

Defining Underinsurance: A Conceptual Framework for Policy and Empirical Analysis

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THE UNINSURED AND THE UNDERINSURED

Much research and policy attention in recent years has been drawn to the plight of the uninsured in the United States—the numbers of people with no health care coverage from any source, their demographics (as well as other characteristics and factors leading to access barriers), and their health status—all under circumstances of escalating costs and seemingly inevitable uncompensated care (Brown 1989; Employee Bene-

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fits Research Institute 1992; Freeman et al. 1990; Moyer 1989; Swartz and Purcell 1989; Renner and Navarro 1989; Swartz and McBride 1990; Dunlop, Wells, and Wilensky 1989; Goldstein 1991; Brook 1991; Pedem and Lee 1991; King 1989).

Policymakers at the state and national levels have been developing and testing various plans and proposals for alleviating the problem of lack of insurance, ranging from universal coverage to limited approaches for protecting vulnerable segments of the population such as children (Freedman et al. 1989) and the working poor (Thorpe, Hendricks, Garnick, et al. 1992).

Problems of the "underinsured," however, have been subject to far less examination. Albeit on a different scale, the problems of underinsured Americans are essentially the same as those of the uninsured. Notably, uninsurance and underinsurance both can mean financial hardship for patients and uncompensated care for providers (Farley 1985).

The Clinton administration's current emphasis on putting together and implementing a comprehensive health care reform package that includes mechanisms for appropriate access and utilization should mean, by definition, that problems of the underinsured are now being studied more actively. Ironically, if a universal national health plan is adopted, and such an event is more likely in the current economic and political environment than in recent years, all of the attempts that will be made to redress the problem of the uninsured as it exists within the current system of care are likely to increase the ranks of the underinsured, because the major actors (employers, government, and insurers) will all be trying to limit their liability through cost sharing.

This related problem—subsequent expansion in the numbers of underinsured Americans—will receive very little attention because of the high level of concern with shrinking the numbers of the uninsured. Hence, it is entirely conceivable that the redistribution of available resources to diminish the ranks of the uninsured will be done at the expense of reducing benefits among the insured. That is to say, in a zero-sum situation, as more people are covered by health insurance, there may well be less actual coverage to go around.

Although the seriousness of underinsurance has been recognized as similar to that of a total lack of health insurance, with parallel negative effects on both access to care and health status, underinsurance itself has defied definition and precise measurement. The lack of a definition despite the presence of underinsurance in health policy discussion has been noted even in the popular press (Boodman 1992). As will be explained later, the inherently normative foundation of the underinsurance concept, the inability to identify *appropriate* levels of care, and the

variety of ways in which underinsurance can be defined may account for the difficulty. Hence, the purpose of this article is to develop a clear conceptual model of underinsurance, including a set of operational definitions, along several dimensions that can be used for policy and empirical analysis.

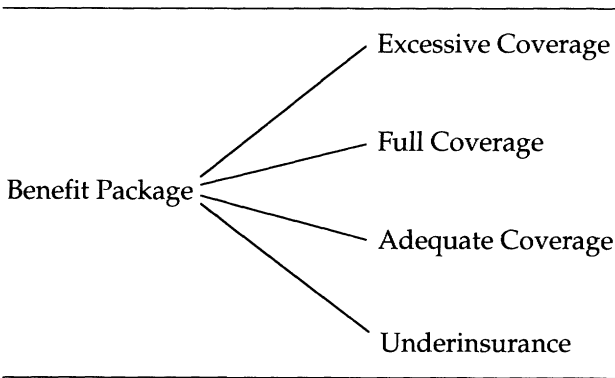
THE CONCEPT OF INSURANCE COVERAGE

While uninsurance is defined categorically, a deficit in insurance coverage, or underinsurance, can be defined both normatively and empirically. For instance, a person is either insured or uninsured, but not every limitation of benefit, in terms of exclusion, deductible, or copayment, constitutes "underinsurance." In fact, some levels of less than full insurance coverage are considered appropriate or socially desirable. As well, some levels of insurance coverage may be considered excessive and therefore undesirable. Thus, a complete explanation of insurance coverage should incorporate all levels, including four basic types: excessive coverage, full coverage, adequate coverage, and underinsurance (as shown in Figure 1). These terms are now defined:

Excessive coverage refers to dual or multiple coverage for the same set of services, which does not provide any true financial benefits over full coverage. Thus, while it may increase the choice of providers—especially if one of the plans subscribed to is an HMO and the other is not—and while it may eliminate out-of-pocket costs, excessive coverage may result in unnecessary premium payments to insurers. Excessive coverage is usually observed under conditions where some individuals and many working couples are covered by more than one insurance policy. However, through coordination-of-benefit arrangements, excess reimbursement to individuals is not permitted and excess payments to providers are virtually eliminated. Estimates of rates of multiple and duplicate coverage have been difficult to determine with precision (Luft and Maerki 1982), but some suggest that perhaps 13 million or more working persons (Schur and Taylor 1991) and 20 percent of the elderly (Short and Vistnes 1992) may have multiple coverage. Recent amendments to legislation pertaining to health insurance policies sold to the elderly to supplement Medicare (the so-called Medigap policies) have restricted deceptive sales practices to protect the elderly from purchasing excessive coverage (Rice and Thomas 1992).

Full coverage refers to truly comprehensive benefits that provide full protection against out-of-pocket expenses outside of premiums. Aside from those who have multiple coverage, which typically results in excessive coverage, a decreasing proportion of the population has full cover-

FIGURE 1 Classification of Health Insurance Coverage



age. In fact, consumer cost sharing has become widespread for almost all health care benefits (Burke and Jain 1991).

Adequate coverage refers to a less comprehensive set of benefits, wherein the beneficiaries are liable for designated amounts of out-of-pocket expenditures in the form of deductibles, copayments, exclusions, limits-of-coverage, and other forms of cost sharing outside of premiums. Ideally, the amount of cost sharing is designed to discourage inappropriate utilization of services, while not limiting access to their appropriate use. Most people have adequate health care coverage.

Underinsurance refers to one or more conditions: where (a) too few services are covered or the coverage is inadequate; (b) amounts of out-of-pocket expenditures, with or without regard to family income, are excessive; (c) insurance is perceived to be inadequate; or (d) some combination is present. Hence, underinsurance reflects a situation in which the consequences of having less than full coverage are so burdensome to the insured that they offset the desired benefits of limiting the scope of insurance.

THE RATIONALE FOR LIMITATIONS IN COVERAGE

Before describing the conceptual model for defining and measuring underinsurance, it is important to consider the assumptions that underlie the current system of health insurance in the United States. The basic premise in support of the practices that have prevailed up to now is unique to the American system: the notion that most insurance policies are not designed to free the insured from all risks of health care

expenditures. In fact, so ingrained is the notion that full coverage might not be appropriate, that the practice by some providers of waiving cost-sharing amounts has had its legality and ethical dimensions called into question (Lachs, Sindelar, and Horwitz 1990).

At least three reasons exist for suggesting that health insurance need not provide full coverage. First, it is argued that full coverage may encourage excessive and inappropriate use of service, as implied in the concept of "moral hazard," so labeled because society loses when the cost borne by the individual consumer is less than the cost of producing the service, which has to be shared by the nonusers. Hence, from a social or economic standpoint, the ideal level of coverage is that which reaches a balance between the cost borne by the consumer and moral hazard. The cost to society of levels of coverage in excess of the social or economic optimum put in place upwards of a decade ago have been estimated to be in the tens of billions of dollars (Feldman and Dowd 1991).

Second, having failed in other ways to contain the rising cost of care, cost sharing has been used as the primary mechanism for cost containment in the United States by theoretically discouraging avoidable or unnecessary utilization. While optimally effective cost containment requires both demand- and supply-side mechanisms (Ellis and McGuire 1990), cost sharing on the demand side has expanded much more quickly than have alternative reimbursement plans and supply constraints. Cost sharing may not differentiate between appropriate and inappropriate utilization, but it does reduce costs to third party payers (Shapiro, Hayward, Freeman, et al. 1989; Siu, Sonnenberg, Manning, et al. 1986).

And third, the outlay for the premiums necessary to provide full coverage could be prohibitive to a large segment of the insured population. Hence, by limiting their liability through shifting some health care expenditures to the consumer, employers and the insurance industry are able to extend insurance benefits to a wider range of people at a generally affordable premium.

It is clear, therefore, that some level of less than full coverage is not only acceptable on social and economic grounds but is also necessary in the current system of care in the United States. However, acceptance of this fact of life also makes it imperative to find the proper balance between moral hazard and access to care. Such a balance requires a precise definition of underinsurance, including a set of criteria and standards to determine when it exists and in what form.

THE TREATMENT OF UNDERINSURANCE IN THE LITERATURE

The term underinsurance has been used rather widely in the literature, particularly when associated with the plight of the uninsured (Gleicher 1991; Harkin 1991; Wilensky 1989; Young 1991). However, most references to underinsurance do not offer specific definitions of the term, nor do they offer a guide on how to arrive at the numbers they cite: some 25–30 million underinsured persons in the United States.

Some notable exceptions to the rule of unscientific estimation of the number of underinsured have appeared in the literature in recent years. The most systematic analysis to date was done by Farley (1985), who estimated that perhaps 13 percent of the privately insured population under 65 years of age was underinsured. Farley used three variables in her definition: the probability of incurring an expense for medical care during the year, the size of the expense, and the relationship between the expense and family income. On this basis, a probability distribution of out-of-pocket expenses relative to family income was created to estimate the magnitude of underinsurance. The 13 percent estimate was based on the premise that a 1 percent chance of spending 10 percent of family income on health services defines an intermediate level of underinsurance. Lower and higher and acceptable probabilities and income limits result in a range of estimates of underinsurance from 8 to 26 percent. The highest estimate, 26 percent, has been widely cited in discussions of underinsurance (Friedman 1991).

Although not intended to account for the underinsured per se, a temporal definition was introduced by Monheit and Schur (1988) and Swartz and McBride (1990) as representing "uninsured spells." Monheit and Schur reported substantial changes in health insurance status among the uninsured, and asserted that the uninsured are a very heterogeneous group. Swartz and McBride estimated that the majority of uninsured spells last no more than one-third of a year, and that few last longer than two years. Not even for persons covered by Medicaid is coverage continuous (Short, Cantor, and Monheit 1988).

An estimate of the underinsured population in Michigan was offered by Bashshur, Webb, and Homan (1989) using survey data. The underinsured were operationally defined as having one or more of the following three criteria: (a) no coverage for physician fees (outside of the hospital), (b) part-year coverage (or spells of uninsurance during the year), (c) a perception that insurance coverage was totally inadequate, or (d) some combinations of these. Accordingly, a total of 19 percent of Michigan's population in 1989 was found to be underinsured. The distri-

bution on the specific criteria was as follows: (a) physician fees not covered (11 percent), (b) uninsurance spells (5 percent), (c) perception of inadequate coverage (less than 1 percent), and (d) combinations of the three (3 percent).

The highest rates of underinsurance found by Bashshur, Webb, and Homan were among those persons covered by personally purchased private health insurance, exclusive of HMOs, at an overall rate of 40 percent. This large group may be considered a residual population of an employment-based voluntary insurance system. Along similar lines, Homan, Glandon, and Counte (1989) found that only 23 percent of consumers covered by fee-for-service insurance policies thought that their policies would completely cover their medical costs, while 66 percent of consumers enrolled in HMOs thought that the HMO could completely cover costs.

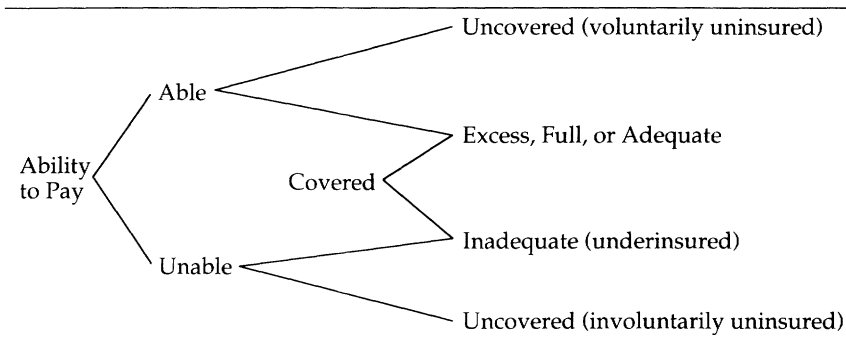
THE CONCEPT OF UNDERINSURANCE

Underinsurance for health care may be defined in general terms as coverage that fails to provide adequate protection against health care expenditures. Hence, it is clear that the concept of underinsurance is essentially normative in nature, somewhat akin to the concepts "underweight" or "underdeveloped." Inherent in each of these concepts is a standard or level to be considered adequate or appropriate.

While it may be argued from a financial perspective that all of the uninsured are also underinsured since their coverage is obviously inadequate, the definitions presented here are limited to the "covered" population. Therefore, if one is to explain the total context of underinsurance and its relationship to financial access to care, then several stages must be identified, as shown in Figure 2. The ultimate starting point is ability to pay. And even though the vast majority of the population either has an actual or a perceived need for health insurance, only a small segment insures itself (or has the ability to purchase insurance but elects not to do so).

Typically, underinsurance is not the result of free choice. The majority of those needing insurance are covered from a private or public source, leaving about 10 percent without any coverage. Of interest here is the group of insured persons that has inadequate coverage. In brief, financial access to health is explained on the basis of people's ability to pay, their health care coverage, and the adequacy of their coverage. We focus on this latter category.

FIGURE 2 Financial Access to Health Care

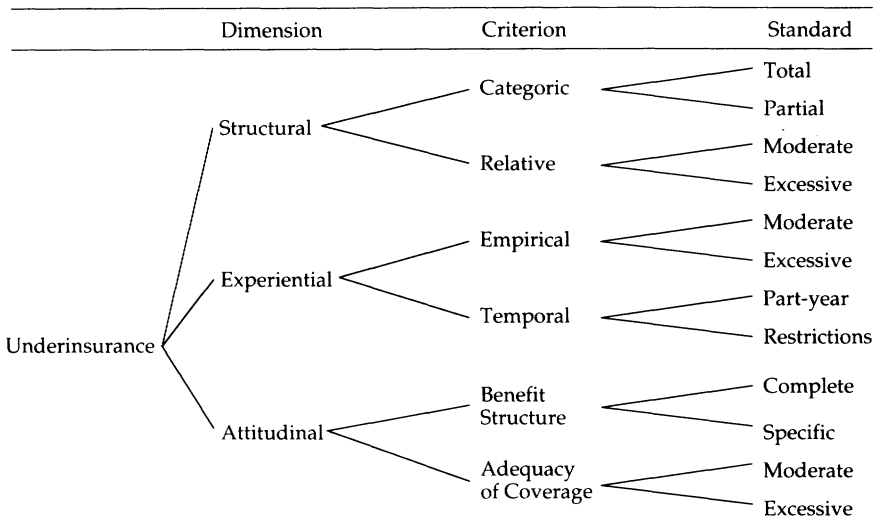


THE DIMENSIONS OF UNDERINSURANCE

Conceptually, underinsurance occurs when limitations in the benefit structure interfere with the beneficiary's ability to obtain needed and appropriate medical services, or when the out-of-pocket portion of medical expenditures is sufficiently large to constitute a serious financial burden. Operationally, persons are underinsured if their benefit packages are deficient, if they pay too much out-of-pocket for health care, if they think that their benefit packages are inadequate in covering health care expenditures, or a combination. Thus, underinsurance can be assessed on the basis of three dimensions: structural, experiential, and perceptual. For each of these dimensions, standards are necessary to determine the undesirable levels at which limitations in insurance constitute underinsurance. A full model incorporating all three dimensions and the standards for them is discussed in the next sections and represented in Figure 3.

Before proceeding with the discussion of the full model, it merits note that one of the central themes in this article is the requirement, perhaps unfortunate, that the determination of underinsurance use normative criteria and empirical standards. While economic analysis might lead to positive statements regarding appropriate levels of coverage, it frequently excludes normative statements that might also be relevant for policymakers. This article does not attempt to define the specific levels of coverage that qualify as underinsurance; rather, it presents the concepts and dimensions of the criteria that might be used to extend empirical work in measuring the underinsured population.

FIGURE 3 Classification Scheme for Underinsurance



STRUCTURAL DIMENSION: CATEGORIC OR RELATIVE INADEQUACY

The structural attributes of underinsurance refer to elements of the benefit package that are deemed insufficient to meet the protection needs of the insured population. Inadequacy can be defined either in categoric or relative terms. Categoric inadequacy refers to excluded benefits, which may be either total or partial. A totally excluded benefit refers to a service that is not covered under any circumstance, whereas a partially excluded benefit refers to the benefit as not covered under specified conditions. For example, in the majority of basic health insurance policies, dental services are not covered (Burke and Jain 1991). However, in many of these same policies, emergency dental work is covered if related to another injury that is a covered benefit, such as a broken jaw.

In both categoric exclusions, underinsurance is determined on the basis of normative criteria that specify excessive and moderate levels, or unacceptable and acceptable levels of coverage. For example, it may appear empirically reasonable to exclude orthoptics coverage, as revealed by its coverage in only 3 percent of typical benefit plans (Burke and Jain 1991). However, it requires a normative judgment to determine whether such an exclusion constitutes underinsurance.

For many specific benefits, societal decisions concerning the appropriateness of coverage have been expressed in laws that mandate

coverage. On a state-by-state basis, insurance policies are required to include specified benefits. While the motivations for these mandates and their economic consequences have been subject to debate (Hall 1989; Gabel and Jensen 1989), their existence is a clear indication that, on at least normative grounds, lawmakers have accepted the idea that insurance policies without these specified benefits are inadequate, rendering persons underinsured.

For most benefits, particularly those for services performed by providers who lack a supporting organization, mandates do not exist, leaving states without a uniform set of benefits to avoid underinsurance. In addition to suggestions made by groups in the public and private sectors, recent health care reform proposals at the national level have supported a "basic benefits package" for all insured. Such a package, however, has not yet been satisfactorily defined (Diamond 1989; Eddy 1991; Priester 1992). Several states have moved in the other direction by permitting "bare-bones" insurance policies to make insurance more affordable to the uninsured (State Health Reports 1992). The laws permitting these kinds of policies typically waive the state's usual mandates, but do not identify a minimal set of benefits.

The relative criterion for underinsurance refers to cost-sharing clauses, such as coinsurance and deductibles for insured benefits, that render the client liable for part of the expense. This liability may be considered excessive or moderate, again on the basis of normative standards. Deductibles for major medical services, for example, that are common in employer-based health plans are in the range of \$300–\$500. Deductibles of \$300 may be reasonable or moderate, whereas deductibles of \$5,000 would be excessive.

Moreover, cost sharing may also be calculated as a percentage of income. Whereas absolute amounts have the advantage of uniformity and simplicity in calculating them for all individuals, percentages of income have the advantage of being more equitable by emphasizing ability to pay. They can also, however, create substantial discrepancies. For instance, expenditures that amount to 10 percent of family income may be considered reasonable for a family with an income of \$30,000, but rather high for an income of \$300,000. Conversely, it might be argued that \$3,000 is less affordable for a family earning \$30,000 a year than \$30,000 would be for a family earning \$300,000, because the latter family theoretically has more discretionary funds to draw from whereas the former is just making ends meet. Further, factors such as age (Anderson, Brook, and Williams 1991; Dunlop, Wells, and Wilensky 1989) and the specific health benefit in question (Oberg, Lia-Huagberg, Hodkinson, et al. 1990; Trevino et al. 1991; Tsai et al. 1988) might be

more important determinants than income of whether or not cost sharing amounts are detrimental to health status.

In practice, deductibles almost always are stated in absolute dollar terms that are not related to the income of the insured (Burke and Jain 1991). But whether expressed in absolute amounts or as a percentage of income, levels of out-of-pocket costs must be classified as either excessive or moderate, the former indicating underinsurance.

In brief, all health insurance schemes—including Medicare and, to a lesser extent, Medicaid—specify a set of benefits that may be partially or totally excluded from coverage. These exclusions constitute “underinsurance” only when they are considered excessive. Similarly, when excessive, cost sharing also constitutes underinsurance.

The question of structure—benefits covered, partially covered, and not covered—is almost totally separable from the rate of return on the premium, or the value for the money paid on insurance premiums. In fact, if it happens that the return on the premium is insufficient and the total benefit package is inadequate, a situation of double jeopardy is observed: the client not only is subject to making excessive payments for premiums, but also ends up with deficient benefits. For example, individuals purchasing some bare-coverage hospitalization insurance might find that much of the premium dollar goes to insurance company administration, making it a poor investment; at the same time the lack of reimbursement restricts access. On the other hand, other such “bare-bones” policies may be offered by limiting administrative costs through the avoidance of small claims, resulting in a high ratio of paid dollars to premiums (the loss ratio), and therefore in a good investment; but they may provide limited coverage that restricts access.

It follows that the determination of underinsurance ultimately depends on a social definition of appropriateness in mixing essential services and cost sharing. Not even the proponents of radical health care reform short of a national health service advocate full coverage for all benefits with no controls on use of service: the built-in inefficiency of such arrangements is presumed. Hence, the normative criteria reflect a societal concern over the efficiency of the system as well as a concern for individuals and families faced with medical expenditures beyond their ability to pay. Some fear that unless health insurance is there to intervene, these expenditures may threaten the stability of the American family and the productivity of the American labor force. Nonetheless, conventional wisdom acknowledges the possible undesirable effects of unchecked and uncontrolled health insurance.

EXPERIENTIAL DIMENSION

Whereas the structural dimension of underinsurance is ascertained according to categoric and relative attributes of the benefit package that are equally applicable to users and nonusers of care, the experiential dimension is based primarily on the actual experience of consumers. It consists of two criteria: an empirical one reflecting the amount of out-of-pocket expenditures and a temporal one that reflects part-year coverage.

The empirical criterion of the experiential dimension is the approach taken by Farley (1985). Closely related methods are used, although for different reasons, by Sofaer and Davidson (1990) and Wilson and Weissert (1989), to evaluate Medigap and long-term care policies, respectively. Based on expected total out-of-pocket expenditures for a specified pattern of experience, one can compare these dollars with some specified maximal expenditures for health care that should not be exceeded. Standards for empirically defined underinsurance require the same decision on moderate versus excessive level of expenditure as do the standards for structurally defined underinsurance. This, again, can be based either on absolute amounts or on percentages of income.

Temporal factors contributing to underinsurance include seasonal or part-time employment, as well as short-term lapses in coverage due to the waiting-period and elimination-period restrictions included in many policies. In effect, part-year coverage constitutes categoric non-coverage for a portion of the year and is always characterized as underinsurance. Because of the volatility of insurance coverage, it is important to include this temporal aspect. During the period of uninsurance, individuals and families are without any insurance protection of any kind. In addition, of course, to the individual's or family's health status, the intensity or seriousness of the problem depends on the frequency and duration of these periods, referred to as "spells without insurance" (Swartz and McBride 1990, 281).

With effects similar to those observed when an insurance contract is available only part of the year, policy restrictions, such as benefit waiting periods (also called probationary periods) exempt or limit coverage at the beginning of an insurance contract period, thereby decreasing demand for services (Eckhuldt et al. 1988). Elimination periods, that is, time intervals between episodes of care (usually for hospitalization and home health care), also specify times when certain services are not covered. In a more specific manner, preexisting-condition clauses, which stipulate that certain conditions are not covered for a defined period of time, can also lead to a status of temporal underinsurance (Cotton 1991).

**PERCEPTUAL/ATTITUDINAL
DIMENSION**

The perceptual/attitudinal dimension of underinsurance refers to the views of insured individuals regarding the adequacy of the benefit structure of their plans. Even though essentially subjective in nature, this dimension purports to measure an objective phenomenon, namely, the extent to which health insurance satisfies the health insurance needs of clients. The rationale for using individuals' judgments as the basis for measuring underinsurance stems from the assumption that these types of attitudes are important determinants of actual utilization behavior.

Individuals' views of the benefit structure reflect their level of satisfaction along the same lines as the categoric criterion of the structural dimension of underinsurance. Standards for the benefit structure dimension can be either complete or specific; that is, satisfaction may be directed either at the plan as a whole, without making distinctions among its constituent parts, or at a specific aspect of service. In both cases, underinsurance is observed when the level of dissatisfaction is excessive. For example, a person might view a policy that contains a \$5,000 deductible and 50 percent coinsurance as the complete form of benefit structure underinsurance. On the other hand, if a plan has full coverage except for a 50 percent coinsurance on mental health benefits, the person might view the coverage as specific benefit structure underinsurance. A separation of the benefit structure criteria can also be made for categoric and relative categories, as was suggested for structural underinsurance.

Views regarding the adequacy of coverage constitute a global measure of the extent to which individuals believe that their health insurance protects them from incurring excessive health care expenditures (Gerst, Rogson, and Hetherington 1969). In this way, the adequacy of coverage criterion is the individual perception corollary to the experiential dimension. Again, underinsurance is observed when clients consider coverage to be excessively inadequate.

The key difference between structural underinsurance and the benefit structure criterion of perceptual/attitudinal underinsurance, and between experiential underinsurance and the adequacy of coverage criterion of perceptual/attitudinal underinsurance, lies in who makes the evaluation of the insurance policy. Both structural and experiential definitions are views of the insurance policy by a third party to the contract who has full information on coverages. The perceptual/attitudinal definition is based on the view of the insured individual who might have full information. Research has revealed that full information of insurance coverage might be the exception rather than the norm for individuals

(Bashshur and Metzner 1970; Cafferata 1984). Moreover, it has been documented that some insurance companies have used deceptive marketing practices "to sell unnecessary coverage, irrelevant coverage, and duplicative coverage . . .," prompting Congress to restrain these practices (Light 1992, 2,506). With the proliferation of benefit packages, it has become nearly impossible for average consumers to determine the precise nature of their insurance coverage. Be that as it may, the fact that consumers lack full information does not make their perception of being underinsured any less important.

COUNTING THE UNDERINSURED AND POLICY OPTIONS

Few reports on the underinsured have offered a count of their numbers, and of those studies that have estimated totals of underinsured, few have defined the methods used for counting. Within the classification scheme for underinsurance offered in Figure 2, previous research has examined three of the six dimensions. Farley (1985) counted the underinsured using the empirical-experiential approach. Swartz and McBride (1990) counted the underinsured using the temporal-experiential (part-year uninsured) approach. And Bashshur, Webb, and Homan (1989) counted the underinsured using an attitudinal-structural approach. Clearly, much work remains before a complete picture of the underinsured can be made available.

Researchers may want to estimate the structural dimension, because it allows for assessing underinsurance within the entire population of users and nonusers of services and it may prove to be the most equitable approach. Researchers may also want to expand work on the perceptual/attitudinal dimension, particularly because policies being proposed or considered may well be developed or fine-tuned in public forums.

Despite an incomplete working definition of the underinsured, many policies have been enacted or proposed (pre-1993) to address this concern. In fact, policies have been considered for most of the dimensions and criteria of underinsurance. Structurally, state mandates for specific benefits are now numerous, to the point where coverage *beyond* a socially desirable level may have been achieved. Defining a minimum benefit package may continue to be an elusive goal in the new initiatives on health care reform, but many proposals for basic benefits are being considered to alleviate the problem of categorical underinsurance. For instance, state mandates do not apply to the growing number of persons covered by self-insured employers (Jensen and Gabel 1988). This split in

regulatory authority between states and the federal government—which may or may not be somewhat altered—makes policymaking in the detailed area of underinsurance all the more difficult (Power, Ralston, and Heflin 1990).

Relative underinsurance, due to excessive cost sharing, can only be fully addressed with explicit limits on cost sharing. Some states implicitly place limits on cost sharing through the insurance policy approval process. For example, limits of 20 percent coinsurance differentials between preferred and other providers are not uncommon (Rolph, Ginsburg, and Hosek 1987). However, there are no global requirements on coverage amounts or percentages for specific services. Perhaps under a health care reform program, this area of health insurance coverage would be addressed.

Experiential underinsurance could be addressed in its empirical criterion through limits on out-of-pocket maxima, either in dollar terms or as a percentage of income. The ill-fated catastrophic health insurance provisions of Medicare would have provided such protection for the elderly (Holstein and Minkler 1991).

The temporal criterion has been partially addressed up to this time through state regulations limiting preexisting condition clauses and waiting periods. Further modification of such regulations, however, should proceed cautiously given the potential for significant selection issues associated with these policy features (Cotlin, Lubash, and Singer 1981). For part-year uninsurance, the Consolidated Omnibus Budget Reconciliation Act (COBRA) of 1985 has provided displaced persons with the opportunity to purchase health insurance at favorable group rates for a limited period of time.

Finally, attitudinal underinsurance can be partially addressed through providing more complete consumer information. While it is probably not cost effective or feasible to make every consumer thoroughly knowledgeable about health insurance, basic information needs can be identified and provided (Davidson 1988; Reis 1988; Varner and Christy 1986). Attitudinal underinsurance can also be addressed by soliciting more consumer input on plan design. Many people have very clear ideas about their preferences for insurance coverage (Crittenden and Madden 1988; Reis et al. 1990). Several authors have examined reasons for initially purchasing insurance (Fergusson, Horwood, and Shannon 1986), selecting one plan instead of another (Juba, Lave, and Shaddy 1980; Luft and Miller 1988), and changing from one plan in favor of another (Riley, Rabey, and Kasper 1989; Rosenberg, Bonner, and Scotti 1989). To the extent that individuals make utilization decisions based on their knowledge of their health insurance coverage, attitudinal

measures imply the same types of effects as structural or experiential measures and therefore merit serious high-level attention.

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20 Years Ago

Medical Care Review published "Some Issues in the Incentive Reimbursement Approach to Cost Containment: An Overview," by Katharine G. Bauer and Paul M. Densen (in *MCR* 30, no. 12 (December 1973): 61-100).

"In the early 1960s the prime concern of national health policy was how to narrow the striking differences in health status and in access to health services among different segments of the United States population. But soon after the passage of the Medicare and Medicaid amendments to the Social Security Act in 1965, the spotlight shifted to the precipitously rising costs of health care services. Although few experts claimed that the old disparities in health had been resolved, cost containment became the name of the game. . . .

"[One approach to cost containment] called for third party payers to develop new incentive programs that would encourage health providers to manage resources more effectively and to provide health services more efficiently. . . .

"But if, over time, the many public and private programs which presently contract with the foundations on behalf of Medicaid and the insured populations come to exercise their buying power to exert pressure for continually tighter norms, the individual physician might well find himself daily facing painful dilemmas of choice. . . .

"The issue thus becomes: Where does society want the physician's basic allegiance to lie? With the consumer as a taxpayer and insurance subscriber who wants a lid on costs? Or with the consumer as a sick person who wants maximum restoration of health, relief from pain and in the end, conditions for an easeful death?"