Patterns of Medicaid Eligibility: A Sample of 408 Medi-Cal Eligibles in San Francisco, California

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Medicaid expenditures per recipient have increased substantially in the past decade, even after controlling for medical care price inflation. In response to this Medicaid expenditure growth, various policies to encourage Medicaid enrollment in cost-effective health maintenance organizations (HMOs) are being considered, including guaranteed Medicaid eligibility for Medicaid eligibles enrolled in HMOs. This paper addresses several important questions about Medicaid eligibility that are essential to an analysis of guaranteed eligibility—the length of eligibility, turnover rates, and reasons individuals lose their Medicaid eligibility.

We selected a stratified random sample of 408 eligibility case files for individuals eligible for Medicaid in San Francisco County during December 1977. Six aid categories are represented in this study: (1) Cash Grant AFDC; (2) Medically Needy Families; (3) Medically Needy Aged; (4) Medically Needy Disabled; (5) Medically Indigent Adults; and (6) Medically Indigent Children. We found that the majority of individuals remain eligibile for Medicaid for long, uninterrupted spells,[1] ranging from a median of 15 months (Medically Indigent Adults) to 40 months (Medically Needy Aged). A much smaller subset of eligible persons had relatively short spells and higher turnover; some of that turnover was due to failure to comply with income reporting requirements.

We used data on length of eligibility to estimate the cost impact of 6 months' guaranteed eligibility (for months during which individuals would otherwise not have been eligible for Medicaid benefits). We also estimated the potential benefits (savings of HMOs relative to average fee-for-service expenditures) and the benefits of guaranteed eligibility appear to be greater than the costs.

Introduction

National Medicaid expenditures have increased rapidly, as evidenced by a 206 percent increase in average Medicaid expenditures per recipient between fiscal years 1968 and 1979[2]. Only part of that increase is explained by medical care price inflation; real growth in Medicaid expenditures per recipient was almost 50 percent between 1968 and 1979 (Medicaid/Medicare Management Institute, 1979). As medical care costs have become a growing national concern, more attention has been directed to cost containment strategies that create incentives for providers of medical care to supply appropriate, less costly services. One model that has received much publicity and is the subject of considerable health services research is the health maintenance organization (HMO), an organized system in which a defined array of health services is offered to a voluntarily enrolled population for a fixed monthly premium.

The term "health maintenance organization" describes many different health care prepayment

[1]A "spell" is defined as the length of time (from when a case opens to when it closes) that an individual is certified eligible for Medicaid. If the case closes and then reopens, two spells are counted. A case closing marks the end of one spell; the reopening of a case marks the beginning of another spell.

[2]The term "recipient" will be used in this paper according to the Federal definition—a person who is eligible for Medicaid and who used Medicaid services sometime during the year. The term "eligible," used frequently in this paper, refers to an individual who has been determined eligible for Medicaid by the county Medicaid offices; the term "eligible" does not denote whether an individual actually used Medicaid services.

systems, ranging from group practice arrangements and staff models with salaried physicians to individual practice associations in which the participating physicians retain their private fee-for-service practice. HMO enrollees benefit from 10-40 percent lower total costs than people with conventional fee-for-service health insurance coverage (Luft, 1978). As HMOs have gained national attention, their potential use by Medicaid populations has also attracted interest. California's experiences in promoting and regulating Medi-Cal[3] contracts with HMOs can provide useful lessons for other States interested in stimulating Medicaid enrollment in prepaid systems.[4]

The first Medi-Cal contracts with HMOs were signed in 1972. Between 1973 and 1975 claims were confirmed that some HMOs with Medi-Cal contracts were involved in fraudulent marketing; occasionally incurred higher costs than for comparable fee-for-service care; had inadequate fiscal resources; and did not provide adequate levels of medical care to their Medi-Cal enrollees (Chavkin and Treseder, 1977). Since then, existing regulations have been enforced and new ones have been enacted to ensure fiscal responsibility, accountability, adequate quality and provision of services in HMOs that contract with Medi-Cal. This increased regulation was responsible, in part, for a sharp decline in the number of HMO contracts (from 54 to 12 since 1975) and enrollment of Medi-Cal eligibles in HMOs (from 275,000 in 1975 to 110,000 in 1980).[5]

The State of California is interested in stimulating Medi-Cal enrollment in high quality, fiscally responsible, cost-effective HMOs in part because of HMO-demonstrated composite savings of approximately 19 percent, compared to costs on a comparison for non-HMO Medi-Cal eligibles (based on a comparison of Medi-Cal HMO capitation rates to average fee-for-service expenditures per eligible in 1978) (California Center for Health Statistics, 1979). As part of this effort, California is addressing a different set of problems that act as barriers to growth of HMOs, including: costly door-to-door marketing, the unstable eligibility status of Medi-Cal HMO enrollees, and the lack of incentives for Medi-Cal eligibles to give up their fee-for-service Medi-Cal cards to enroll in HMOs.

Guaranteed eligibility to Medicaid HMO enrollees addresses the eligibility turnover issue, acts as an incentive for Medicaid eligibles to enroll in HMOs, and eases the problem of marketing prepaid membership since it could be offered easily through the county Medicaid eligibility offices, replacing the costly door-to-door marketing methods. The costs and benefits of guaranteed eligibility, however, cannot be assessed until length of Medicaid eligibility and turnover rates are known. Guaranteeing eligibility could be costly if periods of eligibility were short, but also could be cost-effective if periods of eligibility tended to be long.

Unfortunately, little infomation is available on how long people remain eligible for Medicaid, with the exception of two studies of AFDC populations showing that, on the average, those receiving Aid to Families with Dependent Children (AFDC) retain their eligibility for several years (Deane and Roghmann, 1976; Wiseman, 1976). Turnover—the "on again, off again" phenomenon—also is poorly understood. We do not know: the rates at which Medicaid eligibles lose and regain their eligibility status; whether turnover occurs predominantly within certain Medicaid aid categories; and the degree to which turnover is related to administrative requirements (for example, changes in aid category or income reporting requirements) rather than changes in the eligible person's health status or other personal circumstances.

This study examines: length of Medicaid eligibility; turnover (as measured by the number of times individuals were eligible for Medicaid during their eligibility history); reasons associated with loss of Medicaid eligibility; and demographic characteristics of the study population. The costs of 6 months of guaranteed eligibility are estimated, based on the length of eligibility of the sample population.

Methods

Sources of Data

Data were collected from a sample of Medi-Cal case files in San Francisco County, California. San Francisco was selected because of its large diverse Medi-Cal population, low quality-control error rate, and relatively easy access to data. Case files were used because they were the only data source providing complete information on each eligible's Medi-Cal history, including the number of eligibility spells or times an individual was eligible for Medi-Cal, the reasons for case openings and closings, and demographic characteristics. In addition, case files provided data on length of eligibility and periods of ineligibility. Using computerized eligibility records to study eligibility dynamics would have permitted use of a larger sample but would have yielded less complete information on each person's eligibility history.

Eligibility history data were collected for six Medi-Cal aid categories:

1) Aid to Families with Dependent Children (AFDC);
2) Medically Needy Families;
3) Medically Needy Aged;
4) Medically Needy Disabled;
5) Medically Indigent Children; and
6) Medically Indigent Adults.

[3]Medi-Cal is the name of California's Medicaid program. State Medicaid programs vary according to which Medicaid aid categories and optional benefits are offered, what income maintenance and property levels are used in establishing Medicaid eligibility, and what methods are used to pay for services.

[4]HMOs that contract to provide services to the California Medicaid population are sometimes referred to as prepaid health plans.

[5]The authors obtained this information from personal communication with Bill Maxfield, Center for Health Statistics, and Charles Drew, Prepaid Health Research, Evaluation, and Demonstration Project, Department of Health Services, Sacramento, California, 1980.

The Medically Indigent Adult aid category is entirely State funded. Persons eligible under this program are 21-64 years old and do not meet the eligibility criteria for the categorically linked programs (public assistance or Medically Needy). Three public assistance aid categories, also referred to as cash grant categories—the Supplemental Security Income (SSI) Aged, Blind, and Disabled—were not sampled due to the Social Security Administration's confidentiality restrictions. A fourth aid category, Medically Needy Blind, was not sampled due to the small number of such persons.

Sample size calculations indicated that 68 case files from each of the six aid categories (408 total eligibles) would provide a large enough sample to estimate length of eligibility characteristics for each aid category.[6] All 408 eligibles sampled for study were eligible for Medi-Cal during December 1977. December 1977 was selected as the sample month so that eligibility history could be studied both retrospectively back to the initiation of the Medi-Cal program in 1967[7] and prospectively to March 1980.

Case files were selected at random from a master list of persons eligible for Medi-Cal, which was provided by San Francisco County Department of Social Services. After the case files were retrieved, data on eligibility history were recorded for the *sample eligibility spell* (the case opening during or immediately before December 1977) and for all case openings and closings before and after the sample spell. Additional information was collected on the reasons for case openings and closings and whether the case was still open at the end of the period studied (March 1980). Basic demographic data on age, race, sex, marital status, living arrangement, and employment were collected and are shown in Table 1.

Analysis

The primary unit of analysis for determining length of eligibility was the sample eligibility spell—which includes December 1977, the month from which the cases were sampled. The sample eligibility spell, sometimes referred to as the "eligibility spell" in this paper, is comparable to a random snapshot of an individual's Medi-Cal eligibility history; it should be viewed as one slice of a person's eligibility history that is random and representative, but not complete. It provides useful insights into how long individuals remained on Medi-Cal during a single spell or episode of eligibility, and into what factors caused that spell to be terminated.

Eligibility dynamics and patterns were studied by examining a person's Medi-Cal eligibility history to discern the total number of times an individual's case opened and closed, and the reasons for the case closings. In addition, the effect of income status reports[8] on length of eligibility was assessed by studying the eligibility spells before and after an individual's sample eligibility spell to see if there were temporary interruptions (apparent turnover) due to administrative requirements in an otherwise continuous eligibility spell. Data on length of eligibility after December 1977 were used to estimate the cost impact of guaranteed eligibility.

Limitations of the Data

The use of a single California county for the sample population imposes certain limitations on generalizing from the sample results to the State-wide Medi-Cal population or other States' Medicaid populations. This problem is inherent in studying any subsample of Medicaid eligibles; States vary widely in details of their eligibility criteria, in their population mix, and in county eligibility administration.

The inability to sample the SSI Aged, Blind, and Disabled and Medically Needy Blind categories prevents comparisons of eligibility characteristics among all aid categories. The majority of the Medicaid eligible population is represented in this study, however, since 77 percent of the State-wide Medi-Cal population is either AFDC, Medically Needy (not including the Blind), or Medically Indigent (California Center for Health Statistics, 1979), and 54.4 percent of the national Medicaid population is AFDC or Medically Needy (Medicaid/Medicare Management Institute, 1979).

The data are only as reliable as the case file material—which is dependent upon whether the eligible person accurately reported all information and whether the eligibility worker maintained an accurate, current, and complete case file. Due to separate case file systems for the AFDC, SSI, and other Medi-Cal eligibles (the Medically Needy and Medically Indigent), we could not track eligibles if they changed aid categories between Medi-Cal only and the cash grant programs (AFDC and SSI) because they were assigned a new Medi-Cal identification number. In those instances, the data underestimate total length of eligibility and the

[6]The sample size was determined by estimating the proportion of population expected to be on Medi-Cal for over six months, and by using the formula:

$$P \pm 1.645 \sqrt{p(1-p)/N}$$

where P is the sample proportion, N is sample size, and p is the population proportion. A statistically conservative estimate of 0.5 for p was used, estimating that half of the Medi-Cal population remains eligible for at least six months. Confidence intervals of 90 percent were used in the formula above, indicating a minimum sample size of 68 for each aid category.

[7]The Medically Indigent Adult program was initiated in 1971.

[8]An income status report is a quarterly form that California requires of the Medically Indigent and Medically Needy Families to report income for the past three months. The cash grant AFDC eligibles report income monthly (a Federal requirement for States with retrospective budgeting in AFDC eligibility determination).

impact of administrative adjustments (for example, changes in aid category) on length of eligibility and turnover.

Results

Length of Eligibility—The Sample Eligibility Spell

The mean sample eligibility spell, that spell including December 1977, ranged from 18 months for Medically Indigent Children to 52 months for the Medically Needy Aged (Table 2). For some aid categories, the median length of the sample spell differed significantly from the mean (for example, for AFDC, the mean length of the sample spell was 51 months, and the median was 32 months) and the standard deviation was often quite large relative to the mean (Table 2). Both those observations suggest that the length of eligibility is not normally distributed, that is, clusters of eligibles with either very short or very long eligibility spells may skew the mean. Also, the length of the sample eligibility spell is underestimated, as shown by the proportion of cases with sample spells that were still open as of March 1980 (Table 2). Of the 408 cases sampled, 30 percent had been continuously open since December 1977.

Another measure of duration of eligibility is the percent of the population at different threshold values for the length of the sample eligibility spell. Guaranteed eligibility usually is discussed in terms of 6 or 12 months, so these were chosen to be the threshold values. Aid categories were divided according to sample eligibility spells of 1-5 months, 6-11 months, and 12-plus months. The aid categories ranged from zero percent (Medically Needy Aged) to 17.6 percent (Medically Indigent Adults) in the proportion of their sampled populations with eligibility spells of 1-5 months (Table 3). This variation also occurs among those with eligibility spells of 6-11 months: none of the Medically Needy Disabled had 6-11 month sample eligibility spells, while 23.5 percent of the Medically Needy Families and the Medically Indigent Adults and Children had eligibility spells in that range. The aid categories ranged from 58.9 percent (Medically Indigent Adults) to 98.5 percent (Medically Needy Disabled) in the proportion of the sampled population with sample eligibility spells of 12-plus months.

Turnover

Turnover, or the "on again, off again" phenomenon, can be studied by tracking individuals and recording the total number of spells during their eligibility history and the percentage of the sampled population with multiple spells. Table 4 shows that turnover was considerably higher in certain aid categories, such as the Medically Indigent Adults, where the sample population had an average of 3.4 spells, and 86.8 percent had more than one eligibility spell. These figures compare to an average of 1.5 spells for the sample Medically Needy Disabled population, where only 26.5 percent had more than one spell.

When the aid categories were divided into subgroups based on the length of their sample eligibility spell of 1-5 months, 6-11 months, and 12-plus months, the subgroups with the shortest sample spells (1-5 months) also had a much higher mean number of eligibility spells. This occurrence was particularly evident for the cash grant AFDC and Medically Indigent Adults.

TABLE 1
Demographic Characteristics of the Medi-Cal Population, by Aid Category From a Sample of 408 Medi-Cal Eligibles in San Francisco, Eligible in December 1977

Aid Category	N	Age Years Median	Sex Female %	Race Non-white %	Marital Status Married %	Living Arrangement			Employment Employed (Part/Full Time) %	Share of Cost[1] (SOC) with SOC %
						Alone %	w/Others %	Institutionalized %		
Cash Grant AFDC	68	29	92.6	70.6	20.6	0.0	98.5	1.5	16.2	0.0
Medically Needy Families	68	34	80.9	70.1	26.5	1.5	98.5	0.0	47.7	26.5
Medically Needy Aged	68	76	61.8	22.1	27.9	7.4	25.0	67.6	0.0	82.4
Medically Needy Disabled	68	51	35.3	35.3	22.1	33.8	47.1	19.1	2.9	79.4
Medically Indigent Adults	68	34	38.2	39.7	14.7	32.4	66.2	1.5	29.4	5.9
Medically Indigent Children	68	16	52.9	66.2	4.4	2.9	97.1	0.0	8.8	5.9

[1]"Share of Cost" indicates whether an individual must "spend down" on medical expenses to the allowed income level before Medi-Cal will pay for his medical care. Medi-Cal eligibles in nursing homes can keep only $25 of their income, so the Medically Needy Aged category has a high proportion of individuals with a share of cost. The cash grant AFDC eligibles, by definition, do not have a Medi-Cal share of cost.

TABLE 2
Length of the Sample Eligibility Spell[1]

Aid Category	N	Length of the Sample Spell				Sample Spell Open as of March 1980 %
		Mean (Months)	Median (Months)	Standard Deviation	Range (Months)	
Cash Grant AFDC	68	51.1	32	47.5	1-169	23.5%
Medically Needy Families	68	24.9	22	18.4	4-86	21.2
Medically Needy Aged	68	52.3	40	34.1	8-159	55.9
Medically Needy Disabled	68	47.0	37	31.5	4-159	63.2
Medically Indigent Adults	68	20.5	15	16.8	3-73	10.3
Medically Indigent Children	68	18.0	16	10.3	4-47	4.5

[1]A spell is defined as the length of time (from a case opening to closing) that an individual is eligible for Medi-Cal benefits. Each case opening is counted as one spell for an individual. The sample eligibility spell is the spell from which the cases were sampled—the spell that includes December 1977.

TABLE 3
Distribution of Length of Sample Eligibility Spell[1]

Aid Category	N	Sample Spells 1-5 Months %	Sample Spells 6-11 Months %	Sample Spells $\geq$ 12 Months %
Cash Grant AFDC	68	8.8%	13.2%	78.0%
Medically Needy Families	68	5.9	23.5	70.6
Medically Needy Aged	68	0.0	2.9	97.1
Medically Needy Disabled	68	1.5	0.0	98.5
Medically Indigent Adults	68	17.6	23.5	58.9
Medically Indigent Children	68	8.8	23.5	67.7

[1]A spell is defined as the length of time (from a case opening to closing) that an individual is eligible for Medi-Cal benefits. Each case opening is counted as one spell for an individual. The sample eligibility spell is the spell from which the cases were sampled—the spell that includes December 1977.

TABLE 4
Turnover (Multiple Eligibility Spells[1]) By Aid Category

Aid Category	N	Average Number Eligibility Spells	% With Multiple Spells
Cash Grant AFDC	68	2.3	63.2%
Medically Needy Families	68	2.2	64.7
Medically Needy Aged	68	1.4	27.9
Medically Needy Disabled	68	1.5	26.5
Medically Indigent Adults	68	3.4	86.8
Medically Indigent Children	68	2.2	77.9

[1]A spell is defined as the length of time (from a case opening to closing) that an individual is eligible for Medi-Cal benefits. Each case opening is counted as one spell for an individual.

Effect of Income Status Reports on Length of Eligibility and Turnover

A case example from the cash grant AFDC population demonstrates the phenomenon of multiple eligibility spells that is especially prominent among the AFDC and Medically Indigent Adult categories. Within a 3 year period, a 23 year old female in the AFDC category had 7 eligibility spells, ranging from 2 to 10 months each. For 6 of the 7 spells, the individual lost her eligibility because of her failure to send in her income status report. She then had her case reopened the following month when she brought the income form to her eligibility worker. From the perspective of benefit payments, this individual was essentially continuously eligible for Medi-Cal benefits, yet administrative costs were incurred each time the case was opened and closed.

Table 5 shows the proportion of sample spells that were terminated because eligibles did not comply with the income reporting requirement. Case closings from failure to conform to the income status reporting requirements were most significant for the Medically Needy Families, the Medically Indigent, and the cash grant AFDC. Because the Medically Needy Aged and Disabled are required to have annual redeterminations of their eligibility, rather than monthly or quarterly reports, case closing due to non-compliance with income status reports were much less significant for those two aid categories.

One method of evaluating the impact of the income reporting requirement is to produce a revised "snapshot" of continuous eligibility by disregarding apparent disruptions in eligibility due to income status reports. The new snapshot was obtained by tracing an individuals's eligibililty history forward and backward from the sample spell to see if the other eligibility spells met the following criteria: 1) the case closing of a spell was due to non-compliance with the income reporting requirement, and 2) the spell was immediately before or after the sample spell. The median length of the revised sample spell, including those additional months, was calculated in this manner for each aid category (Column 4 of Table 5).

This analysis produces a very different picture of length of eligibility for the cash grant AFDC eligibles, Medically Needy Families, and Medically Indigent Adults and Children. The median length of the sample spell increased by as much as 18 months (for the cash grant AFDC cases) when temporary cut-offs due to income status reports were disregarded. In addition, when temporary cut-offs due to the income status reporting requirement were disregarded in calculating the length of the sample eligibility spell, only 2 AFDC eligibles and 1 Medically Needy Family remained in the category of 1-5 months. A reduction in the number of eligibles with sample spells of 6-11 months and an increase in the length of their sample spells also occurred when income status reports were ignored, although the change was not as substantial.

Guaranteed Eligibility

From the data on length of eligibility, we can compare the relative costs and benefits of various options for guaranteed Medicaid eligibility and determine which aid categories might be included to minimize costs. Guaranteed Medicaid eligibility could be offered to Medicaid eligibles interested in enrolling in HMOs by two methods. Each method has different cost ramifications because a subset of Medicaid eligibles with different lengths of eligibility and turnover characteristics would be selected in each method. If a State initiated the guaranteed eligibility-HMO option, it would have to decide whether to make that option available to all current Medicaid eligibles or only to eligibles who had a certain length of prior Medicaid eligibility. (It is likely that the longer an individual has been eligible for Medicaid the higher the probability that he or she will remain eligible for Medicaid in the future). The latter group would be expected to result in a lesser risk to the State and Federal government; if most of those eligibles would have been eligible for Medicaid during the guaranteed eligibility option anyway, there would be no substantial additional costs in guaranteeing their Medicaid eligibility. In addition, a State would have to decide whether to offer guaranteed eligibility only to specific aid categories.

TABLE 5
Effect of Income Status Reports on Length of the Sample Eligibility Spell[1]

Aid Category	N	Median Sample Spell (Months)	Sample Spells Closed Due to Non-compliance (%)	Median Sample Spell if Disregard Non-compliance (Months)
Cash Grant AFDC	68	32	44.2%	50
Medically Needy Families	68	22	57.6	29
Medically Needy Aged	68	40	14.7	40
Medically Needy Disabled	68	37	20.6	37
Medically Indigent Adults	68	15	67.6	23
Medically Indigent Children	68	16	71.7	21

[1]A spell is defined as the length of time (from a case opening to closing) that an individual is eligible for Medi-Cal benefits. Each case opening is counted as one spell for an individual. The sample eligibility spell is the spell from which the cases were sampled—the spell that includes December 1977.

For the purpose of this analysis, we call the first method of guaranteeing eligibility to current Medicaid eligibles interested in enrolling in prepaid health plans, *nonselective enrollment.* The second method of offering the guaranteed eligibility-prepaid health plan option only to Medicaid eligibles with a certain length of prior Medicaid eligibility (for example, 12 months) we call *selective enrollment.* The distinction is simplified for analytic purposes; a State could choose to offer the "nonselective" guaranteed eligibility option only to aid categories with longer eligibility spells on the average and offer "selective" guaranteed eligibility to those aid categories with higher turnover. A State also could design "selective" guaranteed eligibility programs with different prior eligibility requirements for the various aid categories based on the turnover and length of eligibility characteristics of the aid categories.

The potential costs for the nonselective enrollment method of guaranteed eligibility can be estimated by calculating the maximum additional costs if all 68 eligibles in each aid category accepted 6 months guaranteed eligibility starting in December 1977. The additional costs are due to guaranteeing eligibility for months otherwise ineligible and are expressed in terms of ineligible months as a proportion of total months (68 eligibles x 6 months = 408 total months per aid category).

The potential costs for the selective enrollment method of guaranteed eligibility can be estimated for those eligibles who had been continuously eligible since December 1976 (that is, 12 months prior to December 1977). The maximum additional costs if all of that subset of eligibles accepted 6 months guaranteed eligibility are derived from examining the 6 months from December 1977 through May 1978 to see what proportion of that period the sample group was actually eligible. Using the AFDC population as an example, 37 eligibles of the original sample of 68 had been continuously eligible for Medicaid since 1976, and thus would have been candidates for the selective enrollment method of guaranteed eligibility. Additional costs are estimated by dividing ineligible months (40 ineligible months for the 37 AFDC eligibles) during December 1977 to May 1978 by the total months (in this case, 37 eligibles x 6 months = 222 months).

Table 6 displays the additional costs by aid category for the nonselective and selective enrollment methods of guaranteeing 6 months eligibility to Medicaid HMO enrollees, based on the sample population for this study. These cost estimates are most meaningful if they are compared to the savings achievable through HMOs relative to fee-for-service Medicaid expenditures. Since Medi-Cal HMO capitation rates are available only for AFDC enrollees, the cost-savings comparison is possible only for that aid category. The approximate additional costs of guaranteeing 6 months' eligibility to AFDC eligibles would be 7.4 percent for nonselective enrollment and 1.8 percent for selective enrollment. HMOs in California have demonstrated approximately a 15 percent savings for AFDC enrollees (relative to average fee-for-service expenditures for AFDC eligibles in 1978) (California Center for Health Statistics, 1979).

We have not included various administrative costs and savings (such as: implementation costs; possible costs or savings in changing the income reporting requirement; and potential adverse selection, depending on which Medicaid eligibles would choose a guaranteed eligibility-HMO option) in this analysis of guaranteed eligibility for Medicaid HMO enrollees. These additional factors need to be assessed to determine potential costs and savings. Based on the length of eligibility of the sample AFDC population, however, 6 months' guaranteed Medicaid eligibility contingent on HMO enrollment appears to be potentially cost-effective for the State and Federal governments.

TABLE 6
Additional Costs of Six Months Guaranteed Medicaid Eligibility, As Measured by Ineligible Months as a Proportion of Six Months

Aid Category	Nonselective Enrollment[1]		Selective Enrollment[2]	
	N	% Additional Costs	N	% Additional Costs
Cash Grant AFDC	68	7.4%	37	1.8%
Medically Needy Families	68	4.9	[3]	[3]
Medically Needy Aged	68	2.0	43	1.9
Medicliy Needy Disabled	68	1.0	35	1.0
Medically Indigent Adults	68	10.0	[3]	[3]
Medically Indigent Children	68	5.1	[3]	[3]
All Six Aid Categories Combined	408	5.1	115	1.6

[1]Nonselective enrollment is defined in this paper as the method of offering the guaranteed eligibility-prepaid health plan option to all Medicaid eligible persons who were currently eligible for Medicaid at a given time. The costs calculations were based on December 1977 as the nonselecive enrollment month, with the additional costs stemming from otherwise ineligible months in the 6 months beginning with December 1977, expressed as a proportion of the total months (68 eligibles x 6 months = 408 months).

[2]Selective enrollment is defined in this paper as the method of offering the guaranteed eligibility-prepaid health plan option to all Medicaid eligible persons at the time of their annual eligibility redetermination. Those eligibles thus have a minimum of 12 months prior Medicaid eligibility. The additional costs stem from otherwise ineligible months in the 6 month period beginning with December 1977 for eligibles who had 12 months continuous eligibility prior to December 1977.

[3]When N $\leq$ 30, the percentage was not calculated. The total N for Selective Enrollment (N = 115) does not include the three aid categories that had N $\leq$ 30.

Capitation rates for the Medically Needy categories and data on length of eligibility for the cash grant (SSI) Aged, Disabled, and Blind are not available, so we cannot assess the costs and savings of guaranteed eligibility for these aid categories. HMOs, however, have demonstrated savings of 22 percent and 30 percent for Medi-Cal cash grant Aged and Disabled, respectively in 1978 (California Center for Health Statistics, 1979). The cash grant Aged and Disabled eligibles would most likely have long, uninterrupted eligibility spells similar to the Medically Needy Aged and Disabled. Hence, the benefit-cost ratio of offering a guaranteed eligibility-HMO option might be substantially higher for the cash grant Aged and Disabled and Medically Needy Aged and Disabled eligibles than the costs and savings calculated above for the cash grant AFDC eligibles.

Conclusions

The Medi-Cal eligible population generally has long eligibility spells, as shown by the mean and median length of the sample eligibility spell. Within individual aid categories, the distribution of the sample spell demonstrates two clusters of individuals—those with very short and those with very long spells. This study showed that most aid categories have longer spells of continuous eligibility than indicated by the sample spell if income reporting requirements were disregarded; this effect was especially pronounced for the groups with short sample spells. Non-compliance with income reporting requirements may explain a substantial portion of the higher turnover among the eligibles with short sample spells. The individual aid categories vary considerably in length of eligibility, eligibility patterns, and demographic characteristics.

The data on the eligibility characteristics of this sample Medi-Cal population suggest that guaranteed eligibility for Medicaid HMO enrollees may be a feasible, cost-effective method of encouraging Medicaid enrollment in HMOs, recognizing, however, the limitations of HMOs to substantially expand their Medicaid enrollment. Either a selective or nonselective enrollment option could be implemented by altering the income reporting requirement to a semi-annual basis. The guaranteed eligibility HMO model warrants further consideration of various costs and savings and the adaptations necessary for various State Medicaid programs.

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