Designing the marketing approach represented a considerable challenge to BCBS/AZ because they were the first Medigap insurer in the country to offer a PPO in any form to the elderly, so no models of successful marketing campaigns were available to be adapted for the Medigap PPO product. **Most** previous PPO products were **marketed to employer**

[10]BCBS/AZ calculated the savings to the beneficiary to be $120. Our estimates, based on per capita Part B reimbursements and the assignment rate for Arizona, amount to an average savings of $66.

and other groups, whereas individuals are the customers for Senior Preferred Among individuals is was not clear whether those most receptive to the Medlgap PPO would be those beneficiaries without Medigap coverage, those with coverage under other insurers' Medigap plans, or those switching from BCBS/AZ's standard Medigap plan Furthermore, it was not clear how to most effectively transmit the information to potential enrollees: though direct mail, presentations to groups of elderly people, or through agents.

Given the degree of uncertainty regarding how best to market the PPO product to elderly beneficiaries, BCBS/AZ experimented with different approaches. Some of these marketing approaches were effective and some were not as discussed below:

1. In December 1988, BCBS/AZ conducted a multimedia, direct-response campaign including radio, television, and print advertisements, and a 35,000-piece direct-mail campaign to Senior Security subscribers. The inquiry response rate was 6 percent, which is considered high in the marketing field, but the resulting number of enrollees was slightly fewer than loo.[11]

2. In May 1989, mailings were sent to 55,000 residents over the age of 55 in the northwest Phoenix area. The response rate was 5 percent, producing slightly fewer than 15 enrollees.

3. In July 1989, a direct-response campaign was targeted to 16,000 residents in two selected zip codes in the East Valley (Maricopa County) area Residents of one zip code area had an average annual income of $19,000, and residents in the other, $21,000. The response rate was 9 percent, resulting in about 20 enrollees.

In March 1989 a branch sales/service office was opened in Sun City, a high-income retirement area near Phoenix in which a Senior Preferred participating hospital is located. It was hoped that this office would increase the Senior Preferred subscriber base, so an intensive telemarketing effort was conducted from that office to follow up on every direct mail inquiry

"Most of the data on BCBS/AZ's marketing effort is drawn from a marketing report prepared for BCBS/AZ titled, "1988-1989 Senior Preferred Report."

response received. It became evident, however, that this effort was contributing little to increased sales. BCBS/AZ cites the fact that a large portion of the Sun City population has its Medigap insurance paid by third party payers-such as previous employers-and thus, has no financial incentive to switch products. Additional reasons for lackluster sales, as documented in the marketing report, include:

- Few participating physicians in the area
- Other major hospital in the area not participating
- Negative reaction to a 'network" concept and a strong desire to be able to choose any doctor or hospital desired
- Average income higher than average income for the people most interested in a PPO-type Medicare supplement
- Because of the high average income, a lack of concern about physicians accepting Medicare's approved charge as payment in full
- A preference for HMOs when restrictions in choice of doctors and hospitals were accepted
- The view that the premium was too high for a policy with provider restrictions

In April 1989, BCBS/AZ hired a market research firm to conduct market surveys and focus group discussions. This research revealed that the group most receptive to a Medigap PPO was the older, lower-income, less educated seniors. The younger, higher-income group on which previous marketing efforts had focused was found to prefer the greater freedom in choosing providers available through traditional Medigap insurance. The research indicated that BCBS/AZ faces significant marketing challenges. The seniors are reluctant to make changes, are angry about any tampering with their benefits, and perceive PPOs and HMOs as having "cheap doctors." BCBS/AZ concluded that selling its products required as much personal, individual marketing as possible, to convince seniors that Senior Preferred is a good value and meets their needs.

In light of the research findiigs, BCBS/AZ implemented a new sales strategy involving agents. BCBS/AZ realized that by relying on mailings and telemarketing for the 65-and-over market it overlooked its traditional use of agents as the sales delivery system Other strategies recommended in the marketing report (such as revised marketing materials, new mail campaigns, retirement seminars, educational forums, health fairs, and other types of presentations) were not implement& although marketing material was updated to reflect changes in the status of the Medicare Catastrophic Coverage Act. New marketing material is now being prepared Senior Preferred has been opened up to Pima County and a popular hospital chain in that county was signed up for the network. A mail campaign to seniors in Pima County is planned. Marketing costs in 1989 for Senior Preferred were $141,000, compared to $910,000 for Senior Security with its 22,483 enrollees.

c . Early Enrollment

As of April 1990, BCBS/AZ had 5,443 enrollees in its Senior Preferred PPO-a huge jump from 836 enrollees at the end of 1989. The firm had originally projected 15,000 Senior Preferred enrollees within one year of its early 1989 start up period. The low enrollment after the first year of operation prompted the firm to conduct market research, which resulted in a new marketing plan and a projected total enrollment of 3,000 to 4,000 by the end of 1990--which was surpassed in March of 1990. In early 1990, before a new marketing campaign and as a result of the repeal of the Medicare Catastrophic Coverage Act and trends in the cost of claims, BCBS/AZ significantly increased the premium for Senior Security while increasing the premium for Senior Preferred a small amount. This created a larger price differential between the two products which BCBS/AZ feels prompted the large influx of enrollees, most of whom switched from Senior Security to Senior Preferred not surprising since BCBS/AZ has not been actively marketing

Senior Preferred to the general population in recent months. About 75 percent or the enrollees are from Maricopa county.

d. Conclusions

The price of the product was overwhelmingly the key to the success of this plan, which gamed more than 4,000 enrollees just after premiums for Senior Security were significantly increased. But this initial experience provides no indication that large numbers of beneficiaries will enroll from the non-Medigap market or join Senior Preferred from other Medigap insurers. The true test of Senior Preferred's power to enroll these beneficiaries will come when the new marketing campaigns begin. Another crucial test will wme when data are available on the use of network rather than out-of-network providers, because the incentives to use network physicians are not strong.

2. The Physician Network

To save on costs, PPOs depend on the more conservative treatment patterns and lower costs of PPO providers, and/or on such utilization review mechanisms as precertification and claims reviews which to be effective require the leverage of a contractual bond between the PPO and the providers selected. For the PPO to reduce utilization, beneficiaries enrolled in the PPO must use PPO providers. The use of PPO providers will be a keystone in the BCBS/AZ demonstration because the UR program revolves around the selection and profiling of physicians

BCBS/AZ's emphasis on having an efficient physician panel requires that they strongly emphasize the selection of desirable physicians and the prompt removal of high-cost physicians. Physician applicants are first screened for state licensure, hospital privileges, and the absence of malpractice litigation. Applications are then judged according to BCBS/AZ's specialty and geographic requirements with determinations between applicants made on the basis of quality and

economic performance indicators such as claims costs, when these data are available. Priority is given to physicians who are members of groups already under contract to the PPO.

The primary incentives for physicians to join the Senior Preferred network and submit to its restrictions are (1) the potential for increasing the volume of business and (2) direct payment of claims to the physician. These incentives are sufficient to maintain the physician network. There is normally a waiting list of providers in all specialties. Overall, there was little feedback from physicians on the Medicare PPO concept-it was simply accepted-but those who did respond, responded positively and with interest

The physician panel has not changed significantly in the past year. There has been a 3-percent turnover among physicians, the primary reason for which was business practices such as billing and coding. The provider contract allows BCBS/AZ to terminate a physician contract at will with no waiting period.

All Senior Preferred physicians are a subset of the Preferred Care Network About 32 percent of the physicians in Maricopa County belong to the network of Preferred Care, and one third of those are in Senior Preferred. (Some specialties are not relevant for the elderly and that is part of the explanation for the lower number of Senior Preferred physicians). In Pima county 39 percent of the physicians are in the Preferred Care network, and 47 percent of those are in the Senior Preferred network. Statewide, there are about 2,600 providers in the Preferred Care network, 16 percent of whom are family practitioners, 15 percent internists, 10 percent anesthesiologists, and 4 percent general practitioners. BCBS/AZ recredentialed its physicians in May and June of 1990.

3. The Hospital Network

BCBS/AZ selects network hospitals through competitive bidding. Hospital proposals are evaluated on the basis of demonstrated capabilities, accreditation, insurance and physician

membership. Finally, a mix of geographic, price, and service features are considered. Senior Preferred hospitals are also a subset of the Preferred Care hospital network.

The Senior Preferred hospital network has remained stable. A chain of hospitals was added in Pima county and one hospital left the network because of bankruptcy. Some hospitals expressed concern about joining the Senior Preferred network because they felt they had more to lose than individual doctors did. Currently Senior Preferred has contracts with 15 hospitals, 12 out of 41 hospitals in Maricopa county and 3 out of 13 in Pima county.

4. Utilization Review

The major premise of the Medicare PPO demonstration is that the PPO will be able to reduce the volume of services through utilization review (UR) procedures, reducing costs to the Medicare program. Thus demonstration PPOs must possess the UR tools necessary to control services. This demonstration is focused on reducing the volume of Part B services, so tools to manage physician utilization effectively, particularly in an ambulatory setting, are crucial.

a The Utilization Review Approach BCBS/AZ Uses

Given the high level of resources (especially development resources) required for traditional UR mechanisms and BCBS/AZ's history with these mechanisms, BCBS/AZ has not included them in its Medicare PPO. During the first four years of operation of Preferred Care, for example, the use of health care services increased despite such UR controls as precertification, second surgical opinions, and mandated outpatient surgery for certain procedures. Considering their costs, BCBS/AZ believes the savings potential of these UR controls for the Medicare population are minimal and that they will save more by more carefully selecting and continuously profiling physicians who demonstrate a conservative pattern of treatment Thus, physician profiling is the only UR mechanism included in Senior Preferred BCBS/AZ does, however, provide prospective and retrospective reviews of cases to help manage use, identity

billing irregularities, and provide quality assurance in Preferred Care in addition to physician profiling. Concurrent review of hospital admissions is delegated to network hospitals.

Physician profiling. Profiling of patterns of physician practice is the mainstay of BCBS/AZ's utilization review procedures, except for the standard review performed by the Medicare Carrier, fiscal, intermediary, and Peer review organization BCBS/AZ maintains a database on physician activity, closely scrutinizes utilization patterns and quality measures, establishes financial parameters for each specialty and penalties for cost-outliers, and dismisses from its panel any physician with large, unexplained, uncorrected deviations from the norm for health care costs for that specialty. To that end, BCBS/AZ has developed an extensive database of physicians which includes information on their specialty, licensing, patients, hospitals used, malpractice history, utilization, and where and with whom the physician practices.

The incentive for physicians to reduce costs and keep within the utilization boundaries set by BCBS/AZ is the threat of removal from the PPO network and thus a reduced caseload. In the original screening of the physician network, 400 to 500 physicians were excluded because of their service costs. Periodically, claims data for each physician are examined and those with particularly high aggregate claims costs (twice the average for that specialty) are investigated and sent a warning letter. So far in 1990, 30 warning letters have been sent to physicians about their claims costs. BCBS/AZ does not have data on the cost-effectiveness of profiling and selecting physicians for its Medicare PPO, but the program has proven cost-effective for the commercial PPO. BCBS/AZ estimates that its savings from UR in Preferred Care are 10 percent. The company feels that its physician profiling for Senior Preferred could be improved if diagnostic codes could be included in claims data to further define utilization of services for the Medicare population. The carrier, Aetna, currently provides procedure codes and billing information to Medigap insurers, but not diagnosis codes.

Prospective Review. Prospective review by definition is review of health care services before they occur. BCBS/AZ prospective review includes preadmission certification, second opinions on surgeries, and mandatory outpatient surgery for certain procedures. BCBS/AZ provides these prospective review procedures for its private-sector clients as contracted. In the past BCBS/AZ has said that these reviews pay for themselves and provide only small savings, but they are quite popular with employers.

Retrospective Review. On a regular basis, as part of the F.R.E. program, BCBS/AZ randomly selects 30 to 40 medical records from each hospital and outpatient facility for review. All readmissions within 10 days are included in this review, which uses both the InterQual ISD-A criteria and HCFA's Generic Quality Screens to review for:

- The medical necessity for admission
- DRG accuracy
- Precertification compliance (when applicable)
- Appropriateness of discharge
- Quality assurance
- Use of physician services

The random cases are linked to claims data for each admission and are reviewed for readmission. Once claims data are linked, the admission and any subsequent readmissions are reviewed by BCBS/AZ staff at the hospital.

Under the F.R.E. program, 20 percent of all admissions are reviewed, and on average 3 percent of these cases reviewed are denied. The F.R.E. program also requires second opinions for certain procedures and on average 5 percent of those result in reversals. No provider has been dropped from the network because of F.R.E. reviews. Rather, BCBS/AZ focuses on recovering funds for any procedures found to be unnecessary. The 400 reviews conducted under

the F.R.E. program cost $120,000 per year, or $300 per review. BCBS/AZ has calculated a benefit/cost ratio of 4 to 1. These procedures duplicate many of those employed by the Medicare Peer Review Organization (PRO) and thus savings in the Medicare PPO would not cover the costs of the program.

American Biodyne Centers. In its original proposal, BCBS/AZ proposed using the American Biodyne Centers as a UR tool in the demonstration. The Biodyne approach provides mental health services to identify patients who have no physical illness but who account for a disproportionate number of physician visits. BCBS/AZ has not ma& a major effort to use the Biodyne concept in the PPO, however, although Biodyne is used in its HMO and has helped to control health care costs. BCBS/AZ is uncertain about how well it would work in the PPO environment because channeling patients into such a program is more difficult than in an HMO.

b. The Utilization Review Approach of Other PPOs

The private-sector PPO industry tends to rely on aggressive day-today management of UR, particularly preadmission review, with less emphasis on periodic physician profiles that BCBS/AZ performs. Langwell, Carlton, and Swearingen (1989) report that 78 percent of tbe PPOs that responded to the original Medicare PPO solicitation use preadmission certification as a UR mechanism, 51 percent perform concurrent inpatient reviews, 55 percent use retrospective inpatient review, and 44 percent require second opinions for selected surgical procedures. Only 23 percent make use of physician profiling in their UR programs. AMCRA (1990), does not provide data on physician profiling but points out the greater use of hands-on UR mechanisms in PPO operations: 97 percent of the 183 PPOs responding use preadmission certification as a UR mechanism, 95 percent perform concurrent inpatient reviews, 85 percent use retrospective inpatient review, and 74 percent use mandatory second opinions for surgery.

This day-today approach to management is demonstrated by the largely automated UR activities of CAPP CARE in its Orange County, California, Medicare PPO demonstration. CAPP CARE's UR activities rely heavily on the use of sophisticated computer programs used by clinically trained staff. Primary UR activities include prospective, concurrent, and retrospective review of both hospital and ambulatory services.

Prospective review is largely telephone-based, with providers calling in on CAPP CARE's toll-free number. Nurse clinicians screen patients using Appropriateness Evaluation Criteria (AEC) to approve admissions and to determine an appropriate level of care and the anticipated length of stay. All surgery (inpatient and outpatient) must have prior authorization, except for emergencies, and second opinions are mandatory for selected surgical procedures. CAPP CARE's concurrent review program uses algorithms to refine diagnoses or to determine the appropriate level of care or length of stay. The UR activities performed by the PRO at CAPP CARE hospitals have largely been assigned to CAPP CARE to avoid unnecessary overlap, although the PRO is continuing its mandated QA functions.

CAPP CARE uses retrospective review to determine contract compliance by physicians and hospitals. CAPP CARE has an automated review program for physician services, both inpatient and ambulatory. Claims data from payers are merged and compared with normative values. Comparisons are possible for a wide range of ambulatory services. Their management information system (MIS) is designed to find dozens of irregularities in claims filed by payers. These irregularities include excessive services, unneeded surgical assistants, billing mistakes, and possible fraud. It is CAPP CARE's policy to demand that providers reimburse payers for overpayments due to inaccurate billing or inappropriate services.

c. Utilization Review Provided Under Medicare

The current Medicare program provides utilization review through its contracts with carriers, fiscal intermediaries (FIs), and PROs.

Carrier Review. Medicare carriers, as part of their contracts to process Part B claims, are required by HCFA to conduct both prepayment and postpayment reviews. Carrier prepayment reviews are performed by applying three categories of screens to incoming claims. Category I screens are designed to flag for payment denial claims that are for services not covered by Medicare. Category II screens select for review claims for services that are potentially unnecessary, inappropriate, or abusive. These screens are designed by the carriers with a minimum level mandated by HCFA. There are wide variations in how carriers implement the HCPA-mandated screens and in the number of optional screens individual carriers use. The General Accounting Office (GAO) (1988b) reported that the number of optional screens carriers use ranged from 5 to 177--and four carriers also use diagnosis codes to determine whether such services as electrocardiograms, were necessary given the diagnosis. Category III screens are designed to flag for review all claims of providers who have been identified as having abnormal practice or billing patterns.

Carrier postpayment review is designed to analyze aggregated claims data for physicians and suppliers. Physicians and suppliers who are in the upper 3 percent of utilization norms for the greatest number of categories are selected for further review. If local conditions do not justify abnormal practice patterns, the carrier discusses with the providers how their practice or billing patterns differ from their peers'. When this fails or when more serious eases are discovered, the carrier may flag the provider for 100-percent review under the Category III prepayment screens, perform an integrity review in which past claims are further examined and medical records might be reviewed, or, in eases of suspected fraud, refer the ease to the Inspector

General of the Department of Health and Human Services for further investigation. Carrier reviews result in denied payment for about 9 percent of annual Part B claims (GAO 1988b).

Fiscal Intermediary Review. The FIs perform utilization review in processing claims for Part A benefits and Part B services under their authority. To avoid duplicating PRO review, FI hospital review is limited to questions of coverage, diagnostic uxiing, and verification of eligibility and copayments. Like carrier review, FI review is fully automated, with screens for unacceptable diagnoses (which do not fully characterize a patient's current illness or injury) and questionable diagnoses (which could indicate unnecessary admission to the hospital). Unacceptable claims are returned to the hospital for correction and resubmission. Questionable claims are processed but referred to the PRO for possible postpayment review. Similar screens are used to detect invalid codes, noncovered procedures, and procedures for outpatient surgery claims for which coverage is questionable. FIs may institute optional UR screens, but a GAO study (1988b) found that 77 percent of FIs do not use optional screens and that the maximum number of optional screens employed was seven. FI review of other services includes:

- Skilled nursing facilities (SNFs). The FI review for SNFs is more in-depth than the review of hospital claims. Each admission to hospital-based SNFs and at least 30 percent of non-hospital-based SNF admissions are reviewed for medical necessity and appropriate level of care. To make these determinations, this review requires examination of medical records and all claims.

- Home health. FIs review about 52 percent of home health bills to assure that the services are covered under Medicare's limited home health coverage. Medical records are requested when this information is needed On an annual basis, the FIs randomly select and review medical records of 20 beneficiaries Per home health provider to determine the accuracy of the information reported to HCFA

- Comprehensive outpatient rehabilitation facilities. All claims that are identified as being provided by a comprehensive outpatient rehabilitation facility are reviewed for coverage and necessity of treatment.

- Outpatient physical therapy. HCFA has developed screens for FIs to use in their review of outpatient physical therapy claims. These screens--

based on diagnostic codes, duration and frequency of treatment, and date of onset of illness or symptoms-are used to identify unnecessary and noncovered services. Claims failing these screens are forwarded to the FI's medical review staff.

- Hospice. FI review of hospice services focuses on the necessity and adequacy of the care provided and on the accuracy of hospice billing. In their review, FIs examine hospice claims as well as medical records and plans of care . All hospital admissions for hospice patients and care for beneficiaries who leave the hospice program are reviewed for necessity, coverage, and potential provider abuse.

These review activities all tend to focus on questions of coverage and medical necessity, with particularly close attention paid to services with strictly limited coverage under Medicare.

Peer Review Organizations. The Medicare PROs provide utilization and quality-of-care review for inpatient hospital services. PRO review encompasses both prospective and retrospective review procedures. To determine the appropriateness of an admission or procedure, preadmission and preprocedure reviews are performed for selected diagnoses determined by the PRO to often be unnecessary. The determination as to which diagnoses receive precertification is made based on findings from retrospective reviews-plus some services targeted by HCFA. PRO retrospective review examines cases again for the appropriateness of services provided. Gases are selected for review based on a 3-percent random sample of discharges and a series of screens that may indicate problems, such as readmissions, day and cost outliers (those long-term or high-cost patients as defined under the prospective payment system), and cases referred by the FL For these cases the PROs review the medical records, paying attention to coverage, correct DRG coding, and the necessity and appropriateness of the admission and discharge.

The data collected in PRO reviews is also used to profile individual physicians and hospitals. Profiles are used to identify providers with abnormal billing and treatment practices and problems with quality of care. Specific utilization issues that PROs examine include admission failure rates, claims denial rates, and, for hospitals, incorrect DRG coding. Providers

shown to be above the norm for these criteria may receive more intensive review on future claims filed. A GAO survey (1988a) of PROs found that the majority of PROs view retrospective review and profiling to be more effective for identifying utilization problems than preadmission and preprocedure reviews.

d. Conclusions

BCBS/AZ's emphasis on physician profiling as the main thrust of Senior Preferred's UR program met with skepticism in the early stages of the demonstration, mainly from PPO industry experts on the various PPO advisory panels. It is too soon to draw any conclusions about the actual effectiveness of this approach in the Medicare environment. We can, however, evaluate the viability of this approach in the Medicare system and its potential for net cost savings. Certain relevant items must be considered:

- BCBS/AZ has no authority to deny payment for claims for which the carrier authorizes payment.
- BCBS/AZ is the FI, and is presumed to be providing as adequate a review of claims as the PPO could perform.
- The Medicare prospective payment system provides adequate incentives for hospitals and physicians to limit the length of inpatient stays.
- PRO review of Medicare admissions and BCBS/AZ review of non-Medicare admissions may modify the behavior of Senior Preferred physicians.
- Reviews of medical records in the M.O.R.E. program identify billing irregularities/fraud that could slip by carrier and FI screens.

Give& these factors and the costs involved in setting up and operating UR mechanisms such as comprehensive claims screening, physician profiling as a UR tool may prove to be effective at cutting the costs of claims. The key items that will produce cost savings are the use of PPO providers, BCBS/AZ's abiity to select and retain providers with truly conservative treatment

patterns, and a large enough provider network and pool of beneficiaries to offset the costs of the PPO. The features of Medicare UR presented herein are based on HCFA requirements of carriers, FIs, and PROs and on a GAO survey of these organizations.

## 5. Quality Assurance

The primary goal of any Medicare PPO is to control utilization and thus reduce Medicare payments, but the quality of care must not be compromised. To this end, the Medicare PPO demonstration sites are required to maintain a structured QA program. The QA program in place at BCBS/AZ is structured around three components-the medical office review and evaluation M.O.R.E. program, the concurrent inpatient review provided by PPO hospitals, and the patient grievance and appeals process. These programs, and quality assurance in general, are guided and supervised by five BCBS/AZ committees with a mandate to monitor quality issues.

### a. M.O.R.E. Prowm

The first component of BCBS/AZ's QA program is the M.O.R.E. program. The M.O.R.E. program provides, through claims review and onsite visits, detailed examinations of: (1) The content of medical records and claims, (2) general office facilities, safety, and hygiene, and (3) laboratory and X-ray facilities and procedures.

Content of Medical Records and Claims. Before a M.O.R.E. onsite review, a random sample of 30 paid claims per physician is drawn for review. The nurse reviewers then examine copies of the claims for:

- Subscriber and provider ID numbers
- Completeness of claim submitted
- Effective/termination dates of contracts and whether payments were made according to contract, policy, and procedure

- Diagnostic codes: Submission of CPT codes and any changes made when the claim was automated, ICD codes and descriptions, and the allowable charge for this code
- Total paid for the claim and whether a duplicate claim was filed or paid
- Identification of problems to be investigated before the office review

The claims reviewed prior to the office visit are then compared to medical charts at the physician's office for potential coding errors, for coding for the appropriate level of service, and for inclusion of all information required by HCFA. Medical charts are also reviewed for completeness, organization, security, and legibility. And attention is paid to whether or not the office consistently collects copayments or coinsurance from patients.

Office Facilities, Safety, and Hygiene. The M.O.R.E. review of office facilities begins with the adequacy of the front office, waiting area(s), personnel, and general office safety. Access for handicapped patients and the presence of CPT-4 code books are noted and the office's ledger card system is reviewed for adequacy. The adequacy of office staff is evaluated by a count of the number of employees and their professional backgrounds (RN, LPN, and so forth), the number of people certified as CPR-trained, and the number of patients seen per hour. Office safety and hygiene are examined in the following areas:

- Disposal of infectious materials
- Presence and location of fire extinguisher
- Presence and completeness of emergency kits and supplies
- Disposal of needles
- Presence of expired drugs
- Use of exposure badges for X-rays

The administration and documentation of medications is reviewed, with particular emphasis on the storage and logging of controlled substances.

Laboratory and X-ray facilities and procedures. Inventoried for key pieces of equipment and supplies that are necessary for common tests. Breakdowns are made for the areas of hematology, chemistry, and microbiology. In addition, labs are reviewed for quality based on 13 criteria, including certification and continuing education of lab personnel, organized workspace, safety equipment, instrument calibration and maintenance log, proper reagent management and storage, written daily quality-control protocol, and external accreditation. In the evaluation of X-ray facilities, the M.O.R.E. reviewers examine the technology of the X-ray machines (film type, screen type, automatic processing, and the like), the maintenance schedule, whether interpretation is done in-house or sent out, the posting of certificates and warnings, and the presence of a protective apron.

Operational experience. In 1989, 15 to 20 physicians were dropped from the panel because of the M.O.R.E. visit. Quality-of-care problems were found in only six out of 400 M.O.R.E. visits, and those physicians were reported to the Board of Medical Examiners. Nine of the remaining physicians were dismissed because of billing practices. So far in 1990, 24 physicians have been dropped, mostly because of problems with business practices rather than quality of care. Experience with the M.O.R.E. program has shown that if the result of a site visit is a recommendation for a change in facilities, the physician usually makes the change. If the recommendation is for a change in charting, sometimes the physician will make the change. And if the recommendation is for a change in coding, the physician usually will not make the change.

BCBS/AZ's focus with the M.O.R.E. program has been on developing standards, as the program is relatively new (three years old). Now BCBS/AZ is moving toward publishing the standards in advance and giving physicians more feedback on where they stand relative to the standards. The company also would like to make more frequent M.O.R.E. office visits. Currently

BCBS/AZ reviewers visit physician offices once every 24 months. They are developing software that should streamline the review process and allow for more frequent visits. The 800 office visits with M.O.RE cost $220,000 a year, but the new software should reduce that cost by about a third. BCBS/AZ is also performing some outcomes review as part of the M.O.R.E. program. These reviews are performed when adequate data are available to track office visits that result in hospitalization and resulting adverse outcomes.

b. Concurrent Review

The second component of the quality assurance program is the concurrent review process, which is designed to control inpatient utilization and assure quality care in the hospital. Admissions are reviewed for medical necessity and patients are monitored at five-day intervals for quality of care by the hospital UR/QA staff.

c. Grievance Process

Patient grievance mechanisms also serve as quality checks. Patients with grievances can correspond directly with the PPO; contact the medical review, claims, or personnel departments; or contact the broker. Problems with claims payments are handled through claims administrative review and denials of care through medical review. Most grievances involve reimbursement problems. For both PPO products, BCBS/AZ receives an average of two grievances a month. That average has not increased with the increased enrollment in Senior Preferred Those grievances have not been related to adverse medical outcomes, but to billing practices or the deportment of physicians. One physician was terminated because of multiple grievances. As discus4 in its application, BCBS/AZ plans to do a patient satisfaction survey of Senior Preferred enrollees to assess the reactions to the provider panel and the service and benefits.

d. Quality Assurance Committees

BCBS/AZ has five quality assurance committees: the Medical Standards Committee (which handles M.O.R.E. findings), the Medical Deletions Committee (which decides upon physician sanctions based on results of the M.O.R.E. findings), the UR Committee (which focuses on inpatient care), the Professional Committee (which focuses on new procedures and technologies and BCBS/AZ's policies about covering them), and the Ethics Committee (which handles about 4 cases per year). The company feels that there are no particular problems or issues in applying QA to an older population. They are, however, experienced with the needs of the elderly and so may approach the issue differently than a PPO with only private-sector experience.

e. Sanctions

Sanctions imposed on providers for QA infractions include denial or return of payment and ultimately removal from the network. Serious ethical issues or problems involving the quality of care are reviewed by a BCBS/AZ ethics panel and, if warranted, referred to the State of Arizona Board of Medical Examiners.

f. Medicare Quality Review

The three main review organizations in the Medicare program-carriers, FIs, and PROs--all review quality-of-care as well as utilization and payments. Carrier and FI quality assurance activities are largely reviews of cases that are identified in the claims review procedures outlined above. Cases involving potential quality-of-care problems are referred to medical directors or medical review committees for further investigation. The FIs are also mandated to carry out quality assurance visits to the homes of beneficiaries in the hospice program

Medicare quality assurance activities are carried out mainly by the Medicare PROs, based on the retrospective reviews described above. Cases under review are screened for potential quality-of-care problems based on HCFA's six "generic" quality screens:

- Adequacy of discharge planning
- Medical stabiity of the patient at discharge
- Deaths
- Nosocomial (hospital-contracted) infections
- Unscheduled return to surgery (for the same condition or to correct problems with the initial operation)
- Trauma suffered in the hospital

Cases that fail any of these screens are referred to PRO physician advisors for further quality-of-care assessments. Individual PROs implement additional screens designed to further identify premature discharges and other quality issues. Provider-specific quality review is also performed as a result of PRO provider profiling. Hospitals and physicians with excessive rates of screen failure or patient mortality, and who fail to meet PRO quality objectives, may be selected as the focus of future PRO review activity.

g. Conclusions

BCBS/AZ's QA program is much more comprehensive than that in most private sector PPOs which, as a result of the desires of their clients to minimize costs, do not emphasize structured QA programs. Langwell, Carlton, and Swearingen (1989), in their examination of PPOs which responded to the initial Medicare PPO solicitation, found that PPOs tend to rely on the selection and retention of "quality" physicians to assure quality of care. The M.O.R.E. program with its onsite facility reviews adds a valuable dimension to the QA performed by the Medicare PROs. The F.R.E. program on the other hand, would duplicate functions of the PRO if the F.R.E. program were included in the Medicare component.

# III. IMPLICATIONS FOR REPLICATING THE BCBS OF ARIZONA MODEL

In this chapter, we assess the viability of BCBS/AZ's Medigap PPO model and its potential effectiveness in containing costs, and discuss implications for replicating the model in other parts of the country. We begin by examining these issues from the perspective of the insurance and managed-care industries, identifying potential entrants in the Medigap PPO market, the current level of interest in the industry, perceived incentives to develop a Medigap PPO, and industry views on government actions that would make the model more viable and effective. We then examine the viability and effectiveness of the Arizona Medigap PPO model in greater detail, focusing on (1) potential incentives for beneficiaries to enroll in a Medigap PPO and, once enrolled, to use network providers, (2) incentives for providers to participate in a Medigap PPO, and (3) the Medigap PPOs' potential effectiveness in containing costs.

## A. THE MEDIGAP INDUSTRY

The private Medigap insurance industry has existed nearly as long as the Medicare program According to recent estimates, more than 70 percent of Medicare beneficiaries have private health insurance to supplement their regular Medicare coverage (Rice et al. 1989, Nelson et al. 1989). Many Medicare beneficiaries have enrolled in more than one Medicare supplemental insurance policy. In a recent survey of 500 elderly beneficiaries sponsored by the Health Insurance Association of America (HIAA), 85 percent of those covered by Medigap were enrolled in one supplemental policy, 12 percent were enrolled in two policies, and 3 percent were enrolled in three or more policies (Rice et al. 1989).

Medigap insurance is supplied by Blue Gross and Blue Shield plans, which have a market share of about 40 percent, and by commercial insurance companies, which have virtually ail the rest of the market. In 1988 more than 45 Blue Gross and Blue Shield plans and more than 280

commercial insurers offered Medigap plans.[12] Virtually all Blue Cross and Blue Shield plans offer Medicare supplemental insurance. In terms of direct premiums earned, the commercial insurance market is dominated by the five firms identified in Table III.1.

TABLE III.1

FIVE LARGEST MEDIGAP COMMERCIAL INSURANCE COMPANIES

| Commercial Insurance Company | Direct premiums earned ($000) in 1988 |
|---|---|
| Prudential Insurance Company of America | $1,122,307 |
| United American Insurance Company | 308,355 |
| Bankers Life and Casualty Company | 279,337 |
| Mutual of Omaha Insurance Company | 173,881 |
| Health Care Service Corporation | 127,253 |

1. Regulation

The McCarran-Ferguson Act, passed in 1945, specifies that state agencies have regulatory jurisdiction over insurance companies. In 1978, in response to concerns that Medigap products had been misrepresented to some Medicare beneficiaries, the National Association of Insurance Commissioners (NAIC) appointed a special task force to investigate how private supplemental insurance was marketed to the elderly. The NAIC study and recommendations convinced policy-makers that federal involvement was needed to supplement state regulation of the Medigap insurance industry. So, in 1980 Congress authorized a voluntary certification program in what became known as the Baucus amendment Under the Baucus amendment, states retain

[12]The estimated market share for Blue Cross and Blue Shield is based on an interview with Gary Meade, Executive Director, Alternative Delivery Systems Product Performance, Blue Cross and Blue Shield Association of America. Industry-wide data are from the National Association of Insurance Commissioners (January 1990). The data contained in the NAIC report are for 1988, for both individual and group policies.

regulatory jurisdiction over the insurance industry, but their regulatory standards must meet or exceed the minimum standards contained in the federal NAIC model requirements.

Since 1982, when the NAIC minimum standards were initially implemented, the NAIC has revised its model standards twice. The NAIC model was first revised in 1988 after passage of the Medicare Catastrophic Act and was revised again in December 1989 after that act was repealed. The new NAIC standards require that at a minimum Medicare supplemental policies include the following benefits:

- Coverage for either all or none of the Medicare Part A inpatient hospital deductible amount ($592 per benefit period in 1990).
- Coverage of Part A eligible expenses for hospitalization to the extent not paid by Medicare from the 61st through the 90th day in any Medicare benefit period ($148 per day in 1990).
- Coverage of Part A Medicare eligible expenses incurred as daily hospital charges during use of Medicare's lifetime hospital inpatient reserve days ($296 for each lifetime reserve day used in 1990).
- Upon exhaustion of all Medicare hospital inpatient coverage, including lifetime reserve days, coverage of 90% of all Medicare Part A eligible expenses for hospitalization not covered by Medicare, subject to a lifetime maximum benefit of an additional 365 days.
- Coverage for the reasonable cost of the first three pints of blood or equivalent quantities of packed red blood cells per calendar year unless replaced in accordance with Federal regulations.
- Coverage for the copayment amount (generally 20 percent) of Medicare-eligible expenses under Part B after the annual $75 Part B deductible (NAIC and HCFA 1990).

States have one year (until December 13, 1990) to adopt standards that meet at least the minimum NAIC model. Existing state laws are in effect until state standards are revised. The implications of these NAIC regulations for the potential development of Medigap PPOs are discussed below.

## 2 Entrants to the Medigap PPO Market

Firms that could be in a position to develop, implement, and operate a Medigap PPO plan include operational PPOs and commercial insurance companies, BC/BS plans, and health service corporations with operational Medigap plans. The firms most likely to develop and operate a Medigap PPO plan are insurance companies or health service corporations[13] that currently offer either Medigap or PPO products. To get an idea of industry views about the types of firms most likely to enter the Medigap PPO market, and about the level of interest in entering this market, we conducted telephone interviews with eight insurance industry representatives, one health insurance consultant, and two HCFA staff members. In addition, we interviewed representatives from four Blue Cross and Blue Shield plans in states other than Arizona that currently offer Medigap plans that have some of the features of PPOs, in order to obtain information on the characteristics of these plans. The individuals we interviewed are identified in Appendix B.

### a. Costs of Entry

The insurance industry representatives all stated that a Medigap insurer which offers a PPO in its private business would have the lowest cost of entry into the Medigap PPO market, since such a firm would be experienced in offering Medigap products and would have a provider network in place. An insurer that has a PPO plan but not a Medigap plan would have lower costs of entry than an insurer that has a Medigap plan but no provider network for other health insurance plans. Existing PPOs have lower costs because it is much less expensive to modify an operational PPO to include Medigap coverage than to modify a Medigap plan by adding a PPO network built from scratch. Two industry representatives speculated that the startup costs for a Medigap PPO would be relatively low once a PPO network is in place. But, another

[13]Health service corporations are firms (such as Blue Cross and Blue Shield plans) that contract directly with providers to render health care services.

representative with some knowledge of BCBS/AZ's experiences implementing Senior Preferred commented that it is difficult to modify a PPO product for the Medicare market because PPOs were originally designed for a private, younger population. Medicare carriers have an advantage over other firms because of their access to claims data To be cost-effective, managed care programs such as PPOs need access to detailed claims data for utilization management and quality assurance.

b. Operational Medigap PPOs

In addition to BCBS/AZ's Senior Preferred, we have identified five other BCBS plans with Medigap products that have some of the features of a PPO: Blue Cross and Blue Shield of Alabama, Hawaii Medical Service Association, Blue Shield of California, Blue Cross and Blue Shield of Minnesota, and Blue Cross and Blue Shield of Missouri. Four of these plans are briefly described below.[14]

BCBS of Alabama C Plus with Preferred Medical Doctors. BCBS of Alabama's Medigap plan, C Plus with Preferred Medical Doctors (PMD), has been in operation since 1985. The plan serves the entire state of Alabama, and currently has 182,000 enrollees. The provider network includes about 5,000 physicians, which is 88 percent of the physicians in Alabama No hospitals are included in the network.

BCBS of Alabama does not attempt to attract enrollees to its Medigap plan through lower premiums, but rather emphasizes the firm's reputation and the benefits covered. The representative we interviewed indicated that the plan's premiums are slightly higher than the premiums for most other Medigap plans available in Alabama Once beneficiaries are enrolled in the plan, they face two incentives to obtain physician services within the network First, after

[14]The Medigap PPO offered by Blue Cross and Blue Shield of Missouri is not described because we were unable to schedule an interview with anyone from this plan.

meeting the Part B deductible, enrollees are assured of no out-of-pocket costs on most Medicare approved physician services when they remain within the network, but they are fully liable for balance bills incurred outside the network.[15] Second, enrollees are not required to file claims when they use network physicians.

The plan has established a set of allowed charges which in general exceed the Medicare allowed charge, so network physicians can receive payments in excess of the Medicare allowed charge without balance billing the patient. When enrollees obtain care from a network physician, the plan covers the 20 percent coinsurance plus the amount by which the plan-allowed charge exceeds the Medicare allowed charge. When enrollees obtain care from a non-network physician, the plan covers the 20 percent coinsurance, but not balance bills.

The BCBS of Alabama Medigap plan does not use physician profiling, does not select physicians into the network on the basis of cost effective practice styles, and does not employ any utilization review procedures. Since the plan does not employ any cost containment mechanisms and allows network physicians to receive payments in excess of the Medicare allowed charge without balance billing their patients, it is not surprising that the plan has been very successful in attracting physicians. Given these features, it is questionable whether this plan should be regarded as a true Medigap PPO.

Hawaii Medical Service Association 65 C Plus Plan. The Hawaii Medical Service Association 65 C Plus Plan was introduced in August 1986.[16] It serves the entire state of Hawaii, and currently has an enrollment of approximately 19,500 beneficiaries. The physician PPO network includes approximately 1,000 PAR providers, which is 60 percent of the total

[15]The plan covers 20 percent of the Part B deductible, regardless of whether a network physician is used Thus, the enrollee's obligation for the deductible is reduced from $75 to $60.

[16]The Hawaii Medical Service Association regards this plan as a PPO, but it is regarded by HCFA as a cost-contracting HMO.

physician population in Hawaii. The network does not include hospitals. The network physicians have agreed to accept the Medicare allowed charges as payment in full for enrollees. When enrollees use a network physician, they pay a $5 copayment; when non-network physicians are used, enrollees are responsible for the $75 Part B deductible and any balance bill amounts. The plan does not select physicians into the network on the basis of cost effective practice styles. The 65 C Plus plan does some physician profiling but does not employ any other utilization review procedures. If a physician's practice patterns are considerably higher than normal, a warning letter may be sent, but the company's representative did not think that a network physician's contract has been canceled due to expensive practice patterns.

Blue Shield of California Preferred Senior Plan. Preferred Senior, the Medigap PPO plan offered by Blue Shield of California, began operations in the winter of 1988. In May 1990 it had 492 enrollees, and served Los Angeles, Orange County, the San Francisco Bay Area, and rural areas in portions of California. A new marketing program is scheduled to begin in July 1990, and Senior Preferred hopes to serve the entire state of California by September 1990. Blue Shield of California also has 56,000 beneficiaries enrolled in three standard Medicare supplemental insurance plans, which vary in the amount of coverage provided.

Preferred Senior has contracted with 159 hospitals and 9,000 physicians (28 percent of the physicians in the state) recruited from the Blue Shield panel. When PPO enrollees use network hospitals, they do not pay the Part A deductible, and when enrollees use network physicians, they are assured of not being balance billed. The plan also includes membership in the Senior Health, Education, and Wellness Program, and optional coverage for outpatient prescription drugs.

Physician practice patterns are screened before they are permitted to join the network, and they are monitored once they are in the network. Preferred Senior does not use any other utilization review measures.

BCBS of Minnesota Senior Gold. Senior Gold, the Medigap PPO plan offered by BCBS of Minnesota, has been in operation since August 1986. The plan currently has approximately 22,000 enrollees, and serves the Minneapolis/St. Paul metropolitan area, the St. Cloud area, and other scattered areas in Minnesota where they have a viable provider network The network includes both physicians and hospitals. When enrollees use network physicians, they are assured that they will not be balance billed; when they use network hospitals, the plan covers the Part A deductible. When enrollees obtain care outside the network, they are fully liable for balance billing and for the Part A deductible (except for hospital admissions in emergencies or in hospitals over 50 miles from the Minnesota state border). The plan also includes other benefits such as routine cancer screening services and some services and supplies for the treatment of alcoholism and chemical dependency.

Senior Gold uses physician profiling to identify physicians with expensive practice patterns, and then subjects those physicians to more intensive review. The plan does not employ any other UR procedures, however.

Network physicians have agreed to accept 80 percent of their usual, customary, and reasonable fee as payment-in-full for Senior Gold enrollees. When enrollees use a network physician, Senior Gold uses an indirect payment procedure. With the indirect payment procedure, the network physicians bill BCBS/MN directly, and BCBS/MN pays the provider the amount agreed upon in the contract. BCBS/MN then submits the claim to the Part B carrier to receive Medicare's portion of the bii When Senior Gold enrollees use a non-network physician, the plan does not use the indirect payment procedure. Instead, the plan covers the Part B deductible and the 20 percent Part B coinsurance up to the Medicare approved charge.

### 3. Incentives for Insurers to Offer a Medieao PPO

The Blue Cross and Blue Shield representatives interviewed for this report were more positive in their assessment of the current viability of Medigap PPOs than were the representatives of commercial insurance companies, although both identified several impediments to the expansion of Medigap PPOs. The major commercial Medigap insurers are not interested in developing Medigap PPOs unless some of the major concerns they cited are addressed. The concerns cited by both commercial insurers and Blue Cross and Blue Shield representatives include:

- The administrative costs of a Medigap PPO program would be high
  - A Medigap PPO plan would have to analyze Medicare claims data for quality assurance, utilization review, and physician profiling activities. These data are costly to obtain
  - Once the Medicare claims data are obtained, many resources are required to correctly format existing records to match Medicare claims records.
  - It might be difficult to coordinate operational activities between the carrier and the plan's staff.
- The financial viability of Medigap PPOs is questionable, since the major portion of the savings generated by the PPO's cost containment procedures will accrue to the Medicare program rather than the Medigap insurer. Since the Medigap insurer's costs for Medicare covered services consist of deductibles and winsurance, the reduction in Medigap payments may not be sufficient to offset the costs of developing, marketing, and administering the PPO.
- A PPO's ability to control costs depends on its success in channeling enrollees to network providers. However, Medigap PPOs are currently limited in the extent to which they can penalize enrollees for obtaining care outside the network, since the NAIC model regulations require Medigap insurers to cover the full 20 percent Part B coinsurance.
- It might be difficult to negotiate discounts with prospective network providers. The Medicare market is already discounted, since many physicians already accept assignment (at rates below those charged in the non-Medicare market).

- It would be difficult to educate beneficiaries about Medigap PPOs. In general, beneficiaries are not well-informed about their basic Medicare and Medigap benefits and often providing them with more information does not increase their understanding (Nelson et al. 1989, Rice et al. 1989). This deficient understanding is exacerbated by introducing the concept of a PPO. A PPO is harder to understand than an HMO. Educating the work force about PPOs is difficult; educating the elderly could be a "nightmare."

- The Medicare market is fragmented; the front-end of the payment decision (the Medicare program) is administered separately from the back-end (the supplemental insurance coverage), and Part A is administered separately from Part B. This fragmentation makes it difficult for insurers to contain costs through utilization review (since Medicare, the front-end, makes the claims decision) or to use a uniform claims data system, which would permit the insurer to integrate the financing of the plan with the payment and data systems, and to identify all services rendered in a given episode of care in order to perform utilization review and quality assurance.

- Informations systems used by Medicare and PROs for utilization management are not as sophisticated as the information systems used by the private sector. The utilization review programs of private insurers are fully integrated with their payment systems.

- The current cost-plus arrangements between Medicare and the carriers and FIs are a disincentive for managed care. Payments to carriers and FIs are based on the dollar volume of claims they handle. Under managed care, however, the dollar volume of claims should decline.

- Currently, there is a lot of liability litigation in the Medigap industry. Utilization review performed by Medigap PPOs could substantially increase the amount of liability litigation.

In response to these concerns, HCFA could provide the following incentives to encourage the development of Medigap PPO plans:

- HCFA could provide easier, cheaper access to detailed claims data for Part A and Part B.

- HCFA could clarify whether Medigap PPOs would be allowed to negotiate with hospitals to reduce deductibles and coinsurance.

- HCFA could seek to have the NAIC model regulations modified for Medigap PPOs to permit penalties for out-of-network use.

- HCFA could pay 85 percent of allowed charges if enrollees use network providers. (The Department of Defense is doing this for the CHAMPUS PPO.)

- HCFA could cover some of the plans' administrative costs, since most of any prospective savings will accrue to HCFA.

- HCFA could assure the industry that the Medigap PPO concept is not a fad. Currently, there is concern about the stability of the Medicare program because of the short-life of the Medicare Catastrophic Coverage Act Firms are reluctant to enter a program they perceive as temporary.

- The role of PROs should be clarified. A Medigap PPO that performs utilization review may not want any of their decisions overruled by a PRO.

- Many of the commercial insurance industry representatives believe that Medigap PPOs are more viable when marketed to groups rather than to individuals. It is easier to communicate information about changes in the plan or in the composition of the provider network to groups than to individuals. A commercial insurance company marketing to individual beneficiaries may be more interested in developing a Medigap PPO if the government gave the insurer a franchise for a particular locale. (Blue Cross plans already have local franchises.) For example, the insurer could be given an exclusive right to market a Medigap PPO in a particular portion of a state. This would be a way for the insurer to gain market share.

- HCFA could educate beneficiaries about how PPOs can lower their out-of-pocket costs.

## B. BENEFICIARY INCENTIVES

Central to an assessment of the feasibility and effectiveness of a Medigap PPO is the question of whether incentives can be designed to encourage enough Medicare beneficiaries to enroll in the PPO and then, once enrolled, to get most of their medical care from network providers. To be most effective, a Medigap PPO must enroll not only patients of network physicians but also other beneficiaries, providing incentives for them to switch from their current physician to a network physician Thus network physicians can increase their patient load, which is their primary incentive for participating, and wntriiute to cost savings through more cost-effective treatment of these patients.

1. Beneficiary Incentives That Medigap PPOs Could Offer

In discussing the beneficiary incentives a Medigap PPO could offer, it is useful to distinguish between incentives (1) to enroll in the PPO and (2) once enrolled, to select providers from within the network This distinction is useful for organizing our discussion, but it is important to remember that the decision to enroll in a PPO will be influenced by incentives to get care within the network once enrolled.

The two main types of incentives that would encourage beneficiaries to enroll are (1) a lower premium than other Medigap plans charge for comparable benefits and (2) coverage for additional services not offered by comparably priced plans. Both of these incentives are offered by BCBS/AZ in its Medigap PPO. A Medigap PPO's ability to attract enrollees will also be affected by the size and composition of its provider network and the penalties for out-of-network use. In general, a PPO that imposes mild or moderate penalties for out-of-network use will be more attractive to beneficiaries than one that imposes severe penalties. A relatively large physician network offers enrollees more options and many beneficiaries could join the PPO without switching physicians. But including proportionately more area physicians in the PPO network may diminish the PPO's ability to control costs, particularly for a PPO such as BCBS/AZ that seeks to control costs through physician screening and monitoring rather than more traditional utilization management procedures. Finally, a Medigap PPO's ability to attract enrollees will depend on the reputation of network providers for delivering high quality care and on the convenience of their location.

Once beneficiaries are enrolled in the PPO, the PPO's ability to control costs will depend on the extent to which enrollees obtain care within the network-that is, within a managed care environment. In their private lines of business, PPOs try to channel enrollees to network providers by having them pay a higher share of costs for care received outside the network. But Medigap PPOs are currently limited in the extent to which they can impose penalties for out-of-

network use, since the NAIC model regulations require Medigap plans to cover the full 20 percent coinsurance under Medicare Part B. Currently, the best way to channel enrollees to network physicians is to require network physicians to accept assignment on all claims for PPO enrollees and to provide no coverage for balance billing incurred outside the network.[17] This is a relatively weak incentive since a large percentage of Part B claims are currently accepted on assignment.

Medigap PPOs would have more leverage to influence enrollees' choice of physician if the NAIC model regulations were modified to allow them to cover less than the full 20 percent Part B coinsurance when enrollees use non-network physicians. Medigap PPOs could then design benefit plans in which enrollees are fully covered for services provided by network physicians but are required to pay a portion (such as 10 percent) of the Medicare-approved charge as well as balance-billed amounts on claims outside the network.

BCBS/AZ's Medigap PPO provides incentives for enrollees to use both network physicians and network hospitals. The plan fully covers the Part A deductible only if care is received at a network hospital, the deductible is not covered if care is received at a non-network hospital, except in the case of an accident or medical emergency. Channeling patients to network hospitals is a particularly useful approach to controlling costs in a PPO's private lines of business, since PPOs generally negotiate reimbursement arrangements with hospitals based on discounted charges or per diems. But Medicare pays hospitals under the prospective payment system, in which hospitals receive a predetermined payment per discharge that depends on the diagnosis related group (DRG) to which the patient is assigned. Thus, unlike PPOs serving private sector clients, a Medigap PPO does not have an incentive to perform aggressive concurrent review of hospital stays to ensure that patients are treated cost effectively and discharged promptly, the DCG

[17]Physicians who accept assignment on a Part B claim agree to accept the Medicare-approved charge as payment in full and not bill the patient for the balance.

payment system already provides such incentives. However, channeling Medigap enrollees to network hospitals could generate cost savings if the PPO performs post-admission review at network hospitals to identify cases of inappropriate hospitalization, and then acts to deny payment to the hospital.

Another potential advantage to a Medigap PPO of channeling Medicare enrollees to network hospitals is that the Medigap insurer may be able to negotiate arrangements with these hospitals whereby the Part A deductible is completely or partially waived for PPO enrollees. This would reduce the Medigap PPO's benefit payments, enabling it to reduce its premium and/or offer additional services to enrollees. BCBS/AZ has negotiated such arrangements with its network hospitals. But the insurance industry representatives we interviewed expressed uncertainty about whether current Medicare regulations permit a hospital to waive the Part A deductible under such an arrangement with a Medigap PPO.

### 2 The Potential Effectiveness of Medigap PPOs at Enrolling Beneficiaries and Influencing Provider Choice

To assess the potential effectiveness of Medigap PPOs at enrolling beneficiaries and inducing enrollees to receive care within the network, we begin by providing an overview of the potential market for such a product, and discuss the relevant considerations for beneficiaries in deciding whether to enroll. We then assess the potential response of beneficiaries to the availability of a Medigap PPO option. Finally, we assess the likely effectiveness of Medigap PPOs in influencing enrollees' choice of provider through financial incentives. Throughout the discussion, we draw on the relevant literature on PPO experiences in the private sector and other relevant literature, as well as the experiences of BCBS/AZ.

a. The Potential Market for Medigap PPOs

The potential market for Medigap PPOs is Medicare beneficiaries (1) currently enrolled in a traditional Medigap plan, (2) not currently enrolled in a Medigap plan, or (3) enrolled in a Medicare HMO. Below we discuss what beneficiaries in each group would consider in deciding whether to enroll in a Medigap PPO.

About 71 percent of all Medicare beneficiaries not enrolled in a Medicare HMO are covered by Medigap insurance, 20 percent rely exclusively on Medicare for their insurance coverage, and the remaining 9 percent are dually eligible for Medicare and Medicaid (Nelson et al. 1989, Gordon 1986). The study by Nelson et al., based on data from a national survey of about 2,000 Medicare beneficiaries conducted by Mathematica Policy Research, Inc. for PPRC,[18] found that the percentage of beneficiaries covered by Medigap insurance varies with income, as follows:

- Below the poverty level: 37 percent
- 100 to 150 percent of the poverty level: 64 percent
- 150 to 200 percent of the poverty level: 77 percent
- More than 200 percent of the poverty level: 89 percent

Rates of Medigap coverage are highest among more affluent beneficiaries, but a substantial number of poor and near-poor beneficiaries are also covered.

Among beneficiaries currently covered by Medigap, a Medigap PPO is likely to appeal most to those with lower incomes, since the primary advantage of a Medigap PPO over a traditional Medigap plan is a lower premium. The marketing materials for BCBS/AZ's Medigap PPO specifically appeal to this segment of the population, pointing out that the PPO was

[18]The survey was conducted over a nine-week period beginning November 28, 1988, on a nationally representative sample of beneficiaries not enrolled in a Medicare HMO. The survey explored a wide range of issues concerning beneficiaries' understanding of Medicare assignment policy and the Participating Physician Program, their assignment experience, and their willingness to switch physicians to obtain care on an assigned basis.

designed for beneficiaries on a "restricted budget" The findings from the PPRC beneficiary survey indicate a potentially large market for Medigap PPOs. Projecting the surv9 findings onto the national Medicare population, we estimate that 4.7 million beneficiaries nationally (representing 14 percent of the total Medicare population) are covered by Medigap and have incomes below 150 percent of the poverty level.

Beneficiaries currently covered by a traditional Medigap plan will switch to a Medigap PPO if they believe that the advantages of the PPO-the lower premium and any additional services covered-outweigh the disadvantages. Several considerations could lead beneficiaries to remain in their current Medigap plan, despite the lower premium the Medigap PPO offers. Beneficiaries may be unfamiliar or uncomfortable with the concept of a network, for example, and may be reluctant to enroll in a Medigap plan that tries to influence their choice of provider. In addition, some beneficiaries may have a strong attachment to a physician outside the network, and may be reluctant to switch physicians to obtain the financial benefits of the PPO. Beneficiaries may also be reluctant to enroll in a Medigap PPO that tries to control utilization through prior review, a concept that is likely to be unfamiliar to many Medicare beneficiaries and may cause concern about potential barriers to necessary care.

The second potential market for Medigap PPOs is beneficiaries who currently rely on Medicare as their sole third-party payer, who are not covered by Medigap or Medicaid. Findings from the PPRC beneficiary survey indicate that 20 percent of all Medicare beneficiaries fall into this category, or 6.7 million beneficiaries nationally. Beneficiaries most Likely to rely on Medicare as their sole third-party payer are those in the lower income brackets: 35 percent of beneficiaries below the poverty level and 25 percent of those between 100 and 150 percent of the poverty level have no insurance coverage other than Medicare, compared with 10 percent of those with incomes above 200 percent of the poverty level. Among survey respondents with no Medigap coverage, half reported that their primary reason for not having Medigap was the high cost. So,

by offering a lower premium than traditional Medigap plans, a Medigap PPO may be able to enroll part of this population. Beneficiaries not currently enrolled in a Medigap plan will enroll in a Medigap PPO if they conclude that the benefit of additional insurance coverage outweighs the costs-that is, the premium and any perceived disadvantages of PPO membership.

The third potential market for Medicare PPOs is beneficiaries who are currently enrolled in Medicare HMOs. About one million beneficiaries, or 3 percent of the Medicare population, are currently enrolled in HMOs under a risk contract with HCFA. Enrollees of Medicare HMOs are beneficiaries who have already expressed a preference or tolerance for managed care in exchange for the advantages of HMO membership-lower premiums (or no premiums) and more coverage than Medigap insurance. Some of these enrollees may switch to a Medicare PPO if given the opportunity, since the PPO has many of the advantages of an HMO but more flexibility in provider choice. But shifting Medicare beneficiaries from HMOs to PPOs may not advance HCFA's objective of cost containment, since the purpose of the PPO initiative is to shift beneficiaries from unmanaged to managed care.[19]

b. Beneficiary Response to a Medigap PPO

A potentially large market may exist for Medigap PPOs, but there is little evidence to predict how beneficiaries nationally would respond to the availability of such an option. The recent surge in enrollment experienced by BCBS/AZ's Medigap PPO suggests that beneficiaries will enroll if the price difference between the PPO and standard Medigap products is Iarge enough. We were unable to obtain data on the characteristics of the PPO's enrollees, but

[19]The Adjusted Average Per Capita Cost (AAPCC) payment system may be resulting in payments to many Medicare HMOs which exceed the costs HCFA would have incurred for enrollees in the fee-for-service sector. (Brown 1988, Nelson and Brown 1989). Thus, shifting beneficiaries from HMOs to PPOs could yield savings for the Medicare program, at least in the short run. However, HCFA is funding research to improve the accuracy of its payment system for Medicare HMOs.

BCBS/AZ management believe the majority of new enrollees in 1990 were individuals who switched from the firm's standard Medigap product.

Educating Beneficiaries About Medicare and Medigap Insurance. Enrolling many Medicare beneficiaries in Medigap PPOs nationally is likely to require substantial marketing efforts to educate consumers about the PPO concept generally and about the specific features of a given plan. The task of educating Medicare beneficiaries so they make informed choices about enrollment in Medigap PPOs and understand the financial penalties for receiving care outside the network should not be underestimated. A number of studies suggest that Medicare beneficiaries have a poor understanding of insurance concepts generally and of the benefits covered under the Medicare program and their current Medigap insurance plan (Cafferata 1984; McCall et al. 1986, Nelson et al. 1989). The latter two studies found that low- income beneficiaries and those without Medigap insurance are the least knowledgeable. In other words, those most financially vulnerable to high medical bills, who could benefit most from a low- cost alternative to traditional Medigap insurance, are likely to be the most difficult to educate.

Consumer ignorance about Medicare and Medigap insurance has important implications for the introduction of a Medigap PPO option. First, Medigap insurers offering a Medigap PPO must develop marketing materials that clearly explain the PPO benefit package, particularly the financial incentives to use network providers. If beneficiaries are not adequately informed about the PPO, some who would benefit from PPO membership may not enroll, and others may enroll without adequately understanding the financial incentives to receive care within the network Enrollees who incur higher than expected out-of-pocket costs due to misunderstanding of the penalties for out-of-network use could become dissatisfied with the PPO and disenroll. Misunderstandings of this type contributed to the relatively high disenrollment rates experienced by some Medicare HMOs under the Medicare Competition Demonstrations. In a study of 17 HMOs that participated in that demonstration, Brown et al. (1986) found that 23 percent of

beneficiaries disenrolled from the HMO within a year of enrollment and that 31 percent of the disenrollments were because enrollees did not understand the terms of HMO membership, particularly the lock-in provision.

The NAIC model regulations for Medigap insurance include a number of provisions to protect consumers from marketing abuses (GAO 1990). But the NAIC should consider whether introducing Medigap PPOs into the market would require additional standards for monitoring Medigap PPO marketing practices. Regulatory standards may be necessary, for example, to ensure that beneficiaries are fully informed about providers included in the PPO network and the financial penalties for out-of-network use. Standards may also be required to ensure that enrollees are fully informed of the utilization management procedures the PPO uses, particularly prior review.

Evidence from the Medicare HMO experience. In 1985, HCFA implemented regulations authorized by the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) which permit HMOs to enroll Medicare beneficiaries on a capitated payment basis. This program, known as the TEFRA HMO program, was preceded by several Medicare HMO demonstrations. Medicare HMOs differ from a Medigap PPO in several important respects. Most important, HMO enrollees are "locked in" to HMO providers and HMOs are paid on a capitation basis. But both types of organizations use a provider network, and both generally try to control costs through managed care. And both may be viewed as competing with traditional Medigap insurance plans, since most Medicare HMOs provide more generous benefits than Medigap plans at a lower premium. For these reasons, the enrolhnent experience of the Medicare HMO program is useful in assessing the potential response of Medicare beneficiaries to a Medigap PPO option.

After an initial increase in enrollments following implementation of the TEFRA HMO program, enrollment in Medicare HMOs has stabilized over the past several years at about one million beneficiaries-just under 3 percent of the total Medicare population. This lack of growth

in enrollment may reflect reluctance on the part of many Medicare beneficiaries to sever the relationship with their current physician and become locked-in to the HMO panel of providers. The lack of growth in Medicare HMO enrollments also reflects concern in the HMO industry over the accuracy of the AAPCC payment methodology. The latter is not an issue for Medigap PPOs, since they are not capitated. Medigap PPOs also address beneficiary concerns about freedom-of-choice, since PPO enrollees are covered for services received outside the network, although less generously than for services received within the network.

Evidence from the Medicare Competition Demonstrations indicates that beneficiaries who enroll in HMOs are younger, poorer, less likely to have Medigap insurance, less likely to have a regular physician or to be satisfied with their regular physician, and have a better self-assessment of their health than those who do not enroll (Brown et al., 1986). Beneficiaries who enroll in HMOs also have significantly lower Medicare reimbursements and fewer hospitalizations for chronic conditions during the period prior to enrollment (Brown, 1988). The differences between enrollees and nonenrollees are greater for staff and group model HMOs than for IPA model HMOs. For example, Medicare reimbursements for enrollees of IPA model HMOs were 23 percent lower than those of nonenrollees in the same area during a two-year period prior to enrollment, while the corresponding differences for staff and group model HMOs were 41 percent and 35 percent, respectively.

The experience of IPA model HMOs is most relevant to assessing the likely experience of Medigap PPOs, since this is the HMO model type most similar to a PPO. An IPA-HMO typically has contractual arrangements with a large number of independent physicians who treat fee-for-service patients as well as HMO patients, Thus, many beneficiaries are able to join an IPA-HMO while retaining their current physician In the live IPA-HMOs included in the Brown studies, half of the beneficiaries who enrolled were able to retain their previous physician, 30 percent switched physicians to join the HMO, and 20 percent had no regular physician before

enrolling. Beneficiaries who enroll in Medigap PPOs are likely to have many of the same characteristics as those who enroll in Medicare HMOs. However, because Medigap PPOs have weaker restrictions on provider choice than HMOs, they may attract a more representative mix of enrollees.

c. Influencing Choice of Provider

To control Medicare costs, Medigap PPOs must induce beneficiaries to find care mainly within the PPO network. Presumably Medigap PPOs will create networks of a broad range of providers, including physicians, hospitals, home health agencies, and laboratories, but influencing the enrollee's choice of primary care physician is most important because in a managed care environment the primary care physician serves as the enrollee's entry point into the medical care system.

Encouraging enrollees to remain within the network for specialist care is also critical to cost containment as services provided by specialists-particularly gastroenterologists, ophthalmologists, cardiologists, psychiatrists, and thoracic surgeons-have contributed much more heavily to the increase in total Part B spending in recent years than services provided by primary care physicians (Mitchell, Wedig, and Cromwell 1989). Unpublished data from the PPRC beneficiary survey indicate that among respondents who had filed a claim for specialist care within the prior two years, 54 percent were referred to the most recent specialist by another physician or health care professional, 23 percent were referred by a friend or relative, and the remaining 23 percent found the specialist through other means. Medigap PPOs may not be successful at channeling enrollees to network specialists through beneficiary incentives, and may find it necessary to influence the referral behavior of network physicians-by requiring them to refer within the network, for example, or providing incentives for them to do so.

The NAIC model regulations require that Medigap insurers cover the full 20 percent of Part B coinsurance, so the primary financial incentive currently available to Medigap PPOs for influencing the enrollees' choice of physician is to require network physicians to accept assignment on all claims for PPO enrollees, and to provide no coverage for balance billing when non-network physicians are used. To assess the likely effectiveness of this incentive, we provide an overview of current assignment rates and physician participation rates under Medicare, discuss variations in assignment rates by region and by specialty, and discuss expected trends in balance billing and assignment in the future following implementation of the Medicare physician payment reforms. We then discuss the findings of relevant prior research that provide insight into the potential effectiveness of a Medigap PPO in influencing enrollees to remain within the network through financial incentives in general.

Assignment, Participation, and Balance Billing. In the past decade, assignment rates on Part B claims have increased dramatically, from 50.9 percent in 1978 to 80.5 percent in 1988 (PPRC 1989).[20] Much of this increase occurred after implementation of the Participating Physician Program in 1984, which provides incentives for physicians to agree in advance to accept assignment on all claims (see Table III.2). Forty-five percent of all physicians signed participation agreements with Medicare for 1989, and participating physicians currently account for about 60 percent of all Medicare expenditures on physician services (PPRC 1990). Nonparticipating physicians are permitted to accept or reject assignment on a claim-by-claim basis. In 1987, the assignment rate among nonparticipating physicians was 30 percent (Rosenbach, Harrow, and Mitchell 1988).

[20]These assignment rates are expressed as a percentage of covered charges accepted on assignment. The percentage of claims accepted on assignment increased from 53.7 percent in 1978 to 77.3 percent in 1988.

TABLE III2

ASSIGNMENT RATES AND CHARGE REDUCTION RATES
FOR TOTAL PART B SERVICES, 1973-1988

| Calendar year | Assignment rate | | Charge reduction rate[a] | |
|---|---|---|---|---|
| | Claims | charges | All Claims | Unassigned claims |
| 1974 | 56.0 | 49.1 | 14.4 | 14.7 |
| 1975 | 55.9 | 49.0 | 17.4 | 17.7 |
| 1976 | 54.4 | 48.9 | 19.5 | 19.8 |
| 1977 | 54.0 | 49.6 | 19.0 | 19.0 |
| 1978 | 53.7 | 50.9 | 193 | 19.2 |
| 1979 | 54.0 | 51.9 | 20.8 | 20.7 |
| 1980 | 54.2 | 52.9 | 22.4 | 22.5 |
| 1981 | 54.9 | 54.2 | 235 | 23.8 |
| 1982 | 55.4 | 55.4 | 23.7 | 23.9 |
| 1983 | 55.8 | 56.5 | 23.2 | 23.0 |
| 1984 | 59.2 | 59.7 | 24.9 | 24.2 |
| 1985 | 68.5 | 68.6 | 26.9 | 25.9 |
| 1986 | 68.0 | 69.6 | 27.9 | 26.9 |
| 1987 | 73.1 | 75.2 | 27.2 | 24.7 |
| 1988 | 77.3 | 80.5 | 28.8 | 25.0 |

SOURCE: Physician Payment Review Commission, 1989.

[a]The charge reduction rate is defined as the percentage difference between physicians' billed charges and Medicare-allowed charges.

Medicare assignment rates are relatively high, but beneficiaries treated on an unassigned basis can be exposed to substantial balance bills. As Table III2 shows, physicians' billed charges on unassigned claims in 1988 exceeded Medicare-approved charges by 25 percent. PPRC estimates that beneficiaries' total liability for balance billing in 1988 was $225 billion, or an average of $154 for each beneficiary who was balance billed at least once. No evidence is available on the extent to which balance bills are actually collected.

Rates of assignment and participation vary significantly by region and by physician specialty. In 1987, assignment rates ranged from a low of 24 percent in Idaho to a high of 98 percent in Massachusetts (PPRC 1988). Eight states had assignment rates below 50 percent in 1987: Idaho, Minnesota, Nebraska, North Dakota, Oregon, South Dakota, Washington, and Wyoming. Five states had assignment rates above 85 percent in 1987: Massachusetts, Michigan, Nevada, Pennsylvania, and Rhode Island The high assignment rate in Massachusetts reflects the fact that Massachusetts law requires physicians to accept assignment on all claims. Three other states (Connecticut, Rhode Island, and Vermont) require physicians to accept assignment for low-income beneficiaries (PPRC 1989).

Assignment rates also vary by physician specialty, although less than by state. In 1985, assignment rates ranged from a low of 51 percent for anesthesiologists to a high of 81 percent for psychiatrists (PPRC 1988). Primary care physicians tend to have lower-than-average assignment rates. In 1985, when the overall assignment rate was 69 percent, the assignment rate for general practitioners was 59 percent, family practitioners 60 percent, and internists 62 percent.

Legislation passed in November 1989 authorizing a comprehensive reform of the Medicare physician payment system includes a provision limiting the extent to which physicians can balance bill patients. When this provision is fully implemented in 1993, physicians will not be allowed to charge patients more than 15 percent above the Medicare fee. The Medicare fee for nonparticipating physicians will be 5 percent below the full fee schedule amount for participating

physicians, however, so this requirement means that nonparticipating physicians will not be allowed to charge patients more than 9.25 percent above the fee for participating physicians (PPRC 1990). PPRC estimates that this provision will reduce total balance billing liability for Medicare beneficiaries by 73 percent (Ginsburg, LeRoy, and Hammonds 1990). What this all means is that Medigap PPOs are not likely to channel enrollees to network physicians if the only incentive they can offer is the assurance that network physicians will accept assignment-especial@ in states with relatively high assignment rates or that mandate assignment on all claims. Even in states with low assignment rates, a Medigap PPO's ability to channel enrollees to network physicians by guaranteeing assignment will be considerably weakened by the limit on balance billing included in the Medicare physician payment reform legislation.

Research Findings on Medicare Beneficiaries' Choice of Physicians. Medicare beneficiaries currently have an incentive to select physicians who accept assignment, so their behavior in choosing physicians under Medicare may yield insight into the Medigap PPOs' ability to channel enrollees to network physicians through financial incentives.[21] In fact, from the beneficiaries' perspective, the Participating Physician and Supplier Program (PAR) has the basic features of a PPO: beneficiaries have an incentive to select a physician from an annual directory that lists all participating physicians, since by doing so they are sure not to be balance billed. Directories that identify participating physicians are available free of charge from the carriers and are mailed to Social Security offices, hospitals, senior citizens' organizations, and participating physicians' offices. Beneficiaries are informed of the availability of these directories in an annual enclosure with their Social Security checks. And beneficiaries who have unassigned claims receive information about the PAR program and a toll-free telephone number to call for information in

[21]Even beneficiaries with Medigap insurance have an incentive to select a physician who accepts assignment, since most Medigap plans do not cover balance bills.

the "Explanation of Medicare Benefits" form, which is mailed to all beneficiaries informing them of the disposition of each claim.

Despite these efforts to publicize the PAR program, many beneficiaries are unaware of the program and most do not understand it. The PPRC beneficiary survey found that only 52 percent of respondents had heard of the PAR pmgram and only 25 percent understood that participating physicians have agreed to accept the Medicare-approved charge as payment in full on all claims (Nelson et al. 1989). Levels of awareness and knowledge were lowest among low-income beneficiaries, the poorly educated, and those without Medigap insurance-the groups most financially vulnerable to high medical bills and therefore likely to benefit most from using a participating physician The survey also found that only 8 percent of respondents had seen a PAR directory, and only 3 percent had used one to find a physician

Medigap PPOs would presumably take more aggressive action to inform enrollees about the providers in the PPO network than the government has taken to inform Medicare beneficiaries of the PAR pmgram. Medigap PPOs would presumably mail a list of network providers to all enrollees, for example.[22] So the way beneficiaries under the PAR program choose a physician may not be a reliable guide to how a better-informed group of PPO enrollees would do so. But the difficulty of educating beneficiaries about the PAR program suggests that Medigap PPOs will face a challenge in educating beneficiaries about the PPO concept generally, and the financial incentives in a given plan.

The PPRC beneficiary survey asked respondents if they had changed physicians in the prior year and, if so, for what primary reason. Nine percent of respondents indicated that they had changed physicians in the prior year. The most common reasons given for changing physicians (each cited by 2 percent of the sample) were (1) that the physician had retired, died, or moved

[22]BCBS/AZ has mailed a provider directory to its enrollees.

and (2) dissatisfaction with the quality of care or the physician's personality. Less than 1 percent of respondents repotted that they had changed physicians because of cost. This low level of switching may partly reflect the beneficiaries' failure to understand the financial incentive to switch to a participating physician. But many survey respondents expressed a reluctance to switch to a participating physician even after the PAR program was explained to them.

Respondents in the PPRC beneficiary survey were questioned about their assignment experience, and those not usually treated on assignment were asked about their willingness to switch to a participating physician. Many beneficiaries do not understand the concept of assignment, so information about their assignment experience was obtained by asking respondents whether the provider submitted the claim to Medicare and whether the Medicare check had been sent directly to the provider, both of which occur on assigned claims. Overall, 55 percent of respondents with a regular source of care and not on Medicaid reported that they were usually treated on assignment by their regular physician, and 69 percent of these beneficiaries had been treated on assignment on their last visit to a specialist.[23] Fifty-four percent of beneficiaries without a regular source of care and not on Medicaid reported being treated on assignment on their last physician visit. Data on the relationship between beneficiary characteristics and assignment experience is presented in Nelson et al. (1989).

Survey respondents who reported haying a regular physician who does not always accept assignment were asked whether they would be willing to switch to a physician who would always accept the Medicare-approved charge as payment in full and would always file the Medicare claim (that is, a participating physician). Only 9 percent indicated that they would definitely switch, 21

[23]Medicare beneficiaries covered by Medicaid are excluded from these figures because they cannot be balance billed In addition, the questions about assignment were asked only of **beneficiaries who had submitted a claim in the prior two years.**

**TABLE** III.3

BENEFICIARIES' WILLINGNESS TO SWITCH PROM A NONPARTICIPATING TO A PARTICIPATING PHYSICIAN
(Percentage)

| | Would definitely switch | Would consider switching | Would Not Switch |
|---|---|---|---|
| Respondents with a regular Source of care | | | |
| -- Willingness to switch from regular source (N=601) | 8.8 (1.2) | 21.4 (1.7) | 50.2 (21) |
| -- Willingness to switch from most recent specialist seen (N=517) | 16.2 (1.7) | 17.7 (1.8) | 46.3 (2.3) |
| Respondents with no regular source of care | | | |
| -- Willingness to switch from most recent physician seen (N=43) | 13.1 (5.3) | 29.0 (7.1) | 45.2 (7.8) |

**NOTE:** The standard error for each percentage is provided in parentheses.

**SOURCE:** Nelson, Ciemnecki, Carlton, and Langwell, 1989.

percent would consider switching, and 50 percent would not switch (see Table III.3).[24] Respondents were somewhat more willing to switch from the most recent specialist seen. Of those who had not been treated on assignment on their most recent visit to a specialist, 16 percent would definitely switch to a participating specialist, 18 percent would consider switching, and 46 percent would not switch. Even among beneficiaries without a regular physician, 45 percent indicated they would not switch from the physician seen most recently.

Table III.4 shows demographic and socioeconomic characteristics of beneficiaries receptive to switching from their regular physician and from the most recent specialist they have seen. For the purposes of this table, beneficiaries who indicated they would definitely switch were combined with those who would consider switching in a single category of "potential switchers." We highlight here a few findings from the more detailed analysis available in Nelson et al. (1989). The beneficiaries most willing to switch from their regular physician to a participating physician are the disabled, males, blacks, and those who have been with their regular physician for less than one year. Somewhat surprisingly, low-income beneficiaries are not more likely than high-income beneficiaries to indicate a willingness to switch from their regular physician go, even among low-income beneficiaries, the relationship with a regular physician is often strong enough that the individual is unwilling to sever that relationship in response to financial incentives.

Research Findings on Provider Choice in PPOs. There is little available evidence on the success of PPOs in channeling enrollees to network providers. The only published study of this issue examined the experience of a PPO developed for the employees of a major California bank (Hester et al., 1987). The bank incorporated the PPO benefit design into its existing insurance plan; employees thus were not faced with an enrollment decision. The PPO was structured to encourage individuals to choose a network physician for primary care services. For physician

[24] The other 20 percent were not sure whether they would switch.

TABLE III.4

BENEFICIARIES WHO WOULD DEFINITELY SWITCH, OR CONSIDER SWITCHING, TO A PARTICIPATING PHYSICIAN
(Percentage)

| Characteristics | Regular source of care (N=601) | Specialist (N=517) |
|---|---|---|
| Total | 30.2 (1.9) | 33.9 (2.2) |
| **Age** | | |
| Under 65 (disabled) | 60.5 (8.7) | 49.5 (8.5) |
| 65-74 | 30.1 (2.7) | 35.5 (3.2) |
| 75-84 | 29.5 (3.6) | 31.0 (4.0) |
| 85 and over | 17.5 (3.8) | 24.6 (4.4) |
| **Sex** | | |
| Male | 36.0 (3.2) | 37.4 (3.4) |
| Female | 26.1 (2.4) | 31.2 (2.8) |
| Income | | |
| Below the PL | 31.7 (5.3) | 47.9 (5.6) |
| 100-150% of the PL | 32.5 (4.6) | 35.7 (5.0) |
| 150-200% of the PL | 33.4 (5.0) | 28.7 (6.2) |
| 200-300% of the PL | 35.9 (4.6) | 34.0 (4.7) |
| over 300% of the PL | 30.2 (4.3) | 34.4 (4.7) |
| Education | | |
| 8 years or less | 30.7 (4.0) | 38.6 (4.6) |
| 9-11 years | 34.5 (5.3) | 33.9 (5.3) |
| High school graduate | 32.4 (3.6) | 30.0 (4.0) |
| Some college | 27.4 (5.3) | 33.0 (5.8) |
| College graduate | 22.8 (4.8) | 37.5 (5.8) |
| Race/ethnic backmound | | |
| White, Non-Hispanic | 29.6 (21) | 32.8 (2.3) |
| Black, Non-Hispanic | 57.4 (6.8) | 48.7 (6.5) |
| Hispanic | * | * |
| Other, Non-Hispanic | * | * |
| Health status | | |
| Excellent | 33.8 (5.3) | 27.2 (5.4) |
| Good | 26.6 (3.0) | 37.4 (3.8) |
| Fair | 33.0 (3.5) | 34.3 (3.8) |
| Poor | 320 (53) | 33.1 (5.4) |
| Supplemental coverage | | |
| Medicare only | 35.4 (4.7) | 35.8 (4.6) |
| Medicare and Medicaid (with or without supplemental) | n/a | n/a |
| Medicare and private supplemental (no Medicaid) | 29.2 (21) | 33.6 (2.5) |
| Number of years with regular source of care | | |
| Less than 1 year | 50.9 (7.4) | |
| 1 - 2 years | 24.4 (5.1) | |
| 3 - 5 years | 24.7 (4.1) | |
| 5 - 10 years | 33.7 (4.7) | |
| More than 10 years | 28.4 (3.1) | |

*Indicates that there are fewer than 25 observations in the cell.

NOTE: The standard error for each percentage is provided in parentheses.

SOURCE Nelson, Ciemnecki, Carlton, and Langwell, 1989.

visits within the network, patients faced a fixed $10 copayment per visit, with no deductible. For visits outside the network, patients were reimbursed SO percent of the physician's charge, after meeting the deductible. Patients faced no financial incentive to choose PPO hospitals.

Covered individuals who used services during the two-year study period were classified into 3 categories: (1) strong PPO users, who obtained at least half of their care within the network; (2) weak PPO users, who obtained less than half of their care within the network; and (3) non-PPO users, who obtained all their care outside the network.[25] Strong PPO users accounted for 26 percent of the total user population, weak PPO users 12 percent, and non-PPO users 62 percent. Strong PPO users were much healthier than the two other groups. They had significantly lower health care costs prior to and following implementation of the PPO, fewer chronic conditions, and a higher self-assessment of their overall health status.

Users of PPO providers were younger, had been hired more recently, and were more heavily concentrated in the lower pay grades than non-PPO users. Eighty-one percent of non-PPO users reported in a survey that their primary reason for not using PPO providers was their satisfaction with their current physician and unwillingness to sever that relationship. PPO users had weaker attachments to physicians prior to implementation of the PPO. Seventy-nine percent of PPO users reported that they had tried at least one new physician as a result of the PPO's incentives, and 40 percent reported that they had changed their regular source of care to a PPO physician.

The study found that individuals who used PPO providers did so very selectively, obtaining primary care services within the network but often going outside the network for specialist and hospital care. For example, even among individuals who obtained all of their ambulatory care from PPO physicians, 47 percent went outside the network for their inpatient hospital care.

[25]The percent of care received within the network was measured in terms of charges.

Network physicians were required by their contracts with the PPO to refer patients to network specialists and hospitals, but had no direct financial incentive to do so. The PPO was ineffective at monitoring and enforcing provider compliance due to significant problems in implementing and operating its management information system and poor coordination with the employer's self-insured health plan, which was responsible for payment of claims. The findings of this study underscore the importance of influencing the referral patterns of network physicians through strong administrative controls, financial incentives, or both.

## C. PHYSICIAN RECRUITMENT

How physicians will respond to a Medigap PPO in a particular health-care delivery market will depend on the competitiveness of the market and the extent to which physicians in that market are already in a PPO network. Physicians who are already in a PPO network (and thus familiar with the PPO concept) and who want to increase their patient volume may seriously consider joining a Medigap PPO (which may be only a minor variation on a PPO network they already belong to).

### 1. Physician Participation Rates in PPOs

The rapid growth of PPOs in recent years indicates that a significant number of physicians are willing to participate in this type of arrangement. As Table III.5 shows, 45 percent of U.S. physicians belong to at least one PPO network and more than 25 percent belong to two or more (Managed HealthCare April 1990). BCBS/AZ reports that about 32 percent of the physicians in Maricopa County belong to its private-sector PPO, Preferred Care, and one third of the network physicians belong to Senior Preferred. There is normally a waiting list of physicians in all specialties who want to join the Senior Preferred network

TABLE III.5

PERCENTAGE OF U.S PHYSICIANS IN PPOS

| Number of PPO networks | Percentage of physicians |
|---|---|
| At least 1 | 45 |
| At least 2 | 2 7 |
| At least 3 | 15 |
| At least 4 | 10 |
| At least 5 | 8 |
| At least 6 | 5 |
| At least 7 | 4 |
| At least 10 | 3 |
| NONE | 55 |

SOURCE: Managed HealthCare, April 9, 1990

2 Trends in Physician Services

The supply of physicians in the United States has increased steadily in the past and is expected to continue doing so. From 1970 to 1986, the number of physicians grew from 326,000 to 545,000, and the number of physicians per 100,000 residents grew from 156 to 225. The Bureau of Health Professions has projected that by the year 2000 the number of U.S. physicians will climb to 709,000, or 264 physicians per 100,000 residents. (DHHS 1988).

Physicians' willingness to participate in PPOs will be heavily influenced by the supply and demand for physician services. An excess of physicians should induce more physicians to join PPOs to maintain or increase their patient volume. There is a debate in the health services

research community about whether the country is headed toward a significant oversupply of physicians in the next decade. In 1980 the Graduate Medical Education National Advisory Committee forecast a surplus of 145,000 physicians by the year 2000. In 1988, the Bureau of Health Professions projected a surplus of 72,000 physicians for the same year. But Schwartz, Sloan, and Mendelson (1988), employing different assumptions and different analytical methods, project little or no physician surplus in 2000. In any case, physicians' willingness to join PPOs should at least remain stable and may actually increase in the next decade.

a. Physicians' income

The increasing supply of physicians does not appear to have depressed their incomes. Since the mid 1970s, physician incomes have grown much faster than incomes of the average full-time employee. In 1987, physicians' net incomes averaged $132,000, which was more than twice their net income in 1978. In real terms (adjusting for inflation), physicians' average net income rose 133 percent between 1975 and 1987, while the average income for all full-time, year-round U.S. employees rose only 3 percent (PPRC 1989).

A significant portion of physicians' incomes comes from treating Medicare patients. Medicare accounts for 24 percent of physicians' aggregate gross revenue and 32 percent of the gross revenue of medical specialists that treat Medicare patients (PPRC 1989).

b. Medicare Assignment and Participation Rates

The trend of increasing rates of assignment and participation under Medicare suggests that many physicians are willing to forego balance billing in order to maintain or increase their Medicare patient load. The Medicare PAR program has some of the basic elements of a PPO, since PAR physicians agree in advance to accept assignment on all Medicare claims. The fact that 45 percent of all U.S. physicians signed PAR agreements in 1989 suggests that many physicians may be receptive to participating in a Medigap PPO.

A study of the factors that affect physicians' decisions to participate found that participation rates were affected by local income levels, the rate of HMO penetration, and Medicare-allowed charges. A 10-percent increase in the Medicare-allowed charge, for example, increased average participation rates by 9.5 percent. Physicians were more likely to participate in lower-income areas, presumably because there was less private demand there for physician services so they had more need to boost their patient volume. Participation rates were also higher in areas with higher HMO penetration, where physicians are leas able to replace Medicare patients with private patients. (Mitchell et al. 1988).

c. Medicare Physician Payment Reform

Predicting physicians' future response to Medigap PPOs is complicated by the fact that in 1989 Congress passed legislation establishing a comprehensive reform of the Medicare physician payment system. The reform package includes a fee schedule based on resource costs, limits on balance billing, Medicare volume performance standards (MVPS), and more support for effectiveness research and practice guidelines.

The new fee schedule will be phased in over a five-year period, beginning in 1992. In 1996, all Medicare payments to physicians will be based on the fee schedule. Fees will be determined using a relative value scale based upon the amount of physician work and overhead and professional liability costs. It will also be adjusted for geographic variations. The volume of physician services will be controlled through annual Medicare spending targets set by Congress. Fees will be based upon how growth in spending compares to the target.

The effect of the fee schedule on physician payments from Medicare will vary significantly by specialty. Payments for physicians whose practices largely involve diagnostic and surgical procedures are expected to be reduced, payments for those whose practices largely involve primary care services are expected to increase; PPRC (1989) projects that Medicare payments to

family practitioners and internists will increase by 38 and 17 percent, respectively, for example, while payments to thoracic surgeons, radiologists, and pathologists will be reduced by at least 20 percent.

### 3. Physicians' Attitudes Toward Cost Containment Measures

Medical practice has been greatly affected by efforts to contain the costs of third-party payers. In a recent AMA survey, physicians reported that over one third of their cases required prior review as a condition of payment (Institute of Medicine 1989). It is not uncommon for a physician to receive calls from 10 to 20 utilization review firms a day, with each firm using different criteria

Costs are contained in any one of the following ways:

- Review (for example, concurrent or retrospective inpatient review or ambulatory review) over the telephone by a utilization review company
- Physician profiling
- Regularly providing physicians with comparative practice data so they can compare their performance with that of colleagues
- Encouraging efficient treatment by paying providers a percentage of savings

Much of the anecdotal physician feedback on utilization review by telephone has been negative. Many of the reviewers are nurses, retired physicians, or nonspecialists who many physicians believe are unqualified to make clinical judgments in complex cases. Sometimes physicians concede to reviewer judgment in questionable cases rather than go through the trouble of challenging the reviewer's recommendation. Many physicians believe that utilization review compromises their professional autonomy and increases their vulnerability to malpractice suits. Some physicians, however, have found that because of utilization review they now explain their care more carefully to patients, which has improved patient relations (Institute of Medicine 1989).

Physician suggestions for improving utilization review include:

- More standardization of processes across organizations
- Better communication of requirements, criteria, and results
- Tiieiier handling of review requests and appeals
- Uniform definition and coding of medical diagnoses (Institute of Medicine 1989)

4. Discussion

The rapid growth of PPOs in the private sector, physicians' increasing willingness to accept assignment and sign Medicare participation agreements, and the projected trends of an increasing supply of physicians all indicate an increasingly competitive market for physicians' services. In this competitive environment, many physicians are likely to view participation in a Medigap PPO as a way to maintain or increase patient volume. However, it is difficult to predict the effects of physician payment reform on physicians' receptivity to Medigap PPOs. On the one hand, Medicare fees will increase significantly for physicians who provide mostly primary care services so they may become more willing to accept assignment, which presumably will be one requirement for PPO participation. On the other hand, higher fees for primary care may diminish their concern about reduced patient volume, so they may be less willing to join a PPO. Physician receptivity to Medigap PPOs may also depend on the utilization review procedures employed, which many physicians view negatively, according to anecdotal evidence.

## D. COST CONTAINMENT POTENTIAL OF MEDIGAP PPOS

A central question for government policymakers in assessing the viability of Medigap PPOs--and the desirability of implementing policies to stimulate their growth and development--is whether PPOs will control costs while maintaining beneficiary access to high quality care. We begin this section by describing the cost containment mechanisms that PPOs use in the private

sector and by assessing their potential applicability to Medigap PPOs. We next discuss other ways that Medigap PPOs could affect Medicare costs. We conclude by reviewing research findings on the effectiveness of PPOs and other managed care arrangements in containing costs.

## 1. Possible Approaches to Cost Containment for Medigap PPOs

The effectiveness of a Medigap PPO in containing costs will depend on its ability to channel enrollees to network providers and induce those providers to adopt more cost-effective practice styles, offer price discounts, or both. We discussed earlier the incentives that could be offered to channel enrollees to network providers and assessed the likely effectiveness of those incentives. Here, we discuss the approaches potentially available to Medigap PPOs to ensure that enrollees, once they are channeled into the network, are treated in a cost-effective manner. The approaches include:

- Obtaining price discounts from providers
- Selecting only providers with cost effective practice styles
- Utilization management and review
- Provider education, monitoring, and feedback
- High-cost case management

For each approach, we first discuss its use in the private sector and then assess its potential application to Medigap PPOs.

### a. Provider Discounts

During the first stages of PPO development in the early 1980s, PPOs sought to control costs primarily by obtaining price discounts from providers. But price discounts by themselves do not ensure savings since providers operating under a fee-for-service payment system can increase

volume to circumvent lower prices, So, almost all PPOs try to control costs through some form of utilization management in combination with price discounts from providers.

In the PPO survey by AMCRA in 1989, almost all the responding PPOs reported having some form of discounted pricing arrangement with the hospitals in their network (AMCRA 1990). Most PPOs reported having several types of hospital reimbursement contracts. Seventy-five percent of the PPOs reported paying at least some of the hospitals in their network on the basis of discounted charges, 75 percent had negotiated per diem rates with hospitals, and 31 percent paid hospitals a rate per discharge based on diagnosis related groups (DRGs). Only 3 percent of the PPOs reported paying actual billed charges for hospital care. Most PPOs also have discounted pricing arrangements with the physicians in their networks, and as for hospital reimbursement, most PPOs reported several types of physician reimbursement contracts. The most common methods of setting physician reimbursements (and the percentage of PPOs that indicated using each method for at least some of their network physicians) are: a negotiated fee schedule (69 percent), a fee schedule based on a relative value scale (41 percent), and a percentage discount off the usual fee (39 percent).

Medigap PPOs are less likely than PPOs in the private sector to obtain discounts from providers because the Medicare program has already implemented policies to control prices-most notably, the prospective payment system for hospitals, the physician fee freeze, and the incentives for physicians to accept assignment (Bachman et al. 1989). In addition, the Medicare program will begin replacing its current physician payment system in 1992 with a fee schedule derived from a resource-based relative value scale. This schedule will considerably reduce the fees for many surgical and diagnostic procedures and raise the fees for most primary care services. Medigap PPOs might be able to encourage some physicians to accept a lower fee from Medicare in exchange for an anticipated increase in patient volume. But this would require interaction with the carrier and increase the administrative complexity of the program. In addition, reducing the

Medicare fee for PPO network physicians would be contrary to the provision of the Medicare physician payment reform legislation, which rewards participating physicians by paying them a higher fee than nonparticipating physicians.[26] Offering physicians higher fees if they sign participation agreements-but then reducing their fees if they also join a Medigap PPO network--would create a confusing set of incentives for physicians.

If Medigap PPOs are to obtain discounts from providers, the most likely route would be negotiated arrangements in which network providers waive the deductible or a portion of the coinsurance. For example, BCBS/AZ has obtained agreements from hospitals in its network to waive the Part A deductible for enrollees of its Medigap PPO. This approach is administratively simple since it does not require involvement by the fiscal intermediary, and it will yield cost savings for the Medigap insurer.

b. Selecting Cost Effective Providers

A 1986 survey of PPOs sponsored by the Health Insurance Association of America found that PPOs were not using cost-effectiveness as a criterion to select physicians for their network (de Lissovoy et al. 1987). PPOs were drawing their physicians from existing physician panels, such as those of Blue Shield plans, and from the staffs of network hospitals-without screening for cost-effective practice styles. Information on the criteria for provider selection was not obtained in the more recent surveys sponsored by AMCRA and the American Association of Preferred Provider Organizations (AAPPO), so it is not known whether PPOs have changed their provider screening practices since the earlier survey. BCBS/AZ indicated that cost-effectiveness is one of its criteria for selecting physicians for its network

[26] To encourage physicians to sign participation agreements with Medicare, nonparticipating physicians will be paid 95 percent of the fee schedule amount for each service, while participating physicians will receive the full fee schedule amount (PPRC 1990).

Selecting network physicians on the basis of prior practice styles may not be critical to containing costs, since the ability of a PPO to control costs depends not on how physicians practiced prior to joining the network It depends on how they practice after joining it-and in particular, on whether the PPO can change the physicians' practice styles. collecting a group of cost-effective providers in a network, and doing nothing to change their behavior, has a limited potential for cost containment since no savings would be achieved for the existing patients of these physicians. Savings in this case could be achieved only by inducing enrollees to switch from high-cost (non-network) providers to network providers.

If Medigap PPOs are viewed as a potential mechanism for altering physicians' practice patterns, excluding physicians who have had high-cost practice patterns in the past may limit the effectiveness of the intervention in reducing total Medicare costs. Perhaps a more appropriate selection criterion would be a professed willingness by the physician to abide by the PPO's utilization control mechanisms. This strategy would require monitoring the practice patterns of physicians once they are in the network and expelling those who refuse to comply with the PPO's standards, as BCBS/AZ does.

c. Utilization Management and Review

Virtually all PPOs attempt to control enrollees' utilization of services through some form of utilization management and review. The Institute of Medicine has recently sponsored a major study of utilization management, which it defined as "a set of techniques used by or on behalf of purchasers of health care benefits to manage health care costs by influencing patient care decision-making through case-by-case assessments of the appropriateness of care prior to its provision" (Institute of Medicine 1989, p.17).[27] In recent years, utilization management

[27]Utilization review is a more general term used in the literature to include both prospective and retrospective review.

procedures have been widely adopted for conventional fee-for-service insurance plans as well as for PPOs.

The utilization management programs of most PPOs concentrate on reducing unnecessary and inappropriate use of inpatient hospital services. The most common utilization management technique is preadmission review. Such a review requires that physicians obtain approval from the insurer (or from the utilization management company acting on the insurer's behalf) before an elective hospital admission. Failure to comply typically results in lower reimbursement from the insurer. The 1989 PPO survey sponsored by AMCRA found that 97 percent of responding PPOs use preadmission reviews. Prior authorization is not required for emergency admissions, but 81 percent of PPOs responding to the AMCRA survey subject such cases to admission review-assessing the appropriateness of the admission within the first few days of the stay. Ninety-live percent of the responding PPOs indicated that they employ concurrent review of hospital stays, monitoring the course of treatment during the hospitalization and assessing the appropriate length of stay.

Seventy-four percent of responding PPOs reported having mandatory second opinion requirements for surgery. The Institute of Medicine study found that second opinion requirements of PPOs and conventional insurance plans are generally limited to a set of 15 to 30 high-cost surgical procedures. Some second opinion programs fully reimburse the surgery regardless of whether the second opinion confirms the first; while other programs require a third opinion if the second opinion conflicts with the first.

Another cost-containment method of many PPOs and conventional insurance plans, that falls outside the Institute of Medicine's definition of utilization management is retrospective review of inpatient hospital stays: claims for hospital care are reviewed after discharge to assess the appropriateness of care, and the assessment can result in denial of payment, Eightyeight percent of PPOs responding to the AMCRA survey reported conducting retrospective reviews

of inpatient hospital stays. But the utilization review programs of most PPOs place primary emphasis on the prospective reviews, since these provide the PPO an opportunity to influence treatment.

PPOs place less emphasis on controlling the use of ambulatory services than that of inpatient hospital services. Half the PPOs responding to the AMCRA survey reported that they employ prior review for selected ambulatory procedures, though no information is available on the procedures. Physician profiling, discussed below, is another approach that is likely to become more common for PPOs in controlling inpatient and outpatient utilization.

Medigap PPOs would likely employ the same types of utilization management and review procedures as by private sector PPOs. To avoid duplication of effort under Medicare, however, these activities should be coordinated with the review activities currently performed by the carriers, fiscal intermediaries, and the PROs.

d. Physician Education, Monitoring, and Feedback

An increasing number of PPOs are including physician profiling in their utilization control program, and this is BCBS/AZ's primary approach to cost containment. We discuss physician profiling under the heading "education, monitoring, and feedback" since these are the three elements of an ideal profiling system. de Lissovoy et al. (1987) report that in 1986 nearly half of all PPOs were developing physician profiling systems, and many others planned to begin development in the future.

The physician profiling system of BCBS/AZ, described in chapter II, involves analyzing claims data to monitor the practice patterns of individual physicians. The objective is to identify outlier physicians and to notify them that their practice patterns vary substantially from other physicians of the same specialty. This notification can serve an educational function and

encourage physicians to modify their practice patterns. Physicians whose practice patterns continue to deviate significantly from the norm are expelled from the network.

Medigap PPOs with a physician profiling system could complement the initiatives by the Agency for Health Care Policy and Research (AHCPR) to develop and disseminate practice guidelines and clinical standards based on research on the effectiveness of medical care and the outcomes of care. The structure and incentives of a physician profiling system could encourage physicians to modify their practice patterns in response to the practice guidelines and standards to be disseminated by AHCPR Given the evidence of significant variations in physician practice patterns (Wennberg and Gittelsohn 1982, Chassin et al., 1986), modifying those patterns could yield significant cost savings for Medicare.

e. High-Cost Case Management?

The objective of high-cost case management is to promote more appropriate and cost effective care for individuals with serious, high-cost illnesses. Typically, the patient is assigned a case manager who assesses the individual's needs and circumstances and assists in planning, coordinating, and arranging the most appropriate care. Unlike participation in prior review programs, high-cost case management is usually voluntary, with no financial penalties for failures to comply.

High-cost case management programs have developed rapidly, reflecting the growing recognition that a substantial percentage of an insurer's benefit costs in a given year are often attributable to a very small proportion of its enrollees. High-cost case management services are currently offered by most commercial insurers, Blue Cross and Blue Shield plans, utilization management firms, and third-party administrators (Institute of Medicine 1989). Such management

[28]The insurance industry also refers to high-cost case management as medical case management, catastrophic case management, and individual benefits management.

programs could offer significant savings for the Medicare program. A Medigap PPO is unlikely to provide case management services without receiving additional compensation from Medicare since, as a secondary insurer, the Medigap PPO's financial exposure in catastrophic cases is much less than that of the Medicare program. But Medigap PPOs could provide a useful structure for Medicare to contract for case management services for catastrophically ill beneficiaries.

### 2. Other Potential Effects of Medigap PPOs on Medicare Costs

The introduction of Medigap PPOs could affect Medicare costs through mechanisms other than those just described. For example, by offering a low-cost alternative to traditional Medigap insurance, Medigap PPOs are likely to increase the percentage of the Medicare population with supplemental coverage. By reducing the net price of care for newly covered beneficiaries, this expansion in Medigap coverage is likely to increase their demand for care. In fact, enrolling additional beneficiaries in Medigap insurance plans runs contrary to one of the major cost-containment approaches historically used by insurers: requiring significant cost-sharing by patients to restrain the demand for care. Reliable estimates of the effect of Medigap insurance on the demand for care are not available, but the findings of the Rand Health Insurance Experiment provide convincing evidence that lower cost sharing increases the demand for care (Manning et al. 1987).

The growth and development of Medigap PPOs could induce competitive responses from other market participants, particularly from non-network providers, other Medigap insurers, and Medicare HMOs. These competitive responses could significantly affect Medicare costs in the market areas that the Medigap PPOs serve. But predicting those responses is difficult given the Medicare physician payment reforms in 1992 and the other major changes in the health care market.

Non-network physicians could respond to the threat of losing patients to the Medigap PPOs in several ways. First, they might increase their willingness to accept assignment, which would reduce out-of-pocket costs for their patients. Second, they might try to induce additional demand among their existing patients-say, by ordering additional tests or additional follow-up office visits. The empirical evidence on whether physicians have the power to induce demand for their services is inconclusive, but many health economists believe-that they have such power, at least to a limited extent. Third, non-network physicians could choose to compete with the Medigap PPO by combining with area hospitals and another insurer to create their own Medigap PPO.

IPA-model HMOs are likely to be well-positioned to create their own Medigap PPO, because they contract with large networks of physicians who treat fee-for-service patients in addition to HMO patients. Creating a Medigap PPO could be viewed by HMO management as a potential means of increasing its Medicare market share. But allowing a Medicare HMO and Medigap PPO to operate in the same area under the same ownership would raise problems, since the HMO would have an incentive to disenroll its sickest patients and enroll them in the PPO, thus shifting high-cost patients from capitation to fee-for-service.

3. Effects of PPOs and Other Managed Care Products on Health Care Costs

Since the evidence on PPOs is limited, we also review the available evidence on two other managed care products--HMOs and conventional fee-for-service insurance plans that employ utilization management. A considerable body of literature indicates that HMOs reduce health care costs for people under 65 (Manning et al. 1984; Luft 1981) and for Medicare beneficiaries (Nelson and Brown 1989). HMOs do this primarily through reductions in hospital admissions, with some estimates indicating reductions of up to 40 percent. Such findings are of limited relevance for PPOs, however, because of the differences between the two types of organizations.

Most important, PPO enrollees are not locked in to the provider network, and PPOs typically pay providers on a fee-for-service basis, without any risk-sharing by the provider, common among HMOs.

Studies of the effects of utilization management in conventional fee-for-service insurance plans provide more useful insights about the potential effects of PPOs. The most reliable of these studies are those of Feldstein et al. (1988) and Wickizer et al. (1989) examining claims data from 1984436 for 223 employee groups insured by a large private insurance carrier.[29] Ninety-one of the insured groups operated under a utilization review program that involved preadmission certification and concurrent review for inpatient hospital care. The remaining 132 groups did not operate under such a program during the study period. For groups operating under the program, the utilization review procedures were applied to all employees and their dependents; those who did not comply were subject to financial penalties that reduced reimbursements from the insurer by 20 percent or more.

Using multivariate procedures to control for differences across groups in employee characteristics, benefit plan features, and market area characteristics, the studies found that the utilization review program reduced hospital admissions by 13 percent, hospital days by 11 percent, expenditures on routine inpatient hospital services by 7 percent, expenditures on hospital ancillary services by 9 percent, and total medical expenditures by 6 percent. The program did not have a statistically significant effect on hospital lengths of stay. The authors estimated that the savings-to-cost ratio of the program was approximately 8 to l-that is, $8 in savings were achieved for every dollar spent administering the program. The studies did not investigate the impact of the program on health outcomes.

[29]The studies used data from the same source, but Feldstein et al. used data covering 1984-85 while Wickizer et al. also included data from 1986. The two studies obtained very similar results. The results in the text are from the second study.

The Institute of Medicine recently sponsored a study of utilization management in the U.S. that included a review of the literature on its effects on health care costs (Institute of Medicine 1989). This review included the Wickizer et al. and Feldstein et al. studies discussed above as well as a number of other studies, most of which were conducted by the insurers, employers, or utilization management firms that had developed the program being studied These studies suffered from various methodological flaws, but the Institute of Medicine concluded that the evidence indicates that utilization management reduces inpatient hospital use and total medical expenditures.

Little evidence is available on the effects of PPOs on costs. The previously reviewed study by Hester et al. presented descriptive data on the experiences of a large California bank that incorporated a PPO in its existing insurance plan, but the study did not estimate the impact of the PPO on costs. However, since the individuals in this plan who used PPO physicians were much healthier than those who did not, and since the PPO was not successful at channeling enrollees to network specialists and hospitals, it is unlikely that the PPO reduced costs significantly, if at all.

The Rand Corporation is currently conducting a study of five PPOs serving private sector clients. When the final results of this study become available, more will be known about the ability of PPOs to channel enrollees to network providers and their ability to reduce costs.

# IV. CONCLUSIONS

This report has given a detailed description of the BCBS/AZ Medigap PPO, summarized its early operational experience, and given a preliminary assessment of its viability, effectiveness, and replicability. The report was prepared in the early stages of a 42-month evaluation of the Medicare PPO demonstration, so its conclusions are preliminary. The conclusions are based on information obtained from interviews with BCBS/AZ management, interviews with knowledgeable industry and government representatives, prior research findings, and data on recent and projected trends in the health care market.

The initial experience of BCBS/AZ shows that a Medigap PPO can be implemented relatively inexpensively, given an existing provider network Senior Preferred startup costs were $240,000. The costs to HCFA were virtually nothing. BCBS/AZ did not receive funding from HCFA and posed no burden on the Medicare system since no carrier or PRO changes were necessary. BCBS/AZ has also shown that its PPO model can attract enrollees. After some early disappointments, BCBS/AZ now has 5,443 enrollees in its Medigap PPO. Most of these enrollees switched from BCBS/AZ's standard Medigap product after recent premium increases created a large difference between the two products.

Interviews with knowledgeable industry representatives revealed interest in the Medigap PPO concept but a perception that the current financial incentives to enter the market are minimal, since most of the savings generated by a Medigap PPO would accrue to the Medicare program. Industry representatives expressed the view that any savings captured by the Medigap insurer would be largely, if not totally, offset by the lower premiums and other incentives needed to attract enrollees. The industry representatives we interviewed identified a number of actions the government could take to make Medigap PPOs a more viable and effective product. These include (1) providing the Medigap insurer with easier, cheaper access to the claims data required

for utilization management and quality assurance, (2) clarifying whether Medigap PPOs are allowed to negotiate with hospitals to obtain waivers or reductions in deductibles and coinsurance, (3) modifying the NAIC model regulations to give Medigap PPOs greater ability to penalize enrollees for receiving care outside the network (4) covering a portion of the Medigap PPO's administrative costs, and (5) paying more than 80 percent of allowed charges when enrollees obtain care from a network physician. In addition, some insurers have expressed potential interest in a risk-sharing arrangement with HCFA, in which a greater share of any savings or losses generated would accrue to the Medigap PPO.

The success of Medigap PPOs nationally will depend to a large extent on the response of Medicare beneficiaries. Will a substantial number of beneficiaries choose to enroll in a Medigap PPO when given the opportunity? And, once enrolled, will they choose providers from within the PPO network? Medigap PPOs are likely to be most attractive to lower income beneficiaries, since we expect other sponsors to follow the lead of BCBS/AZ and market them as lower cost alternatives to standard Medigap plans. The enrollment experience of BCBS/AZ in early 1990 implies that an insurer may be able to shift a significant number of beneficiaries from its standard Medigap plan to its Medigap PPO with a large premium differential, however, it remains to be seen whether Medigap PPOs can attract beneficiaries currently covered by other Medigap insurers and those without Medigap coverage. The latter may be an important measure of success from the perspective of the insurer, since achieving an increased market share is likely to be a motivating factor in offering a Medigap PPO.

A Medigap PPO's success in controlling costs will depend in large part on its ability to channel enrollees to network providers. Medigap PPOs are currently very limited in the incentives they can use to achieve that objective, since the NAIC model regulations require that they cover the full 20 percent coinsurance on Part B claims. The primary incentive currently available to Medigap PPOs to influence enrollees' choice of physician is to require that network

physicians accept assignment on all claims, and to provide no coverage for balance billing outside the network. This is a very weak incentive in many parts of the country, however, because assignment rates are very high. And the incentive will become much weaker when the limitations on balance billing included in the Medicare physician payment reform legislation are implemented beginning in 1992. Furthermore, prior research findings show that most Medicare beneficiaries are reluctant to switch physicians to obtain care on an assigned basis. Thus, Medigap PPOs are unlikely to be successful at channeling enrollees to network physicians unless the NAIC model regulations are modified to permit them to wver less than the full 20 percent coinsurance when enrollees obtain physician services outside the network.

To reduce costs, a Medigap PPO must ensure that, once enrollees are channeled to a network provider, they are treated cost effectively. The principal mechanism available to Medigap PPOs for controlling costs within the network is to control the volume of services provided. Most PPOs try to control volume through various utilization management procedures involving prior review. The most reliable prior research findings show that utilization management in conventional insurance plans for an employed population reduces hospital admissions by about 10 percent and total medical expenditures by about 5 percent. Whether PPOs can achieve greater savings by combining utilization management with selective provider contracting is not known. Another approach to wntrolling volume-which is the one used by the BCBS/AZ Medigap PPO-is physician profiling. Surveys of PPO managers indicate that this approach is likely to become more common in the future. There is no evidence on whether physician profiling programs cause physicians to modify their practice patterns. But given the significant variation in practice patterns, this approach has the potential to yield significant cost savings.

Our preliminary assessment is that there are currently some important impediments limiting the development and effectiveness of Medigap PPOs. If the government wishes to encourage

the growth and development of Medigap PPOs, it should take several actions to address these impediments.

Fiit, the government should facilitate Medigap PPOs' access to the detailed claims data required for utilization management and quality assurance activities, and perhaps provide the data at a lower cost The government should also clarify whether Medigap PPOs are allowed to negotiate with hospitals to obtain waivers or reductions of deductibles and coinsurance, since the industry representatives we interviewed are unsure of whether this is permitted under current Medicare regulations. Such arrangements with hospitals would allow Medigap PPOs to reduce their claims costs, thus enhancing their ability to reduce premiums or offer additional incentives to attract enrollees. In addition, the government should act to give Medigap PPOs greater ability to channel enrollees to network physicians, since this is critical to cost containment. The most effective approach would be to modify theNAIC model regulations to permit Medigap PPOs to cover less than the full 20 percent coinsurance when enrollees receive physician services outside the network

The introduction of Medigap PPOs may also require government action to help consumers make informed choices about Medigap PPOs and protect them from abusive or misleading marketing practices. If enrollees are not fully informed about the financial penalties for using out-of-network providers and the utilization management procedures employed by Medigap PPOs--particularly those involving prior review-many enrollees could incur higher than expected out-of-pocket costs, become dissatisfied, and disenroll.

Future research to be conducted under this evaluation will yield much more information about the viability and effectiveness of the BCBS/AZ Medigap PPO. Subsequent analyses will examine a broad range of issues for BCBS/AZ and other participants in the Medicare PPO demonstration. These analyses include an examination of the beneficiaries' decision to enroll in the PPO and potential selection bias of enrollees and an examination of the impact of the PPO

on the use and cost of services provided to Medicare beneficiaries. Preliminary results of these analyses will be available in April of 1991 and final results will be available in October of 1992 An additional analysis of the feasibility of PPOs for Medicare will be prepared in September of 1992.

## REFERENCES


American Medical Care and Review Association. "January 1990 PPO Directory." Bethesda, MD: AMCRA, 1990.

Bachman, Sara, Thomas McGuire, David Pomeranz, Christopher Tompkins, Frank Porell, and Stanley Wallack. "Preferred Provider Organizations: Options for Medicare." Inquiry, vol. 26, spring 1989, pp. 24-34.

Blue Cross and Blue Shield of Arizona '1988-1989 Senior Preferred Report' Phoenix, AZ BCBS/AZ, 1989.

Brown, Randall. "Biased Selection in the Medicare Competition Demonstrations." Report prepared for the Health Care Financing Administration. Princeton, N.J.: Mathematica Policy Research, Inc., 1988.

Brown, Randall, Kathryn Langwell, Katherine Berman, Ann Ciemnecki, Lyle Nelson, Alisa Schrier, and Anthony Tucker. "Enrollment and Disenrollment in Medicare Competition Demonstration Plans: A Descriptive Analysis." Report Prepared for the Health Care Financing Administration. Princeton, N.J.: Mathematica Policy Research, Inc., 1986.

Cafferata, G.L "Knowledge of Their Health Insurance Coverage by the Elderly." Medical Care, vol. 22, 1984, pp. 835-847.

de Lissovoy, Gregory, Thomas Rice, Jon Gabel, and Heidi Geltzer. "Preferred Provider Organizations One Year Later." Inquiry, vol. 24, summer, 1987, pp. 127-135.

Feldstein, Paul, Thomas Wickizer, and John Wheeler. "Private Cost Containment: The Effects of Utilization Review Programs on Health Care Use and Expenditures." The New England Journal of Medicine, vol. 318, no. 20, May 19, 1988, pp. 1310-1314.

Ginsburg, Paul, Lauren LeRoy, and Glenn Hammons. "Medicare Physician Payment Reform." Health Affairs, vol. 9, no.1, spring 1990, pp. 178-188.

Gordon, Nancy. Testimony before the Subcommittee on Health and the Environment, Committee on Energy and Commerce, U.S. House of Representatives, March 26, 1986.

Health Insurance Association of America, Summary list of preferred provider plan laws by state, September, 1989.

Heater, James, Annemarie Wouters, and Norman Wright. "Evaluation of a Preferred Provider Organization." The Milbank Quarterly, vol. 65, no. 4, 1987, pp.572-612

Institute of Medicine Controlling Costs and Changing Patient Care: the Role of Utilization Management. Washington, D.C.: National Academy Press, 1989.

Langwell, Kathryn, Nancy Carlton, and Gary Swearingen. "Industry Profile: An In-depth Look at Medicare PPO Applicants." Monograph prepared for the American Association of Preferred Provider Organizations. Washington, D.C.: Mathematica Policy Research, Inc., 1989.

Langwell, Kathryn, Lyle Nelson, Nancy Carlton, Merrile Sing, Sharon Arnold, Gary Swearingen, and Elizabeth Quinn. "Evaluation Design Report for the Medicare Physician Preferred Provider Organization Demonstration." Report Prepared for the Health Care Financing Administration. Washington, D.C.: Mathematica Policy Research, Inc., 1990.

Lockhart, Carol, Ph.D., Executive Director, Greater Phoenix Affordable Health Care Foundation. Telephone interview, 1990.

Managed Health Care, April 9, 1990.

Managed Health Care, January 8, 1990.

Manning, Willard, Joseph Newhouse, Naihua Duan, Emmett Reeler, Arleen Leibowitz, and Susan Marquis. "Health Insurance and the Demand for Medical Care." American Economic Review, vol. 77, no. 3, June 1987, pp. 251-277.

McCall, Nelda, Thomas Rice, and Judith Sangl. "Consumer Knowledge of Medicare and Supplemental Health Insurance Benefits." Health Services Research, vol. 20, no. 6, February 1986, pp. 633-657.

Mitchell, Janet, Margo Rosenbach, and Jerry Cromwell. "To Sign or Not to Sign: Physician Participation in Medicare, 1984." Health Care Financing Review, vol. 10, no. 1, fall 1988, pp. 17-26.

Mitchell, Janet, Gerard Wedig, and Jerry Cromwell. "The Medicare Physician Fee Freeze: What Really Happened?" Health Affairs, Spring 1989, pp. 21-32

National Association of Insurance Commissioners. "1988 Medicare Supplement Loss Ratios." Washington, D.C: NAIC, 1990.

National Association of Insurance Commissioners and Health Care Financing Administration. "Guide to Health Insurance for People with Medicare." Washington, D.C.: NAIC, 1990.

Nelson, Lyle and Randall Brown "The Impact of the Medicare Competition Demonstrations on the Use and Cost of Services. Report prepared for the Health Care Fmancing Administration. Washington, D.C.: Mathematica Policy Research, Inc., 1989.

Nelson, Lyle, Anne Ciemnecki, Nancy Carlton, and Kathryn Langwell. "Assignment and the Participating Physician Program: An Analysis of Beneficiary Awareness, Understanding, and Experience." Washington, D.C.: Physician Payment Review Commission, Background Paper 89-1, 1989.

Physician Payment Review Commission. Annual Report to Congress. Washington, D.C.: U.S. Government Printing Office, 1990.

_____. Annual Report to Congress. Washington, D.C.: U.S. Government Printing Office, 1989.

_____. Annual Report to Congress. Washington, D.C.: U.S. Government Printing Office, 1988.

Rice, Thomas, Katherine Desmond, and Jon Gabel. "Older Americans and Their Health Coverage." Health Insurance Association of America Research Bulletin, October 1989.

Rolph, Elizabeth, Paul Ginsburg, Susan Hosek, J. Peter Rich, Karen Keenan, and Gary Gertler. "State Laws and Regulations Governing Preferred Provider Organizations." Santa Monica, CA: The Rand Corporation, 1986.

Schwartz, William, Frank Sloan, and Daniel Mendelson. "Why There Will Be Little or No Physician Surplus Between Now and the Year 2000." The New England Journal of Medicine, vol. 318, no. 14, April 7, 1988, pp. 892-897.

State of Arizona, Department of Economic Security, Aging and Adult Administration. "Aging Arizona: Trends and Projections." Phoenix, AZ, 1989.

U.S. Department of Commerce, Bureau of the Census. Statistical Abstract of the United States. Washington, D.C.: U.S. Government Printing Office, 1989.

U.S. Department of Health and Human Services, Health Care Financing Administration. "Private Health Plan Option Operational Report." Washington, D.C.: HCFA, 1990.

U.S. General Accounting Office. "Medigap Insurance: Expected 1990 Premiums After Repeal of the Medicare Catastrophic Coverage Act and 1988 Loss Ratio Data" Statement of Janet Shikles, Director, Health Financing and Policy Issues, Human Resources Division before the Subcommittee on Medicare and Long-Term Care, Committee on Finance, U.S. Senate.

_____. "Medicare PROs: Extreme Variation in Organizational Structure and Activities. Washington, D.C.: GAO, 1988a.

_____. "Medicare: Improving Quality of Care Assessment and Assurance." Washington, D.C.: GAO, 1988b.

Wickizer, Thomas, John Wheeler, and Paul Feldstein. "Does Utilization Review Reduce Unnecessary Hospital Costs?" Medical Care, vol. 27, no. 6, June, 1989, pp. 632-647.

# APPENDIXA

## PPO MARKET CHARACTERISTICS

APPENDIX A

PPO MARKET CHARACTERISTICS

| Characteristic | Arizona Maricopa | Arizona Pima | All Metropolitan Counties (Mean) N=707 |
|---|---|---|---|
| Population | 1900,200 | 602,400 | 258,183 |
| Percentage of the population who are medicare beneficiaries | 12.5% | 13.6% | 120% |
| Per capita income | $15,294 | $13,401 | $13,626 |
| Active physicians per 1,000 persons | 215 | 287 | 1.66 |
| Inpatient surgeries per 1,000 persons | 49.29 | 55.10 | 45.10 |
| Outpatient surgeries per 1,000 persons | 36.52 | 35.17 | 36.45 |
| Medicare hospital admissions per 1,000 beneficiaries | 332 | 353 | 318 |
| Medicare hospital days per 1,000 beneficiaries | 2,639 | 2,577 | 2,734 |
| Medicare part A reimbursements per beneficiary | $1,640 | $1,504 | $1,450 |
| Medicare part B reimbursements per beneficiary | $912 | $859 | $758 |
| Medicare prevailing charges as a percentage of the national mean[a] (specialist and G.P.) | 1.23 | 1.15 | 1.06 |

SOURCE: September 1989 Bureau of Health Professions Area Resource File (ARF).

The Medicare Prevailing Charges Index is an indexed sum of the charges for selected medical procedures for specialists and general practitioners combined. The procedures selected are those that comprise the top 85 percent of expenditures nationally. The entry in the table represents each county's value divided by the mean value for all counties in the United States.

# APPENDIX B

## INDUSTRY AND GOVERNMENT REPRESENTATIVES CONTACTED

APPENDIX B

# INDUSTRY AND GOVERNMENT REPRESENTATIVES CONTACTED

Joan Ardoin
Director, Sales and Marketing
Senior Plans
Blue Shield of California

Joanne Boyd, Associate General Counsel
Torchmark[1]

Paul Cooper, Vice President
Health Care Policy
Prudential Insurance Company

Thomas Faulds
Executive Vice President
Blue Cross and Blue Shield of South Carolina

Elizabeth Willson Hoy
Consultant

Jean LeMasurier
Policy Analyst
Office of Prepaid Health Care
Health Care Financing Administration

Mary Masland, Staff Analyst
Hawaii Medical Service Association

Gary Meade
Executive Director
Alternative Delivery Systems
Product Performance
Blue Cross and Blue Shield Association

Matthew Minor
Coordinator, C Plus and Nongroup Products,
Blue Cross and Blue Shield of Alabama

---

[1]Torchmark owns United American Insurance Company, a major provider of Medigap insurance.

Michael Morrow
Director, Provider Contracting and Payment
Blue Cross and Blue Shield of Minnesota

Edward T. Procaro, Assistant Vice President
Metropolitan Life Insurance Company

Carl Scott, Senior Vice President and
Director of Product Management Division
Mutual of Omaha

Judith Triibett
Program Manager
Alternative Delivery Systems
Product Services
Blue Cross and Blue Shield Association

Julie H. Walton
Program Analyst
Bureau of Policy Development
Health Care Financing Administration

A representative from a large commercial insurance company who wishes to remain anonymous because the company does not have an official position or statement on Medigap PPOs