
Solutions for Adverse Selection in Behavioral Health Care

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Health plans have incentives to discourage high-cost enrollees (such as persons with mental illness) from joining. Public policy to counter incentives created by adverse selection is difficult when managed care controls cost through methods that are largely beyond the grasp of direct regulation. In this article, the authors evaluate three approaches to dealing with selection incentives: risk adjustment, the carving out of benefits, and cost- or risk-sharing between the payer and the plan. Adverse selection is a serious problem in the context of managed care. Risk adjustment is not likely to help much, but carving out the benefit and cost-sharing are promising directions for policy.

INTRODUCTION

Biased, or adverse, selection undermines the functioning of insurance markets for mental health and substance abuse care (together known as behavioral health care). This was true when the main device for cost control was consumer copayments and remains true today in the era of managed care. Adverse selection is one of the primary explanations for the more limited coverage of mental health within private health insurance. (The other is a higher demand response to insurance,

referred to as "moral hazard.")¹ Data from employer surveys regularly show that mental health care typically is subject to higher levels of cost-sharing, lower limits on covered days and visits, and lower lifetime limits.

The traditional story is this: Health plans compete to attract the good risks, the low-cost enrollees. By providing "good coverage" for behavioral health care, health plans would do the opposite: attract the bad risks. When copayments and limits are the primary mechanism of cost control, competition among plans for the good risks undermines incentives to offer coverage for behavioral health care. Regulators have a straightforward way to deal with this. Mandated benefits, either at the State or Federal level, intervene against selection-driven coverage competition.²

Replacement of demand-side cost-sharing by managed care as the main strategy for controlling moral hazard in health insurance has altered health plans' competitive tactics and channeled selection-related behavior into service competition. Competing health plans must consider how the package of services they offer and the access to these services they allow will influence the nature of the risks they attract. The incentive to avoid high-cost enrollees has not dissipated with managed care. Indeed, because insuring organizations such as health maintenance

Funding for this article was provided by HCFA Cooperative Agreement #18-C-90314/1, the Robert Wood Johnson Foundation, and the Alfred P. Sloan Foundation. Richard Frank is with Harvard University, Thomas McGuire is with Boston University, Jay Bae is with the Health Care Financing Administration (HCFA), and Agnes Rupp is with the National Institute of Mental Health. The opinions expressed in this article are those of the authors and do not necessarily represent the views of Harvard University, Boston University, HCFA, or the National Institute of Mental Health.

¹ The terms "demand response" or "moral hazard" refer to the increase in utilization caused by an improvement in insurance coverage.

² For discussion of State mandates for behavioral health care, see McGuire and Montgomery (1982) and Frank (1989). Recent Federal policy regulating lifetime limits for behavioral health care is in the same spirit as these State mandates.

organizations (HMOs) are frequently bearing more risk than payers did 10 years ago, incentives to attract good risks are probably higher now. Managed care simply opens up new possibilities for discouraging membership from high-cost groups. Conventional wisdom is that high-cost enrollees are attracted by benefits for behavioral health care. When nominal benefits are mandated, competition to avoid the high-cost enrollees takes the form of aggressively managing care for the services that would appeal to these potential enrollees. Behavioral health and other services used by the chronically ill may be the target of such competitive strategies. The debate over the use of managed competition in President Clinton's Health Security Act and other behavioral health policy venues has highlighted a concern for access among individuals who may be perceived to be bad risks (Schlesinger and Mechanic, 1993). As we argue here, because of the formidable difficulties in regulating health plans' "management" of care, the incentives created by adverse selection may be more insidious in an environment of competing managed care plans.

In this article, we address adverse selection and benefits for behavioral health care in the context of managed care. In the section "Biased Selection and MH/SA Services," we review the problem of adverse selection in insurance for mental health and substance abuse (MH/SA). We show how the problem is recast in a managed care environment and argue that old policies to regulate selection-driven behavior, such as mandated benefits, are less effective in the new era. Next, we describe policies to counter selection incentives in managed care, emphasizing how they deal with selection-related incentives, and assess how well we can expect these policies to work. In the section "Risk Adjustment," we consider the potential for risk-adjusted premiums to attenuate selec-

tion incentives. Carving out benefits as a method for dealing with selection is discussed in the next section, followed by discussion of a strategy that can be used with risk adjustment or carve-outs to ameliorate financial incentives. Directions for research are discussed in the final section.

Biased Selection and MH/SA Services

Selection-related incentives derive from asymmetry of information between health plans and potential enrollees. Enrollees differ in their degree of risk. If these differences are not picked up by a risk-adjusted premium, and enrollees are aware of the differences, plans have an incentive to structure their benefits to be unattractive to high-cost enrollees and attractive to low-cost enrollees. Because plans are attempting to be attractive to the low-risk potential enrollees, the issue is one of the relative quality of different services, not an overall reduction in quality. Plans have an incentive to offer poor access and services in some dimensions but good access and service in others. The quality of some services will be "too high" in relation to the efficient level (those services that are relatively intensively used by the good risks), and the quality of some services (those that are relatively intensively used by bad risks) will be too low (Glazer and McGuire, 1996). Plans can adopt this quality "twist" even when they do not know the good risks from the bad risks, and/or they are prevented from practicing overt discrimination by open enrollment policies.

Many mental health problems are persistent and therefore likely to be predictable to individuals. People expecting to use MH/SA care will tend to join plans that offer generous coverage of those services. Users of MH/SA services are bad risks, using more of these types of services and more of other

services as well. In a multiyear data set of Michigan Medicaid enrollees, the average total health payment for a person enrolled for all 3 years was \$1,873. If the enrollee used MH/SA care at some point during the 3 years, his or her average payments were \$3,722. Most of this difference, approximately 65 percent, is attributable to the use of MH/SA care, but other costs are higher for these users as well. Other researchers have noted that MH/SA users tend to be expensive. Morlock (1989) provided a review of evidence of links between mental and general health care utilization. She concluded that there was an important positive correlation between MH/SA costs and other costs.

The result of the empirical association between mental health use and total cost is that competitive health plans will seek to discourage enrollment of high-cost enrollees by not offering an attractive MH/SA benefit. Note that this does not have to do with moral hazard; the incentive is driven by selection. Even if a plan could perfectly manage care, in the sense of providing care if and only if the benefits exceed the costs (thus fully dealing with moral hazard), the plan would have an incentive to reduce the care in the MH/SA area. This is the selection-related incentive that implies that MH/SA care may be "overmanaged" by competing health plans.³

Evidence for Adverse Selection in MH/SA Care

During the 1960s and 1970s, the Federal Employees Health Benefit Program (FEHBP) provided an early example of how concerns about selection drove competing insurers to lower benefits for MH/SA

services. Plans offering more generous benefits quickly attracted individuals who wanted to avail themselves of these services. The generous coverage of MH/SA lost viability as people not expecting to use services enrolled in plans with more limited coverage (Reed, 1974; McGuire, 1981). Use of mental health care was found to be two to three times higher in the Blue Cross/Blue Shield High Option plan, compared with the Low Option plan, even though the actual coverage differences were quite small (Padgett et al., 1993). During this period, the coinsurance in the High Option plan was 20 percent, compared with 25 percent in the Low Option plan. Demand response to such small differences in coverage could not possibly explain the large differences in use, implying that the differences in use are primarily the result of selection.⁴ The High Option (lower cost-sharing) plan differentially attracted poorer risks.

Adverse selection is an issue for all of health insurance, but may be especially serious in the mental health area. In a recent paper by Deb et al. (1996), evidence was presented showing that individuals with a family member with a mental illness were more likely than otherwise similar members of the U.S. population to choose coverage with more generous mental health care provisions. Sturm, Meredith, and Wells (1994) analyzed the treatment of depression across health plans as part of the Medical Outcomes Study (MOS). They observed more frequent health-plan switching among depressed individuals. Those receiving care from mental health specialists were more likely to migrate from prepaid to fee-for-service plans. They also found that

³ These selection-driven incentives are of course not confined to MH/SA. In ongoing research we are characterizing, in theory and with data, the services that are most likely to be subject to incentives to overmanage (Frank, Glazer, and McGuire, 1997). The analysis in this article, cast in terms of MH/SA care, is thus potentially applicable to other areas of service as well.

⁴ In the RAND experiment, individuals were randomly assigned to health insurance plans, and the observed price response to differential coverage was substantially lower than what was observed in FEHBP (Newhouse and The Insurance Experiment Group, 1993).

individuals switching from prepaid to fee-for-service plans were at risk for poorer outcomes. Ellis (1988) examined the persistence of spending over time and its implications for health plan choice. Individuals with a history of mental health care utilization had persistently higher levels of spending than did otherwise similar individuals. He also found that a history of mental health care utilization had a significant impact on an individual's choice of health plan. Higher levels of prior-year mental health spending increase the likelihood that an enrollee will choose more generous coverage. Persistent levels of above-average spending for Medicaid enrollees with severe mental disorders was recently reported by Kronick et al. (1996). Taken together, these results suggest that use of mental health care may be more likely to predict subsequent year health care spending than use of other health services and that plans attracting mental health users will be at a financial disadvantage. In sum, there is both direct and indirect evidence that persons with mental illness have higher levels of health care spending and that they systematically select health plans that offer more generous coverage for treatment of mental illnesses. Such behavior creates strong economic incentives for health plans to adopt strategies that will reduce their attractiveness to users of mental health care.

Policy Responses to Adverse Selection

During the 1970s and 1980s, competition to avoid bad risks took the form of limiting coverage for treatment of mental and addictive disorders. Approximately 22 States counteracted adverse selection by mandated-benefit statutes that specified minimum levels of coverage for MH/SA care (Frank, 1989). These statutes generally specified coverage minimums in terms of coinsur-

ance, limits on outpatient visits and hospital days, and deductibles. Because benefit design features were the key provisions of an insurance contract determining coverage, regulation of these components of coverage was potentially effective in limiting market failure associated with adverse selection. The impact of mandated-benefit statutes was limited because of the exemption of self-insured employers under the Employee Retirement and Income Security Act of 1974 (ERISA). It is worth noting that most large self-insured employers (often with populations in several States) typically offered their employees health insurance plans that complied with or exceeded the terms of most State-mandated benefit statutes. This strategy toward "fixing" difficulties in the insurance market continues today. In 1993 and 1994, a fierce debate took place regarding mandated benefits in insurance as proposed under President Clinton's Health Security Act. The inclusion of MH/SA as part of the benefit mandate was especially contentious, primarily because of concerns over the costs of such provisions. The same argument reappeared in 1996 in the form of proposed legislation that would call for parity in benefit-design provisions between other health benefits and those for MH/SA care. Again, concern over the costs of such mandates and the uncertainty surrounding the predicted impacts strictly limited the scope of the legislation that eventually passed (U.S. Congress, 1996). Attenuating these selection-related incentives is the main argument supporting policies to mandate insurance benefits.

"Non-Contractable" Dimensions of Coverage

The dramatic growth of managed care arrangements in the United States has fundamentally altered the context in which

we must deal with policy issues raised by selection. Nowhere has the growth and impact of managed care been greater than in the area of MH/SA care. In 1995, enrollment in HMOs and preferred provider organizations (PPOs) accounted for an estimated 73 percent of the insured population of the United States (Foster-Higgins, 1995). In addition, specialized managed care arrangements for MH/SA care also grew dramatically. These arrangements have often taken the form of so-called managed behavioral health care (MBHC) organizations. According to Oss (1995), there are about 111 million people who have at least some of their MH/SA benefit managed by a specialty MBHC firm. Of these, 53 million (including both public and private insurance) are enrolled in some type of carve-out program. A carve-out plan refers to the choice by a buyer of health insurance to separate the health insurance function by disease or service category and seek separate contracts for managing those risks. Approximately 21.8 million people are enrolled in what has become known as risk-based carve-out contracts. That is, the MBHC firm is placed at some financial risk for claims costs. Carve-out firms in private insurance are found disproportionately in plans purchased by large employers. Umland (1995) reports that 35 percent of employers with 5,000 or more employees were contracting with an MBHC vendor, compared with 3 percent of firms with fewer than 500 employees. Fourteen State employee health programs have adopted MBHC carve-out arrangements. State Medicaid programs have also been making use of the carve-out form of organization for managing MH/SA care. By the end of 1995, 12 States had adopted some form of MBHC carve-out program for their Medicaid programs.

The significance of the shift to managed care for MH/SA is that insurance contracts have become much more complicated and at

the same time more remote from regulatory control. Managed care typically covers "medically necessary" care. Medical necessity and therefore de facto coverage for treatment of MH/SA conditions depends on a complex set of interrelationships involving the features of the benefit package, the structure of the provider network organized by the managed care organization, the financial incentives facing providers, and the administrative mechanisms put in place by the managed care organization to control utilization and quality of care. Copayments and limits are no longer the main dimensions of coverage.

To illustrate the new contractual complexity, we describe here a managed behavioral health environment based on a composite of observations made from interviews and site visits with dozens of MBHC vendors. An MBHC firm develops treatment guidelines to assist its care managers in developing treatment plans with network clinicians (psychologists, psychiatrists, social workers, and other therapists). A patient is referred for care, and the care manager, usually in consultation with a clinician, makes an initial authorization for treatment, for example, for 10 sessions. The benefit plan suggests that in-network therapy sessions are covered in such a way as to require a \$10 copayment by the patient for each visit, subject to a 50-visit per year limit on outpatient treatment. In effect, the medical-necessity condition means that the effective benefit for this patient is limited to 10 visits, unless an approval for more care is obtained. This depends on the judgment of the care manager (an employee of the MBHC vendor) and the judgment and reports of the treating clinician about the status of the patient. Clearly, regulating the structure of the coverage in the benefit plan is now only one factor among several determining the actual availability and use of covered services. Contracts between the payer and

the MBHC vendor, between the vendor and the clinician, and between the plan and the enrollee all matter. In addition, the interpretation of medical necessity by clinician, care manager, and plan all enter into establishing effective access to care.

Determination of medical necessity can be highly subjective in the case of individual patients, conferring discretion on those authorizing services. Furthermore, the size, structure, and location of provider networks also influence the access to and use of care, and thereby effective coverage. Management of care—the set of policies that determine access and use—is in large measure immune from regulation. Some payers stipulate some dimensions of access and care management, such as the number and location of providers in a network, but this leaves many other dimensions to the discretion of the MBHC firm. In the language of contract theory, management of care is largely “non-contractable.” In other words, a government or an employer is not able to stipulate in a contract or in regulation the pertinent dimensions of management, such as the stringency with which medical necessity criteria are applied or the quality of a provider network.

Policies from the 1970s and 1980s, based on the notion that regulating the coverage itself could regulate access and use, are unlikely to be as effective as they once were in combating incentives derived from adverse selection. The Domenici-Wellstone Amendment recently signed into law by President Clinton over half-hearted opposition from business leaders is a “mandated benefit” style of regulation. There are two sides to this story. On the one hand, managed care enables a payer to more effectively manage a benefit and therefore makes deeper coverage more affordable. On the other hand, controlling nominal benefits through regulation is a

much less powerful leverage on the service system when access and use are controlled by managed care. Expansion of coverage limits may be relatively easily counteracted by a variety of administrative mechanisms that cannot be regulated and that may be more stringent than they are in the rest of health care. Benefit parity has less meaning in the era of managed care.

A health plan has a large set of instruments to affect enrollment choice, and nominal coverage is only one of them. A plan can be made less attractive to individuals with severe mental disorders, for example, while allowing easier entry to care favored by less disabled (and less expensive populations), such as short-term counseling. Promoting easy access and high quality in low-intensity care, and at the same time, difficult access and low quality in high-intensity care is an example of the quality “twist” plans may adopt to become relatively attractive to low-cost enrollees. Access can be affected by utilization review policies, the location of treatment facilities in the network, and the number of specialized providers.

Competitive HMOs have long instituted practices that serve to limit access to intensive forms of MH/SA treatment. For example, many HMOs define their area of responsibility as acute care, thus case management and day hospital care are viewed as long-term or chronic care and not considered part of the HMO’s responsibility. The result is that the HMO refers enrollees in need of such care out of its system, typically to a tax-funded agency (Mechanic, 1996), as has been observed in Minnesota and Wisconsin, where competing HMOs were given responsibility for all mentally ill individuals enrolled in Medicaid.

In sum, it seems likely that the problems of biased selection will be accentuated in the era of managed care, when typical enrollees face more choices of competing

health plans that have more mechanisms at their disposal for affecting enrollee choice. Managed care may make the expansion of benefits possible because of improved controls on moral hazard, but these same controls can be used to strategically overmanage care in pursuit of low-risk populations. Explicit regulation may be relatively powerless against these new forms of selection behavior by plans. But even if management is outside the direct control of regulation, a government or an employer does have some policies to contend with selection incentives.

RISK ADJUSTMENT

The goal of risk adjustment of capitation rates paid to plans is to align expected revenues of health plans with expected costs, so as to make both high- and low-cost enrollees attractive to plans.⁵ In this way plans will tend to offer good quality for services used across the range of potential enrollees and not twist service quality toward the services used by the low risks.

Risk adjustment uses a signal about expected health care costs to adjust a prospective capitation rate paid to health plans. For example, age, sex, welfare status, and county of residence are the signals used to adjust Medicare's capitation payment to HMOs enrolling Medicare beneficiaries. If the elderly are observed to cost more, premium payments for elderly beneficiaries are adjusted upward by an estimate of the higher average cost. Current research on risk adjusters focuses on clinical information such as diagnosis and health care use in past periods as well as demographic characteristics (see, for example, Ellis et al., 1996). The value of a

⁵ Risk adjustment has also been used within health programs such as State Medicaid plans, where there is no enrollee choice of plan. The purpose of risk adjustment in these cases is to ensure that payments to health plans are fair in the face of changing enrollment patterns.

risk-adjustment system is typically evaluated by how well it classifies patients according to levels of resource use, typically measured by an R^2 statistic.

The underlying purpose of risk adjustment is to pay plans fairly and to counter plans' selection-related incentives. Therefore, the utility of a risk-adjustment system depends fundamentally on how individuals sort themselves into plans or, in other words, the equilibrium in the market for competing health plans. Most research on risk adjustment ignores the importance of characterizing the nature of market failure in order to evaluate the effects of a risk-adjustment policy.⁶ Some recent research makes explicit the assumptions about the selection taking place in order to draw the implications for risk adjustment (Glazer and McGuire, 1996; Keeler, Carter, and Newhouse, to be published). In general, by knowing the nature of selection that occurs in a market, information in the signals about health costs can be put to better use to address these incentives than would be the case if risk adjustment simply used regression analysis to determine the weights of the various adjusters.

In the development of risk-adjustment systems, little attention has been paid to MH/SA care, though that is changing as continued research proceeds on risk-adjustment systems. The Ambulatory Care Group (ACG) classification system makes use of several levels of diagnostic clusters. That system is most often implemented relying on clusters known as Ambulatory Diagnostic Groups (or ADGs). ADGs can be classified more finely into the ACG groups, which are less often applied in

⁶ Some empirical research on risk adjustment uses the measure of a "grouped R-square" to evaluate the fairness of a risk-adjustment system for certain groups of enrollees. The idea of this measure is that if selection took place at the level of the group in question, then the risk-adjustment system could be evaluated against this pattern of selection. The groups formed are arbitrary, and there is no connection to incentives or to market equilibrium.

practice (Weiner, 1996). The Diagnostic Cost Group (DCG) classification system relies on inpatient diagnosis-related groups (DRGs) to create groups. It has recently been modified to incorporate outpatient information, using a classification called Hierarchical Coexisting Conditions (HCCs). Psychoses and major depression are grouped into one DCG, and substance abuse is another. Most other mental and addictive disorders are ignored because those disorders were considered "too discretionary" by the physicians scoring DRGs for inclusion in the DCG system.

Classification of MH/SA patients has posed a difficult problem for policymakers since the initial introduction of prospective payment policies in the early 1980s. The development of Medicare's prospective payment system (PPS) required the Federal Government to determine whether psychiatric and substance abuse DRGs constituted an adequate patient classification system. Horgan and Jencks (1987) and Jencks and Goldman (1987) reviewed competing patient classification systems for grouping psychiatric inpatients. Their conclusion, expressing the notion of a low R^2 in lay language, was: "In general, research has not provided a robust explanation of differences in costs between psychiatric facilities. In particular, research has not developed classification systems that class together inpatient episodes with similar costs or that have substantial differences in costs between classes" (Jencks and Goldman, 1987). The low explanatory power of the DRGs for MH/SA was not the most serious problem. The unexplained variation in cost was systematically related to certain classes of facilities. Even after risk adjustment, simulation analyses (summarized in Jencks and Goldman) showed that more specialized psychiatric facilities drew a more costly case mix than general hospitals without specialized facilities. Putting MH/SA into

the PPS would have conferred windfall gains (on non-specialized facilities) and losses (on specialized facilities). Responses of facilities to the new system would have modified these losses and gains, but the fundamental unfairness of the PPS in this case, which we emphasize could only be evaluated with a conception of how the equilibrium would look, could not be avoided (Freiman, Mitchell, and Rosenbach, 1987). The research reviewed by Horgan and Jencks (1987) included studies of five major classification systems.

The failure of inpatient discharge-level risk-adjustment raises concerns about the potential of per person-level risk adjustment to adjust capitation rates for mental health care. Other research in health services suggests that the variation in rates of use of MH/SA care might be especially large and difficult to capture with the routinely available risk adjusters. Research on demand for mental health services seldom offers models with explanatory power comparable to that for general health services (Frank and McGuire, 1986). In the RAND Health Insurance Experiment, Keeler et al. (1986, 1988) were able to group general outpatient medical care into episodes and explain the occurrence and extent of these episodes statistically. A similar effort met with much less success in the case of outpatient mental health care.

Two initial evaluations of risk adjusters for MH/SA care have been completed using Medicaid and private insurance data sets. The first analysis assessed the ACG classification system using Medicaid data from the State of New Hampshire (Ettner and Notman, to be published). In that analysis, data on approximately 30,000 Medicaid enrollees were used for fiscal years 1993 and 1994. Ettner and Notman (to be published) evaluated the predictive power of the ACG classification system, a set of

diagnostic clusters and age and sex groupings. Weights for the classification systems were constructed using fiscal year 1993 data to predict 1994 expenditures. The authors evaluated the explanatory power of the classification systems for predicting total individual health care spending and individual MH/SA spending. The results revealed several key points. First, none of the classification systems studied explained more than 4 percent of variance in total health spending, with the percent of variance explained ranging from 2 to 4 percent. Second, in the MH/SA area, the maximum explanatory power was 13 percent of the variance. Third, in the analysis of MH/SA spending, the results suggested that including age and sex along with a set of variables indicating whether an individual had 1, 2, or 3+ separate MH/SA disorders indicated in claims during the previous year provided greater explanatory power than any other method.⁷

In the second analysis, Ettner et al. (to be published) examined risk adjusters within a larger data set of privately insured employees and their dependents. In that study data from a population of approximately 450,000 enrollees were examined to evaluate several risk-adjustment methods. The classification systems studied included ACGs, ADGs, HCCs, age and sex groups, and a new set of diagnostic clusters that emphasized MH/SA comorbidities. In addition, to study the predictive ability of each system for total MH/SA spending, the authors made use of actual health plan choices of employees to assess how well each classification system would account for naturally occurring selection into plans. The data were for the years 1992 and 1993. The 1992 patterns of illness were used to classify enrollees and to

⁷ Dunn et al. (1995) show that with stratified data and use of ADGs, adjusted R^2 for total health charges can be as high as 0.20. This exceeds the explanatory power found in MH/SA.

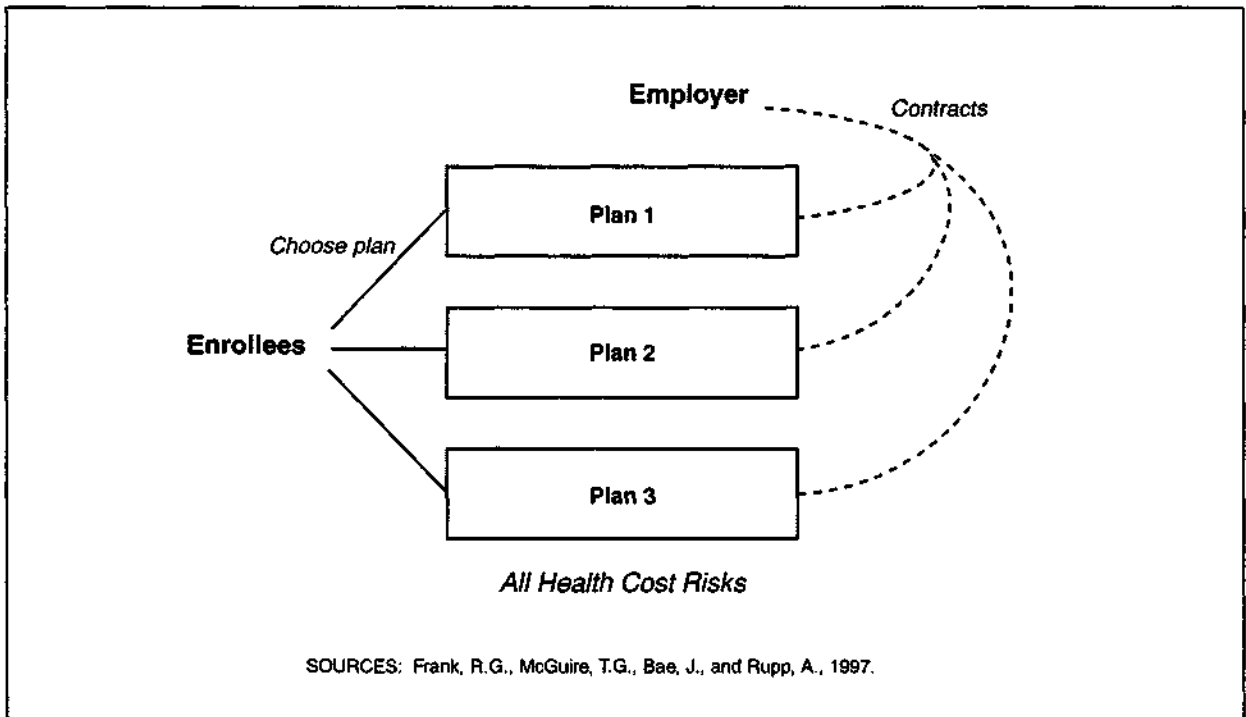
predict 1993 spending. As in the case of New Hampshire, no classification system displayed strong predictive ability. The ADG and MH/SA comorbid groups performed best in terms of having the highest estimated R^2 statistic. The results from the analysis of naturally occurring selection across plans for two large employer groups contained in the data illuminated the weaknesses of all the classification systems.⁸ When the payments that would have been made under each classification scheme were compared with payments based on the simple average for all enrollees (across all plan choices), little meaningful improvement was contributed by the risk-adjusted payment mechanisms. The results suggest that little of the systematic risk between plans was accounted for by the classification methods examined. When considered as a whole, the experiences with classification schemes for MH/SA care in general and the analysis of risk adjusters specifically leave us pessimistic about the prospects of using risk adjustment as the primary tool to limit the inefficiencies that may arise from biased selection among competitive health plans. Research on this subject continues and may yield better classification methods than have been found to date.

CARVE-OUTS AND SELECTION

An employer (or other payers such as State Medicaid programs) can purchase all health risks together and offer enrollees a choice among competing integrated health plans. The market structure for health risks would in this case look like Figure 1.

⁸ The apparent selection across three plans may have been quite large. For example, in comparing plans with similar deductibles, differences in annual visit limits of 50, 50 and 25, and similar copayments for outpatient care, per person per year costs ranged from \$6 to \$105. Because the cost differences were unlikely to be attributable to differences in limits, we interpret cost variation to be largely the result of selection.

Figure 1
Competition Among Integrated Health Plans



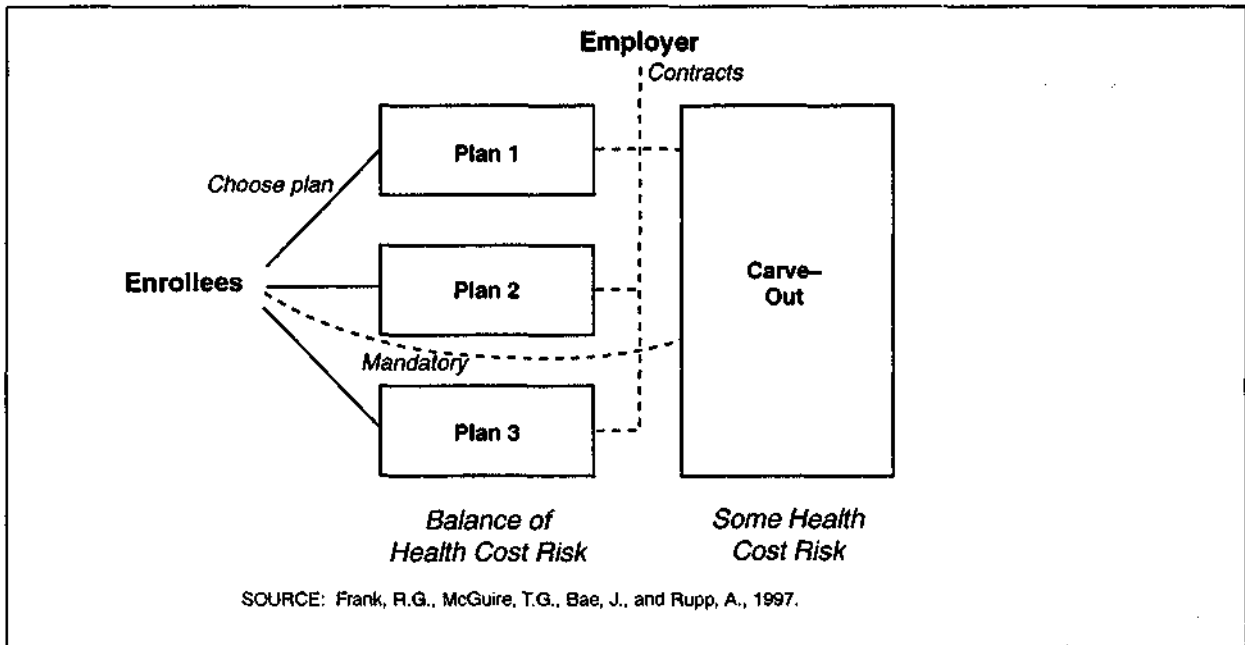
Enrollees choose among plans. The employer has a contract with each plan specifying the payment to the plan based on the number of enrollees who join it, the enrollee characteristics (if there is risk adjustment), and possibly other factors, such as cost realizations. Plans typically must take any enrollee who seeks to join them and compete for enrollees by choosing a “quality” of its services. Quality, as already noted, can be set to some degree separately for different services.

The alternative structure, with a carve-out, is shown in Figure 2. One area of health care is taken out of the contract with integrated health plans. The most commonly carved-out area of health risk is behavioral health, though there are others. Under the carve-out structure, enrollees choose among competing health plans for most of their health care but are required to join another plan that provides behavioral health care. The employer has a contract with each competing integrated

plan (again, which could be based on a risk adjuster and other factors) and a contract with the carve-out company. The competing health plans behave as before, but with one less dimension of quality—that associated with the carved-out service. The State Employees Plan in Ohio and Pacific Bell’s Plan are examples of this type of carve-out.

Carve-outs come in other varieties. The carve-out might be from just one plan, with other integrated plans in competition for enrollees. If an employer offers a fee-for-service option, MH/SA might be carved out from this plan but included in the overall premium paid to HMOs and other managed care options for employees. Some well-known carve-out programs are of this type, such as Massachusetts Medicaid and the Group Insurance Commission (Callahan et al., 1995; Frank and McGuire, to be published; Huskamp, to be published; Ma and McGuire, to be published). Carve-out contracts need not be with a single organization—a purchaser

Figure 2
Competition Among Partially Integrated Health Plans
With Mandatory Carve-Out Plan



may allow enrollees a choice of behavioral health care carve-outs, as is done in TENNCARE. Carve-outs may also occur between a managed care plan and an MBHC firm. This form of contract is between one plan and another, not between the purchaser and the MBHC firm. Risk-selection incentives still exist among competing plans and are not modified by this final form of carve-out.⁹

The specialty carve-out plan can affect service competition aimed at avoiding enrollment by individuals at relatively high risk of using MH/SA care by separating and consolidating MH/SA insurance risk. If the high-cost types are attracted by MH/SA benefits, competition among integrated health plans might lead, as we have argued, to overmanagement of this area of service. Carving out the benefit in a separate contract effectively eliminates

this as a competitive strategy. This is accomplished by setting a separate MH/SA budget in the carve-out contract and by reducing the effective choice of enrollees in terms of how they receive MH/SA care.

Carve-out contracts have other pluses and minuses to be weighed against the selection issue. One controversial question relates to whether MH/SA care is more effectively delivered in a fashion that is integrated with medical care via a primary care physician. Carve-outs create new administrative costs that appear to range from 8 to 15 percent of MH/SA benefit costs. The discussion and evidence presented herein suggest that selection incentives associated with integrated competing health plans may be quite strong and in many cases will outweigh disadvantages of the carve-out form.

The carve-out approach limits how competition can be used to encourage efficiency and quality. Competition must be confined to competition for the carve-out contract.

⁹ When an HMO carves out its MH/SA care to a behavioral health company, there is no new contract between the payer and the behavioral health care vendor. This final form of subcontracting should be viewed as a "make-buy" decision of an HMO rather than one that is fundamentally about selection incentives. See Hodgkin, Horgan, and Garnick (to be published).

MH/SA contracts are typically procured competitively. The purchaser (employer or government) sets out purchasing specifications that are incorporated into a Request For Proposals (RFP) from qualified potential vendors. The RFP usually contains details regarding information on benefit structure, performance standards, financial risk-sharing arrangements (between payer and vendor), historical spending data for the enrolled population, and specification of standards for the provider network. Most contracts are 2-3 years in duration. Typically, between 4 and 10 firms bid on the contracts for larger population groups where there has historically been a generous benefit in place. The MBHC industry is very competitive, with well over 15 large national vendors and dozens of smaller local firms vying for contracts. The purpose of competition is to limit contract costs and elicit commitments from vendors to adhere to certain standards that can be written into a contract. Contracts are renewed competitively after 2 or 3 years, which requires incumbent vendors to compete with other firms to secure the new contract. Recent experience shows that major purchasers are willing to switch vendors if they are dissatisfied with the performance of an MBHC contractor (e.g., Ohio and Massachusetts).

A similar observation can be made about carve-outs as can be made about risk adjustment, which is that analysis of the effects of a carve-out need to take into account how the market for health risk will respond to an employer or a State's repackaging of risk through use of a carve-out. Moving from Figure 1 to the structure in Figure 2 or the alternative forms of carve-out structures will affect the incentives and actions of all health plans, integrated or specialty, and will affect the incentives to provide quality of care for both MH/SA and other services. These sets of effects will be complex. Conceptual and empirical

study of the relationships among health risks should help shed light on the general nature of carve-out effects. As this new work proceeds, it seems clear that carve-outs are a potentially useful mechanism for a payer to deal with some areas of selection-related incentives. Especially for areas of care (and for people who use these areas) for which risk adjustment performs poorly, carving out may be a good option.

DISCUSSION AND DIRECTIONS FOR RESEARCH

So far, we have not discussed the nature of the contract between a payer and an integrated health plan relying on risk adjustment or between a payer and a carve-out company. In each case, there are contract features that can provide further protection over and above risk adjustment and carving out against selection-related incentives. Consider payments to competing managed care plans. Adverse-selection incentives are generated when a plan expects to lose money on the enrollees attracted by a service expansion. Such losses can be reduced, given a risk-adjustment scheme, if a plan is partly reimbursed on the basis of costs actually incurred, as well as on a prospective basis, depending on enrollee characteristics. Payment systems that have both prospective and cost-based components have been referred to as "mixed systems," following Ellis and McGuire's (1986) depiction of such systems in the hospital payment context. In a recent paper, Newhouse (1996) has undertaken a comprehensive review of methods for provider payment and supported the idea of mixing cost-related payment with a prospective component to partially compensate for the shortcomings of risk-adjustment systems. Paying partly on the basis of cost may have an efficiency cost in terms of diluting the incentives for

a plan to control costs, but this cost may be small in relation to the selection-related efficiency gains as some small amount of cost-based payment is first introduced in a payment system.¹⁰

Carve-out contracts represent an alternative mechanism for dealing with inefficiencies resulting from biased selection. Of particular significance is that carve-outs offer an organizational strategy that reduces the incentives of plans to compete for good risks. The structure of the risk pool is altered by separation of the MH/SA segment from the rest of the risk. Although carve-out contracts are key features of the MBHC market, they do not typically involve capitated approaches to payment. More common is a payment system that shares financial risk between the payer and the MBHC vendor. This means that at least part of the payment will be based on the actual costs incurred by the vendor. Such contracts take the form of payment systems that specify a cost or utilization target (often expressed as a per member per month cost), and the vendor collects a reward or suffers a loss according to how actual costs fall relative to the target. In a number of carve-out contracts, maximum profit levels and losses are specified, which serves to constrain risk. The Massachusetts Medicaid carve-out and the Iowa Medicaid carve-out are both examples of such provisions. Risk-sharing arrangements, such as those described here, are used to soften strong financial incentives to reduce care even where no selection incentives exist. Because quality standards are in their infancy in the MH/SA arena, risk-sharing mechanisms are aimed at preserving reasonable levels of quality and access to care.

¹⁰ Over and above correcting selection problems, the first argument for a mixed system is to simply moderate incentives for cost reduction across the board.

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