Part I: The Concept of Access and Managed Care

Beyond Coverage and Supply: Measuring Access to Healthcare in Today's Market

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Objective/Purpose. To stimulate discussion within the research and policy community about the value of and issues surrounding different ways to describe access to care in a health system reconfigured by the growth of managed care, competition, and other marketplace changes.

Principle Findings. The concept of access has evolved over time to address shifting health policy concerns like the growing interest in looking beyond utilization as a measure of access to a better consideration, too, of the effectiveness of services used as judged by costs and outcomes. Yet current frameworks used to look at access are person-based and do not capture the complexity of the healthcare system and the complex structures involved in managed care organizations that combine delivery and financing and vary substantially within and across markets. In addition, many at times competing or conflicting policy goals on access exist. There also is an increasingly diverse and widening set of uses that include benchmarking against national goals, measuring performance of accountable entities, and providing consumer information. Conclusions and Recommendations. Traditional access frameworks are invaluable in encouraging focus on historical measures of access, like insurance coverage and other barriers to system entry. But much greater attention needs to be paid to adapting current access frameworks so that they also better support the ability to understand how processes inherent in diverse health delivery and financing arrangements influence access to services within a system and what this means for how well individuals negotiate healthcare systems and the effects on care outcomes. The increasing demands on access measures and the growing diversity of users also point to a need for collaboration to better pool insights, share experiences, and honestly confront trade-offs or disagreements to progress in addressing these issues.

Key Words. Access, managed care, health policy, surveys, health services delivery

WHY THE ISSUE AND WHY NOW?

Objectives of This Article and Project

This article seeks to stimulate discussion within the research and policy community about the value of and issues surrounding different ways to describe access to care in a health system reconfigured by the growth of managed care, competition, and other marketplace changes. A key assumption is that the reconfiguration of the current system makes it advisable to adapt existing ways of conceptualizing and measuring access so that they are better able to support performance assessment in today's environment. The article places access concerns in a historical context and considers how the concept of access has been variously defined and measured and modified over time to reflect shifting policy concerns and system features. The paper then focuses on considering potential implications of current change, with particular attention to assessing how integration of financing and delivery might modify how access is conceptualized and purchased, particularly in an environment in which there is heightened emphasis on efficacy and cost-effective care. A key conclusion is that existing, largely individual-based models of access need to be modified to better capture how organizational (and market) variables affect access. In addition, greater attention has to be paid to the implications of diverse uses and users of access measures, each of which has distinct though overlapping needs.

Rationale for Concern About Access to Healthcare

The focus of this article is on access to healthcare—especially medical care—even though obviously that is only one determinant of health outcomes. Medical care does not guarantee health. Indeed, for many conditions, medical care is not even the major determinant of health outcomes, which can be heavily influenced by such factors as income and occupation, where one lives and how one is socially connected to others, genetic predisposition, global public health measures, and even chance and faith (Illich 1976; LaLonde 1975; Blum 1974). Yet timely receipt of healthcare has been shown to make a

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difference in health outcomes (Hadley 1982; Office of Technology Assessment [OTA] 1992). Further, the United States has structured its healthcare financing system around a medical model linked to health insurance, leading to a split in programmatic responsibility for medical care interventions versus other public and social programs that may have the same end. Thus, having good measures for the ability to get needed medical care, and for any trends and differences across subgroups of the population, is important in holding our healthcare delivery and financing system accountable, even if there are limitations in that perspective that are important to recognize.

To an extent, the historical focus on access reflects the values of our nation, which view it inequitable when the ability to get needed healthcare is affected in important ways by financial and other external factors. In the blunt title, Who Shall Live? a well-regarded book on health policy choices, Fuchs (1974) captures the essence of what distinguishes healthcare from other goods and services. As pointed out in the first line of the 1983 report, Securing Access to Health Care, by the President's Commission for the Study of Ethical Problems in Medicine and Biomedical Behavioral Research:

The prevention of death and disability, the relief of pain and suffering, the restoration of functioning: these are the aims of health care . . . health care touches on countless important and in some ways mysterious aspects of personal life that invest it with significant value as a thing in itself.

Thus, broad-based concern about access to healthcare is long-standing and coexists with equally broad-based disagreement over how to measure access and determine if it is equitable as distributed across the population.

The Evolving Concerns over Access

Although we now spend a larger share of the nation's income on healthcare than ever before, there have not been commensurate gains in access to healthcare (Millman 1993). Indeed, there is some concern that the long-term trend may be toward a reduction in access as purchasers respond to rising costs by limiting coverage or changing the form in which healthcare is delivered, and as the bottom line becomes increasingly important as a measure of performance (Chollet 1996; Holahan et al. 1996; Davis 1996).

Current changes in our healthcare system also challenge the definition of access. Historically, health insurance coverage and, to an extent, proximity to providers, have been the chief measures of equitable access, with a focus on whether people could get into the system and get care. That is, health policy has focused on encouraging insurance coverage and an adequate supply of

healthcare providers to reduce financial and geographic barriers to healthcare (Rowland 1993; Grumbach et al. 1997). Special attention also has been paid to poor populations, demographic groups such as children or the elderly, geographically isolated populations such as residents of the inner city and rural neighborhoods, and culturally distinct subgroups that are particularly vulnerable (Davis and Rowland 1983; Rowland and Lyons 1989; Robert Wood Johnson Foundation 1993). The assumption has been that if barriers to coverage and proximity are removed, equitable access would be manifested in utilization rates that, once adjusted for need, are similar across subpopulations (Aday 1993; Davis et al. 1981; Kleinman et al. 1981). Such concerns remain relevant today amid reports of declining levels of health insurance and pressure on public funds, which have the potential to undermine traditional access and shift the distribution of services across the population (Donelan et al. 1997; EBRI 1997; Cooper and Schoen 1997; Schoen et al. 1997).

While traditional concepts remain relevant to ensuring access, they are no longer adequate to address all the public policy concerns in today's changing market. The current context demands as well as measures the effectiveness and value of services received. It also shifts emphasis from concern primarily with initial entry to the system toward concern also with how care within that system is negotiated and what outcomes result. For example, cost and the appropriateness of care is a growing concern, especially for third-party purchasers who pay a large share of the bills. Managed care systems that integrate financing and delivery are rapidly expanding, and the use of capitation and other financial incentives that reward cost-effective care are growing (Jensen et al. 1997; Gold et al. 1995b). The financial incentives in managed care have the potential to increase the efficiency and appropriateness of care, but they could also lead to undertreatment and more limited access to appropriate care. The healthcare environment also is becoming increasingly competitive, and healthcare leadership and often ownership are being shifted to the market and a rapidly consolidating private sector (Corrigan et al. 1997; Eckholm 1994). Competitive models have reduced the cross-subsidies that historically provided support for services for those otherwise unable to pay for them.

These trends in today's healthcare market are driving interest in access beyond the historical concern over coverage, system entry, and aggregate utilization. In addition to knowing what services are in place and financially covered, there is growing interest in knowing how covered benefits and services are defined, how access to them is determined, and whether the results reflect appropriate and effective use of care and ultimately improve

health. There is a recognition that resources are limited, with opportunity costs to any expenditure. Yet there also remains continuing strong support for access to potentially life-enhancing medical care, whatever its cost, with consumer surveys showing strong support for large expenditures of money if this can save a life. These dissonant values and preferences result in tension and conflicting objectives that muddy the policy waters.

Current trends create challenges and inevitably large disagreements over what we mean by access and what standards and measures need to be applied to measure it. For example, which is more important: meeting the needs of patients as patients define them and as they have become accustomed to receiving care; or providing care that professionals view as appropriate or that researchers have even proven to be so? What about access to services that are effective but very expensive, or services that consumers value but have only marginal effects on health? How much weight should be given to general measures of access for a population, and how much should be given to more specific measures of access for vulnerable subpopulations or the chronically ill? Are rich and poor always entitled to equal access? If we want access measures to reflect issues important to today's systems of care, how do we account for the great diversity in managed care products and for the variability and instability of their features across the country or over time?

Unique Opportunities for a Fresh Consideration of Access

The influence of current trends in the healthcare market is broad and multifaceted with equally wide-ranging implications for information needed to serve a variety of purposes and users both in the public and private sectors. There is an increased desire for information to support purchasing decisions that generate "value" in terms of price/quality trade-offs, with emerging studies providing evidence of the high value consumers today place on information about access (Hibbard and Jewett 1996). Regulators are reshaping licensure and monitoring processes in response to market change. There are daily reports of new legislation introduced in response to changes such as shortened hospital stays for postnatal or mastectomy care. These initiatives place clinical and insurance decision making increasingly in the public sector, with a greater risk for inconsistent policies and priorities.

Whether or not health plans provide adequate and appropriate access to healthcare also are important issues generally. These concerns are especially important in assessing plans, like Medicaid, that serve disadvantaged populations that have historically encountered a disproportionate share of problems in accessing healthcare providers and services. More general is the broader

challenge of adapting ongoing population-based monitoring systems to provide better, more sensitive, and specific evidence about potential changes in access that may be associated with current market and public policy trends (Docteur, Colby, and Gold 1996; Ginsburg, Hughes, and Knickman 1995).

Historical studies of access have relied heavily on population-based surveys. The National Health Interview Survey (NHIS), the National Medical Expenditure Survey (NMES), and more recently, the Medicare Current Beneficiary Survey have served as the major ongoing national sources of healthcare information. Periodic foundation-funded surveys, most notably the long-standing, ongoing series of access surveys by the Robert Wood Johnson Foundation, have also contributed to the historical body of knowledge (Berk et al. 1995; Berk and Schur 1997). Population-based surveys are only one of many sources of information used to assess access, but they have long had particular appeal since surveys allow estimates for an entire population without the bias of coverage and use patterns.

Now is a promising time to reassess the contribution of such surveys in light of current access issues. New trends already have spurred changes in existing national surveys, along with new and emerging efforts in response to issues generated by the changing marketplace. At the federal level, the Department of Health and Human Services has initiated an effort to better integrate federal health surveys, starting with the NHIS and NMES now recast as the Medical Expenditure Panel Survey (MEPS) (Cohen et al. 1996/1997). Several foundations are starting programs to monitor health system change, with commissioned surveys of various types central to these efforts (Kemper et al. 1996; GrantWatch 1997). Recent experience has also highlighted the importance of measures that provide state-by-state and market-by-market estimates of access, leading to work focused on methods for developing better and more precise survey-based estimates of access for individual states and markets (Gold et al. 1995a; Gold et al. 1995e). With the growth of managed care, interest is growing in measures that are specific to populations enrolled in particular health plans or served by individual provider systems or groups. Although most attention to date has focused on plan- or provider-specific measures geared toward consumer satisfaction or quality of care, there is increased interest in similar measures that address concerns for access to care, a closely related concept (AHCPR 1996; NCQA 1996). There also is a growing recognition of trade-offs that may arise in access for different population groups (e.g., insured versus uninsured, health plan A versus health plan B, previously using provider A versus always using provider A). This increases the interest in the relationship between population-based surveys defined broadly and those that are defined more narrowly based on subpopulations.

ACCESS CONCERNS AND FRAMEWORKS IN HISTORICAL PERSPECTIVE

Shifting Health Policy Issues, 1945 to the Present

Three interrelated trends arguably account for the way in which health policy issues influencing access have evolved in the post–World War II era: (1) the growth of health insurance; (2) the evolution of healthcare supply; and (3) the emergence of the medical-industrial complex, along with broader changes in the nation's socioeconomic infrastructure.

The growth of health insurance coverage has resulted from a push to expand coverage using a mix of employment-based, public, and other strategies that are consistent with tax and labor market incentives but also with interest in but a lack of consensus on any more universal comprehensive approach (Schroeder 1996). Public policy has led to a growth in the proportion of the population that is insured and in the continuity of that coverage in the post-World War II era. But the historical trade-off to gain provider support for enactment of programs like Medicare and Medicaid was the inclusion of policies that in effect gave providers a blank check to induce them to support the program. These public policy trade-offs, in turn, have influenced the evolution of the private insurance market (Marmor 1973; Starr 1973). With this has come an explosion in healthcare costs that is now the prime impetus for the growth of managed care and more competitively based market models. The growth of these models, in turn, means that access is potentially influenced by the form of coverage (which influences the way healthcare may be accessed) as well as the fact of coverage itself. If, in the past, we were very concerned about entry into the medical pipeline and assumed that all doors would then be open (which, in fact, was never true), concern is now growing that coverage may only open some doors and that there may be tolls to pay to get into others. And once you're in, the game's just begun.

Trends in provider supply and medical technology in many ways parallel those of insurance. Health policy in the post–World War II era promoted the growth of healthcare facilities, especially hospitals, most notably through the Hill-Burton program. What was then viewed as health manpower policy promoted an expansion in the number of physicians and other providers trained. In terms of medical technology, excitement over discoveries like penicillin and the polio vaccine led to a growth in biomedical research and federal support for the National Institutes of Health. This in turn led to the tremendous expansion of grant-funded research and with it the emergence of powerful academic medical centers focused on expanding training for physicians in increasingly specialized fields. Medicare financing policy furthered this trend.

As with insurance coverage, over time these trends toward a more resources-intensive medical infrastructure have led to increased concern about healthcare costs and the allocation of resources. Along with continuing concern about geographic maldistribution that can impede access is a growing interest in changing incentives to reshape the supply of health providers, constrain its growth, and respond to the ethical and budgetary issues associated with the growth of medical technology. Anticipated demands on resources from an aging population and a shifting economy that has affected the distribution of wealth and dependency are adding to the pressure to confront these issues rather than deferring them.

From the perspective of access, these trends have prompted concern over the process and outcomes of care and the organizational structures through which these are generated. In particular, there is enhanced focus on value, outcomes, and appropriateness of care and with assigning accountability for these outcomes to defined parties, whether they are health plans, provider groups, or public bodies. Any meaningful effort to assess access in today's environment needs to account for these concerns.

Evolution of Thinking on the Concept of Access

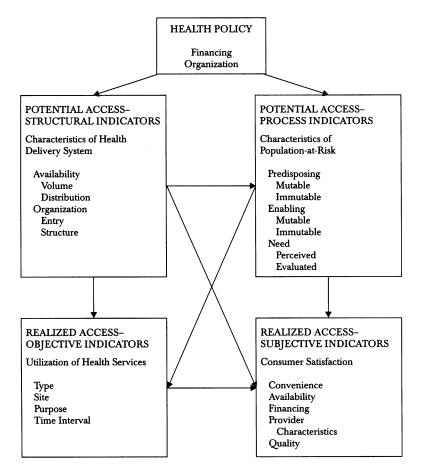
Changes in health policy concerns about access are also reflected in the way in which frameworks used to conceptualize access have evolved over time. Work on access measurement has been motivated by both theoretical and operational considerations, with applied sociologists having had the most influence on theoretical development. Work by Andersen, Aday, and colleagues, originally at the University of Chicago, led to the development of frameworks that have been applied for access measurement (Andersen 1995; Aday 1993; Aday et al. 1993; Aday et al. 1980; Aday and Andersen 1981; Aday and Andersen 1974; Andersen 1968). Concurrent work at the University of Michigan by Donabedian and colleagues developed related access models and measures (Donabedian 1973; Berki and Ashcraft 1979; Penchansky and Thomas 1981; Greenlick et al. 1988).

The concepts that have evolved for studies of access originated in the behavioral model first developed in the late 1960s to predict and explain the utilization of health services (Andersen 1995). The model suggested that people's use of healthcare is a function of their predisposition to use services, the factors enabling or impeding use, and their need for care. As elaborated over time, the model has differentiated potential and realized access (Figure 1). Realized access reflects utilization and satisfaction, while potential access is influenced both by predisposing (need, health beliefs, social structure) and enabling (availability and organization of health services) processes, some mutable and others not. The models incorporate concerns for the outcomes of utilization. For example, Andersen notes that effective access reflects the use of health services that improves health or satisfaction while efficient access produces relatively higher gains in outcomes for each unit of use (Andersen 1995). However, despite continued development of this component, the emphasis of the models historically has been on the determinants of utilization rather than on its effects (Aday 1994; Anderson and Davis 1996).

More recent theoretical work has reflected, to an extent, shifting concerns about effectiveness and efficiency in studies of access. A prominent example is the work by the Institute of Medicine's Committee on Monitoring Access to Personal Health Services (Millman 1993). Charged with developing a set of indicators for monitoring access to personal healthcare services nationally over time, the committee emphasized outcome-related measures of access. These were utilization measures of access that are clearly linked to outcomes and outcomes for which utilization can make a difference.

To support their work, IOM adapted and elaborated earlier work and access to more clearly link structural, financial, and personal barriers to access as they influence use of services, with outcome as affected by mediating processes like appropriateness of care, quality of providers, or patient adherence on outcomes (Figure 2). Five outcome-based policy objectives were defined with associated measures: (1) promoting successful birth outcomes; (2) reducing the incidence of vaccine-preventable childhood diseases; (3) encouraging early detection and diagnosis of treatable diseases; (4) reducing the effects of chronic disease and prolonging life; and (5) reducing morbidity and pain through timely and appropriate treatment. By stressing outcomes and effectiveness of care as measures of access, current initiatives highlight the critical interrelationships among the concepts applicable to assessing performance of the healthcare system including access, cost, quality, and consumer satisfaction (Aday et al. 1993).

Figure 1: Aday and Andersen Access Framework



Source: L. A. Aday and R. M. Andersen, "Equity to Access to Medical Care: A Conceptual and Empirical Overview," Medical Care 19 (Supplement): 4-27. © 1981.

EMERGING ISSUES CENTRAL TO THE CONCEPT OF ACCESS

At least three issues arise in thinking about how to conceptualize measures of access that will be useful and practical in today's environment. First, what do the structural changes currently occurring in the healthcare system imply

for access measurement? Second, what normative judgments are embedded in the way in which access is measured, and how do these relate to policy goals and the diverse uses and users of access measures? And third, what operational challenges can be anticipated as we move forward in addressing the first two questions?

Implications of a Changing Delivery System for Measuring Access

The healthcare system is relatively undeveloped in current frameworks for the measurement of access. Although both health insurance and healthcare delivery are incorporated in existing models, the focus is on explaining individual behavior through person-level analysis. Both insurance and delivery tend to be treated as relatively simple independent variables among many others, to be measured by the presence or absence of insurance coverage and providers. Market variables that may be associated with these structures also tend to be ignored. This has two serious flaws. First, it is insensitive to the emergence of managed care systems that integrate financing and delivery. And second, it oversimplifies what, in fact, has become an increasingly complex and internally differentiated set of systems and processes through which care

Structural Availability How organized Transportation Health Status **Financial** Mortality Appropriateness • Insurance coverage Morbidity Visits Efficacy of treatment · Reimbursement levels Well-being Procedures Quality of providers Public support Functioning Patient adherence Personal Equity of Acceptability Services

Figure 2: Institute of Medicine Framework for Access

CulturalLanguageAttitudes

Education/income

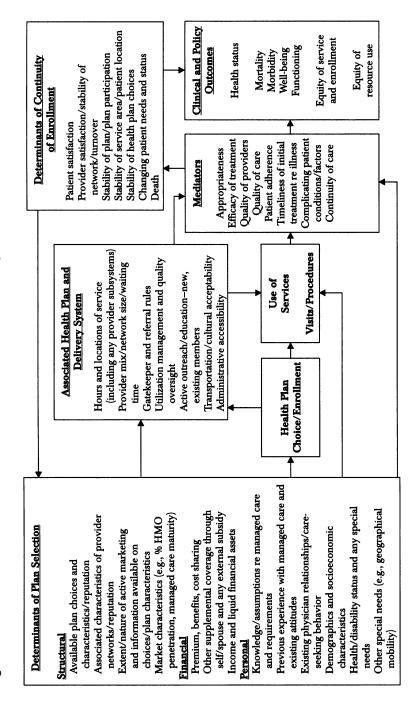
Source: Adapted with permission from a figure in M. Millman ed., Access to Health Care in America. © 1993. Courtesy of National Academy Press, Washington, DC.

is financed and delivered, and thus access is influenced across a variety of diverse communities or markets.

The emergence of managed care systems that integrate financing with delivery means that financing and delivery can no longer be appropriately viewed as separate and independent variables. When individuals select a health plan, they also are making choices that will influence the way in which they receive healthcare and the rules that apply (Figure 3). Structural, financial, and personal variables influence both insurance coverage and healthcare services. The introduction of managed care and competitive models means that purchasers have much more influence than in the past over the way in which individuals covered under their plans seek care within them. Purchasers in both the private and public sectors define the available plan choices and the provider networks and system features that are associated with those plans. Purchasers have always influenced financial access to healthcare because of their role in the market for third-party coverage. With managed care, purchasers now influence not only the shape of the insurance market and the aggregate use of care, but also more directly the care system itself, the array of available therapies, and the way in which individuals access it.

The growing linkage between coverage and delivery is particularly important because health insurance products and delivery systems also are becoming increasingly complex and organizationally differentiated (Gold et al. 1995d; Shortell and Hull 1996). Managed care products include such networkbased provider models as health maintenance organizations (HMOs), preferred provider plans (PPOs), and the hybrid point-of-service (POS) products. Managed care products now account for almost three-quarters of privately insured individuals (Jensen et al. 1997), a third of Medicaid lives (Rowland and Hansen 1996), and 11 percent of Medicare lives (Health Care Financing Administration [HCFA] 1997), with a sharply upward trend. These products either limit nonemergency coverage to a defined provider network or provide strong financial incentives in the form of deductibles or coinsurance for patients to select providers within the plan network (Weiner and deLissovoy 1993; Gold et al. 1995b). Historically, HMOs, though typically not PPOs, have shifted financial incentives for providers away from pure fee-for-service payment toward capitation and other risk-based models that seek to encourage caregivers to be more aware of the cost-effectiveness of the care provided (Gold et al. 1995b). Managed care also has increased the emphasis on utilization management and accountability for the appropriateness and quality of care through such features as utilization review, gatekeeping and referral rules, practice guidelines, quality oversight and focused studies,

Revised Institute of Medicine Framework for Access Accounting for Managed Care Systems Figure 3:



and clinical profiling. While clinical integration is still more a concept than a reality in many systems, managed care has led, at least on paper, to a rapid consolidation among providers and to increasingly integrated healthcare systems. This sharply contrasts with the "cottage industry" models underlying historical measures of access.

Beyond the implications for the nature of the doctor-patient relationship (Mechanic 1996; Emmanuel and Dubler 1995), current trends in the healthcare system highlight the importance of appreciating how healthcare systems vary across markets. Research shows, for example, that the form of physician practice varies markedly among markets, with some markets much more dependent than others on large groups, which in turn influences the way in which arrangements with physicians are defined (Hurley et al. 1996). Market variation may even influence the entities accountable for access. The increasing presence of large organizations in healthcare delivery along with the financial pressures and performance expectations put on providers by purchasers and others in today's market argue for better measurement of insurance and delivery. They also suggest that there is value in considering how to merge traditional models of access with concepts and perspectives gleaned from other theoretical work based less on individuals and more on organizations and markets (see, for example, Robinson and Casalino 1996; Morrissey 1996; Shortell and Hull 1996). This body of work can shed light on the organizational features of care and on how those features influence both patients and providers, but it will require a concerted effort to identify best not only what to measure but also how. Analysis shows, for example, that national data systems are woefully inadequate in their ability to capture important information about the structure of healthcare delivery and provider practice, both nationally and in specific markets (Gold, Frazer, and Klein 1997).

Implications of Intended Uses of Access Measures and Normative Issues

Access measures have multiple uses and users. For purposes of exposition, it is useful to differentiate between the policy goal inherent in the definition of access and the use to which an access measure is intended to be put and the party that is the focus of that use.

Diversity of Policy Goals on Access. Public policy experts do not agree on how access to healthcare should be defined or on when to judge it equitable. The Institute of Medicine (Millman 1993) defined access as "the timely use of personal health services to achieve the best possible health outcomes" but did not stipulate principles to apply in judging the distribution of healthcare.

What is the "right" to healthcare and which ways of allocating it across the population are equitable? After long debate, the presidential commission charged with considering this issue decided that access was ethical when it meant "access for all to an adequate level of care without the imposition of excessive burdens" (President's Commission 1983). But it is doubtful that there will ever be consensus on a normative definition of optimal access, not to mention the government's role in facilitating it.

This has important implications for measuring access today because different measures emphasize different normative standards about what equitable access implies. Aday et al. (1993) review alternative theories of distributive justice and consider their practical implications for access measures (Figure 4). Multiple policy goals can be sought in achieving equitable access, with each implying a different set of criteria and set of measures for judgment. In the absence of consensus, this suggests the obvious need for multiple diverse measures that capture the diversity of perspectives and goals.

However, potentially competing policy goals also raise other issues that are particularly relevant today and involve conflicts and trade-offs of principles. For example, the concept of freedom of choice argues for marketbased solutions and also for multiple choices so that individuals are not constrained in decision making. This principle could imply that access is undermined when individuals face plan choices that limit access to specific providers or an individual's ability to self-insure, particularly if an individual can afford to do so without risk that others will have to step in. Yet the principle of freedom of choice could conflict with the principle of "similar treatment" to create equality of opportunity when there are great differences in resources and needs across the population. Further, the opting into high-deductible plans (with or without access to medical savings accounts) by those who stand to gain by such action because they are healthier and will gain financially would reduce pooled funding (cross-subsidies or insured risk) and so could undercut funds available to enhance access where access depends heavily on the distribution of health services. These issues are far from academic given the current range of high-profile legislative proposals that purport to provide patient protection by mandating specific kinds of health insurance products or services.

Further, different policy goals may argue for different kinds of survey methods or item emphases. For example, the goal of equality of opportunity raises questions about who is to get similar treatment. Surveys focused on users, for example, are incapable of addressing those who use no services, whether because of barriers to access or lack of need. Those based on defined

Figure 4: Ethical and Empirical Foundations of the Goal of Equity of Access to Medical Care

Goal of Equity of Access to Medical Care	Criteria of Equity	Dimensions of Access	Indicators of Equity of Access
To Provide		Potential Access	
The freedom and	Freedom of choice	Characteristics of the delivery system	
		-Availability	Distribution of providers
		-Organization	Types of facilities
		-Financing	Sources of payment
Equality of opportunity	Similar treatment	Characteristics of the population -Predisposing (age, sex, race, education) -Enabling (income,	Regular source of care
		regular source, insurance) -Need (perceived, evaluated)	Insurance coverage
To Obtain		Actual Access	
Adequate and	Decent basic minimum	Type of utilization	Use of selected services
Effective	Need	Purpose of utilization	Use of services relative to need
	Cost-effectiveness		
		Satisfaction	
		-General	Public opinion
3.6 10 1		-Visit-specific	Patient opinion
Medical care			

Source: L. A. Aday et al., Evaluating the Medical Care System: Effectiveness, Efficiency, and Equity. © 1993, Health Administration Press, Chicago, IL. Used by permission.

subgroups (e.g., health plan members) do not readily lend themselves to analysis about the equity across such subgroups. They also provide little insight on access for those "outside" the system, who include not only the uninsured in general but also "fugitive" populations, like the homeless, refugees, immigrants, or drug users, whose perspectives may be difficult to capture even in the most broadly based population survey. And, obviously, measures focused on policy goals related to access to medical care will fall short if the goal is more broadly defined as access to a broader array of public health, social, or other interventions that may also contribute to outcomes.

Different Uses and Users of Assess Measures. The audience for access information is diverse and widening. Three main types of uses of access measures can be distinguished (Figure 5).

Figure 5: Comparison of Three Uses for Access Measures

Use and Example	Key Users	Likely Use	Important Features of Measures
Benchmarking National (or subdivision) Trends Against Goals	Legislators	Policy oversight and feedback	Trends/comparison of policy-relevant subgroups
-Health U.SHealth Goals 2000 -HCFA/PPRC annual reports to	Policymakers Press	Issue identification Policy refinement	Stable measures over time on policy- mutable outcomes and determinants
Congress on medicale racess			Inclusive of entire population without bias
2. Performance of Accountable Entities (e.g., plans, providers,	Regulators/Licensure/ Accreditation Bodies	Approve/monitor against minimum acceptable standards	Sensitive for meaningful differences
-HEDIS 3.0 -Consumer Assessment of Health	Purchasers (other agents)	Incentives to improve (IQJ)	Comparable and consistently define measure across entities
Plans Survey (CAHPS) -State filings of provider lists, ratios	Plan/Provider Managers/Clinicians	Select/reward best performers	Time-relevant information
3. Consumer Information -FEHBP Checkbook	Enrollees/Potentials	Understand/assess generic choices	Relevant to consumer concerns
-Minnesota Newspaper Inserts -Xerox Initiative	Public/Press Consultants/Enrollment	Choose among specific plans and providers	Option, plan, or provider-specific measures
	DIOKEIS	Become more effective user	Interpretable to mixed audience with limited time

The first and historically most influential use has been to benchmark population trends against goals, nationally or by other political jurisdictions, by examining trends and comparing measures across policy-relevant subgroups. These may be defined by socio-demographic characteristics (e.g., race, insurance status, income) or other policy-relevant variables that may influence access to care (e.g., type of health plan coverage, availability of providers in locale). Population-based surveys have been used extensively for this purpose, along with other population-based measures like physicianto-population ratios. Measures have been used to provide policy feedback and to help identify emerging issues and desirable policy refinements (see, for example, HCFA 1994; PPRC 1994, 1995). Access monitoring is a key justification for conducting population-based health surveys. Key users include policymakers and the public at large to whom they are accountable. The focus is on trends for relatively stable indicators predictive or reflective of access. This means that creating stable, unbiased measures that are sufficiently sensitive to capture change, including change for sometimes small subgroups, has had high priority.

While timeliness is important, some lag has been viewed as a reasonable trade-off for high-quality information. For these reasons, the task of changing indicators is a particularly sensitive one that tends to be considered cautiously and infrequently. Yet measures from these surveys provide much of the information relied on to assess access nationally, so making sure that measures continue to be appropriate in a changing market has high priority. This suggests the value of considering mixed and somewhat flexible models of instrument design that provide stability while allowing for experimentation and change over time in core measures.

The other two uses of access measures—to assess performance of accountable entities and to provide consumer information—are related and relatively more recent, although they have existed in some form for quite some time. These use information about the performance of discrete entities (e.g., plans, provider groups, types of healthcare systems) that have some level of accountability over access for a defined population. Regulators (public and private), purchasers, and individuals affiliated with the entities (or who may become so) seek such information. Access information may be used to determine "who plays," particularly as it shows whether minimum acceptable standards are achieved such as with accessible provider networks to support licensure or participation. Access measures are also used to encourage improvement over time within plans or provider groups and to select or reward the best performers. While trend information may be very useful, information that highlights meaningful differences among entities

using appropriate and consistently defined measures is particularly valuable for regulators and purchasers. Timeliness is highly relevant, particularly in a rapidly evolving market where appropriate incentives are needed to encourage improvement and value over time. To be timely, these measure must be repeated more frequently, requiring simpler and less costly data collection methods that maintain essential data quality as much as possible. In practice, this has meant acceptance of a smaller set of less-precise measures than is desirable for monitoring purposes.

Providing consumer information, the third use of access measures, shares many characteristics with measures for accountable entities but probably is most distinguished by the nature of the users (Edgeman-Levitan and Cleary 1996). Consumers are a highly diverse group with variable knowledge of the healthcare system, literacy levels, modes of communication, and preferences. Yet most consumers share a relatively pragmatic orientation and desire to minimize the time spent in making choices or becoming informed since they face multiple demands on their time and may be sporadic users of healthcare. Possible exceptions are those with chronic illnesses and needs for considerable care and who thus are more motivated to become sophisticated purchasers. This means that consumers place great priority on information that is accessible and focused on their central concerns. Consumers may look externally for assurance that appropriate oversight is provided either by regulators or the market. Yet they may also be suspicious that purchasers and others may not share their values and objectives (Isaacs 1996). This means that consumers may be particularly vulnerable to anecdotal evidence or reports from sources they respect. In today's market, for example, politicians and diverse interest groups may play a critical, but sometimes unacknowledged, role in and responsibility for the quality of information about access that is available to consumers, since access to media often is not equal. Reporters may have a similar influence to the extent that their views or experiences color the questions they ask or the stories they write.

Associated Operational Issues for Methods of Access Measurement

A host of methodological issues can be anticipated in moving to address the issues previously discussed. I review briefly just a few of them here.

Encouraging Consistency of Incentives and Values Across Efforts

In today's market it is impossible to fully disentangle concepts like access, quality, satisfaction, effectiveness, and outcomes. Historically, access has

been a "consumer" concept, with the focus on how system factors (enabling services) like health insurance coverage and provider supply have affected the use of services, controlling for other, largely personal, characteristics that have influenced use (predisposing factors). However, the IOM's approach, as noted previously, has strengthened the emphasis on measures that consider not just use but the outcomes that result from such use. If access is judged by outcome-based standards, it therefore also reflects the effects of quality and effectiveness of care, as well as how consumers perceive such concepts and how the system affects their compliance or care-seeking behavior. To better reflect distinctions that are associated with access as a measure of initial entry versus access as a measure of ultimate system performance and outcomes, it may be valuable to distinguish among measures by their ability to best tap each of these concepts. Such an approach may, for example, encourage a continued emphasis on historical barriers to access like insurance coverage while at the same time adding new emphasis on access once people are within the system-in terms both of their ability to appropriately and effectively negotiate that system and also the ultimate outcomes of that process, as viewed both by patients and by clinicians.

Reconciling and balancing these disparate views may be hard to do since research on these concepts has in part evolved in different ways and frequently has involved different people. The responsibility for developing such measures or acting on them also may be dispersed to a number of discrete entities. Before its recent reorganization, for example, one office within HCFA provided consumer information, another approved plans, a third generated information on overall system performance, and a fourth was responsible for strategic policy initiatives. This may be appropriate given the size of HCFA, but it increases the need for coordination and communication. Determining who to hold accountable for what and how to do so in a way that leads to a particular cohesive and nonconflicting practice will not be easy.

Further, the disparity in functional demands for measures and the time frame in which they are sought by different users has meant that development of access measures has proceeded unevenly and, to some extent, inconsistently. Since purchasing decisions have provided the most immediate rationale for new measurement development, there has been an emphasis on outcomes in terms of both quality of care and consumer satisfaction using plan-based measures (Gold and Wooldridge 1995c). But emerging evidence suggests that information on access is highly valued by consumers (Hibbard and Jewett 1996), and the content of information is evolving. For example, the current release of HEDIS (3.0) has ten measures of access in the reporting

or testing set, and others are under development. However, these concepts are relatively undeveloped and access measures have not received the attention in HEDIS that has been given to more clinically based indicators of performance.

Access, in contrast, has historically been a strong focus of national monitoring efforts. But with pressure for change slowest to develop in this arena, there is less incentive to coordinate the evolution of these surveys with evolving efforts of different types. Yet if health plans or providers are to be held accountable, what they are held accountable *for* arguably needs to reflect, at least in part, the policy goals behind national monitoring efforts and what consumers value. This is more likely to occur if prompt attention is paid to assessing how the achievement of national goals is measured, with any discernible changes, and to educating the public to enhance knowledge in a rapidly evolving market.

Dealing with the Implications of Health System Diversity and Instability. The current diversity and instability of the healthcare market creates at least three major challenges for the use of population-based surveys to measure access. First, it means that some measures that are important to access (e.g., access to a full range of providers and administrative barriers to care) differ with the type of health plan or market and may change over time. For example, managed care tends to be more important and to be structured differently in urban areas than in rural areas. Plans also vary in their characteristics. Group practice is more prevalent in care systems on the West Coast and in the North Central states than elsewhere. Medicaid managed care plans often "look" different from commercial managed care plans. Managed care is irrelevant to those without insurance except in so far as it creates pressure that may reduce provider flexibility or willingness to cross-subsidize. Yet national monitoring requires some consistency of measures, both across the population and over time. Informed choice also demands a level playing field for competing health entities, which is difficult to achieve when there may not be consensus on the values that should underlie access assessment.

Second, marketplace changes have resulted in widespread confusion and discomfort. Purchasers may be uncertain about which values have priority and to what extent. Consumers may be unfamiliar with many of the features of emerging managed care models. Whether by consumers, providers, policy-makers, or the press, the standard used to assess performance will almost invariably be heavily weighted toward the familiar, emphasizing features common in historical systems. Thus, despite relative consensus on the oversupply of specialists and the disproportionate focus of healthcare delivery

on technologically intensive services, expectations of access and even quality are formed by experience with this model. What weight should be given to current preferences in deciding on measures that will be appropriate into the future?

Third, current interest in effectiveness, combined with the rapid changes in the health system, may make population-based surveys less relevant for some measures that, for example, require accurate and precise reporting of specific clinical conditions and associated care services. Yet the same system changes are limiting, at least in the short run, the availability of one alternative source of information upon which to build measures: claims. We need to understand better what consumers can report and how reliably. And we may need to rethink the sources of information that are needed to measure access so that we have the kinds of information likely to be required in the future.

Assessing Implications for Resources and Priorities. Changes in the healthcare market likely will increase demand on the resources needed to effectively monitor access. Establishing accountability for defined plans or provider entities and using value-based purchasing may ultimately promise to increase the effectiveness and performance of the healthcare system. In the short term, however, such changes will certainly increase the number of distinct access estimates desired. The emphasis on systems means that it is not enough to develop point estimates for subpopulation groups, but that estimates also are needed for distinct plans or provider entities. Because healthcare varies by market and some features are regulated by states and localities, the demand for geographically specific estimates is expanding. Further, value-based purchasing generates a demand for estimates specific to individual purchasers or at least to purchasing groups or types. Desires for sensitive measures are leading to an interest in estimates that are more targeted to particularly vulnerable individuals or subgroups. The interest in effectiveness dictates measures specific to populations with defined conditions or needs. All of these requirements have implications for the number of distinct samples that need to be formed and surveyed to generate estimates. They also have implications for the cost of sampling, since some needs require samples that have no obvious or readily accessible sample frames.

Clearly, the demands for information will be greater than the available resources. This will place a high value on strategic thinking and on discussing priorities among a diverse set of parties that previously may have had little interaction with one another. Further, it may call for new funding strategies that involve various consortiums, including diverse levels of government, public- and private-sector groups, purchasers, and health plans and providers.

CONCLUSIONS

These are challenging times. With the changing marketplace, a number of emerging diverse issues are very relevant to our thinking about and ultimately measuring access in the future. While historical frameworks and measures remain relevant today, the integration of financing and delivery means that much greater attention needs to be paid to the effects on access that derive from organizational structures and their interactions both with market structures and diverse personal characteristics. The disparate views of access also argue for a multiplicity of diverse measures. Access also is hard to consider as a measure of system performance independent of other system features. Further, the disparities in needs and time frames of different users of access measures means that inconsistencies in measures used for different purposes may grow across diverse efforts. Emerging concerns also are creating considerable stress on the limited resources that tend to be made available for access measurement. At the same time, evidence is emerging of the continued importance of trending historical measures of access, like insurance coverage and continuity of care, which may be eroding. These concerns point to a need for collaboration among diverse efforts, entities, and individuals involved in various ways in thinking about and measuring access. Only by pooling insights, sharing experiences, and honestly confronting trade-offs or disagreements can we hope to make progress in addressing these issues.

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