Chapter 2

Private Health Insurance: Background and OTA Survey

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INTRODUCTION

The majority of people in the United States under the age of 65 who are protected by private health benefit programs are covered through some type of group plan, usually sponsored by an employer. In group insurance, the underwriting unit is the group itself, and not the individual members of the group. The overwhelming majority of persons with private health coverage in the United States are protected by some type of group health benefits program. Thus, with some exceptions coverage is ordinarily offered without medical examination or evidence of individual insurability. Individuals and small groups, however, are often "medically underwritten, " meaning that their health history and current health status directly bear on whether they will be insured.

In a private, voluntary health insurance system, not all applicants for insurance meet the underwriting criteria established by insurers. Thus, the marketplace does not meet the insurance needs of all individuals who want insurance. Those who are already ill or who, in the judgment of the insurers, present a very great risk for claims, may be denied insurance altogether. Thus, serious policy problems are posed for dealing with the needs of the uninsured in general, and the high-risk uninsured in particular.

In this chapter the following areas are examined:

- a review of the basic principles of health insurance and the differences between group and individual underwriting;
- an examination of the regulatory framework for health insurance, and brief discussions of applicable State and Federal laws;
- a discussion of the current health benefits marketplace; and
- a description of the role of medical tests in the underwriting process, including the use of AIDS antibody testing by insurers.

[1]The Health Insurance Association of America (HIAA) estimates that in 1985 only 11 percent of commercial health insurance policies covering those under age 65 were for individuals and their family members (66).

GROUP V. INDIVIDUAL HEALTH INSURANCE

The purpose of insurance is to minimize financial losses that may arise from unexpected events. Insurance operates by spreading risks so that many individuals who could have a loss, but don't, help pay for the losses of the few that do sustain loss. Insurers are in the business of spreading or pooling risks and, in exchange for premiums, agree to pay all or part of some definable loss. Insurance also works on the principle that there must be uncertainty that a loss will occur, and that the loss is beyond the control of the insured. Thus, insurance is not written for losses that are already occurring—"you can't buy fire insurance on a burning building. " In such cases, the insurer would have to charge the full amount of the loss the insurer agreed to cover, plus additional charges for the insurer's services.

Insurers establish the costs of insurance (i.e., premiums) on the basis of an assessment of the potential losses that they expect to incur. To accomplish this, they employ the mathematical principles of probability and the law of large numbers **(125).** The ability to make reasonable predictions about expected losses improves as the number of observations of the events leading to losses increases.

The size of a potential loss is another factor in insurance. Potential losses should ordinarily be of such a large magnitude that their occurrence

has a significant financial impact on the insured. Budgetable expenses and small losses are generally not insured, because the administrative costs of such insurance would be very high relative to claims paid. The insurer would have to collect premiums not only to cover the small losses but also to pay the expenses of handling many claims transactions. The most administratively efficient forms of insurance, therefore, cover only potentially large losses that seldom occur and that seriously affect the financial position of the insured when they do occur. Measured by these criteria, some forms of insurance are less efficient in their design (e.g., first dollar coverage or no deductible) than other forms.

Finally, private insurance operates on the principle that the costs of insurance generally should be proportional to the risks involved. Individuals applying for private insurance whose potential losses are large are expected to pay higher premiums than those whose potential losses are likely to be less.

The term "health insurance" broadly includes various types of insurance—such as accident insurance, disability income insurance, medical expense insurance, and accidental death and dismemberment insurance—that are designed to reimburse or indemnify individuals or families for the costs of medical care arising from illness or injuries.

Distinguishing Features of Individual v. Group Insurance

Although individual and group health insurance plans provide protection against similar types of medical expenses they are, in a sense, fundamentally different types of insurance. Understanding the differences is important in judging how each type of insurance responds to the needs of the insured, including those who are at high risk.

The Contract

An individual health insurance contract is one made by an insurer with an individual applicant, called a "policyholder" or "subscriber," and normally covers that individual or, in some cases, the individual and his or her dependents. A group insurance contract is made with the sponsor of the group coverage—usually an employer—and covers a group of persons (and in some cases, their dependents) identified as individuals by reference to the group. The group sponsor, not the members of the group, is the insured party. Group insurance contracts are, as a rule, continuous in nature and ordinarily continue beyond the lifetime or membership in the group of any of its participants. Though some terminations do occur, most employers and other groups provide health insurance continually as an ongoing part of their regular fringe benefit programs.

Underwriting Differences

Among the most important of the differences between individual and group insurance is the matter of risk selection, or underwriting. Underwriting refers to the processes used by insurers to select, classify, rate, and accept or deny risks.[2]

With some exceptions (such as in the case of small groups), group insurance is generally issued without medical examination or other evidence of insurability. Group underwriters are usually interested only in whether the group as a whole can be insured. In a large group of employed persons (and their dependents), it is presumed that the overall risk for the entire group is close to average and that there are relatively few individuals who have health needs of such severity or frequency that they would be uninsurable or substandard risks for individual insurance coverage. In other words, the variation in average risk among group contracts—where the group size is reasonably large—is likely to be small.

In contrast, applicants for individual insurance are not part of a well-defined, homogeneous, and generally healthy group. Because of the potentially great differences in the health status and potential risks presented to insurers by individual applicants, insurers evaluate individuals by using quite different criteria than are used in underwriting groups. Thus, "medical underwriting" is customarily used by most insurers to determine

[2] The term "underwriting" is sometimes used in a narrower ***sense*** to refer simply to the process by which an insurer accepts or rejects an applicant for insurance.

whether and under what terms individual insurance coverage will be approved.

Adverse Selection

"Adverse selection" refers to the situation whereby, in the absence of any controls, persons who seek to obtain insurance will tend to be those who will use it the most, that is, those with a greater than average probability of loss. Applicants who are motivated to purchase coverage because they are aware of a medical problem that is not yet evident to the underwriter can select against the insurer. This is of concern to both group and individual insurance markets, but particularly to the latter. Group insurers try to protect themselves against adverse selection by using certain group underwriting techniques. For example, groups organized for the purpose of obtaining insurance are likely to include a disproportionate number of higher risks. Therefore, group insurers usually write coverage only for groups that exist for reasons other than for the purposes of obtaining insurance.

Employment-based groups are especially attractive to insurers. There generally is a flow of members into and out of such groups so that the average age and therefore the average risks of these groups do not increase much over time. Employees also typically comprise a generally healthy group because of the implicit (and sometimes explicit) health standards required by employers for hiring and retaining workers. Employees whose health is good enough to meet employment standards are generally better than average risks for insurance purposes. The families of employees, on the other hand, generally represent average risks.

The distribution of insurance costs in group versus individual insurance is also a critical difference, because it bears on the overall affordability of each type of health insurance product. In most cases, group members do not pay the full costs of their health insurance protection. Instead, the sponsor of the group plan—for example, the employer—usually contributes the major portion (sometimes all) of the premium costs. Without these contributions, premiums charged each member in the group would be likely to vary with the known risk, so that they would increase with age and could eventually become quite large for the older members. Charging the actual average group rate without an employer contribution could also lead to little or no enrollment among younger members of the group who might obtain lower-cost insurance individually. Thus, the employer's contribution makes it feasible to charge all workers affordable rates that do not increase with age and do not result in asking younger persons to pay more. This type of cross-subsidy among group members is not found in much of the individual insurance market and is a major advantage of group insurance.

Adverse selection is a particular problem in the individual insurance market. Most applicants for individual insurance are seeking coverage for the costs of unknown or unpredictable losses. Some applicants, however, are motivated to obtain insurance, because they know that they may have a higher than average probability or even a certainty that they will require treatment.

Relative Costs of Group v. Individual Insurance

Yet another very important difference between group and individual insurance is the non-benefit costs and the economies of scale in providing each type of insurance. Group insurance is essentially low-cost, mass protection. Group insurance is also written without assessing each individual, thereby removing a source of considerable underwriting expense.

The administrative costs of marketing, acquiring, and maintaining individual accounts—as a percentage of premium—are far greater than are ordinarily incurred in the group market. Thus, the amount of premium dollars available to pay benefits is much less for individual than for group insurance.

Tax-Favored Treatment of Group Benefits

Finally, the tax treatment of employer contributions toward group insurance favors enrollees in group health plans in contrast to purchasers of individual coverage. Employer contributions to a group plan are deductible to the employer as business expenses and, more importantly, not

counted as taxable income to the members of the group plan. Thus, group insurance provides a greater after-tax value to group members than comparable wage or salary payments. Put differently, the cost of individual insurance is greater than the comparable cost of the same coverage in a group, because all of the costs of individual coverage is paid with after-tax dollars, while some or all of group coverage costs are financed with pre-tax dollars. (The Tax Reform Act of 1986 provides a limited tax subsidy toward the purchase of individual insurance for some self-employed persons) (1161 of the Tax Act of 1986).

Underwriting Groups

In the private insurance marketplace, the characteristics of an acceptable group are determined by each insurer, subject to State restrictions relating to group insurance. Different insurers have different business goals and market segments in which they are particularly interested. Their underwriting rules are designed with these goals in mind. Group underwriters will select group risks whose expected claims experience will meet the standards established by each insurer for a plan of benefits and will set a rate to cover those expected costs.

As noted above, most group insurance is not medically underwritten. Instead, group underwriting involves examination of the experience of a group as a whole in terms of the following risk classification factors: size of the group, industry, composition of the group, location, plan of insurance, cost-sharing, administrative arrangements, and previous claims experience of the group. Larger groups are generally experience-rated, meaning that the premiums charged are based on the actual amount of claims payments made on behalf of the group in a prior period, usually the preceding year.

The capacity to spread risks in a group diminishes as the group becomes smaller. Most insurers, therefore, employ special rules for underwriting smaller groups. Because of the limited spread of risk, the experience of small groups is generally pooled with other small groups, and all groups in a particular category are treated as a single risk for rating purposes. Because the potential for adverse selection is quite high in small groups, many insurers apply especially restrictive underwriting standards—including the imposition of preexisting condition limitations, plan or benefit restrictions, etc.—that are not applied to the larger groups.

Very small groups (2 to 15 lives) are often medically underwritten in much the same manner as applicants for individual coverage (see below). In such cases, the insurer requires proof of insurability from each member of the group (including their potentially covered dependents). Where a member of the small group is determined to be uninsurable, the insurer may respond in a number of different ways, but generally the entire group is declined. In group plans where the individual pays a portion of the premium, people who elect not to enroll when first permitted to do so may also be medically underwritten if they seek coverage later on, in order to prevent adverse selection against the insurer. These individuals are commonly referred to as “late applicants. ”

Underwriting Individuals

As premium rates are based on expectations, and not on certainties, the underwriting of individuals involves placing individuals in classes with about the same expectations of loss. “Preferred risks”- that is, those with average or less than average expected losses—will be accepted for insurance. Those with higher than average expected losses may be accepted but under special conditions. Those with the highest expectation of loss are declined and deemed uninsurable, except in some States where Blue Cross/Blue Shield (BC/BS) is required to accept all applicants (i.e., “open enrollment” is required).

Underwriting Factors

The largest portion of the health insurance premium consists of expected claims (or benefit) costs. This amount is determined by the morbidity of the insured policyholders. Morbidity refers to the estimated frequency and severity (or average magnitude of loss) of illnesses and accidents in a well-defined class of persons. The probability of loss and the average severity are affected by such risk selection or classification factors as:

age, sex, health status and history, amount of benefits, financial status, occupation, and certain other factors. Each insurer prescribes its own range of acceptable risk-selection factors.

Insofar as health insurance is concerned, the two most important risk factors affecting individuals are age and current and future health status. For almost every type of benefit, both frequency of use and severity of illness increase with age. Underwriting guidelines developed by insurers often require more frequent use of medical examinations and requests for attending physician statements from older applicants for individual insurance coverage. Claims costs for different benefits often vary by gender, so sex is also a factor.

The goal of the underwriter is to determine whether insurance can be issued at "standard" rates, offered at "substandard" rates or with other limitations, or whether insurance should be refused (declined) altogether. The current and future health of an applicant is obviously important. When the applicant is already ill, disabled, or undergoing treatment at the time of application, coverage will not ordinarily be extended at all or if approved, will not cover the illness. If the impairment is minor, a policy might be issued with a preexisting condition limitation or waiting period in the contract. But if the condition is more serious, the application may be postponed or declined altogether. Thus, through an assessment of present medical condition and past medical history, the probable effect of future health status on expected claims experience is evaluated. For example, most health insurers deny any applicant whose probability of disease exceeds three times the average for his or her sex and age (HIAA manual). Under these standards, human immunodeficiency virus (HIV) infection far exceeds the limit of insurability for both life and health insurance. Insurers estimate that the mortality for an asymptomatic 35-year-old man infected with the HIV virus is 44 times, or 4,400 percent, that expected of a healthy, non-HIV-infected 35-year-old (81).

Applicants for individual coverage are assessed from three perspectives. First is the health history of the individual applicant. A history of past illness or accident will be given weight depending on: the severity of the original ailment, degree of permanent impairment (if any), possibilities of recurrence, complications that may develop, etc. Certain types of impairment have high recurrence rates (e.g., peptic ulcers), while others may have little or no bearing on future risk for claims (e.g., bone fractures, appendicitis), especially if a reasonable time has elapsed without complications. Conditions that are chronic and that also produce severe losses (i.e., involve high costs and large claims) may result in declination altogether. Second, certain family health information may be requested relating to the health of parents, children, and spouses. Generally, such information is more important to life insurance than to health insurance underwriting, but it may have some bearing on the applicant's future health as well (e. g., family history of diabetes).

Finally, the applicant's current physical condition is evaluated. Depending on this assessment (including judgments by the applicant himself and the insurance agent's observations about the applicant), certain tests or studies maybe requested (e.g., blood chemistry, urinalysis, electrocardiogram), depending on the age or kinds of coverage sought.

Some States have legislated certain limitations on the underwriting process, precluding insurers from rejecting or separately rating certain persons (141). Typically, such provisions preclude refusal to issue coverage solely because of a physical handicap or some other circumstance pertaining to the applicant's health status. These restrictions on insurer underwriting are discussed elsewhere in this chapter.

INDIVIDUAL INSURANCE MARKET

The individual insurance marketplace, compared with group insurance, is very small and consists of several different segments. The first of these is the "primary permanent" market, consisting of persons who generally look to individual insurance for their principal health benefit pro-

tection and who have the means to purchase such coverage. This market is not as significant as it once was, because many of the writers of group benefits–such as Blue Cross and Blue Shield plans—have expanded their group market offerings down to and including very small groups (e.g., two to nine members).

A second, but increasingly important part of the individual marketplace is the "supplemental" individual insurance area. This, too, is something of a special market that serves the narrower insurance needs of people whose basic health benefit requirements are already satisfied through some kind of group coverage arrangement or through Medicare. The consumers in this market are looking only to supplement the benefit design features of that group insurance. "Medigap" insurance for the elderly is an example of this type of protection. Cancer insurance is another example. Cash-benefit type plans are frequently marketed as supplements to other forms of benefits.

A third segment of the individual market is sometimes called the "primary interim" market. This consists of individuals or families caught between group coverage options, usually because of a break in the insured's connection to a sponsor of group benefits (e.g., through job loss, caused by prolonged illness and/or disability, voluntary separation from work, death of the worker, etc.). These persons usually seek individual insurance coverage on an interim basis. It is in this latter market that problems relating to the availability and/or affordability of private insurance options for certain individuals are often found.

Many of those interested in individual insurance—sometimes on a permanent, sometimes on a temporary basis—are those who have converted from a group policy.[3] Once a converted policy is issued, the administration of the policy follows that of other forms of individual insurance, including premiums paid directly by the insured to the insurer. Those who take the opportunity to convert often do so with the expectation of medical expenses and are generally poorer than average risks.

[3]Conversions represent a not insignificant portion of individual enrollments in some Blue Cross/Blue Shield plans.

Companies that wish to compete in the individual health insurance field must price their products low enough to be competitive with other offerings and affordable to potential buyers but also high enough to cover expected claims and administrative expenses, and provide a return on capital. Understanding this objective helps to explain the importance of the underwriting function, or risk classification process, in the individual health insurance field. If, after deciding on the kinds of business it wishes to have, an insurer prices its products on the basis of assumptions that later prove erroneous—including estimates about expected future claims—the company will lose money. If the assumptions about expected claims are very wrong, and the resulting losses severe, the company may even face solvency problems that could impair its ability to meet other contractual obligations. The selection and rating processes are used by the companies that medically underwrite coverage in the individual marketplace to minimize such risks for the insuring organization. Unless private companies are allowed to exercise reasonable control over risk selection, they face possible failure as insuring organizations. This is because a considerable number of persons would wait to obtain insurance until shortly before they expect to incur large health costs and would drop coverage when their health care needs were no longer significant.

The individual insurance market is not regarded by many insurers as an efficient, effective, or profitable insurance line, and over the years the number of major insurance companies involved in the individual insurance field has diminished. Individual insurance products are viewed by many as inefficient because of the high expense ratios needed to support the costs of acquiring business, the expensive underwriting processes required, and the costlier distribution system. These factors reduce significantly the amount of premiums that can be returned in the form of benefits.

Profitability for individual insurance products is largely a function of actual claims experience, expenses, and persistency (i. e., the degree to which policies are renewed by the insured through continued payment of premiums), relative to the assumptions used in pricing. Investment income,

which is a major factor in the group market, is not ordinarily a major contributor to earnings on individual insurance. The ability to earn a profit, therefore, is very sensitive to pricing assumptions, such as inflation projections and the willingness of regulators to view rate increases as reasonable.

The capacity of insurers to adequately price any insurance product depends on their ability to estimate risks. To assess the risks presented by an individual applicant for insurance, the insurer must gather as much information about the applicant as it deems needed to assign the individual to an appropriate class of risk. Insurers argue that they must have reasonable access to knowledge that has a significant bearing on the risk assignment process **(148).**

In order for rate equity to be fair among classes of insureds, premiums must also be reasonably related to the degree of risk involved for the class. Under this theory, two policyholders buying individual insurance and presenting approximately the same risk in terms of expected claims and expenses are expected to pay the same premiums. If their risks differ, the premiums should differ as well. Unless insurers have access to and can use pertinent information in the risk categorization process, high-risk individuals can become insured without paying premiums commensurate with their risks. Failure to use underwriting tools to identify different risks will result in the subsidization of high-risk persons by low-risk groups. If this subsidization is inadvertent or undisclosed, it is unfair to the low-risk groups. Even if disclosed, it will induce those benefited to accept insurance and those overcharged to reject it, regardless of the inherent efficiency of the insuring mechanism.

Both the marketplace and regulatory policies impose limitations on the charges assessed to low-risk groups to support high-risk individuals. Premiums that are high because of the expected experience of higher-risk individuals that are covered will result in lower-risk individuals seeking insurance elsewhere from competitors who underwrite differently, or they may drop insurance because the benefits of insurance are not worth the cost to them. Regulators, too, must be concerned that premiums are not only reasonable from the consumer's point of view, but also that they are adequate to assure the solvency of the insurer. Thus, competitive pressures of the marketplace introduce real limits on the ability of insurers to accept heterogeneous risks in a single pool.

Predictive Testing—Underwriting v. Discrimination

Until recently, the need of insurers to inquire about and/or use tests in the underwriting process for individual coverage was generally accepted by many in the insurance industry and by the regulatory community. Past regulatory concerns have focused not so much on the use of test information for underwriting purposes, but rather on the need to preserve test result confidentiality. High-risk individuals are especially concerned about privacy issues and about potential discrimination in employment, housing, or other areas, if their health circumstances are known. As a result, many State insurance departments developed specific policies regarding insurance company use and disclosure of medical information about applicants and insureds, including test results. The National Association of Insurance Commissioners (NAIC) has developed a Model Information and Privacy Protection Act that has been adopted by a number of States to deal with disclosure of personal or privileged information, including unauthorized disclosures of information to employers **(123).** Other States, though not using the NAIC model law, have comparable requirements of one sort or another (see app. C).

In recent years, however, many of the States have gone beyond confidentiality concerns to prohibit certain kinds of underwriting approaches that have been deemed by State legislatures as discriminatory. For example, in 1987 Maine and North Carolina approved laws prohibiting discrimination in issuing, continuing, or canceling insurance policies, or charging higher premiums solely because of certain physical handicaps (141). Maine prohibits discrimination against those who are blind, partially blind, or have physical or mental handicaps unless discrimination can be justified by sound actuarial practice. North Carolina prohibits discrimination solely on the basis of blindness, partial blindness, or partial deafness.

Denial of coverage may not be based on the handicap alone.

Other laws have been approved in recent years in some States prohibiting rating or rejecting persons exposed to a drug (DES) linked to cancer in the offspring of certain women or persons having certain genetic characteristics, such as sickle-cell traits. At least eight States have adopted NAIC guidelines barring insurers from using sexual orientation in the underwriting process or in the determination of insurability, premium, terms of coverage, or nonrenewal (212, 213).[4]

The specific rulings from many insurance departments about underwriting limitations seem to have two major goals: first, to assure that insurer practices adequately safeguard against discrimination and breaches of confidentiality, and, second, to assure that underwriting decisions are related to the nature and degree of risk covered or expenses involved. As in the case of Maine, Wisconsin demands that the factors that are used for underwriting purposes are justified. But Wisconsin has also concluded, for instance, that an applicant's sexual orientation cannot be used as a factor in the underwriting process **(274).**

Predictive Testing and AIDS

The AIDS epidemic has brought about a great deal of attention to the problems of the high-risk uninsured and the appropriateness of predictive testing in the underwriting process, particularly in individual health and life insurance markets. In an effort to assess the levels of risk presented by individual applicants, some insurers ask questions directed specifically at the AIDS risk. Others seek to have applicants physically examined, including blood testing for AIDS antibodies. Still others are looking for indications of a recent history of sexually transmitted diseases (STD). (See box 2-A for a description of how one insurer handles applicants who may be AIDS antibody positive.)

These steps have provoked considerable concern among those who are in the highest risk categories for potentially contracting AIDS, AIDS-related complex (ARC) or other AIDS-related disorders. Consumer and advocacy groups are particularly worried about confidentiality issues and discrimination—particularly in the workplace—and about the ability of some persons to obtain health or life insurance coverage in the individual marketplace. AIDS advocacy groups have also charged that much of the antibody testing now being done is not appropriate or reliable testing for underwriting purposes. The tests, it is asserted, may indicate the presence of the AIDS virus, but not the disease itself.

Regulators and legislators throughout the country have been urged to pass laws or adopt regulations that limit or ban the use of AIDS antibody testing or test results as a basis for making underwriting decisions. The NAIC has been very active in the formulation of policies relating to insurer medical/lifestyle questions and underwriting guidelines affecting AIDS and ARC (212). Among State legislation on AIDS, California has passed a law prohibiting the use of the AIDS antibody tests or their results—but not other tests reflecting immune function—for the determination of insurability. Florida, Maine, and other States do not prohibit the use of AIDS antibody tests, but disallow questions regarding prior antibody testing history. The New York Department of Insurance held that the antibody tests are not diagnostic, because they only indicate exposure to the AIDS virus, not the presence of the disease. It attempted to prohibit AIDS antibody testing in underwriting and rating health insurance or in the denial of claims, but was denied by the State Supreme Court in April 1988.

The District of Columbia has adopted the most restrictive legislation regarding AIDS testing and insurance. The legislation prohibits the use of all AIDS-related tests for a 5-year period, including tests for AIDS antibodies, tests for the condition of the immune system, and tests to identify the existence of the AIDS virus itself. The legislation further prohibits the use of personal characteristics such as age, marital status, geographic area of residence, occupation, sex, or sexual orientation for the purpose of seeking to predict whether any individual may in the future develop AIDS or ARC.

[4]Including Colorado, Delaware, Florida, Iowa, Oregon, South Dakota, Texas, and Wisconsin.

Box 2-A.—How One Insurer Handles Suspected Seropositives: Metropolitan Life's Policy

This information is taken from "Impact on AIDS on the Health Insurance Industry," a speech by Philip Briggs, vice-chairman, Metropolitan Life Insurance Co., September **30, 1987,** to the Institute for International Research Conference on AIDS.

Insurance testing for AIDS primarily concerns three groups of people:

- Those applying for individual life or health insurance.
- Those in small group insurance plans (usually from **2 to 49** people).

Those who originally do not accept large group coverage but later apply for the insurance.

Metropolitan Life requires the HIV antibody test when an applicant seeks a substantial amount of coverage, and when the applicant has symptoms possibly suggestive of AIDS. We use two ELISAS and a Western blot. Where such tests are prohibited, we use T-cell testing. No testing is performed without the applicant's consent. If the person declines the test, the application is marked "no action" and filed.

An application turned down because of a seropositive test is sent to the medical director, where the information is distributed strictly on a need-to-know basis.

To determine if applicants want to know about their seropositive test, we first tell them there was a significant result from their blood test. Then if they return a signed authorization, we offer the information to them or their doctors.

In group insurance, premiums and rates can be changed annually. But this may not be practical or desirable. Instead, insurers might suggest redesigning the health plan to included some of these features:

- Longer probation periods.
- Limitations on benefits that involve many conditions in addition to AIDS.
- Add limited coverage clauses to plans that do not have them.

SOURCE: "How One Insurer I-iandles Suspected Seropositives Metropolitan Life's Policy" ***AIDS Patient*** *Care,* **2(1):6 February 1988.**

Wisconsin's experience in developing AIDS-related policies brings a different focus to some of the specific issues ielating to predictive testing and insurance underwriting. In the fall of 1985, the Wisconsin legislature amended a law passed earlier in the year prohibiting insurance companies from requiring individuals to take the AIDS antibody test or to reveal the results of tests already taken. The provision also prohibited insurers from basing rates or any other terms of coverage on whether an applicant had taken the test or had revealed the results of a test already taken. The amended law, however, allows insurers to use a series of AIDS antibody tests which the State epidemiologist finds to be medically significant and sufficiently reliable for detecting the antibody and which the Commissioner finds and designates by rule to be sufficiently reliable for use in underwriting of individual life, health, and accident insurance.

The State epidemiologist did determine that a series of multiple ELISA (Enzyme-Linked Immunosorbent Assay) tests coupled with a Western blot test is medically significant and sufficiently reliable.

The Commissioner's office found, however, that these rulings leave unanswered the much broader—and much more significant—public policy question of how the costs of treating the AIDS pandemic should be dealt with, and particularly for those who are denied coverage sought on an individual basis.

REGULATION OF HEALTH INSURANCE

There are two broad categories of health insuring organizations in the marketplace—commercial insurance companies and hospital service (Blue Cross) and/or medical service (Blue Shield) plans.

More than 800 insurance companies and 77 BC/BS plans write group and individual health insurance contracts in the United States. In addition to the insurers, there are also hundreds of health delivery organizations, such as health maintenance organizations (HMOS) and competitive medical plans (CMPS) that, in addition to performing a financing role, actually arrange for the provision of health services for persons enrolled in their plans. [5]

Regulation of Insuring Entities

All of the States have established insurance laws that require insurance companies to meet a variety of financial and other requirements in order to obtain a license to do business in the State. The exact requirements vary widely from State to State but ordinarily stipulate certain amounts of financial resources needed to establish solvency as an insurer (289). The specific financial requirements vary according to such factors as the kind of insurer involved (e.g., a stock versus a mutual company), how the firm is to be organized (e.g., as a domestic versus out-of-State company), the number and/or combination of insurance lines (e.g., life, casualty, accident and health, etc.) a company proposes to market, and the insurance experience of a firm prior to the licensing request. Many States also require companies to maintain membership in a guarantee association as a condition of doing business to cover the liabilities of impaired or insolvent companies.

Hospital service (Blue Cross) and medical service (Blue Shield) plans are ordinarily exempted from State commercial insurance law but are granted franchises to do business and are regulated under separate enabling legislation (289). BC/BS plans usually do not have to meet the initial capitalization requirements required of commercial insurance companies, but in many other respects the plans are treated like commercial insurers in such matters as policy filing and approval, reporting and examination requirements, and investment limitations. On the other hand, BC/BS plans are frequently subject to a rate-making process that does not generally apply to commercial insurers. Involved in this process are review and approval of subscriber premiums, public rate hearings, benefit modification approvals, and the review and approval of payment agreements and fee schedules with providers of health services. In response to growing competitive pressures, an increasing number of plans are seeking legislative approval to reorganize themselves as mutual insurance companies instead of traditional hospital or medical service corporations under State law.

Regulation of Insurance Contracts

Generally speaking, the statutory requirements regarding group contracts differ from those applicable to individual contracts. In essence, regulation in the individual contract area is somewhat more rigorous and also more standardized than is found in the group contracts area. This is due in large part to the view that people who are individually insured lack expertise about many insurance matters and are not in a position to negotiate the terms of contracts with the companies that specialize in this field. Group insurance arrangements, on the other hand, involve negotiations between more equally situated parties who can better protect their own interests in entering into a health benefits contract. Thus, group insurance laws are usually not as detailed or as prescriptive as the statutes affecting individual contracts, especially with respect to policy language, though some States do require certain uniform provisions in the group area. Some States require the filing of group rates and information justifying rates; others require rate information only when requested by the regulatory authority. However, the States generally do not regulate group health insurance rates on the theory that health insurance written on a group basis has a history of being quite competitive.

All States require that individual health insurance policy forms be filed with the appropriate regulatory authority before being used. Most States also require similar filings of group insurance contracts. Insurance laws generally authorize an insurance commissioner (or comparable authority) to disapprove policies if they contain

[5] The regulatory framework governing alternative delivery organizations is not reviewed in this report.

unjust, unfair, inequitable, misleading, or deceptive provisions. Many States also permit their commissioners to disapprove contracts on the grounds that the benefits provided are unreasonable in relation to the premium charged for protection; that is, the premiums must not be excessive. Actuarial tests have been developed for making these assessments. Many of the BC/BS plans are required to obtain prior approval of individual subscriber rate schedules.

Some States require the advance approval of individual policies, riders, endorsements, and other related contractual materials (e. g., the application form). Most States, however, make use of "deemer" provisions which provide that policy forms and related items will be "deemed" approved, unless the insurance authority advises to the contrary within a specified period of time. Some States permit the immediate use of new or revised policy forms without any "deeming" period until some disapproval action, if any, is taken. States may also require an insurer to obtain prior policy approval from the State in which the insurer is domiciled before it may be offered in their own jurisdictions.

States frequently apply statutory provisions that prohibit certain types of discriminatory practices in issuing, continuing, or canceling insurance policies, or prohibit charging higher premiums solely because of certain physical handicaps such as blindness, mental handicaps, etc., unless the discrimination can be justified by sound actuarial practice **(123).** Other anti-discrimination statutes require that underwriting decisions be related to the nature and degree of the risk covered or expenses involved. Thus, certain factors—some of which are discussed elsewhere in this report—may be barred from use in making underwriting decisions for individual coverages.

The policy form and supporting material filed by an insurer are assigned within an insurance department to an insurance examiner, who determines that the documents are in compliance with various statutory and administrative standards established by the State for policy form and content. A typical filing would include several copies of the actual policy form, the application for insurance, information regarding rates and the classification of risks used in connection with the policy, an outline of the rules pertaining to any limits imposed with respect to eligible risks, and statements setting forth anticipated loss ratios (ratios of expected claim payments to premiums).

Many States also have laws governing some aspects of group insurance contracts, such as who constitutes a group for group benefit purposes. In addition, many States have adopted laws requiring group contracts to contain certain types of mandatory conversion and/or continuation-of-coverage provisions. [b] A conversion privilege permits members of a group and their dependents to continue their insurance protection on an individual basis when their coverage under a group plan ceases, without proof of insurability (i.e., without regard to information that would affect the individual's acceptability for coverage under an individual contract). Such requirements are often required not only for workers who leave the employer sponsoring the group plan, but also for certain spouses and dependents in the case of the insured's death or dissolution of marriage. The continuation is an extension of the original group plan at the same premium, though the separated group member (or his or her spouse or dependents) pays the full premium costs of coverage, including any employer contributions made on behalf of members still in the group.

Mandated Benefit Laws

In addition to requiring compliance with certain contract provisions, many States have adopted various mandated benefit laws (123). Some of these statutes require that contracts include certain specified benefits. Existing contracts are usually amended to include required coverages on their renewal dates. Alcoholism, drug addiction, maternity coverage, etc., are among the areas frequently addressed by mandated benefit laws.

Rather than mandate specific coverages, some States require insurers to offer prospective buyers certain benefits, but the inclusion of those bene-

[b] The Federal Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA) (Public Law 99-272) has a similar provision regarding continuation of coverage.

fits in the group contract is not required. Other State statutes mandate payment to certain providers by precluding insurers from distinguishing among the providers of certain health services (for payment purposes) as long as those providers are licensed or certified by the State and are operating within the scope of their licenses or certifications.

Premium Taxation

States (and a few other jurisdictions) impose taxes on premiums received by insurance companies, including premiums for health insurance. In general, these taxes vary from State to State, by the type of company involved, and whether the insurer is an out-of-state or domestic company. The tax rates also vary, but most are in the 2 to 2.25 percent range. Most States do not impose premium taxes on Blue Cross or Blue Shield plans, though several States do impose some charges on them in lieu of premium taxes.

Regulatory Authorities

In each of the States and the District of Columbia, some authority is designated to regulate insurance, including health insurance. (Health insurance is only one of the concerns of these authorities.) In some cases, this is an independent State agency, such as a department of insurance; in others, the authority is a constituent of some other entity with broader responsibilities than insurance alone, such as business regulation. The insurance departments, however called, are headed by an official (usually appointed, but in some instances, elected) known as a commissioner, superintendent, or director of insurance (in a few States, the attorney general's office performs certain regulatory functions, usually relating to BC/BS plans). Insurance authorities are charged with enforcing the insurance, hospital, and medical service corporation and other State laws pertaining to insurance.

Enforcement is carried out through the issuance of regulations, rulings, and other formal processes, but also frequently through letter communications and informal discussions and meetings. Not all regulatory policy, therefore, is clearly spelled out in official, secondary source documents, or materials published by State insurance regulatory authorities.

The powers of commissioners and their staffs to affect the business of insurance are numerous and include the power to issue or withhold licenses; examine an insurer's records and financial condition; approve insurance products; surveillance and, in some cases, prior approval of rates; and the conduct of audits of operations. Other regulatory supervision focuses on the licensing of agents, advertising practices, disclosure requirements, and policyholder complaints.

Federal Laws Affecting Health Insurance

The McCarran-Ferguson Act (Public Law 15, 79th Congress) provides that the States have major regulatory responsibilities with regard to the business of insurance. In addition, several Federal laws affect health benefit plans, particularly group plans. For example, the Federal tax code has an important impact on health insurance, such as the exclusion of employer contributions for health benefits from the taxable income of workers. Legislation such as ERISA (the Employee Retirement Income Security Act), the HMO (Health Maintenance Organization) Act, and Medicare each affect the design of many private health benefit programs. COBRA (Consolidated Omnibus Budget Reconciliation Act of 1985) (Public Law 99-272) mandates that employers provide continuation of coverage for those employees and their dependents who would otherwise lose eligibility because of reduced work hours or termination of employment. Congress has also enacted laws prohibiting certain discriminatory practices relating to age and sex in the provision of health benefits for workers and their dependents.

THE HEALTH BENEFITS MARKETPLACE

Development of Health Insurance

The private health benefits marketplace is a complex and competitive arena that involves many different parties concerned with the design, sale and distribution, cost, regulation, and performance of the health benefits industry.

The health benefits market is dominated by concerns with group benefits, since most non-elderly Americans are protected against the costs of medical care through group benefit plans usually sponsored by their employers. Modern group health insurance evolved during the Depression with the development of hospital service plans (Blue Cross) that paid for specified hospital room and board and ancillary services for a pre-determined monthly payment or premium. Also during the 1930s, commercial insurance companies, that did provide some sickness and accident coverages on an individual basis, began to offer cash (or indemnity) benefits toward the costs of health care as part of group contracts.

During the Second World War, interest in group health benefits began to expand as a component of many collective bargaining activities, because such benefits were not subject to wartime wage and price control limitations. Even greater interest in employer-sponsored group health benefits emerged soon after the War, when the Supreme Court ruled that such benefits were a legitimate part of the labor-management bargaining process.

Initial worker interest in group health benefits focused on hospital care, where new technological advances in surgery and anesthesia were taking place and where the largest and most difficult-to-budget-for expenses were incurred. Expanding use of surgical procedures led to a broadening of basic hospital benefits to include physician surgical expenses as well. During the 1950s, group health protection grew rapidly to cover non-surgical services provided by physicians in hospitals, and then to other medical care provided in office and other non-hospital settings. Today, many workers enjoy comprehensive group benefit protection that often encompasses a wide range of medical care, including dental, vision, and other non-medical benefits as well.

The Insured Group Market

Until the 1970s, most group buyers of health benefits—such as employers—purchased coverage from a commercial insurance company or BC/BS plan. Unless the purchasers (e.g., employers) were very large, however, they generally did not have much influence over the design, financing, or administration of the health plan. In the smaller group marketplace, the insurers themselves developed and marketed a range of standardized products from which an employer could choose, allowing for some modifications to meet the employer's specific needs.

In exchange for premium payments, the group buyers transferred to the insuring entities—insurance companies or BC/BS plans—the financial risks of paying benefits. It is the transfer of financial risk that is the essence of the insured health benefits plan. In most instances, the insurers also performed other functions relating to the contract, such as help in the design of benefits, collection of premiums, payment of claims, and other administrative functions. Thus, the group buyer purchased a "package" of insurance services. Larger group health purchasers (e. g., multistate employers or large associations) often have their own in-house staffs of benefits specialists, including experts in group benefits contracting. These employers, using their market power as buyers, will generally invite proposals from competing insurers to provide health benefits for their workforce on the basis of specifications developed by the employer's own benefits staff, by insurance brokers, or by health benefits consultants working for the buyer. As a result, larger group plans are generally tailored to meet the needs of the purchaser and are offered on a bid basis. Thus, knowledgeable buyers and sophisticated suppliers make the group health benefits marketplace highly competitive.

The commercial insurance companies and the BC/BS plans—which are basically health care

financing and marketing arrangements—are not the only sources of group benefit coverage. Significant growth has also occurred in the numbers of health delivery organizations (such as health maintenance organizations and competitive medical plans) that provide, as well as finance, benefits. This growth has further intensified competition in the marketplace.

Self= insurance

The most important competitive development in the group health benefits market during the last 15 years has been the "unbundling" of the traditional health insurance product.[7] Major changes have occurred in the development of new and alternate methods to finance and/or administer health benefit programs. The principal source of this competition for traditional insurers in recent years has come from their own potential policyholders—the employers—who have elected to self-insure their benefit plans and purchase related administrative services separately.

During the economic ups and downs of the early 1970s and early 1980s, many larger corporations with health plans experienced significant pressures on profits and cash flow. At the same time, health care inflation and rising utilization resulted in sharp increases in the costs of their group health plans. As these costs increased, employers began to consider alternative ways to control expenses, including alternate methods for financing benefits and for administering claims.

Many group buyers, particularly those with more stable workforces, noted that they experienced relatively little fluctuation in their volume of health claims, and that the annual increases in their experience-rated premiums were reasonably predictable by applying a standard medical care inflation factor. This straightforward relationship brought home the fact that the insurers were relieving the employers of very little risk, except perhaps to protect one year's cash flow. In effect, the employee groups covered by large corporations had grown to such a size as to render of little value the essential function of insurance—i.e., reducing the risk by pooling independent exposures. In fact, if the group is composed of better than average risks, it can reduce its benefit costs by not having to share in any of the costs of other risks taken on by an insurer.

The logical next steps were to redesign the financing mechanisms altogether. Many insurers responded to new demands from their policyholders by entering into a variety of arrangements through which the employers or groups retained or "self-insured" part or all of the financial risks for the payment of claims. Today, self-insured health benefit plans of various types and design are the predominant form of group coverage in the marketplace among larger employers and groups. In addition to their traditional insured group products, most major group health insurers (commercial and BC/BS) now offer various types of new products, including administrative services only (ASO) or claims services only (CSO) programs because of the demand from group sponsors for such arrangements.

Self-insured plans offer several key advantages to employers. First, self-insured employers are able to use and retain earnings on amounts that would otherwise be paid to and held by insurers to create claims reserves. Both commercial carriers and BC/BS plans are required, under various State laws, to hold reserves to cover claims that are due but as yet unpaid, in the course of settlement, or incurred but not yet reported. The actual amount of these reserves varies from case to case and from carrier to carrier, but they can represent a sizeable portion of the annual premium. The insurers earn interest on these reserve amounts. Competition, however, has led most insurers to negotiate a retention—that is, the amount retained by insurers for expenses, for contingencies, and for profits or for additions to surplus—with employers that reflects rate credits for the interest earned on the reserves. Many employers, however, felt that they could gain even more by holding onto these amounts in the first place.

Second, no State premium taxis applied to self-insured plans. A self-insured arrangement, therefore, depending on its design, can reduce or eliminate altogether the costs of State taxes on health insurance premiums.

[7]The traditional insurance product consists of various components including risk assumption, financing arrangements, claims management, actuarial services, legal services, etc.

A third and very important benefit of self-insurance is that self-insured plans can avoid the requirements of State insurance law and regulation because of the Federal Employee Retirement Income Security Act, or ERISA. A provision in ERISA allows Federal law to preempt State laws, insofar as such laws relate to benefit plans covered by ERISA.[8] While an exemption from the general preemption rule for ERISA leaves untouched State laws that are designed to regulate the business of insurance, ERISA preempts laws that have a regulatory impact on employee benefit plans. Thus, self-insured plans need not comply with any of the State laws that require health insurance contracts to include specified benefits, comply with certain anti-discrimination standards applicable to insured plans, pay State insurance premium taxes, or participate in insurance pools for high-risk individuals. Much of the group benefits marketplace, therefore, is virtually unregulated by the States.

[8]Section s14 of ERISA. Amendments to ERISA have provided for some State regulatory review of multiple employer trusts.

THE OTA SURVEY[9]

Introduction

Many insurance texts describe the principles of underwriting and the underwriting process. [10] Yet, there are few or no details on whom insurers test and what tests they require. A 1986 survey conducted by the Health Insurance Association of America (HIAA) and the American Council on Life Insurance (ACLI) gathered data on screening by insurers for infections with the human immunodeficiency virus (HIV) (127). This survey, however, had two important limitations. It did not provide a view of HIV testing in the context of other routine tests required by insurers, and it included neither Blue Cross and Blue Shield (BC/BS) plans nor health maintenance organizations (1-IMOS), a rapidly growing health insurance sector.

In an effort to fill this gap, the Office of Technology Assessment (OTA) conducted a survey of commercial carriers and BC/BS plans in July 1987, and a survey of HMOS in September 1987. Approximately 14.s million non-Medicare individuals have health insurance without the benefits of group membership. Commercial carriers insure approximately 9.3 million (66); BC/BS, 4.2 million (203); and HMOS, approximately 1 million **(146, 239).** These are the principal individuals that must meet underwriting standards to obtain health coverage, and their insurers were the focus of the OTA survey.

The survey was developed in cooperation with HIAA, the national Blue Cross and Blue Shield Association (BCBSA), and the Group Health Association of America (GHAA). The purpose of the survey was twofold:

1. to collect basic information on individual underwriting practices and the use of medical screening by insurers, and
2. to document how health underwriters have responded to the AIDS epidemic.

The survey questionnaire varied little among the three target groups. Terminology was tailored to each, and some questions were modified to reflect differences in rating and enrollment practices. The survey of commercial companies is presented in app. D.

Overall, 84 percent of the total group of commercial carriers, BC/BS plans, and HMOS that were surveyed responded. Survey responses are summarized in table 2-1 and described below.

Commercial Health Insurers

The commercial health insurance survey was targeted to those firms that sell individual policies. These firms are the principal health insurers who require some applicants to undergo diagnostic

[9]This survey was published in February 1988 as the second staff paper in OTA'S Series on AIDS-Related Issues. The staff paper is expanded here to include relevant data on group-based health insurance underwriting.

[10]Underwriting is the process by which an insurer determines whether or not and on what basis it will accept an application for insurance.

Table 2-1.—Response to the Survey: Commercial Health Insurers, BC/BS Plans, and HMOS

	Commercial insurers	BC/BS plans	HMOS
Total mailed questionnaires	88	15	50
Replied	73 (83%)	15 (100%)	40 (80%)
fully responded	62[a] (70%)	15 (100%)	16[b] (32%)
omitted (not relevant)	9 (10?4o)	–	23 (46%)
company liquidated	1	—	—
too late for inclusion	1	—	1 (2%)
No Reply	15 (17%)	–	10 (20%)

[a]One of the sixty-two responding companies had recently withdrawn from the individual health insurance market and responded only to those questions concerning small underwritten group policies.
[b]One of the sixteen responding HMOs does not allow individual enrollment but does accept small underwritten groups.

SOURCE: Office of Technology Assessment, 1988.

testing or physical examination .11 The survey was sent to the 88 largest individual health insurers identified by the 1985 "Best's Life-Health Industry Marketing Results" (20). These 88 companies represented 70 percent of the commercial, individual health insurance market .12 Two insurers not found on the Best list but reported elsewhere (217) to be "leaders" in individual health were included. Two companies reported on the Best's list were never located. Thus, the survey was sent to a total of 88 companies.

Eighty-three percent (73 of 88) of the commercial insurers responded, although one response arrived too late for inclusion and nine companies issued policies that were not relevant to the intent of the survey (table 2-1). These nine companies sold only cancer, intensive care unit (ICU), guarantee issue, or Medigap policies and were omitted .13 Another company had been liquidated. Nevertheless, commercial participation was high; 62 companies (70 percent) completed the survey in time to be included in the analysis, representing approximately 57 percent of the commercial, individual health insurance market (20). (One company had recently withdrawn from the individual health market and responded only to those questions concerning group policies.) Response was especially strong among industry leaders. Of the 25 largest companies in 1985, 19 completed the survey (41 percent of the market), 4 were not relevant to the survey, and 2 did not reply.

Three health insurance populations were defined in the questionnaire:

1. individuals-those who seek insurance independently and without any association with an employer or membership group of any kind (also referred to as direct pay or nongroup in the BC/BS survey and self-pay in the HMO survey);
2. individually underwritten groups—those groups that are too small to qualify for experience-rating and whose members must be individually underwritten (referred to in this report as small groups);
3. other groups—employee and other large groups that do not require individual underwriting (referred to in this report as large groups).

Survey respondents were asked to avoid including group conversions to individual coverage or Medigap policies in their responses.

It is important to emphasize that the surveyed companies were selected to target leaders in individual health rather than group-based insurance. Indeed, a significant number of the respondents do not sell group health insurance. Of the 62 survey respondents, 38 reported that they underwrite small group health insurance, and only 27 indicated that they offer large group coverage. While the survey's focus was on individual underwriting, these companies were asked to also respond to questions concerning their group underwriting practices .14

Companies were selected for inclusion in the survey regardless of HIAA affiliation. However, letters endorsing the survey were sent by HIAA,

[11]Large group health insurers may test, but only in rare cases of so-called "late applicants. " Late applicants are employees who are eligible for group health insurance but choose not to sign up until after the normal enrollment period. Employees who do not participate when first eligible may later choose to join when they know they soon will have a claim. Insurers often require proof of insurability to prevent such adverse selection (124).

[12]Market share calculations were based on 1985 direct premiums earned for collectively renewable, guaranteed renewable, and all other accident and health insurance.

[13]Cancer insurance provides coverage only for cancer. ICU policies cover only stays in hospital intensive care units. "Guarantee issue" refers to policies sold without regard to health status. Medigap policies are designed as supplements to Medicare coverage for the elderly.

[14]The response to group-related questions was sometimes poor, thus only significant findings are reviewed in this report.

on OTA'S behalf, to their 52 members. Companies providing confusing or incomplete data were called for clarifications.

The responding companies reported receiving a total of 2.24 million applications for individual health insurance each year. '5 The annual volume of applications ranged from 700 to 325,000. The largest insurers dramatically overshadowed the others. Although 70 percent of responding companies process no more than 33,000 applications annually, 6 firms alone accounted for 1.2 million applications, or more than half the annual volume of the entire group (table 2-2).

Twenty-eight of the respondents reported also receiving 436,000 small group applications annually. While most of these insurers (17 of 28) process fewer than 10,000, one company alone accounted for 100,000 small group applications or more than **20** percent of the annual volume of the entire group (table 2-2).[16]

Blue Cross/Blue Shield Plans

There are 77 BC/BS plans nationwide, all offering some form of individual health coverage. BC/BS plans often operate under considerably different conditions from commercial carriers. Some plans hold open enrollment periods, all are regionally based, and many enjoy significant shares of their local health insurance market. These factors may play a pivotal role in underwriting policies.

Twenty-four plans (31 percent) in 15 States, 4 according to State mandate, accept anyone who applies for individual coverage, regardless of health status, during certain periods of the year. Seventeen (22 percent) of these "open enrollment" plans are termed "continuous," because they accept all applicants throughout the year **(165).** The implications for the underwriting process are significant. Because no individual standards of insurability are applied to open enrollment applicants, there is considerable adverse selection. In other words, people with poorer than average health expectations are more likely to apply for insurance than those with average or better health expectations. Most plans attempt to hold down premium rates for open enrollment subscribers by providing less comprehensive benefits relative to medically underwritten applicants. Others require open enrollment subscribers to pay higher premiums than underwritten applicants for identical coverage. Open enrollment coverage of high-risk applicants usually entails waiting periods before initial benefits may be paid and may impose limitations on coverage of preexisting conditions.

Even though open enrollment plans never deny an application, applicants may be required to furnish evidence of their health status, including an attending physician's statement (APS).[17] Individuals enrolling in an open enrollment program

[15] Four of the sixty-one individual insurers did not provide data on number of applications received annually.

[16] Ten of the thirty-eight responding companies (26 percent) that underwrite small group insurance did not report their application statistics.

[17] An attending physician statement is a report summarizing the applicant's recent health history that is prepared by the applicant's personal physician.

Table 2-2.—Commercial Health Insurers Annual Volume of Applications for Individual and Small Group Coverage

	Individual policies		Small group policies	
Average number of applications per year	Number of companies (n=61)	Percent of companies	Number of companies (n=38)	Percent of companies
100-15,000	26	43'?!0	19	50 "/0
15,001 -30,000	16	26	5	13
30,001 -45,000	5	8		3
45,001 -100,000	5	8	:	8
More than 100,000	5	8	0	—
Not available	4	7	10	26
Total	61	1000/0	38	1000/0

SOURCE" Office of Technology Assessment, 1988.

often have the option of undergoing medical underwriting, and even a physical exam, to determine whether they qualify for a more comprehensive benefit package at a preferable rate. In addition, health information may be required by the underwriter to develop benefit limits, exclusion riders, waiting periods for preexisting conditions, or premium rates.

Unlike commercial insurers, the BC/BS plans are regional and do not sell coverage outside a particular State, metropolitan area, or region. This has particular significance vis a vis AIDS, not only because of the disproportionate effect of the epidemic on certain locales, but also because of State and local regulations on screening for HIV infection.

The market share of many BC/BS plans, though decreasing in recent years, has historically overshadowed that of any individual commercial carrier. In some States, as much as half the population may be BC/BS subscribers. Such a secure market position can shape underwriting policies and allow a plan, for example, to enroll high-risk applicants.

Fifteen plans were selected for the OTA survey and were chosen to ensure representative geographic distribution, variations in market share, location in areas of low and high AIDS prevalence, and differing policies regarding open enrollment (table 2-3). The survey was sent to the plans, on OTA'S behalf, by the national Blue Cross and Blue Shield Association along with a letter of endorsement. All 15 plans completed the questionnaire and reported that they offer individual and large group coverage. Fourteen also underwrite small groups. Plans providing confusing or incomplete data were called for clarifications.

The commercial questionnaire was adapted for the BC/BS plans to include appropriate terminology and address BC/BS open enrollment and underwriting practices. "

[18]References t. "individual coverage" were replaced by "non-group/direct pay" coverage to reflect BC/BS terminology. Plans were asked to verify whether they offered continuous or noncontinuous open enrollment. Question 11. B. in the commercial insurers survey (see app. D), which concerns the importance of nonmedical underwriting factors, was split into three parts, focusing on the actual proportion of BC/BS applicants affected by medical as well as nonmedical underwriting factors.

Table 2-3.—Characteristics of the 15 Responding Blue Cross/Blue Shield Plans

Plan characteristic	Number of plans (n= 15)[a]
In an area of high AIDS prevalence[b]	5
Significant market share (more than 38°/0 share)	7
In a competitive market (20-31 °/o share)	8
Offers continuous open enrollment[c]	4

[a]Some plans appear in more than one category.
[b]Market share data come from P. Fanara and W. Greenberg, "The Impact of Competition and Regulation on Blue Cross Enrollment of Non-Group Individuals," *The Journal of Risk and Insurance*, pp. 188-189, June 1985,
[c]An additional plan holds open enrollment, but it is limited to certain months of the year.

SOURCE: Office of Technology Assessment, 1988,

Health Maintenance Organizations

HMOS are health care organizations that provide comprehensive services to enrolled members for a fixed, prepaid amount that is independent of the number of services actually used. As of March **1987,** there were **654** HMOS in the United States, with enrollment exceeding 27.7 million members, or more than 10 percent of the U.S. population. HMO growth has been phenomenal. From 1981 to 1986, average annual enrollment increased 20 percent, while the number of plans increased by 48 percent. Thirty-four new plans started in the first 3 months of 1987 alone (147).

By assuming not only the insurance risk but also the responsibility for providing their members' health care, HMOS operate under significantly different conditions from either BC/BS plans or commercial carriers. Another important distinction is that while commercial insurers and BC/BS plans are governed solely by State regulations, many HMOS voluntarily adhere to Federal qualification standards as well.[19]

More than half the nation's HMOS are federally qualified, and 80 percent of HMO enrollment

[19]The Federal Health Maintenance Organization Act of 1973, as amended (42 U.S.C. Sec. 300e et seq.), created an HMO office within the Department of Health and Human Services to regulate HMOs through qualification and ongoing compliance requirements. In order to become federally qualified, HMOs must meet certain financial, underwriting, and rate-setting standards and provide specified medically necessary health services (116).

is in federally qualified plans (147). Federal qualification shapes HMO insurance practices including rate-setting, risk classification, coverage, preexisting conditions, and waiting periods. It requires that if an HMO accepts non-Medicare individual members, they must be either accepted at a community rate or rejected altogether. Exclusion riders and rated premiums are prohibited. In addition, benefits for preexisting conditions must be available upon enrollment because waiting periods are not allowed.[20] Medical screening of individual applicants is permitted, however.

State HMO regulation varies. While some States give HMOS considerable latitude with respect to nongroup underwriting, others are more restrictive than the Federal HMO Act. Minnesota, for example, allows medical screening, exclusion riders and experience-rating (315). In contrast, Ohio forbids medical screening of nongroup applicants during a mandated 30-day open enrollment period each year (283),

Most industry experts believe that individual enrollment in HMOS is rare. The Group Health Association of America estimates that no more than 4 percent of non-Medicare HMO members enroll as individuals (239). Many of these "self-payers" are "conversions" (i. e., former group members who have converted to individual enrollment because of a change in employment or marital status). Both the Federal HMO Act Regulations (42 CFR 417.108(e)) and The Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA) (Public Law 99-272) mandate that HMOS allow group members to convert to individual enrollment without providing evidence of insurability y.

No national database identifies the HMOS that accept self-paying individuals. Because OTA was not able to ascertain which HMOS accept individual enrollment, the survey questionnaire was sent to the 50 largest local and national HMOS to first inquire whether the organization enrolled individuals other than on a conversion basis and, if so, to request that the HMO participate in the survey .[21] Endorsement letters from GHAA were enclosed with the survey. Plans providing confusing or incomplete data were called for clarifications.

Eighty percent of the HMOS (40 of 50) responded.[23] Sixteen (32 percent) reported that they met the survey requirements and completed the questionnaire in time to be included in the analysis; of these, 15 (30 percent) accept nongroup individuals (i.e., on a non-conversion basis), eight (16 percent) underwrite small group, and 16 (100 percent) and 4 (25 percent) enroll community-rated and experience-rated groups respectively. (Note that one of the sixteen responding HMOS does not allow individual enrollment but does underwrite small groups.) The fact that close to one-third of the 50 largest HMOS enrolled nonconversion individuals indicates that HMOS may be playing a greater role in the individual health insurance market than previously believed.

The 16 plans that completed the survey had a total of 9.2 million members and one-third of the nation's total HMO membership. Membership for these HMOS ranged from 110,000 to more than 4.9 million; several were national firms that included from 6 to 24 local plans. The 23 HMOS that responded to OTA'S letter but accepted neither nonconversion individuals nor underwritten groups had a total of 6.5 million members (147). Other responding plan characteristics are summarized in table 2-4.

Although the responding HMOS represent a substantial share of the national HMO membership, these older, established, and very large organizations are not necessarily representative of younger plans and recent entrants into the mar-

[20] However, if an HMO applicant knowingly misrepresents his or her state of health, the plan may have grounds to terminate membership.

[21] The surveyed plans were selected from "The Interstudy Edge" report of HMO membership as of Mar. 31, 1987. Note that many of the so largest HMOs are national firms that may include as many as 37 local plans.

[22] The HMO survey instrument differed from the commercial questionnaire in several ways. Plans were asked if the HMO (1) accepted self-paying individuals other than on a conversion basis; (2) was federally qualified or had a nonfederally qualified subsidiary; (3) offered continuous or noncontinuous open enrollment; and (4) had individually underwritten groups, community-rated groups, or experience-rated groups. In addition, some terminology was changed to reflect HMO practice.

[23] However, one HMO responded too late to be included in the analysis for this report.

Table 2-4.—Characteristics of the 16 Responding HMOs[a]

HMO characteristic	Number of HMOS (n= 16)	Percent of HMOS
Federally qualified (FQ),	9	56%
FO with non-FQ subsidiary	3	19
Model type:		
Network	7	44%
IPA[b]	5	31
Staff	3	19
Group	1	6
Membership types accepted:		
Self-pay individuals	15	94%
Individually underwritten groups	8	50
Community-rated groups	16	100
Experience-rated group	4	25

[a]An additional 16 HMOs responded to the survey but were excluded because they accept neither individuals nor individually underwritten groups.
[b]Independent practice association.

SOURCE: Office of Technology Assessment, 1988.

ket. Small, young HMOS are less likely to enroll individuals, be federally qualified, or operate on a not-for-profit basis (147).

Survey Results

Medical and Other Factors in Risk Classification[24]*

Commercial Insurers.—The outcome of underwriting is risk classification, the final evaluation of whether the proposed insured will be covered on a "standard" or "substandard" basis, or not at all. Insurers were asked to list those conditions or impairments that they exclude from coverage, "rate-up" (i. e., require a more costly premium), or consider uninsurable. In general, the companies take a very similar approach to classifying risk. However, there are differences; some medical conditions or impairments that make the applicant wholly uninsurable by one insurer may just be excluded from coverage or rated-up by another. For example, although some companies are unwilling to underwrite applicants with any history of diabetes, others decline only juvenile diabetics and insure but exclude diabetes for other diabetic applicants. In some cases, severity of the condition is key. For example, if hypertension is controlled and moderate, a rated premium (i. e., more expensive) may be offered; if the hypertension is uncontrolled or severe, the applicant may be denied coverage altogether (table 2-5).

Most applicants for individual health coverage are classified as standard and can purchase insurance protection without extra premiums or special limitations. Three-quarters of the responding insurers (46 of 61) provided standard coverage to at least 60 percent of their individual applicants. In total, the responding insurers reported selling

[24]Throughout this discussion, small group risk classification statistics are provided only when the related survey response was meaningful. Note also that small group underwriting varies. Some insurers risk-classify each small group member individually; covering some members on a standard basis, requiring exclusion waivers for others, and possibly refusing to cover others. Other insurers look at the small group as a whole and either underwrite the group entirely or not at all. The statistics reported here reflect the former practice.

Table 2-5.—Risk Classification by Commercial Health Insurers: Common Conditions Requiring a Higher Premium, Exclusion Waiver, or Denial

Higher premium	Exclusion waiver	Denial
Allergies	Cataract	AIDS
Asthma	Gallstones	Ulcerative colitis
Back strain	Fibroid tumor (uterus)	Cirrhosis of liver
Hypertension (controlled)	Hernia (hiatal/inguinal)	Diabetes mellitus
Arthritis	Migraine headaches	Leukemia
Gout	Pelvic inflammatory disease	Schizophrenia
Glaucoma	Chronic otitis media (recent)	Hypertension (uncontrolled)
Obesity	Spine/back disorders	Emphysema
Psychoneurosis (mild)	Hemorrhoids	Stroke
Kidney stones	Knee impairment	Obesity (severe)
Emphysema (mild to moderate)	Asthma	Angina (severe)
Alcoholism/drug use	Allergies	Coronary artery disease
Heart murmur	Varicose veins	Epilepsy
Peptic ulcer	Sinusitis, chronic or severe	LUPUS
Colitis	Fractures	Alcoholism/drug abuse

SOURCE: Office of Technology Assessment, 1988.

more than 1.5 million new standard individual policies each year; approximately 73 percent of their individual applicants are classified as standard (table 2-6, figure 2-l).

Almost two-thirds (24 of 38) of the respondents underwriting small groups also cover 60 to 100 percent of group members on a standard basis. Overall, approximately three-quarters of small

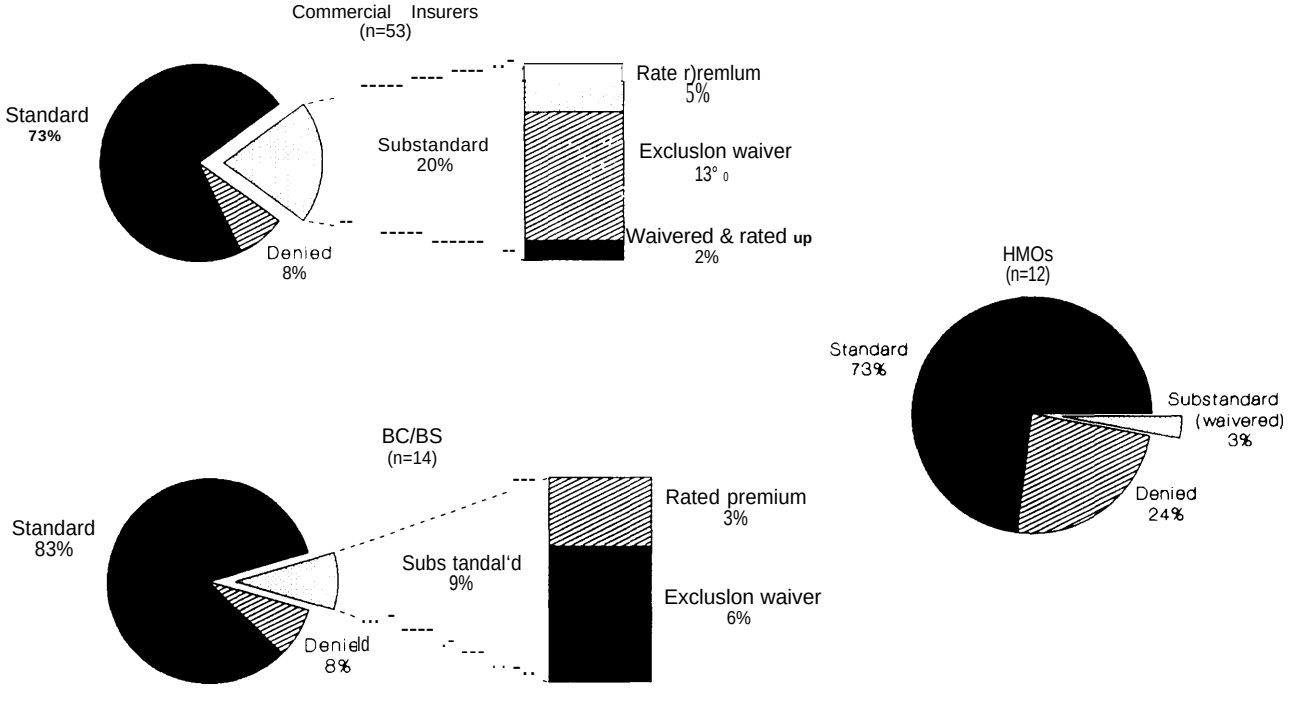
Table 2-6.—Underwriting by Commercial Health Insurers: Risk Classification of Individual and Small Group Applicants

	Individuals		Small group	
Percent of applicants	Number of companies (n=61)	Percent of companies	Number of companies (n=38)	Percent of companies
Standard:				
Never used	0	—	0	—
1 to 190/0	0	—	0	—
20 to 390/0	1	2Y0	1	30/0
40 to 590/0	7	11	1	3
60 to 790/0	26	43	7	18
80 to 1000/o	20	33	17	45
Not available	7	11	12	32
Total	61	100YO	38	1000/0
Substandard:				
Exclusion waiver:				
Never used	3	50/0	14	370/0
1 to 190/0	35	57	10	26
20 to 390/0	13	21	2	5
40 to 590/0		2	0	—
60 to 790/0	:	—	0	—
80 to 1000/o	0	—	0	—
Not available	9	15	12	32
Total	61	100YO	38	100%
Rated premium:				
Never used	13	21V0	20	53Y0
1 to 190/0	35	57	5	13
2o to 39%	3	5	1	3
4o to 59 %	0	—	0	—
60 to 79 %	0	—	0	—
80 to 100/o	0	—	0	—
Not available	10	16	12	32
Total	61	100YO	38	100%
Exclusion waiver and rated premium:				
Never used	16	26Y0	22	58Y0
1 to 190/0	33	54	3	8
2o to 39%	1	2	1	3
4o to 59%	0	—	0	—
60 t0 79%	0	—	0	—
80 to 100%	0	—	0	—
Not available	11	18	12	32
Total	61	100YO	38	100%
Rejected:				
Never used		2?40	0	—
1 to 19%	5;	85	20	53Y0
2o to 39%	1	2	7	18
4o to 59%	0	—	0	—
60 t0 79%	0	—	0	—
80 to 100%	0	—	0	—
Not available	7	11	11	29
Total	61	100%	38	1000/0

[a]Percentages may not total 100 due to rounding.

SOURCE: Office of Technology Assessment, 1988

Figure 2-1 .—Risk Classification in Individual Health Insurance: Estimated Proportions of Standard, Substandard, and Denied Applicants[a b c]



[a]Only those respondents reporting complete risk classification data were included.
[b]Proportions were estimated by dividing the respondents' total number of applicants in each risk class by their total number of applications
[c]Percentages may not total 100 due to rounding.

SOURCE: Office of Technology Assessment, 1988.

group applicants to companies that underwrite each group member individually are offered standard coverage.

Substandard policies include an exclusion waiver, a rated premium, or both. About 413,000 individual applicants were offered coverage on this basis by the responding insurers, or 20 percent of completed applications. The small group insurers offered substandard coverage to approximately 15 percent of their applicants (figure 2-l).

Exclusion waivers may temporarily or permanently exclude a medical condition from coverage. The exclusion may be for a specific condition, such as gallstones, or for an entire organ system, such as reproductive disorders. Permanent waivers usually exclude from coverage chronic conditions that are moderately costly and without life-threatening implications. Temporary waivers generally involve acute conditions that are short-term in nature, such as fractures or some minor surgery. More than half of the responding insurers (35 of 61) reported that 1 to 19 percent of their individual applicants carry an exclusion waiver. Thirteen (21 percent) required exclusions for 20 to 39 percent of their applicants (table 2-6).

Thirty-two percent of the small group insurers (12 of 38) required exclusion waivers **for 1 to 39** percent of small group members applying for coverage.

Thirty-five insurers (57 percent) reported that the increased risk associated with 1 to 19 percent of their applicants required a rated premium. The additional premiums usually range from 25 to 100 percent of the standard premium, although some insurers will use higher ratings (123). Thirteen companies (21 percent) never rate-up applicants.

Rated conditions do not differ significantly from those that insurers may exclude; in general, higher premiums are required for chronic but moderately severe conditions (e.g., asthma, glaucoma). Whether a condition is excluded or rated is a matter of company pricing policy and strategy. Sometimes the insurer does both.

Most of the responding insurers **(56** percent) noted that some policies may require an exclusion and rated premium; 1 to 22 percent of applicants are underwritten this way.

Eight percent of individual applicants were denied coverage by the responding insurers; approximately 164,000 individuals each year. Most companies (54 percent) deny coverage to less than 10 percent of their applicants; 31 percent deny coverage to between 10 and 19 percent. Coverage may be denied for serious medical reasons or "because an applicant is clearly outside a particular company's parameter of acceptable risks for occupational or financial reasons" (123). Most insurers deny any applicant whose probability of disease exceeds three times the average for his sex and age.

More than half the small group insurers (20 of 38) deny 1 to **19** percent of small group applicants, Overall, approximately 10 percent of small group applicants to companies that underwrite each group member individually are denied coverage.

Insurability is not just a matter of health status; several factors are key to the underwriter's decision to deny an application, to exclude a condition, or to rate up an applicant. The survey results indicate that other factors besides ill health can seriously hamper access to health coverage for nongroup individuals and their family members (table 2-7).

When asked to indicate which nonmedical underwriting factors could affect an application's acceptance, commercial insurers most commonly cited dangerous health habits (e. g., drug abuse), illegal or unethical behavior (e. g., criminal business practices), age, and occupation.

Drug abuse, and other health endangering habits, perhaps better categorized as significant predictors of health status, were considered of critical importance by 57 (93 percent) responding companies; indeed, many emphasized that drug abusers are uninsurable. Nearly three-quarters (44 of 61) of those responding also considered "illegal or unethical behavior" incompatible with insurability. This probably reflects the great sensitivity of the industry to fraud. Age and occupation, though reported by roughly one-third to be key to a proposed insured's acceptance or rejection, were more often noted to influence coverage limits or premiums.

Healthy habits, such as non-smoking, were rated "important" by more than half of the insurers (34 of 61), an indication of the increasingly common use of premium credits for nonsmokers. Dangerous avocations, such as race car driving or hang gliding, were considered either "very important" or "important" to almost 80 percent (48 of **61)** of those surveyed. Rather than deny coverage to applicants with risky hobbies, most underwriters choose to limit only the insurer's responsibility for related accidents.

The survey results also show that financial status plays a key role in health insurance underwriting. Sixteen percent **(10** of **61)** of those responding said financial factors alone could affect acceptance of an application; another 43 percent (26 of 61) considered it "important" to coverage limits and premium levels. Some insurers may establish minimum income requirements for certain types of medical expense policies in order to avoid early lapses caused by the insured's inability to afford the premium **(123).**

Many respondents reported requiring financial and personal investigations. (See "Sources of Medical Information, " table 2-12.) Although 25 percent (15 of 61) of the respondents never require an investigation, 16 percent (10 of 61) investigate one-fourth or more of their applicants. Two companies reported that financial or personal checks are done on every individual applicant. More than one-third of the small group insurers (13 of 38) also require similar checks on applicants. One company requires investigations of all its small group applicants. Most commonly, these inspections are credit and motor vehicle record checks, but insurers also rely on inspection agencies to verify health information reported in the appli-

Table 2-7.—individual Underwriting by Commercial Health Insurers: The Importance of Non-Medical Factors

Underwriting factor (n=61)[b]	Very important Number	Percent[c]	important Number	Percent[c]	Unimportant Number	Percent[c]	Never used Number	Percent[c]
1. Aae	23	38%	29	48%	6	10?40	3	5?40
2. T~pe of occupation	18	30	29	48	11	18	3	5
3. Avocation (e.g., race car driving)	9	15	39	64	9	15	4	7
4. Financial status	10	16	26	43	20	33	5	8
5. Health endangering personal habitS(e.9., drug abuse)	57	93	3	5	o	–	1	2
6. Health enhancing personal behavior (e.gq non-smoking)	6	10	34	56	9	15	12	20
7. lilegal or unethical behavior.	44	72	13	21	2	3	2	3
8. Place of residence	3	5	13	21	21	34	24	39
9. Sexual orientation	1	2	4	7	13	21	43	70

aDefiniti~n~: Vef.Y/mP~ffaflt-Critical to underwfiting process; can affect acceptance/rejection.

Important—Always considered but will never by itself affect acceptance/rejection. It may, however, influence coverage limits (e.g. exclusions or waiting period) and/or premium.

Unimportant—Rarely affects acceptance/rejection, coverage limits, or premium—unless in conjunction with other more important factors.

Never used—Never considered.

b one company did not respond to this question.

crow percentages may not total 100 due to rounding.

SOURCE: Office of Technology Assessment, 1988.

cation and even information on sexual orientation (see below).

Although close to 40 percent (24 of 61) of the commercial insurers never use place of residence in underwriting, more than one-quarter (16 of 61) consider it very "important" or "important." Another **34** percent (21 of 61) reported that residence may influence underwriting determinations when considered in conjunction with other more important risk factors. Several carriers noted that their concern over place of residence was due to insurance fraud that was known to occur in certain localities. Others indicated that use of place of residence in setting premiums is a result of regional variations in health care costs. Among the 31 respondents who tested for exposure to the AIDS virus, 3 (10 percent) required HIV screening of all applicants residing in areas of high AIDS prevalence.

Seventy percent **(43** of **61)** of the respondents indicated that sexual orientation is never used in underwriting. However, contrary to the 1987 National Association of Insurance Commissioner (NAIC) guidelines (212) recommending against using sexual orientation in underwriting, 5 companies considered it "very important" or "important" (i. e., affecting coverage, premiums, or possibly acceptance), and another 13 ranked it as "unimportant" (i.e., not affecting insurability unless present with other more important factors).[25] [26] In addition, three companies reported requesting an APS or physical exam based on sexual orientation.

It is unclear how insurers ascertain an applicant's sexual preference. Most **(48** of **61)** of the respondents provided samples of their health insurance applications, none of which included any questions concerning sexual orientation or lifestyle. One manager of a firm which specializes in insurance paramedical exams reported seeing references to an applicant's homosexuality in attending physician statements. Three insurers, in conversations with OTA, noted using indirect approaches or inspection agencies to confirm "suspicions of homosexuality" by, for example, interviewing a proposed insured's neighbors. (The NAIC guidelines, referred to above, also advise that "insurance support organizations shall be directed by insurers not to investigate, directly or

[25] In July 1987, the NAIC issued a proposed bulletin stating that "sexual orientation may not be used in the underwriting process or in the determination of insurability. " At least nine States (California, Colorado, Delaware, Florida, Iowa, Oregon, South Dakota, Texas, and Wisconsin) have barred using sexual orientation in underwriting or in the determination of insurability, premiums, terms of coverage, or renewals (212).

[26] These 18 companies hold approximately 10 percent of the individual, commercial health insurance market; 5 are among the 25 largest in the country (20).

indirectly, the sexual orientation of an applicant or beneficiary ".) (212)

Blue Cross/Blue Shield Plans.—Although BC/BS plans do not screen for high-risk applicants as exhaustively as do commercial carriers, the risk classification that is used once a high-risk applicant is identified varies little from the approach used by commercial carriers. Medical conditions that commonly require a rated premium, exclusion waiver, or are wholly uninsurable by commercial insurers are similarly classified by the nonopen, responding plans (see table **2-5).**

Open enrollment programs do not classify applicants by risk in the usual sense, although they typically provide fewer comprehensive benefits and may require open enrollment subscribers to pay higher premiums than other applicants for identical coverage. Open enrollment coverage usually requires waiting periods before initial benefits may be paid for preexisting conditions and may exclude preexisting conditions.

Fourteen of fifteen responding plans reported receiving a total of **401,500** individual applications annually,[27]

Most BC/BS applicants for individual coverage are classified as standard. Thirteen plans **(86** percent) provided standard coverage to **60** to 100 percent of their nongroup applicants; the other two plans classified **40** to 59 percent as standard (table 2-8). In total, respondents reported selling approximately 332,000 new nongroup standard policies each year. Eighty-three percent of their individual applicants were classified as standard (figure 2-l).

Sixty to 100 percent of small group applicants were also accepted as standard by half the plans (7 of 14) and up to 25 percent were denied.

Each year about 37,000 individual applicants are offered substandard coverage by the responding plans; 9 percent of those completing applications. Exclusion riders, rather than rated premiums, are more commonly used in BC/BS individual policies. Eight plans **(53** percent) reported requiring an exclusion for up to 39 percent of their nongroup applicants, while only four plans **(27** percent) charged higher premiums for less than **20** percent of applicants. One continuous open enrollment plan required exclusion waivers for 27 percent of its applicants.

Only two plans (14 percent) reported ever requiring exclusions or rated premiums for small group members.

The respondents (open and nonopen enrollment combined) refused coverage to **8** percent of their individual applicants. Denial rates range from **O** (for open enrollment plans) to 35 percent (table **2-8).**

Underwriting by BC/BS plans appears to be considerably less complex than that done by the commercials. Not only is medical evaluation of applicants much less exhaustive, but also far fewer factors are weighed. The survey questionnaire asked the plans to try to quantify the effects of a number of factors on an applicant's insurability; that is, to estimate the proportion of applicants who are either denied coverage or offered only limited coverage or an increased premium because of medical condition, age, poor health habits, place of residence, etc. (table **2-9).**

The responses to these questions indicate that BC/BS insurability is almost purely a question of medical condition. All but the four continuous open enrollment plans reject some applicants in poor health, with medically-based denial rates ranging from **7** to **33** percent. Close to half the plans (7 of 15) also reported denying nongroup applications because of alcohol or drug abuse histories (table 2-9).[28]

In many BC/BS plans, regardless of open enrollment policy, any known existing disease or impairment, whether acute or chronic, may not be covered, or a waiting period may be required. Nine of the **15** plans **(60** percent) used such limits because of the medical condition of 5 to **27** percent of their applicants.

Nearly three-quarters (11 of **15)** of the responding plans never "rate-up" individual premiums because of medical condition. Of the four plans that

[27] One plan did not furnish nongroup application data. Small group application statistics were unavailable from most of the respondents.

[28] BC/BS plans may deny coverage to applicants residing outside their service area.

Table 2-8.—Blue Cross/Blue Shield Plans: Risk Classification of Individual and Small Group Applicants

Percent of applicants	Individuals: Number of plans (n= 15)	Individuals: Percent of plans	Small groups: Number of plans (n =14)	Small groups: Percent of plans
Standard:				
Never used	**o**		**0**	
1 to 190/0	**0**		**0**	—
20 to 390/0	**0**			7Y0
40 to 59'?/0	*2*	1370	**:**	—
60t079Yo	*8*	53	1	7
80to 100Yo	5	33	***6***	43
Not available	0	—	***6***	43
Total	15	100!/0	14	100%
Substandard:				
Exc/usion waiver				
Never used	7	47?40		5070
1 to 19Y0	6	40	;	14
2oto39Yo	2	13	o	—
4oto 5970	0	—	0	—
60t079Yo	0	—	0	—
80to100Yo	0		0	—
Not available	0		5	36
Total	15	100YO	14	100VO
Rated premium:				
Never used	11	73?40	8	5070
1 to 1970	4	27	0	—
2oto39?40	0	—	0	—
4oto59Yo	0	—	1	7
60t079?40	0	—	0	—
80to 100VO	0	—	0	—
Not available	0		5	36
Total	15	100YO	14	100%
Rejected:				
Never used	3	***20Y0***	1	7Y0
1 to 19?40	7	***47***	4	29
2oto39?40 !.....	5	***33***	3	21
4oto 59Y0	0	—	0	—
60t079V'o	0	—	0	—
8oto 100YO	0	—	0	—
Not available..	0		***6***	43
Total	15	10070	14	100YO

SOURCE: Officeof Technology Assessment, 1988.

do, 2t019percent of their individual applicants are affected. All the nongroup premium rates are age-based by four plans and affectedly place of residence by two plans (i.e., because of regional variations in health costs.) More than half the applicants at two other plans are given nonsmoker discounts.

No BC/BS plan reported using sexual orientation in underwriting. However, one plan did originally report modifying nongroup premiums on this basis (for3 percent of their applicants). When questioned by OTAas to how sexual orientation is identified, the plan underwriter explained that they had interpreted the term to mean sex (i.e., male or female).

Only one respondent requested routine financialor personal investigations, inspecting 10 percent ofits applicants for nongroup coverage (See "Sources of Medical Information," table 2-15.)

Table 2-9.—individual Undewriting by Blue Cross/Blue Shield Plans: The Importance of Medical and Other Factors

Percent of non-group applicants	Reject applicant (n=15) Number of plans	Reject applicant (n=15) Percent of plans[b]	Limit coverage (n= 15) Number of plans	Limit coverage (n= 15) Percent of plans[b]	Increase (decrease) premium rates (n= 15) Number of plans	Increase (decrease) premium rates (n= 15) Percent of plans[b]
Medical condition:						
Never used	4	27Y0	5	33Y0	8	530/0
1 to 90/0	2	13	3	20	2	13
10 to 190/0	4	27	4	27	2	13
20 to 290/o	4	27	2	13	0	—
3oto39°/o	1	7	0	—	0	—
Not applicable	0	—	1	7	3	20
Total	15	1000/0	15	100%	15	100%
Age:						
Never used	15	1000/0	14	930/o	8	53Y0
1000/0	0	—	0	·	4	27
Non applicable	0		1	7	3	20
Total	15	1000/0	15	100YO	15	1000/0
Dangerous habits (e.gw drug abuse)						
Never used	6	400/0	12	8070	11	730/0
1 to9%	6	40	0	—	0	—
loto 19Y0	0		1	7	0	·
2oto 290/o	1	7	0	—	0	—
Not applicable	2	13	2	13	4	27
Total	15	1000/0	15	1000/0	15	1000/0
Place of residence:						
Never used	13	870/o	14	930/0	10	670/o
1 to9%	2	13	0	—	0	—
90 to 100YO	0		0	—	2	13
Not applicable	0		1	7	3	20
Total	15	100%	15	1000/0	15	1000/0
Heafthyhabits(e.gw non-smoking)						
Never used					10	670/o
50t069Yo					1	7
7oto 79%	– N A –		—NA—		1	7
Not applicable					3	20
Total					15	100%

alntewals with no reported frequency are omitted.
b p$_{ercentage}$ s m$_{ay\ no}$t total loodue to rounding.

SOURCE: Office of Technology Assessment, 1988

Health Maintenance Organizations.[29]—HM0 risk classification often differs from the traditional commercial and BC/BS insurers' approaches. Federally qualified plans are restricted to either accepting non-Medicare applicants at acommunity rate or denying membership altogether. Exclusions, rated premiums, and waiting periods are prohibited. Some States have similar requirements. However, HMO underwriting does reflect traditional practice with respect to medically uninsurable conditions. The responding HMOs were no more willing to underwrite high-risk applicants than the commercial insurers or BC/BS plans. When asked which conditions the HMO considered uninsurable, the plans' responses mirrored those given by the traditional insurers (see table **2-5).**

In total, 12 0f 15 HMOs reported receiving approximately 57,900 self-pay (i.e., individual) applacations each year and enrolling 73 percent on a standard basis. Standard acceptance rates ranged from 49 percent at one plan to 100 percent at two

[29]Most of th, responding HMOS were unable to provide small group risk classification data.

plans required by State law to hold open enrollment (tables 2-10, figure 2-1).[30]

Only two HMOS (I3 percent) reported enrolling individual members on a substandard basis; both required exclusion waivers for 10 to 15 percent of their applicants. (One of these plans was not federally qualified, the other was but had a nonfederally qualified subsidiary.)

Rejection rates for the responding HMOS were high relative to the commercial and BC/BS insurers. Eleven of fifteen HMOS denied membership to 20 to 59 percent of their individual applicants. In total, 12 responding HMOS refused membership to approximately 13,700 self-pay applicants annually, 24 percent of their self-pay applicants. In contrast, the commercials and BC/BS plans both denied 8 percent of self-pay applicants. It may be that HMOS receive a greater proportion of high-risk applicants because of their comprehensive coverage and community rating practices. In addition, the Federal qualification requirements and State regulations that restrict HMO use of exclusions and rated premiums may limit the ability of the plans to underwrite many individuals. Clearly, further study is warranted in order to understand these differences.

[30] Statistics for some national plans may represent **Only One locale.**

Table 2-10.—Health Maintenance Organizations: Risk Classification of Individual Applicants[a]

Percent of applicants	Number of HMOS (n= 15)	Percent of HMOs[b]
Standard:		
Never used	0	
1 to 19!40	0	
20 to ***390/0***	0	
40 to ***590/0***	1	70/0
60 **to** 790/0	*6*	**40**
80 to 100°\o	*6*	**40**
Not available	*2*	**13**
Total	15	**1000/0**
Substandard:		
Exclusion waiver:		
Never used	11	***73''?!0***
1 to 19%0	**2**	***13***
20 to 390/0	**0**	
40 to 590/0	**0**	—
60 to 790/0	**0**	—
80 to ~OOO/o	**0**	—
Not available	**2**	**13**
Total	**15**	**100''?!0**
Rated premium:		
Never used	**13**	***870/o***
Not available	**2**	***13***
Total	**15**	**1000/0**
Rejected:		
Never used	**2**	130/0
1 to 190/0	1	
20 to 390/0	**9**	6 :
40 to 590/0	1	7
60 to 790/0	**0**	—
80 to 1000/o	**0**	—
Not available	**2**	**13**
Total	**15**	**100''?/0**

[a] Small group data are omitted due to poor response to this question.
[b] Percentages may not total 100 due to rounding.

SOURCE: Office of Technology Assessment, 1988.

Access to HMO self-pay membership is fundamentally a matter of health status. All but three of the respondents (81 percent) reported that medical conditions can affect either the applicant's acceptance, premium rate, or scope of benefits. The three plans that never consider the applicant's health are located in a State that mandates HMOS to hold an annual 30-day open enrollment period (without medical screening); due to possible adverse selection, this is the only time these HMOS are willing to enroll individuals (table 2-11).

Age, type of occupation, health enhancing behavior (e.g., nonsmoking), and sexual orientation are also considered key to insurability by 19 percent or more of the respondents. It is not clear how sexual orientation is identified by the four plans that use it in underwriting. No surveyed plan reported using personal inspection agencies, and none of the provided enrollment applications included any relevant lifestyle questions. The National Association of HMO Regulators (NAHMOR), which serves a role similar to that of the NAIC, has not yet taken a position on the appropriateness of using sexual orientation in underwriting (208). (See previous discussion of the NAIC recommendations.)

Sources of Medical Information

Commercial Insurers. —The underwriter's objective is to know as much about the applicant's health status as the applicant. Any health insurance policy based on medical underwriting requires the applicant (and each family member) to complete a health history questionnaire. (An ex-

Table 2-11 .—Individual Underwriting by Health Maintenance Organizations: The Importance of Medical and Other Factors

Underwriting factor (n= 16)[b]	Very important		Important		Unimportant		Never used	
	Number of HMOS	Percent of HMOs[c]	Number of HMOS	Percent of HMOs[c]	Number of HMOS	Percent of HMOs[c]	Number of HMOS	Percent of HMOs[c]
1. Medical condition	10	63%	2	13%	1	6%	3	19%
2, Age	1	6	6	38	2	13	7	44
3. Type of occupation	o	–	3	19	3	19	10	63
4, Avocation (e. g., race car driving)'"" '	O	–	1	6	3	19	12	75
5. Financial status.	1	6	o"	–	4	25	11	69
6. Health enhancing personal behaviOr (e. g., nOnsm0klng)	2	13	3	19	2	13	9	56
7.111egal or unethical behavior	O	–	2	13	4	25	10	63
8. Place of residence.	1	6	1	6	1	6	13	81
9. Sexual orientation	0	–	3	19	1	6	12	75

aDefinitl~n~: *Very important*—Critical to underwriting process; can affect acceptance/rejection.
Important—Always considered but will never by itself affect acceptance/rejection. It may, however, influence coverage limits (e g , exclusions or waiting period) and/or premium.
Unimportant—Rarely affects acceptance/rejection, coverage limits, or premium—unless in conjunction with other more important factors
Never used—Never considered.
bIncludes one HMO that does not underwrite individuals but accepts individually underwritten groups.
cRow percentages may not total 100 due to rounding.

SOURCE Office of Technology Assessment, 1988.

ample is presented in figure 2-2). As evidenced by the survey responses, company policies vary considerably with respect to the proportion of applicants required to provide further evidence of their health status, either via an attending physician statement, physical exam, blood and urine tests, and / or financial or personal investigations (table 2-12).

Attending Physician Statements CAPS). —Individually underwritten health insurance applicants are always asked to supply the name and address of their personal physician and their doctor may be asked to complete a medical history in a standard APS form (although physicians sometimes send the insurer a photocopy of the applicant's medical record instead). The standard APS questionnaire calls for a complete description of the patient's complaints, any abnormal findings including laboratory and other test results, treatment or operation, present condition if known, and other medical information that has a bearing on the applicant's health, such as smoking or alcohol use. For children under 6 months of age, additional information may be requested regarding birth weight and the presence of any disease or abnormality. (An example of an APS is presented in figure 2-3.)

Beyond the health data provided directly in the insurance application, the APS is the most common supplemental source of medical underwriting information. Overall, the responding insurers reported requiring an APS for 20 percent of their individual applicants, a total of 446,000 physician statements each year. Members of small and large groups are often required to provide an APS as well .[31]

More than half the responding small group insurers **(20** of **38)** require an APS for 10 percent or more of their applicants and 13 of 27 large group insurers (48 percent) request an APS of 1 to 75 percent of their applicants. Overall, 18 percent of the respondents' small group applicants were required to furnish an APS (table 2-12, figure 2-4).

The APS is clearly the insurer's principal source of testing data, since it often includes recent test results as well as x-rays, electrocardiograms, and pathology reports. Although close to two-thirds of the respondents **(38** of 61) require physician statements of 20 to 79 percent of their individual applicants, more than three-quarters (47 of 61) test only 5 percent or less. Therefore, testing ordered by the applicant's personal physician appears to be as critical insurability as tests initiated by the insurer (table 2-12, figure 2-4).

[31]The discussion, of large groups throughout this report refers Primarily to employees who are eligible for group health insurance but choose not to sign up until after the normal enrollment period (i. e., late applicants).

Figure 2.2.—Typical Health History Questionnaire in a Commercial Health Insurance Application

7. HEALTH HISTORY OF YOU AND YOUR FAMILY:

Applicant's Name ____________________

Include information on all family members you wish to cover.

Has any person listed on this application ever been hospitalized, received treatment or had treatment recommended for any of the following conditions? All questions must be answered "yes" or "no". **INCOMPLETE APPLICATIONS WILL BE REJECTED.**

	YES	NO
1. The brain or nervous system—such as: dizziness, headaches, loss of consciousness, paralysis, weakness, Parkinson's disease, polio, seizure disorder/convulsions, MS, myasthenia, gravis, ALS (Lou Gherig's Disease)?	☐	☐
2. The cardiovascular system—such as: chest pain, fluid retention, heart disease, heart murmur, high blood pressure, palpitations, rheumatic fever?	☐	☐
3. The circulatory system—such as: phlebitis, Raynaud's Disease, stroke, varicose veins, vein or artery disease?	☐	☐
4. The respiratory system—such as: allergies/hay fever/sinus, asthma, breathing problems, bronchitis, emphysema, lung/chest diseases, tuberculosis?	☐	☐
5. The digestive system—such as: colitis, diarrhea (chronic), gall bladder problems, hemorrhoids/rectal bleeding, hernia, intestinal/stomach/colon problems, liver problems/hepatitis, pancreatitis, ulcer?	☐	☐
6. The genito-urinary system—such as: herpes, urinary/kidney/bladder problem, venereal disease, breast disorder, infertility, female genital/reproductive organ problem, male genital problem, impotency?	☐	☐
7. The musculoskeletal system—such as: abnormal jaw closure, arthritis, back or spinal injuries/disorders, foot, hand problems, joint pains/disorders, knee, hip, shoulder, elbow problems, physical handicap?	☐	☐
8. The metabolic system—such as: lupus, adrenal disorders, anemia, diabetes, thyroid disorders/goiter, immune system disorders including acquired immune deficiency syndrome (AIDS) or AIDS related complex (ARC)?	☐	☐
9. Cancer, tumor, growths or cysts?	☐	☐
10. Skin conditions/disorders?	☐	☐
11. Diseases/disorders of the eyes, ears/nose/throat?	☐	☐
12. Alcohol/substance abuse, nervous, emotional or mental disorders, eating disorders or suicide attempts?	☐	☐
13. Is any person on this application currently pregnant?	☐	☐
14. Has any person on this application ever had a pregnancy terminated by cesearean section?	☐	☐
15. Does any person on this application have any condition, impairment or deformities not disclosed elsewhere on this application?	☐	☐
16. Does any person on this application have any signs or symptoms for which he/she has not yet consulted a physician, psychologist, therapist, or other health care professional?	☐	☐

Please explain and provide us with full details for each "Yes" answer to any condition(s) checked in all the preceding boxes. Include name of family member, nature of illness, dates and duration of treatment. Please include full details of last check-up or examination (attach additional sheets if necessary).

COND. NO.	FAMILY MEMBER NAME	NAME OF HOSPITAL, FULL NAME AND ADDRESS OF EVERY PHYSICIAN OR CLINIC (INCLUDE ZIP CODE)	NAME OF CONDITION(S) ILLNESS(ES) TREATED	INDICATE TREATMENT RENDERED SUCH AS CHECK-UP, X-RAY, LAB AND SURGICAL PROCEDURES, ETC.	B.C. ONLY
	Name Date Began Mo/Yr · Still under treatment? ☐ Yes ☐ No · Date Ended ____	Name Address Ste # City State Zip			
	Name Date Began Mo/Yr · Still under treatment? ☐ Yes ☐ No · Date Ended ____	Name Address Ste # City State Zip			
	Name Date Began Mo/Yr · Still under treatment? ☐ Yes ☐ No · Date Ended ____	Name Address Ste # City State Zip			
	Name Date Began Mo/Yr · Still under treatment? ☐ Yes ☐ No · Date Ended ____	Name Address Ste # City State Zip			

Please list all MEDICATIONS taken currently or within the last year by you or any family member listed on this application. (Attacn additional sheets if necessary.)

NAME OF FAMILY MEMBER	NAME OF MEDICATION (PLEASE PRINT)	NAME OF ATTENDING PHYSICIAN	IDENTIFY ILLNESS FOR WHICH MEDICATION PRESCRIBED	DATE PRESCRIBED	DATE DISCONT'D

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Figure 2-3.—Attending Physician's Statement Used for Commercial Health Insurance Applicants

ATTENDING PHYSICIAN'S STATEMENT
UNDERWRITING INFORMATION

ATTN: UNDERWRITING DIVSN. UND-1

MEDICAL DIRECTOR
TO:

Code No.
case No.
Date
Name
Address
Date of Birth

Deaf Doctor:

Your Patient named above has applied for voluntary insurance in this Company, and gives a history of having consulted you.

Please complete this form from the information contained in your records. Attached **is a release form signed by the applicant.** This information will be processed in**a confidential manner.**

If you will indicate your usual arid customary fee for completing this statement($_____), a check will be mailed to you **monthly with itemized statements.**

Your courtesy in giving us this information will be appreciated

1) DATES ATTENDED MONTH YEAR	COMPLAINTS & ABNORMAL PHYSICAL FINDINGS	DURATION OF *ILLNESS*	DIAGNOSIS	DESCRIBE TREATMENT OR OPERATION

*(2) Laboratory findings (including x-ray, ECG, Bmr a***nd pathological re**Ports, **etc.,** with dates).

(3) Present condition, **if known?(incfude sequelae and complications of above reported illness).**

(4) Have any other physicians or surgeons been consulted? If so, please give name, date, and nature of disorder.

(5) Please record any other information which might have a bearing on this person's health.

SAMPLE

DATE: _____ **(Signature)** _____ M.D.

Soc. Sec. or Tax I.D. No. _____

Approved by the Council on Medical Service, AMA 1965
L 32-030-05 (4/87)

Table 2-12.-Underwriting by Commercial Health Insurers: Health and Other Information Requirements

Required underwriting information (percent of applicants)	Individual policies (n=61)		Small group policies (n =38)		Large group policies[a] (n=27)	
	Number of companies	Percent of companies	Number of companies	Percent of companies	Number of companies	Percent of companies
Attending physician statement (APS):						
Never used. .,	*3*	5Y0	*5*	**13%**	**12**	44Y0
1 to 190!0	*18*	30	*16*	**42**	**10**	37
2oto 390/o	*25*	41	**11**	**29**	**2**	7
4oto59Y'o	*9*	15	1	**3**	**0**	—
60 to 790/0	*4*	7	1	**3**	1	4
80to loo~o"	1	2	**2**	**5**	**0**	—
Not available	1	2	**2**	**5**	**2**	**7**
Total	**61**	100YO	**38**	**100V'O**	**27**	100%
Physical exam:						
Never used.....	17	*28?40*	**19**	**50Y0**	**19**	**70%**
1 to 19?40	35	*57*	**16**	**42**	**6**	**22**
2oto39?40	5	*8*	1	**3**	**0**	—
4oto 59'YO	1	*2*	**0**	—	**0**	—
60t079'Yo	0	—	**0**	—	**0**	—
80to loo~o"	2	*3*	**0**	—	**0**	—
Not available	1	*2*	**2**	**5**	**2**	7
Total	**61**	**100VO**	*38*	100?40	**27**	100%
Blood or urine screens:						
Never used.....	**23**	*38Y0*	*24*	*63Y0*	**21**	780/o
1 to 19?40	**30**	*49*	**11**	*29*		15
2oto39?40	**4**	*16*	1	*3*	**:**	—
4oto 590/o	**0**	—	**0**	—	**o**	
60t079'Yo	**0**	—	**0**	—	**0**	
80to 100'Yo	**2**	*3*	**0**	—	**0**	—
Not available	**2**	*3*	**2**	*5*	**2**	7
Total	**61**	100?AO	*38*	**1000/0**	27	**100%**
Financial or personal investigation:						
Never used.....	**15**	*25Y0*	**22**	*580/o*	22	810/o
1 to 1970	**33**	*54*	**12**	*32*	2	7
2oto39Yo	**5**	*8*	**1**	*3*	1	4
4oto 59V0	1	*2*	**0**	—	**0**	
60to 79!/0	**2**	*3*	**0**		**0**	
80to 100?4o	**4**	*7*	**1**	*7*	**0**	—
Not available	1	*2*	**2**	*5*	2	7
Total	**61**	100YO	*38*	**100%**	27	**100!AO**

[a]Only late applicants to large groupware required to provide heaithand related information to obtain coverage.
b p$_{ercen}$t$_{age}$s $_{may}$ not total 100 due to rounding,

SOURCE: Office of Technology Assessment, 198S.

There are a number of factors that lead the underwriter to require an APS. These are listed, in table 2-13, along with the number of survey respondents who use them as routine APS "triggers.'' The medical history revealed in the insurance application is the most common trigger; it was cited by every responding company that ever requires an APS. Seventy percent indicated that reports from the Medical Information Bureau (MIB), a databank of underwriting information shared by commercial insurers,[32] routinely trigger APS requests; 65 percent, that inspection reports (i.e., background checks) triggered a request for an APS; and 78 percent, that a history

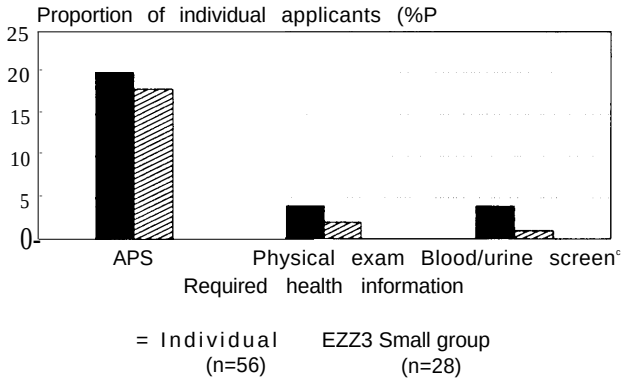
[32]The MIB is a non-profit association of more than 700 life and health insurers establishedin 1905 to facilitate sharing of underwriting information. Participating insurers report each applicant's significant medical findings (including test results) to the MIB and also routinely consult the MIB database for any relevant underwriting information on their current applicants.

of drug abuse triggered APS requests. Older applicants are commonly required to provide further evidence of good health; 57 percent of the companies reported that APS requests are age-based. It is not surprising that older applicants are more closely scrutinized, as they are more likely to have health problems that are not reported on the application (123). As noted earlier, three companies reported using sexual orientation as a basis for requiring an APS.

Other reasons cited for requiring an APS included policy amount, blood transfusion before 1985, height/weight, previous claims history, occupation, and being uninsured for an extensive period.

Physical Exams.[33]— Physical examinations of individual health insurance applicants are much less common. Overall, only 4 percent were examined each year by the respondents, less than 94,000 nationwide. Seventeen (28 percent) of the 61 responding companies never require physicals for individual applicants. However, 15 (25 percent) did require at least 1 out of 10 applicants

Figure 2-4.— Commercial Health Insurers[a] Estimated Proportion of Applicants Required To Have an APS, Physical Exam, or BloodAJrine Screen



[a]Only those companies reporting complete data are included.
[b]The proportions were estimated by dividing the respondents' total number of applicants required to have ar APS, physical, or blood/urine screen by their annual volume of applications.
[c]Blood/urine screening data do not include HIV screening.
SOURCE" Off Ice of Technology Assessment, 1988.

[33]Note that attending physician statements are furnished by the applicants' personal physicians while the physical exams described here are performed by physicians or paramedical professionals employed by the insurer.

Table 2-13.—Individual Underwriting by Commercial Health Insurers: Reasons for Requiring an Attending Physician Statement or Physical Exam

	Attending physician statement (APS)[a] (n =60)		Physical exam[b] (n =47)	
Reasons for requiring an APS or physical exam	Number of companies	Percent of companies	Number of companies	Percent of companies
Diagnosis reported on application	60	100%0	42	890/o
Attending physician statement (APS)	–	—	44	94
Medical Information Bureau report (MI B)	42	70	33	70
Drug abuse history	47	78	25	53
Inspection report	39	65	29	62
Age	34	57	22	47
Late group applicant	12	20	4	9
Geographic area	4	7	1	2
Sexual orientation	3	5	2	4
Sex	2	3	0	0
Other, including:	16	27	21	45
Policy amount	3	5	8	17
Heightlweight	2	3	4	9
Blood transfusion before 1985	1	2	—	—
Claimslmedical history	4	7	5	11
Occupation	1	2	—	—
Extensive period of no insurance	1	2	1	2
No current physical	—	—	1	2

[a]Includes two companies that only require an APS for members of individually underwritten groups.
[b]Includes three companies that only require physicals on members of individually underwritten groups.

SOURCE: Office of Technology Assessment, 1988.

to be examined by a physician or paramedical professional. In one company, every applicant must pass a physical; in another, 80 percent (table 2-12, figure 2-4).

Group insurance physicals are even less common. At least half of the responding group insurers never require a physical for either small or large group members. The majority of the small group insurers (14 of 17) that do require physicals examine 5 percent or less of their applicants. Overall, only 2 percent of the respondents' small group applicants were required to undergo a physical exam.

The reasons insurers cite for ordering a physical exam closely mirror those for requiring attending physician statements. In addition, APS findings themselves often lead the underwriter to request an exam for further clarification of the proposed insured's medical condition (table **2-13).**

Blood and Urine Screening, —HIV screening may be the most discussed test, but it is only one of many tests ordered by commercial underwriters. Among the responding insurers who do test, standard panels of blood chemistries and urinalysis are most common. These standard panels of tests are characteristic of those commonly ordered by physicians as part of a general physical evaluation. In addition to the panels, many insurers reported ordering urine screens for drugs of abuse —such as cocaine and barbiturates—as well as for nicotine and prescription medications for diabetes, heart disease, and hypertension. The insurer's interest in prescription medication is twofold; first, to "catch" applicants who are less than straightforward in their health history questionnaire and, second, to determine whether known hypertensive applicants, for example, are conscientiously following prescribed treatment (table **2-14).**

Insurance testing appears to be linked with physical exams. Close to 90 percent of commercial insurers requiring physicals (41 of 47) sometimes request that the applicant also be tested, and almost half of these insurers (22 of 47) uniformly test and examine equivalent proportions of their applicants. Only five companies reported performing physicals and never testing.

As in the case of physical examinations, routine testing is rare. In the aggregate, responding insurers reported requiring blood and/or urine screens from 4 percent of individual applicants, a total of approximately **83,000** individuals annually. Twenty-three **(38** percent) respondents reported that individual applicants were never tested. Most companies that do test, do so infrequently; 24 (39 percent) respondents tested only 1 to 5 percent of their individual applicants. Eleven (18 percent) reported testing at least 1 out of 10 individual applicants. One company tested every applicant (table 2-12, figure 2-4).

Testing by the responding group insurers was especially uncommon; 63 percent of the small group (24 of 38) and 78 percent (21 of 27) of the large group carriers never require a blood or urine screen. The majority of group insurers that do screen require tests of less than 5 percent of their applicants. Overall, only 1 percent of the respondents' small group applicants were tested.

Blue Cross/Blue Shield Plans.—Although BC/BS plans have faced increasing competition from HMOS and other alternative insurers in recent years, the underwriting practices of many plans still reflect their past tradition of community rating and "taking all comers. " Today, the majority of plans (69 percent) do not hold open enrollment periods (165). Nevertheless, relative to the commercial health insurers, the survey findings indicate that less scrutiny is given a BC/BS versus a commercial insurance applicant. Most BC/BS plans make no inquiries beyond the health history portion of the application and an attending physician statement. It is the rare BC/BS plan that demands a physical exam, blood chemistry, or urinalysis.

***Health** History Questionnaire,* —All but one (i.e., a continuous open enrollment program) of the respondents require nongroup applicants to provide some health information prior to enrollment. BC/BS enrollment health history questionnaires vary in their comprehensiveness, but typically ask the applicant (and each family member) to indicate any history of receiving medical treatment or advice for a long list of diseases and disorders (see figure 2-1).

Attending Physician Statements. —The APS, along with the health history questionnaire, is the information foundation of BC/BS nongroup un-

Table 2-14.—Tests Commonly Ordered by Commercial Health Insurers

Blood screens		Urine screens	
Type of test	Common diagnostic use	Type of test	Common diagnostic use
I, Diagnosf/c screens		*1. Diagnostic screens*	
Gl~~ose	Diabetes	Microscopic analysis:	
Bun/creatlnlne	Kidney function	White blood cell count	Infection, cancer
Uric acid	Kidney stones	Red blood cell count	Anemia
Alkallne phosphatase	Lwer function	Casts (granular, hyaline)	Kidney disorders
Blllrubin total	Gall bladder and lwer function	Protein	Kidney disorders, hypertension
SGOT/SGPT	Hepatitis (alcoholic), liver function	Glucose	Diabetes
GGTP	Liver function	Specific gravity	Kidney function
Total protein	General health		
Albumln	Liver function	II. *Prescription drug screens*	
Immunoglobulin	Immunodeficiency, infection	Oral hypoglycemic	Diabetes
Cholesterol	Circulatory disorders	Beta-blocker	Hypertension, coronary disease
Tnglycerldes	Circulatory disorders	Thiazide diuretics	Hypertension
HDL	Circulatory disorders		
Chol/HDL chol ratio	Circulatory disorders	***Ill, Drug** abuse screens*	
ELISA/ELISA/Western blot	HIV infection	Barbiturates	
T-Cell subset	HIV infection, immune system	Cocaine	
		Nicotine	

SOURCE Office of Technology Assessment, 1988.

derwriting. Twelve of the fifteen responding plans (8O percent), including three that offer open enrollment, order an APS for at least 20 percent of their individual applicants. Four of these plans require physician statements for 40 percent or more of their applicants. The only two respondents that never ask nongroup applicants for an APS are traditional, continuous, open enrollment programs with significant market shares (table 2-15).

Generally, less information is required of group applicants to BC/BS plans. Six of the fourteen plans with small group coverage (43 percent) never request an APS; of the eight that do, 1 to 40 percent of applicants are affected. Only one-third (5 of 15) of the large group plans request an APS of some applicants.

The physician statements used by the respondents are similar to those used by commercial health insurers; physicians are asked to describe the applicant's recent health history and provide laboratory findings. Two BC/BS plans sometimes use diagnosis-specific (e.g., cardiac, hypertension) physician questionnaires that ask for extensive clarification of the applicant's health, including all relevant test findings (see figure 2-5).

A number of factors can lead a plan to require a physician statement. All the respondents said that the applicant's self-reported medical history can "trigger" an APS request. In addition, an APS is routinely ordered by 12 plans (86 percent) in cases of drug abuse history; 5 plans (36 percent), based on claims history; and 4 plans (29 percent), according to age (table 2-16).

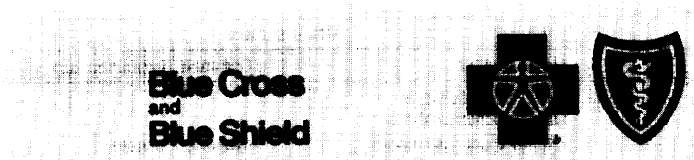
Physical *Exams.* —Only two plans reported requiring nongroup applicants to undergo a physical exam. One holds continuous open enrollment and examines close to one-third **(3o** percent) of nongroup enrollees. These physicals are done to evaluate whether the applicant may opt out of the open enrollment program and enroll in a more comprehensive plan. The other plan does not accept all applicants and examines, on average, 4 percent.

One plan orders physicals for 1 percent of small and 2 percent of large group applicants.

Medical history, age, and weight were reported as reasons for requiring a physical (table **2-16).**

Bkxxi *and Urine Screening.* —Blood and urine testing is very rare among BC/BS plans. Only one plan (7 percent) reported doing any screening of applicants; testing **4** percent of nongroup, 1 percent of small group, and 2 percent of large group applicants in conjunction with a physical exam. (A second plan reported intentions to test some

Figure 2-5.—Diagnosis.Specific Attending Physician Statement Used by a Blue CrosslBlue Shield Plan



Cardiac Questionnaire

I.D.# or B/D_____

Dear Applicant:

Additional medical information is needed to give your application further consideration for standard coverage.

Please ask the patient's attending physician to provide the information requested below and return this form in the enclosed envelope. The information must be based on an examination within 90 days of the date the application is returned to us. ALL QUESTIONS MUST BE ANSWERED FULLY.

If your application is attached, it must be returned with this completed form. If you wish to apply for the coverage(s) in Section 11 of the application, this form may be returned without being completed. Simply sign in the appropriate section of the application and return this form and the application in the enclosed envelope. However, if your application is not attached, and you do not wish to have this form completed, you may maintain your present coverage without further action on your part.

NON-GROUP MEMBERSHIP SECTION

SECTION BELOW TO BE COMPLETED BY PHYSICIAN

PATIENT'S NAME: _____ CONDITION (from application): _____

1. Complete cardiac diagnosis(es) (include functional classification):

_____ _____/_____/_____
(Date of onset) (Date of 1st visit)

_____ _____/_____/_____
(Date of onset) (Date of 1st visit)

2. Signs and/or symptoms:

( ) Chest pain
( ) Dyspnea
( ) Orthopnea
( ) Edema
( ) Murmur

Current Status or Prognosis:
( ) Claudication
( ) Palpitations
( ) Syncope
( ) Other_____

Details (including duration):_____

HOSPITAL SERVICE PLAN OF
MEDICAL-SURGICAL PLAN OF

Figure 2.5.—Diagnosis"Specific Attending Physician Statement Used by a Blue Cross/Blue Shield Plan—Continued

3. Arrhythmias (specify typ8]t _____

4. Blood pressure:

50 Dates and results of relevant tests:

Test	Data	Results

60 Treatment (include medication and dosage

Past _____

Current _____

7. If patient has been hospitalized during past five years give date(s) and reason(s)for admission(s) : _____

8m Future medical/surgical plans: _____

9. Does patient have any other illness or condition? ( ) No

Spec fy _____

If yes, indicate *name* and address of treating physician:

_____
(Name - print) (Address - print)

_____
(Name - print) (Address - print)

Thank you for your cooperation.

_____
Physician's name and degree - print)

_____
(Address - print)

_____
(Signature) (Date)

Table 2.15.—Underwriting by BCIBS Plans: Health and Other Information Requirements

Required underwriting information (percent of applicants)	Individual policies (n= 15)		Small group policies (n=14)		Large group policies[a] (n= 15)	
	Number of plans	Percent of plans[b]	Number of plans	Percent of plans[b]	Number of plans	Percent of plans[b]
Attending physician statement (APS):						
Never used	2	130!0	6	43%	10	67?A0
1 to 190/0		7	5	36	4	27
20 to 390/0	i	53	2	14	0	—
4oto59%o	2	13	1	7	1	7
60 to 790/0	2	13	0	—	0	—
80to100Vo	0	—	0	—	0	—
Not available	0	—	0	—	0	—
Total	**15**	100'%0	**14**	100YO	15	100?/0
Physical exam:						
Never used	13	***87Y0***	**13**	***93Y0***	14	***93Y0***
1 to 19Y0	1	***7***	1	***7***	1	***7***
2oto39?/o	1	***7***	**0**	—	0	—
4oto59?/o	0	—	**0**	—	0	—
60t079?40	0	—	**0**	—	0	—
80to 1000/o	0	—	**0**	—	0	—
Not available	0	—	**0**	—	0	—
Total	15	100YO	14	100CZO	**15**	100%
Blood or urine screens:						
Never Used	14	***93Y0***	13	***93Y0***	**14**	930/0
1 to 19Y0	1	***7***	1	***7***	1	7
2oto39Yo	0	—	0	—	**0**	—
4oto59'%o	0	—	0	—	**0**	—
60t079Yo	0	—	0	—	**0**	—
80to loo~o	0	—	0	—	**0**	—
Not available	0	—	0	—	**0**	—
Total	15	100YO	**14**	100%	**15**	100VO
Financial or personal investigation:						
Never used	14	***93Y0***	**13**	93Y0	**14**	93?40
1 to 1970		***7***		7	1	7
2oto39Yo	:	—	**:**	—	**0**	—
4oto59%	0	—	**o**	—	**0**	—
60t079Vo	0	—	**0**	—	**0**	—
80to looyo"	0	—	**0**	—	**0**	—
Not available	0	—	**0**	—	**0**	—
Total	**15**	100YO	14	**100?40**	**15**	100%

%nly late applicants to large groupware required to provide health and related information to obtain coverage.
b p$_{\text{ercentage s may}}$ **hot totai to 100 dueto rounding.**

SOURCE: Office of Technology Assessment, 19S8,

applicants for HIV infection. See below for details regarding HIV screening.)

Thus, as for the commercial insurers, the APS appears to be the principal source of testing information for the BC/BS plans.

Health Maintenance Organizations.-The principal source of health information for the HMO underwriter is the health history portion of the enrollment application. The survey findings indicate that like BC/BS applicants, the average HMO applicant receives less scrutiny than acommercial insurance applicant. Most HMOS make no inquiries beyond the health history portion of the application and an attending physician statement. It is the rare HMO plan that demands a physical exam, blood chemistry, or urinalysis. None of the respondents reported requiring an APS, physical, or laboratory test for large group applicants.

Health History Questionnaire. —Al lbut l of the 15 plans reported that individual applicants must

Table 2-16.—Individual Underwriting by Blue Cross/Blue Shield Plans: Reasons for Requesting an Attending Physician Statement

Reasons	Number of plans (n= 14)[a]	Percent of Dlans
Diagnosis reported on application	14	100%0
Drug abuse history.	12	86
Age	4	29
Late group applicants	1	7
Sex	1	7
Sexual orientation	0	—
Geographic area	0	—
Inspection report	0	—
Other, including:		
Claims history	5	36
Height/weight	2	14

%lne plan did not answer th!s question.

SOURCE Off Ice of Technology Assessment, 1988

complete a medical history questionnaire, and for 5 HMOS (33 percent) it was the sole evidence of the applicant's health.

Attending Physician Statements.– At least half of the responding HMOS went beyond the enrollment application and requested an APS for 10 to 85 percent of their nongroup applicants and 10 to 20 percent of small group applicants. All the plans said that the applicant's self-reported medical history could trigger an APS request. In addition, an APS was ordered routinely by five plans (33 percent) in cases of drug abuse history; two plans, because of age, previous prescription drug use, or claims history; and one plan, for late application to a large group (table 2-17).

HMO physician statements do not differ from those used by commercial insurers or BC/BS plans; physicians are asked to describe the applicant's recent health history and provide laboratory findings.

Physical Exams. —Only 3 of the 15 respondents accepting individuals reported requiring a physical exam as a condition of enrollment for 2 to 30 percent of self-pay applicants. One of these plans required 30 percent of its applicants to get a physical at their own expense. No plan reported requiring physicals for small group applicants. Medical history, APS findings, and age were reported

Table 2-17.—HMOS: Health and Other Information Requirements

Required underwriting information (percent of applicants)[a]	Individual applicants (n= 15) Number	Individual applicants (n= 15) Percent[b]	Small group applicants (n =8) Number	Small group applicants (n =8) Percent
Attending physician statement (APS):				
Never used	5	330/0	4	500!0
1 to 19%0	2	13	3	38
20 to 39?40	1	7	1	12
40 to 59%0	1	7	0	—
60 to 790/0	2	13	0	—
80 to 1000/o	2	13	0	·
Not available	2	13	0	—
Total	15	1000!0	8	100 "/0
Physical exam:				
Never used	10	670/o	7	880/0
1 to 19'Yo	1	7	0	—
20 to 390/0	2	13	0	—
Not available	2	13	1	12
Total	15	1000/0	8	1000/0
Blood or urine **screens:**				
Never used	12	800/0	7	880/0
1 to 190/0	1	7	0	—
20 to 390/0	1	7	0	—
80 to loOO/""	1	7	0	—
Not available	0	—	1	12
Total	15	100 "/0	8	100'YO

alntewals with no reported frequency are omitted.
bpercentages may not total 100 due to rounding.

SOURCE: Office of Technology Assessment, 1988.

as reasons for requiring a physical. In addition, one plan noted an unofficial policy requiring routine examinations of applicants thought to be homosexual (e.g., single men 35 years or older).

Blood *and Urine Screening.* —HMO screening is as uncommon as physical exams; only three plans reported sometimes testing individual applicants. One plan required a complete blood count and urine check for 20 percent of its individual applicants. Another ordered a complete blood count, cholesterol check, and urinalysis for 85 percent of their self-pay applicants. The third plan reported testing very infrequently (i.e., less than 1 percent) and always in conjunction with a physical exam. No plan reported requiring blood or urine screens for small group applicants.

Thus, the APS also is the principal source of testing data for HMOS.

AIDS Policies and Experience

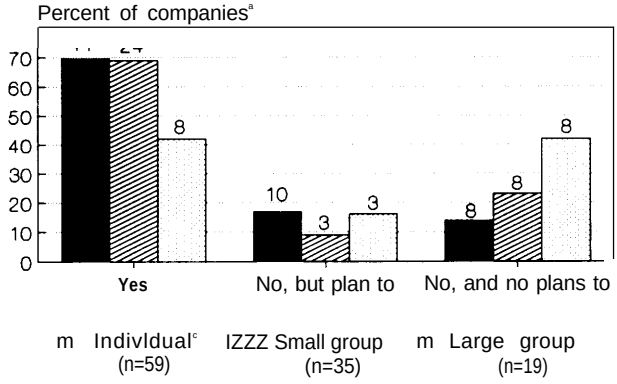
Commercial Insurers. —The survey asked several questions concerning AIDS underwriting policies and claims experience:

Do Health Insurers Attempt to Identify Applicants Exposed to the AIDS Virus?-Fifty-one **(86** percent) responding commercial insurers either screen or plan to screen individual health insurance applicants for infections with the AIDS virus through some method; of these companies, 41 do it currently and 10 plan to do so (figure 2-6).

Efforts to identify high-risk group applicants are also common. Twenty-seven small group (77 percent) and 11 large group insurers (58 percent) either screen or plan to screen through some method (figure 2-6).

How Do Insurers Screen for AIDS Exposure?— Not every company interested in identifying a proposed insured's HIV status, or risk for AIDS, tests applicants. Many rely on the application's health history questionnaire and attending physician statements to evaluate the risk for AIDS. Medical Information Bureau reports also play an important role and may serve as a catalyst for testing an applicant or scrutinizing more carefully an applicant's health history (figure 2-7).[34]

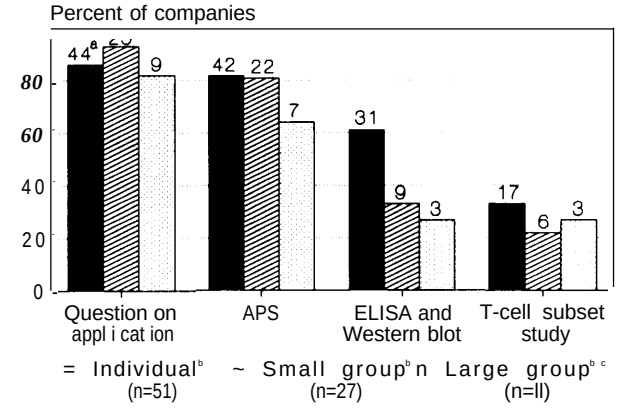
Figure 2-6.-Commercial Health Insurers Attempting To Identify Applicants Exposed to the AIDS Virus



[a]Percentages may not total 100 due to rounding.
[b]Represents the number of responding companies.
[c]Data were unavailable for two individual, three small group, and eight large group insurers.

SOURCE: Office of Technology Assessment, 198S.

Figure 2-7.-Commercial Health Insurers: Methods Used To Identify AIDS Exposure



[a]Represents the number of responding companies.
[b]Only those respondents screening or intending to screen for AIDS exposure are included. Data were unavailable for one small and one large group insurer.
[c]Only "late applicants" to large groups are screened.

SOURCE: Office of Technology Assessment, 1988.

[34]On May 14, 1987, the MIB announced that, in response to confidentiality concerns expressed by gay rights advocates, it "will no longer keep records that show an applicant for insurance has tested positive for the AIDS virus antibodies" (2). MIB reports now use a more general code that indicates an "abnormal" blood count (without identifying the test) while continuing to report other high-risk indicators including symptoms of AIDS, history of sexually transmitted disease, drug abuse, etc.

The most common approach to screening potential insureds for AIDS is by incorporating a question in the health history portion of the application. All but seven of the companies (86 percent) who screen individual applicants use an AIDS question. Ninety-three percent (25 of 27) of small group insurers and 82 percent (9 of 11) of large group insurers who screen also use this method.

It is important to realize that including an AIDS question on the application is not only an effective screen but also a tool for contesting preexisting condition claims. If an applicant knowingly misrepresents his or her health condition (e.g., recognized symptoms of AIDS, or fully diagnosed AIDS or ARC), the insurer may have grounds for subsequently denying reimbursement for the condition or rescinding coverage altogether. (See discussion below concerning insurers' reported experience with preexisting condition claims for AIDS.)

AIDS-directed questions vary; some ask about test results, others detail symptoms or inquire whether the applicant has been diagnosed or treated for AIDS or an AIDS-related condition. An admission of AIDS, ARC, or HIV seropositivity results in immediate refusal of the application. The survey did not clarify whether applicants with a history of sexually transmitted disease or AIDS symptoms are also automatically rejected. These are some typical examples of questions appearing in policy applications:

- Ever had Acquired Immune Deficiency Syndrome (AIDS), "AIDS" Related Complex (ARC), or tested positive for antibodies to the "AIDS" HTLV-111 Virus?
- Social or venereal disease of any type?
- Recurrent fever, fatigue, or night sweats?
- Had a fever of more than three weeks' duration, weight loss of more than 1s pounds in two months, diarrhea of more than one month's duration, persistent skin rash or oral lesions (infections or sores of the mouth)?
- During the past ten years, has any person to be insured consulted a physician or practitioner for, been treated for, had, or been informed that he or she had, Acquired Immune Deficiency Syndrome (AIDS), AIDS Related Complex (ARC), or other immune deficiency?

Underwriters frequently order an APS to help evaluate an applicant's risk for AIDS; **82** percent or more of those screening individuals (42 of s1) for AIDS exposure require applicants' physicians to submit an APS describing their recent health history and laboratory and other diagnostic test results (figure 2-7). Eighty-one percent of small group (22 of 27) and 64 percent (7 of 11) of large group insurers also order an APS. In addition to possibly revealing AIDS symptoms or other risk factors, the APS may report the applicant's HIV status. If a photocopied medical record is submitted in lieu of the standard APS (a common practice among physicians), the applicant's sexual preference may be indicated as well.

HIV testing is also quite common. This is particularly true for individual health insurance, where 61 percent of those insurers that screen (and more than half of all respondents) require applicants to pass the ELISA-ELISA-Western blot series. One-third of those that screen individuals (17 of 51) also use the T-cell subset test, presumably in States where HIV testing is prohibited. No company reported using the ELISA test without Western blot confirmation.

Substitution of the T-cell test can be problematic even for the healthy insurance applicant. In California, where HIV testing is prohibited and T-cell testing is common, the Department of Insurance has received complaints from *HIV-negative* individuals who were unable to obtain insurance because of positive T-cell test findings (11s).

HIV testing is less common among the responding group insurers; only nine of the small group (33 percent) and three of the large group insurers (27 percent) require an ELISA and Western blot for some applicants. T-cell subset studies are also ordered in States where HIV testing is prohibited by six small group (22 percent) and 3 large group insurers **(27** percent).

No insurer reported using any blood test alternative other than the T-cell subset study.

Who 1s Required To Have an AIDS Test?— Thirty-one **(51** percent) of the respondents ***rou***tinely tested individual health insurance applicants for HIV antibodies; of these, **7** test all applicants, 14 test only those considered to be "high-risk," and 10 test according to various criteria (e.g.,

State of residence, medical history, policy amount, etc.). Nine small group insurers routinely HIV-test; one tests all applicants, five test "high-risk" applicants, and three test according to other criteria. Three large group insurers test only those applicants thought to be at risk (table 2-18).

"High-risk" is defined differently by each company; history of sexually transmitted disease was the most commonly reported criteria, although those with a history of drug abuse, receiving blood transfusions, and hemophiliacs are also frequently tested. Many companies, however, reported that hemophiliacs and known drug abusers are automatically denied coverage. Three companies noted that for residents in areas of high AIDS prevalence, particularly New York and California, 100 percent of their applicants are HIV-tested. Applicants in California, where HIV antibody testing is prohibited, undergo the T-cell test (table 2-18).

How Many Individuals Have Insurers Reimbursed for AIDS-Related Claims ?—Almost three-quarters of the individual insurers (45 of **61)** responding to the survey had reimbursed at least one policyholder (or dependent) for AIDS-related care. In total, 1,010 AIDS cases were reported and, on average, each insurer financed the care of 22 AIDS-related cases. The range of the AIDS "burden" on each insurer, however, varied widely. For individual health insurance, for example, payments for AIDS-related services ranged from no cases (6 companies) up to 269 (1 company). More than half of the companies (34 of 61) reported 10 reimbursable AIDS cases or fewer, while only 4 have reimbursed so or more individuals for AIDS-related care (figure **2-8).**

Of the 20 insurers providing AIDS case data for their small group policies, 6 reported no AIDS-related cases and 14 had from 1 to 50, totalling 146. Twenty-two large group insurers reported

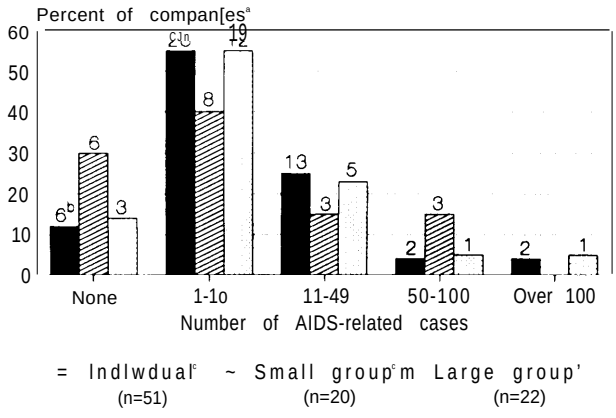
Table 2-18.—Commercial Health Insurers: HIV Testing Practices and Criteria for High.Risk Individual, Small Group, and Large Group Applicants

	Individual applicants (n=61)	Small group applicants (n =38)	Large group applicants (n =27)
Surveyed companies requiring HIV test	31 (51 "/0)	9	3
Who do they test?[b]			
All applicants	7	1	0
High-risk applicants only	14	5	2
Other, including:	7	3	1
High incidence areas-ail; elsewhere based on medical history .,	2	1	0
New York and California-all; elswhere based on medical history	1	0	0
Anyone whose blood is drawn	1	0	0
Policy amounts more than $100,000	1	0	0
If medical history warrants it	2	1	1
Criteria care under review	0	1	0
Who is considered high-risk?			
All males.	1	1	0
History of sexually transmitted disease	15	7	3
Hemophiliacs [c]	7	5	3
History of receiving blood transfusions	8	5	3
Drug abusers[c]	10	6	3
Other, including:			
AIDS symptoms present	4	0	0
History of hepatitis	1	0	0
Individual consideration	1	0	0
Medical history	1	1	1

[a]Only "late applicants' to large groups are tested.
[b]Three of the thirty-one individual insurers that HIV test did not answer this question
[c]Numerous carriers noted that they do not underwrite hemophiliacs or drug abusers under any conditions.

SOURCE: Office of Technology Assessment, 1988.

Figure 2-8.-Commercial Health Insurers: Number of AIDS-Related Cases



[a]Percentages may not total 100 due to rounding.
[b]Represents the number of responding companies.
[c]Data were unavailable for 10 individual, 18 small group, and 27 large group insurers.

SOURCE Office of Technology Assessment, 1988.

613 AIDS-related cases; 3 had no cases, 12 had 1 to 10, and 6 had 11 to 100, and 1 company alone, 350.

It is important to note here that surveillance of AIDS-related cases and of costs to insurers is sketchy at best. Sixteen percent (10 of 61) of the individual and 47 percent (18 of 38) of the small group health insurers noted that case data were unknown or unavailable, and the majority of those responding reported collecting AIDS-related case data only since 1986. Cost projections for AIDS cases were not provided by two-thirds of the individual and 82 percent of the small group insurers. Many commented to OTA that identifying AIDS-related cases is often difficult and, if data collection systems do exist, cases and costs are probably undercounted. Moreover, it is not standard practice among most insurers to project annual costs or claims by diagnosis.

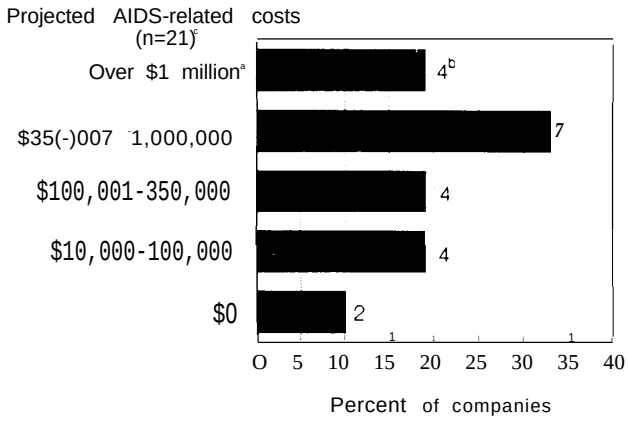
Poor reporting of AIDS-related data may be, in part, a reflection of the minimal impact of the disease in many locales around the country. An official of 1 of the 5 largest individual health insurers, despite reporting 269 AIDS-related cases and historical costs of more than $3.2 million, commented to OTA that AIDS "is just a drop in the bucket. "

What Costs Do Insurers Project for AIDS-Related Claims for 1987?—Twenty-one companies provided projections of AIDS-related claims costs for 1987, forecasting total claims of $11.04 million for individual health policies, an average of $0.53 million per individual insurer. Projections ranged tremendously; two companies did not expect any AIDS cases this year (both specialize in insurance for seniors), while four projected costs of $1.3 to $2.3 million for individual health policies (figure 2-9). (As noted above, one carrier reported more than $3,2 million in AIDS-related claims to date.)

Seven small group insurers forecast a total of $1.5 million AIDS-related costs for 1987, ranging from none at one firm up to $618,000 at another. Seven large group insurers projected a total $488,600; an additional company reported that it expected 1987 AIDS-related group claims to total $5 to $10 million.

What Proportion of Insureds With AIDS Have Been Found To Have a Preexisting Condition for AZDS?—Preexisting condition clauses are used universally by health insurers and significantly restrict reimbursement for medical conditions that existed before the effective date of coverage. Two

Figure 2-9.-Commercial Health Insurers: Range of 1987 AIDS-Related Cost Projections for Individual Subscribers



[a]One respondent was unable to project 1987 costs but reported historical costs of $3.22 million for 289 individual subscribers
[b]Represents the number of responding companies.
[c]Forty individual insurers (almost two-thirds of the respondents) were unable to provide AIDS-related cost data

SOURCE: Office of Technology Assessment, 1988.

key time periods set limits on the insurer's financial responsibility for such conditions: the length of time before and the length of time after the policy goes into effect. The NAIC has issued several relevant model regulations. Regulations to implement their Individual Accident and Sickness Insurance Minimum Standards Act define a preexisting condition as ". . . the existence of symptoms which would cause an ordinarily prudent person to seek diagnosis, care or treatment" or "a condition for which medical advice or treatment was recommended by a physician or received from a physician within a *S-year period preceding the effective date of the coverage* of the insured person" (emphasis added) (213).[35] In addition, no claim for losses incurred after a *2-year waiting period starting on the policy date* should be denied on the ground that the disease or physical condition was preexisting (213).

Though most experts agree that HIV seropositivity does not meet the NAIC definition of a preexisting condition, the head underwriter of a top-10 company told OTA of denying reimbursement on that basis. At present, there are several court cases pending relating to what comprises a preexisting condition for AIDS and the alleged refusal by insurer(s) to pay for AIDS-related claims based on a policy's preexisting condition provision.

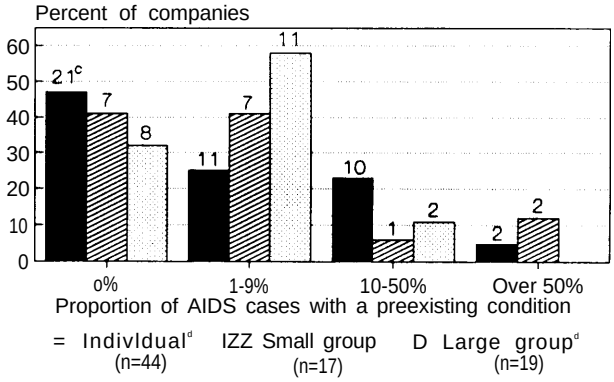
Almost half (21 of 44) of the individual health insurers who had received at least one AIDS-related claim reported finding no preexisting AIDS-related cases. Eleven found 1 to 9 percent of cases to be preexisting; 10 companies discovered 10 to 50 percent. Two companies reported more than 50 percent (figure 2-10).

Seven small group insurers found no AIDS-related claims to be linked with a preexisting condition; another seven reported 1 to 9 percent; one reported 10 to 50 percent; and two, more than 50 percent.

Six of the large group insurers reporting AIDS-related claims identified none as preexisting, 11 found 1 to 9 percent, and 2 found 10 to sO percent.

[35] As of October 1987, the regulation had been adopted by 20 States (16).

Figure 2-10.—Commercial Health Insurers: Percent of AIDS Cases Determined To Be Preexisting[a]



[a] Only those respondents providing AIDS case data are included.
[b] p_{ercent} t_{ages} may not total 100 due to rounding.
[c] Represents the number of responding companies.
[d] D_{ata} were unavailable for one individual and 22 large group insurers reporting AIDS cases.

SOURCE: Office of Technology Assessment, 1988.

What Plans Have Companies Made in Response to the Financial Impact of AIDS?—Beyond the actions already taken by many insurers, and reported above, many companies have additional plans in the works. The most common are plans to reduce company exposure in the individual and small group health insurance markets (e.g., by introducing tighter underwriting guidelines) and to expand HIV or other testing. One-third of those responding (20 of 61) plan one or both of these measures. Nine companies intend to add an AIDS question to the health history portion of their application forms. Five reported plans to exclude AIDS and/or sexually transmitted diseases from individual health coverage. Other planned measures include placing a dollar limit on AIDS coverage in new policies and establishing a waiting period for AIDS benefits (table 2-19).

No insurer cited plans to withdraw from the individual health market; however, one of the largest surveyed insurers noted its withdrawal from the Washington, DC, area. (The District of Columbia has the nation's most stringent prohibitions regarding AIDS testing and underwriting.) Nonetheless, it is difficult to assess whether AIDS has reduced the availability of nongroup health coverage; insurers, for example, can effectively

Table 2-19.—Response to the AIDS Epidemic: Reported Plans by Commercial Health Insurers, BCIBS Plans, and HMOS

Reported plans	Commercial insurers (n=61) Number	Percent	BC/BS plans (n= 15) Number	Percent	HMOS (n= 16) Number	Percent
Withdraw from the individual health market altogethe~ .	0	—	0		1	60/0
Exclude AIDS and/or sexually transmitted diseases from individual health coverage	5	80/0	1	7“/0	0	—
Reduce company exposure in the individual and small group health markets (e.g., by introducing more restrictive underwriting guidelines)	21	34	6	“ 40	5	31
Expand HIV or other testing of applicants	20	33	1	7	2	13
Terminate open enrollment	N A[b]	—	0		0	—
Other:						
Considering one or more of the above	3	5	0		0	—
Would consider any of the above policies if they were adopted by competing HMOS	NA	—	NA		1	6
Add an AIDS question to application ... , ...	9	15	2	13	0	—
Include a dollar limit for AIDS care in new policies . . .	2	3	0	—	0	
Establish a 12-24 month waiting period for AIDS.	1	2	0	—	0	
Deny applicants with a history of sexually transmitted disease and expand waiting period for hepatitis, lymph disease, and mononucleosis	0	—	1	7	0	
Expand education role	0	—	2	7	0	
Policies currently under review	0	—	2	13	2	13
Considering HIV testing	0	—	0		1	6
No actions planned or reported	10	16	2	13	7	44

[a]One commercial insurer reported withdrawing from the Washington, D.C. market
[b]NA = Not applicable.

SOURCE Office of Technology Assessment, 1988.

eliminate their role in the market by pricing nongroup policies so high that no one will buy them **(218).**

Blue Cross/Blue Shield Plans.—The survey asked several questions concerning AIDS underwriting policies and claims experience:

Do Blue Cross/Blue Shield Plans Attempt To Identify Applicants Exposed to the AIDS Virus?—Eleven or 73 percent of the respondents either screen or plan to screen nongroup applicants for AIDS exposure by one method or another; of these, eight currently screen nongroup applicants and three plan to. One additional plan noted that its AIDS policies are under review (figure 2-11).

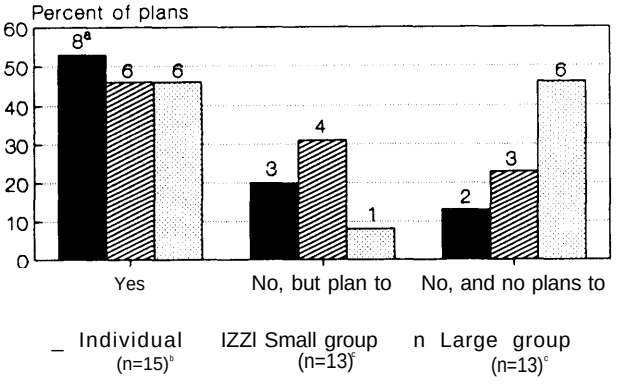
BC/BS efforts to identify high-risk group applicants are also common. Ten small group (77 percent) and 7 large group plans (54 percent) either screen or plan to screen through some method (figure 2-11).

How Do Blue Cross/Blue Shield Plans Screen *for AIDS Exposure?–The* plans' approach to screening for AIDS very much mirrors their general approach to underwriting. The health history questionnaire along with an attending physician statement are the principal means for assessing an applicant's health. Testing is very rare (figure **2-12).**

All the plans that try to identify applicants exposed to the AIDS virus use an AIDS-related question in applications for nongroup, small group, and large group coverage. The BC/BS approach to asking about AIDS differs from many commercial earners. Rather than ask about AIDS-related symptoms or test results, the plans have simply added AIDS and/or ARC to their health history diagnoses lists. Venereal disease is also included by five plans. One plan asks a more general question concerning "positive test results for immune disorders" because it is prohibited, by State regulations, from asking directly about AIDS. Interestingly, a continuous, open enrollment plan that does not screen for AIDS *exposure* specifically instructs the applicant not to indicate need for medical advice or treatment 'because you have had a positive result on an AIDS test—HTLV-111."

An admission of AIDS, ARC, or HIV seropositivity results in immediate refusal of the application except in open enrollment plans. As in the case of commercial insurers, BC/BS plans include an AIDS question on the application not only for screening purposes but also as a tool for contesting preexisting condition claims. If an applicant knowingly misrepresents his or her health condition, the plan may have grounds for denying reimbursement for the condition or rescinding coverage altogether. (See discussion below concerning BC/BS reported experience with preexisting condition claims for AIDS.)

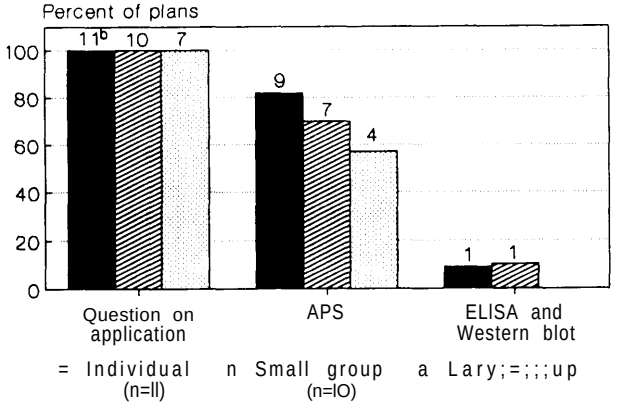
Figure 2-11. -BC/BS Plans Attempting To Identify Applicants Exposed to AIDS



[a]Represents the number of responding companies.
[b]Not shown above are one plan that was reviewing its AIDS policies and another plan that attempts to identify AIDS exposure for less than 0.5% of individual applicants.
[c]Data were unavailable for one small group and two large group plans.

SOURCE: Office of Technology Assessment, 1988.

Figure 2-12. -BC/BS Plans: Methods Used To Identify AIDS Exposure[a]



[a]Only those respondents screening or intending to screen for AIDS exposure are included.
[b]Represents the number of responding companies.
[c]Only "late applicants" to large groups are screened.

SOURCE: Office of Technology Assessment, 1988.

Nine plans (82 percent) may ask for an APS to help evaluate a nongroup applicant's risk for AIDS. Seventy percent of small group (7 of 10) and s4 percent (7 of 11) of large group plans (4 of 7) also order an APS for some applicants. **The APS may indicate AIDS symptoms, other risk factors, HIV status, and even sexual preference.**

Only one plan intends to test some applicants for HIV infection (using the ELISA-ELISA-Western blot series). No plan reported using the T-cell subset test.

Who Is Required To Have an AIDS Test?—As noted above, only one plan expects to test some nongroup and small group applicants for HIV infection. Anyone considered to be "high-risk" will be required to undergo the ELISA-ELISA-Western blot series. The plan's criteria for "high-risk" include: 1) all males, 2) history of sexually transmitted disease, 3) hemophiliacs, 4) history of receiving blood transfusions, and 5) drug abusers.

How *Many Blue Cross/Blue Shield Subscribers Have Been Reimbursed for AIDS-Related* **Claims?—BC/BS surveillance of AIDS-related cases and costs seems sketchy at best. One-third of the plans noted that case data were unknown or unavailable, and the majority reported collecting AIDS-related data only since summer** 1985. Several plans indicated that they are just now developing systems for better identifying subscribers diagnosed with AIDS-related illnesses; furthermore, current caseload data are probably underestimated. Ten of the fifteen respondents were not able to provide projections of AIDS-related claims costs for 1987 (table 2-20). Most of the plans that provided relevant data were unable to identify AIDS-related cases or costs by type of coverage (i.e., individual vs. group). Consequently, aggregate data is presented here reflecting both individual and group policy experience.

Table 2-20.—Blue CrossIBlue Shield Plans: Number of Subscribers Reimbursed for AIDS-Related Claims

	No open enrollment (n =10)	Open enrollment (n =5)[a]	All Dlans (n ~ 15)
Total number of subscribers reimbursed for AIDS-related claims[b]	453	3,480	3,933'
Number of plans reporting AIDS-related claims	7 (70"/0)	3 (60°/0)	10 (670/o)
Average number of AIDS-related cases per plan	65	1,160	393

[a]One of the five plans holds a limited open enrollment period; the others are continuous.
[b]AIDS-related claims data reflect both individual and group policy experience
[c]One plan alone reported 3,000 subscribers with AIDS; the other plans had an average AIDS-related caseload of 104.

SOURCE: Off Ice of Technology Assessment, 1988.

Ten plans reported reimbursing 3,933 subscribers for AIDS-related care, an average of 393 subscribers per plan. The range in caseload was tremendous, from only 1 to 3,000 subscribers. Along with the obvious effect of location on regionally based insurers such as BC/BS plans, market share and open enrollment seem to critically determine a plan's AIDS "burden. "

Open enrollment plans with a large share of the health insurance market appear to be particularly vulnerable if also located in a State that is seriously burdened by the epidemic. The seven plans that never hold an open enrollment period reported a total of 453 AIDS-related cases, an average of 65 subscribers per plan. Three of these plans are located in areas of high AIDS prevalence, and only one has historically held a significant market share (i.e., cIose to **40** percent) (84). In stark contrast, the three plans that are continuously open reported reimbursing 3,480 subscribers for AIDS-related care, an average of 1,160 cases per plan. Two of these plans are in areas of high AIDS prevalence, one plan alone accounts for 3,000 cases. All three have historically held large market shares ranging from 60 to 75 percent (table 2-20).

What Costs Do the BC/BS Plans Project for AIDS-Related Claims for 1987?—Only five plans provided **1987** claims projections. Three non-open enrollment plans forecast a total of $29.6 million in AIDS-related claims for 1987 ($20 million was for one plan alone). Two of these plans are located in high-risk regions. Claims totaling $27 million were projected by two open enrollment plans, $23 million for one plan and and $4 million for the other (table 2-21).

What Proportion of Subscribers With AIDS Were Found To Have a Preexisting Condition for AIDS?—Six of the 10 plans that have identified at least one subscriber with AIDS reported finding that 1 to more than 50 percent of these subscribers had a preexisting condition for AIDS. Two of these plans, both in areas of high AIDS prevalence, linked more than half of their AIDS cases with a preexisting condition (table 2-22). This may be evidence of adverse selection and the effort of AIDS sufferers to obtain insurance protection after an AIDS-related diagnosis had been made or seriously suspected.

What Plans Have BC/BS Plans Made in Response to the Financial Impact of AIDS ?—A1l but two of the respondents report some action in response to the AIDS epidemic. Six plans (4o percent) noted intentions to reduce their exposure in the individual and small group health markets. One cited intentions to expand HIV or other testing of applicants while also excluding AIDS and/or sexually transmitted diseases from individual health coverage. Others reported intentions to add an AIDS question to enrollment applications, deny applicants with a history of sexually transmitted disease, and lengthen the waiting period for new subscribers with a history of hepatitis, lymph disease, and mononucleosis. Two plans (one holds continuous open enrollment) intended to expand their AIDS education efforts, and two others are currently reviewing their AIDS-related policies (table 2-19).

Health Maintenance Organizations .—The survey asked several questions concerning **AIDS** underwriting policies and claims experience:

Table 2-21 - Blue Cross/Blue Shield Plans: Projected AIDS-Related Claims Cost for 1987

	No open enrollment (n= 10)	Open enrollment (n =5)[a]	All plans (n= 15)
Total projected AIDS-related claims cost for 1967[b]	$29.6 million	$27.0 million	$56.6 million
Number of companies reporting projections	3 (30"/0)	2 (40"/0)	5 (33"/0)
Average projected cost for 1967	$9.9 million	$13.5 million	$11.3 million
Range	$2"6 to $20 million	$4t0$23 million	$2.6 to$23 million

[a]One of the five plans holds a limited open enrollment period; the others are continuous.
[b]AIDS-related cost projections include individual and group policies.

SOURCE: Office of Technology Assessment, 1988.

Table 2-22.—BC/BS Plans Reporting AIDS Cases: Prevaiance of Cases With Preexisting Condition for AIDS

	Individual and group policies	
Proportion of AIDS cases with a preexisting condition for AIDS[a]	Number of plans (n=9)	Percent of plans
0 percent	3b	30 "/0
1 to 9 percent	2	20
10 to 50 percent	2[c]	20
Greater than 50 percent	2	20

[a]Only those nine plans that reported AIDS-related cases and preexisting condition data are included. A tenth plan reported 230 cases but the related preexisting condition data were unavailable.
bone of these plans reported that while no small or large group cases were preexisting, 1 to 9 percent of its individual AIDS-related cases were linked with a preexisting condition.
cone of these plans reported that while 10 *to 50* percent of its small and group cases were Preexisting, more than half of its individual AI DS-related cases were linked with a preexisting condition.

SOURCE: Office of Technology Assessment, 1988.

Does the HMO Attempt To Identify Applicants Exposed to the AIDS Virus?- Half or **more of the respondents screen or plan to screen individual (8 of** 15) and small group applicants (4 of 8) for exposure to the AIDS virus by one method or another. Three of the plans that do not try to identify individual applicants exposed to AIDS are prohibited from doing any medical screening by State law. One plan noted that it is currently formulating its AIDS policies (table 2-23).

How *Does the* HMO *Screen for AIDS Exposure?* —The responding HMOS rely primarily on the enrollment application and the attending physician statement to identify applicants exposed to the AIDS virus. HIV testing is done by only two plans and is being considered by a third (table 2-24).

Each of the eight plans that screen for HIV infection ask an AIDS-directed question in the health history portion of their enrollment form. Some of the respondents have simply added AIDS and/or ARC to the application's health history list of diagnoses, while one plan asks: "Had any blood tests including any screening for the presence of viral antibodies?"

An admission of AIDS, ARC, or HIV seropositivity results in immediate declination of the application. Like the commercial insurers and BC/BS plans, the HMOS include an AIDS question on the application not only for screening purposes but also as a tool for contesting preexisting conditions. If an applicant knowingly misrepresents his or her health condition, the plan may have grounds for terminating HMO membership.

Six plans (75 percent) reported that they request an APS to help determine an individual applicant's risk for AIDS; two (50 percent) similarly screen small group applicants. As noted earlier, the APS may report AIDS symptoms, other risk factors, HIV status, and even sexual preference.

Only two plans (25 percent) require individual applicants to be tested. Both use the ELISA-ELISA-

Table 2-23.—HMOS Attempting To Identify Individual and Small Group Applicants Exposed to the AIDS Virus

Attempt to identify applicants exposed to the AIDS virus	Individual applicants		Small group applicants	
	Number of HMOS (n=l)	Percent of HMOS	Number of HMOS (n=7)	Percent of HMOS
Yes	8	53"!0		57"!0
No, but plans to	0	—	:	—
No, and no plans.	6	40	2	29
Other, including:				
—AIDS policies under review	1	7	1	14

[a]One HMO that accepts small group applicants did not answer this question,

SOURCE: Office of Technology Assessment, 1988.

Table 2-24.—HMOS: Methods Used To Screen Individual and Small Group Applicants for Exposure to the AIDS Virus

Method(s) used to identify AIDS exposure[a]	Individual applicants		Small group applicants	
	Number of HMOS (n =8)	Percent of HMOS	Number of HMOS (n=8)	Percent of HMOS
Question on application	8	100 "/0	4	500/0
Attending physician statement.	6	75	2	25
ELISA and Western blot	2	25	0	—
T-Cell subset study.	0	0	0	—
Other, including:				
physical exam if high risk	1	13	0	—

[a]Data include only those HMOs that screen or intend to screen for AIDS.
[b]Two HMOs that screen for AIDS among small group applicants did not report their methods.

SOURCE: Office of Technology Assessment, 1988.

Western blot series. Another plan reported that it is considering plans to introduce HIV testing of applicants. No plan reported testing group applicants or using the T-cell subset test (table 2-24). One plan that is located in a State where HIV testing is prohibited requests a physical exam of all high-risk applicants.

Who Is Required To Have an AIDS Test ?—As noted above, only two HMOS reported that they test some self-pay applicants for HIV infection. At both plans, anyone considered to be "high-risk" will be required to undergo ELISA-ELISA-Western blot testing. At one plan "high-risk" is defined as a history of sexually transmitted disease or drug abuse. (This plan requires applicants to be tested at their own expense.) The other plan requires test results for HIV exposure for individual/family applicants with any one of twelve conditions, including: acute onset of severe seborrheic dermatitis, history of three or more episodes of any sexually transmitted disease, or Kaposi's sarcoma (figure **2-13).**

How Many Members With AIDS/ARC Have the HMOS had?—The responding HMOS' AIDS/ARC case data seem to be just as sketchy as the statistics provided by the commercial and BC/BS plans. One HMO identified AIDS cases as early as 1981, some plans reported patients in 1983, while others cited cases as of only this year. As for the BC/BS plans, the HMOS were unable to identify AIDS-related cases or costs by type of coverage (i.e., individual vs. group). Consequently, aggregate data is presented here reflecting both individual and group membership experience. In total, twelve plans reported caring for 1,468 members with AIDS or ARC, an average of 122 members per HMO. The range in cases varied from none at two HMOS to 940 patients at one HMO (figure 2-14).

What Costs Do the HMOS Project for AIDS-Related Care in 1987?—Only two HMOS pro vialed projections of AIDS-related costs for 1987. One plan that had identified 10 cases during the first 10 months of 1987 forecast total costs of

Figure 2-13.– One HMO's Guidelines for Health Evaluation: AIDS and Exposure to the AIDS Virus

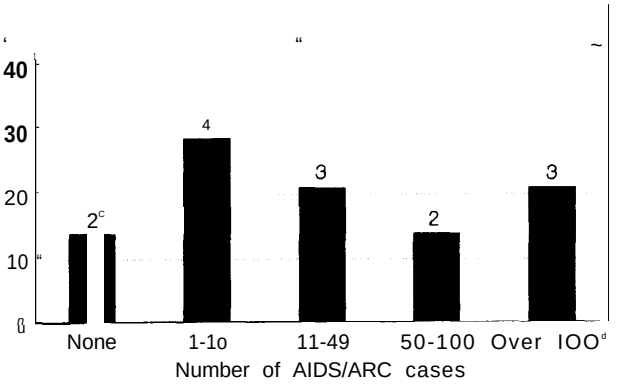
These guidelines define circumstances under which _____ will require submission of test results for HIV (AIDS virus) exposure prior to consideration of an application for the Individual/Family Plan. These have been developed using criteria suggested by the AIDS Task Force, the Legal Department, and the Eligibility Committee at _____

Submission of recent test results (performed 12 months ago or less) for HIV exposure shall be required (using "Western Blot" or other test of equal or greater accuracy) under the following circumstances:

1. Acute onset of severe seborrheic dermatitis in an adult.
2. Generalized adenopathy or unexplained adenopathy.
3. History of illicit IV drug usage which occurred after 1978.
4. Weight loss of more than 10 pounds in the prior 2 years, which is not clearly related to dieting, increased activity, or an acute medical problem.
5. History of 3 or more episodes of any sexually transmitted disease (e.g. chlamydial infections of the sexual organs, gonorrhea, syphilis, condyloma) or 2 episodes of such diseases and an occurance of Hepatitis B which have occurred after 1978.
6. Oral candidiasis in an adult or esophagal, bronchial, or pulmonary candidiasis.
7. Cryptococcosis or isosporiasis.
8. Cryptosporidiosis; pneumocystis carinii pneumonia; strongyloidosis causing infection beyond the GI tract; toxoplasmosis causing infections in organs other than the liver, spleen, or lymph nodes; disseminated histoplasmosis.
9. Mycobacterium infections other than TB, brucellosis, or leprosy.
10. Cytomegalovirus causing infection in internal organs other than liver, spleen, or lymph nodes; herpes simplex causing infection for longer than 1 month, or infections other than mucocutaneous; progressive multifocal leukoencephalopathy.
11. Chronic lymphoid interstitial pneumonitis.
12. Kaposi's sarcoma or non-Hodgkin's lymphoma.

SOURCE: Office of Technology Assessment, 1966.

Figure 2-14.-Health Maintenance Organizations: Number of AIDS/ARC Cases[a]



[a](n = 16) Al DS/ARC cases include individual and group members, Data were not availahla for two plans.
[b]Percentages may not total 100 due to rounding.
[c]Represents the number of responding companies.
[d]One HMO alone reported 940 AIDS cases.

SOURCE: Office of Technology Assessment, 1988.

$750,000 for the year; the other had 11 cases from September 1986 through September 1987 and forecast total costs of $700,000 for 1987. At both plans, no cases occurred among nongroup members. (An additional HMO that had reported caring for 940 AIDS-related cases since 1981 did not project 1987 costs, but estimated average lifetime costs of approximately $35,000.)[36]

What Proportion of HMO ***Members With AIDS or ARC Were Found To Have a Preexisting Condition for*** AIDS?—One non-federally qualified HMO reported that more than half of its individual members with AIDS or ARC were found to have a preexisting condition. According to State law and in contrast to the other insurers, this plan was obligated to provide services for preexisting conditions (without a waiting period) unless the applicant had deliberately misrepresented his or her health before joining the HMO (200). (Federally qualified HMOS my have grounds to disenroll members who misrepresent their health, but the HMO is obligated to provide medically necessary health services until membership is terminated.)

What Plans Have the HMOS Made in Response to the Financial Impact **of** ***the AIDS Epidemic?—*** Half of the respondents (8 of 16) reported no new plans in response to the AIDS epidemic. However, 5 of the 16 HMOS (31 percent) reported intentions to reduce their exposure in the individual and small group health markets (e.g., by introducing more restrictive underwriting guidelines) while two plans intend to expand HIV or other testing, two others are currently considering their AIDS-related policies, and one is withdrawing from the individual health market altogether (table 2-19).

[36]Average lifetime cost is the total cost from time of diagnosis until death.

Top 10 Most Costly Conditions: AIDS v. Other Major Illnesses

Commercial Insurers.—Individual and small group (i.e., individually underwritten) coverage is perhaps the health insurance sector most vulnerable to financial loss in the wake of an unanticipated AIDS epidemic. In an effort to put the costs of AIDS into context and evaluate its impact, OTA asked insurers to identify which 10 of 22 major diagnostic categories (including AIDS and related conditions) absorbed the greatest share of claims dollars for individually underwritten policies. Thirty-six (58 percent) of the 62 respondents were able to provide these data.

Six of 36 companies (17 percent) reported that AIDS was among the 10 diagnoses that accounted for the largest proportion of individually underwritten claims. Overall, AIDS and related conditions ranked sixteenth for commercial insurers. The complete list of diagnoses in order of the frequency with which they were ranked as top 10 are presented in table 2-25.

Blue Cross/Blue Shield Plans.—BC/BS plans were also asked which 10 of 22 major diagnostic categories (including AIDS and related conditions) absorbed the greatest share of claims dollars for individually underwritten policies. Eight of the fifteen respondents (53 percent) were able to provide these data.

Only two of eight plans (25 percent) reported that AIDS was among the 10 diagnoses that accounted for the largest proportion of individually

Table 2-25.—Commercial Health Insurers: AIDS v. Other Major Illnesses

The surveyed insurers were provided a list of 22 major diagnostic categories, including AIDS and related conditions, and asked to rank the ten diagnoses that account for the largest proportion of their total individually underwritten claims costs (see app. D, auestion III-D).

Diagnostic category	Number of times diagnosis was ranked in the top ten (n= 36)[a]
1. Circulatory disorders, including: Heart disease; Essential hypertension; Cerebrovascular disease; Other circulatory disorders	59[b]
2. Neoplasms, including: Malignant neoplasm of trachea, bronchus and lung; Malignant neoplasm of breast; Other neoplasms	51
3. Respiratory disorders	27
4. Digestive disorders	25
5. Diseases of the female reproductive system	25
6. Injury, poisoning and toxic effects	24
7. MusculoskeletaUconnective tissue diseases	21
8. Kidney/urinary tract diseases	15
9. Mental disorders	15
10. Nervous system diseases	14
11. Liver, gallbladder, pancreatic disorders	14
12. Pregnancy, childbirth, and the puerperium	12
13. Diabetes mellitus	10
14. Congenital abnormalities/perinatal conditions	9
15. Substance use/induced organic disorders	8
16. AIDS AND RELATED **CONDITIONS**	6
17. Ear, nose, and throat diseases	4
18. Eye diseases	4
19. Diseases of the skin, subcutaneous tissue and breast	4
20. Male reproductive system diseases	4
21. !nfectious and parasitic diseases	1
22. Other endocrine and metabolic diseases	1

[a]Only 36 of the 62 responding insurers (58°/0) were able to answer to this question
[b]Some of the responding insurers ranked specific diseases (e.g., heart disease, malignant neoplasm of the breast) within the general categories of "circulatory disorders" and "neoplasm"; others were unable to report their claims experience at this level of detail. As a result, circulatory disorders and neoplasms appear in the top ten more than 36 times.

SOURCE: Office of Technology Assessment, 1988

underwritten claims. Both are located in areas of high AIDS prevalence; one plan reported that AIDS and related conditions absorbed 9 percent of claims dollars, the other, 4 percent. Overall, AIDS and related conditions ranked fourteenth for BC/BS plans. The complete list of diagnoses in order of the frequency with which they were ranked as top ten are presented in table 2-26.

Health Maintenance Organizations.—The responding HMOS did not provide sufficient information to analyze their response.

Table 2.26.—Blue Cross/Blue Shield Plans: AIDS v. Other Major Illnesses

The surveyed plans were provided a list of 22 major diagnostic categories, including AIDS and related conditions, and asked to rank the ten diagnoses that account for the largest proportion of their total individually underwritten claims costs (see app. D, question III-D).

Diagnostic category	Number of times diagnosis was ranked in the top ten (n =8)[a]
1. Circulatory disorders, including:	9
Heart disease	
Essential hypertension	
Cerebrovascular disease	
Other circulatory disorders	
2. Respiratory disorders	8
3. Digestive system disorders	8
4, Musculoskeletal/connective tissue diseases	8
5. Neoplasms, including:	6
Malignant neoplasm of trachea, bronchus and lung	
Malignant neoplasm of breast	
Other neoplasms	
6. Pregnancy, childbirth, and the puerperium	6
7. Mental disorders	6
8. Injury, poisoning, and toxic effects	5
9. Congenital abnormalities|perinatal conditions	5
10. Liver, gallbladder, pancreatic disorders	4
11. Kidney/urinary tract diseases.	3
12. Nervous system diseases	3
13. Diseases of the female reproductive system	3
14. AIDS AND RELATED CONDITIONS	2
15. Infectious and parasitic diseases	1
16. Blood diseases	1
17. Ear, nose, and throat diseases	1
18. Eye diseases	1

[a]Only 8 of the 15 responding plans (53%) were able to answer to this question.
[b]Some of the responding plans ranked specific diseases (e.g., heart disease) within the general category of "circulatory disorders"; others were unable to report their claims experience at this level of detail. As a result, circulatory disorders appears in the top ten more than eight times.

SOURCE: Office of Technology Assessment, 1988.