Inequality and Access to Health Care

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INEQUALITY IN HEALTH OUTCOMES AND ACCESS TO health care services has been a central issue in public health policy and health services research over the last 20 years. The recognition that health status and utilization of health services varied significantly depending upon one's income, race, and geographic location was an important factor in support for national health policies to expand health care programs for the poor and other vulnerable population groups in the 1960s and 1970s. Legislative proposals for national health insurance were introduced and debated in the 1970s, but failed to gather sufficient support for passage.

In the 1980s public policy makers became preoccupied with the rising cost of health care, and access to health care received relatively less attention. Cutbacks in funding for public programs and attempts to foster competition and cost consciousness in the health care system came to the forefront. Yet the continued attention in the research literature to the gaps that remained for especially vulnerable subpopulations helped lay the groundwork for some continued modest expansions in programs such as Medicaid and community health center funding.

As the nation enters the decade of the 1990s, national public policy debate has again focused on the need for a universal health plan to ensure access to health care for all Americans. The health services research

The Milbank Quarterly, Vol. 69, No. 2, 1991

literature promises to play an important contribution to this debate through its increasingly sophisticated analyses of the multiple determinants of health outcomes and access to health care.

In this article I will review major developments over the last two decades in the health services research literature on inequality and access to health care services, with a particular emphasis upon the contribution to this evolving literature of the *Milbank Quarterly* (called the *Milbank Memorial Fund Quarterly/Health and Society* until 1986 and referred to hereafter as the *Quarterly*). I conclude with a look ahead to the 1990s and the issues and challenges that promise to receive greater attention.

Equity and National Health Insurance

The passage of Medicare and Medicaid in 1965 and the establishment of federal funding for community and migrant health centers in the 1960s greatly expanded the role of the federal government in assuring access to health care services for the poor and elderly people. Despite the significance of these programs, it was widely recognized that more fundamental reforms would be necessary to ensure that all Americans received adequate health care.

Somers and Somers (1972) were among the earliest analysts of national health insurance legislative reform proposals. They set forth nine criteria for the evaluation of competing proposals:

1. universal coverage
2. comprehensive benefits
3. equitable financing
4. incentives for efficiency and effectiveness
5. regulated competition in insurance underwriting and administration
6. consumer choice of provider
7. administrative simplicity
8. flexibility
9. general acceptability to providers and consumers

Health insurance legislative proposals were characterized as falling into four types:

1. incentives to purchase private health insurance voluntarily (supported by the American Hospital Association, American Medical Association, Health Insurance Association of America)
2. employer-mandated private health insurance for workers and dependents, public programs for low-income families and children, and voluntary purchase of private health insurance for others outside the workplace (Nixon administration)
3. extension of Medicare to the entire population with the option for employers and nonworking families to opt out of Medicare coverage by purchasing private health insurance (Javits bill)
4. a single public plan for all (Kennedy-Griffiths bill)

It is striking to see how closely these early proposals capture the range of options currently under consideration. Somers and Somers expressed concern that the debate would split supporters of a national health insurance plan into two camps: those favoring a purely public financing system and those willing to accommodate a major role for private insurers. Their analysis could just as easily have been written today.

Fein (1972) provided an important conceptual framework for the national health insurance debate by setting forth the importance of achieving equity in access to health care services. This goal could be defined as equal health outcomes for all (e.g., by income group), equal expenditures per capita (e.g., across income groups), or the elimination of income as a rationing device. Fein concluded that a national health insurance plan with comprehensive benefits and no deductibles or other cost sharing by patients was the most likely to achieve equitable access to health services. He also noted that national health insurance schemes with a progressive financing source were more equitable than those that placed a greater burden on lower-income families. He stressed the importance of linking a system of universal financing with a reformed health care delivery system in which financial incentives for physicians to treat patients would not depend upon income of patients or quantity of services rendered, but rather would compensate physicians on a salaried basis for providing quality health care services. White (1972) stressed the importance of assuring an adequate primary health care delivery system to reduce inequalities in access to care.

These pathbreaking articles in the *Quarterly* helped shape the debate over the need for national health insurance in the early 1970s and the merits of different legislative proposals. My own work (Davis

1975b) was greatly influenced by their conceptual framework. Using the criteria set forth by Somers and Somers and by Fein, I contrasted the major national health insurance legislative proposals and analyzed their benefits, costs, and consequences. In addition, I stressed the importance of designing a national health insurance plan that would eliminate disparities by income, race, and geographic location. This would be achieved by coupling universal financing with health system reform and a health resources development fund to develop additional health services in underserved areas.

Although the legislative debate over national health insurance died at the end of the legislative session in 1974, this analysis was instrumental in the design of the Carter National Health Plan in 1979 (U.S. Department of Health and Human Services, 1980). The Carter plan, like the Nixon and Javits plans, was for universal public-private national health insurance, creating a new public plan called HealthCare to replace Medicare and Medicaid and to cover other groups of uninsured. Employers were required to purchase either HealthCare or comparable private health insurance coverage for workers and dependents. However, this plan, too, died in the Senate Finance Committee in the spring of 1980—in large part because of concern with the federal budgetary cost of expanding coverage to all low-income uninsured.

Impact of Medicare and Medicaid on Access

While the debate over national health insurance continued to be a major policy issue through the 1970s, attention in the research literature shifted to analyzing the impact of the Medicare and Medicaid programs on improving access to health care services. This analysis was fostered by a growing concern over major inequities in access to health care and health outcomes.

The classic analysis of socioeconomic differentials in mortality by Kitagawa and Hauser (1973) was a major factor in underscoring concern about inequalities in health. They linked death certificates with 1960 census information on income, education, and race and provided an exhaustive examination of the link between socioeconomic status and mortality. Kosa and Zola (1975) had a similarly significant impact with their examination of the sociological relationships between poverty and health.

Socioeconomic differences in utilization of health care services received major attention with national surveys analyzed by researchers at the Center for Health Administration Studies at the University of Chicago (Aday 1976; Aday and Andersen 1975; Aday, Andersen, and Fleming 1980; Aday, Fleming, and Andersen 1984; Andersen and Aday 1978; Andersen et al. 1972, 1987). Andersen, Aday, and their colleagues developed a conceptual framework for analyzing access to health care services and stressed the importance of identifying predisposing and enabling factors as well as the need for health care as determinants of utilization of health care services. Operationally, this concept has led researchers to measure access to health care services as the relation of level of utilization to the need for health care as measured by health status (Berki and Aschraft 1979; Freeman et al. 1987; Hershey, Luft, and Gianaris 1975; Kronenfeld 1980; Vladeck 1981).

Aday (1976) in the *Quarterly* emphasized the need for developing accurate measures of access that include the need for care rather than just utilization rates. She proposed the ratio of health care utilization to disability days as an indicator of equitable access to care. Based on this indicator, she found that between 1963 and 1970, while Medicare and Medicaid improved utilization of medical services by low-income people, the improvement was not commensurate with level of illness. The use of physician services divided by disability days during the year continued to be lowest for low-income persons in 1970. The Aday analysis, however, did not break down the analysis of low-income persons into those who were covered by Medicare or Medicaid and those who were not. Aday stressed that those who had a usual source of care and a way of entry into the health system were most likely to benefit from health financing coverage.

The pathbreaking work by Andersen, Aday, and their colleagues had a similarly strong influence on my own work. With colleagues at the Brookings Institution (Davis 1975a, 1976a,b; Davis and Reynolds 1976; Davis and Schoen 1978) I pursued an econometric approach to the analysis of utilization of health care services, simultaneously holding constant for health financing coverage such as Medicare, Medicaid, and private health insurance, income, several measures of health status, and other determinants. We found that need for health care as measured by such health status variables as presence of chronic conditions, disability days, and self-assessment of health status was the most important determinant of utilization. However, after holding constant for the need for care, significant differences existed between lower-income persons who were not covered by either a public program of health insurance like Medicaid or Medicare or private health insurance and higher-income individuals in use of health care services. In the framework of Fein's definition of equity, low-income persons without Medicaid coverage did not have equitable access to health care services. Medicaid beneficiaries, by contrast, used health care services at a rate similar to higher-income persons after adjustment for health status differences.

The Medicare program was also a subject of great interest to researchers. Although Medicare was a uniform program with standard benefits for all beneficiaries, the presence of deductibles and coinsurance meant that financial barriers to care might be greater for low-income beneficiaries. Other barriers to care, such as racial discrimination or geographical availability of health care services, could also influence actual utilization of health care services. In one early study published in the *Quarterly*, I analyzed differentials in the distribution of Medicare benefits by race, geographic location, and income and found that despite the uniform benefits afforded by Medicare, actual receipt of benefits was very uneven (Davis 1975a). Higher-income elderly (those with incomes over $15,000 in 1969) received 60 percent more physician services and 45 percent more days of hospital care than lower-income elderly (incomes under $5,000) not covered by Medicaid—holding constant for health status as measured by chronic conditions, limited activity, restricted activity days, age, race, geographic location, and supply of physicians and hospitals. Although it improved access for elderly blacks, in the early years of the program black beneficiaries of Medicare were still less likely to receive health care services than white beneficiaries.

Studies on the Medicaid program also investigated the impact of the program on beneficiaries. Early studies showed that Medicaid was successful in increasing utilization of beneficiaries up to a level comparable to that of higher-income persons, holding constant for health differences (Davis 1976a, b; Davis and Reynolds 1976; and Davis and Schoen 1978). Further research documented that care for Medicaid beneficiaries was not more costly than care for all Americans (Blendon and Moloney 1982; Davis and Schoen 1978; Rogers, Blendon, and Moloney 1982). This helped establish that Medicaid costs were high because health care was costly, not because of any flaws specific to the program.

An article by Zwick (1972) in the *Quarterly* documented the importance of community health centers in improving access to health care services—despite the strong opposition of organized medicine. Another pathbreaking study by Reynolds (1976) in the *Quarterly* found that community health centers improved access to health care for those most in need: the young, blacks, and seriously ill people. His analysis of data from 32 community health centers for the period from October 1972 to September 1973 found that they provided more preventive care and stressed continuity of care to a greater degree than care delivered to comparable persons outside of community health centers. The greatest problems community health centers faced was inadequate funding and the difficulty of attracting and retaining physicians.

These early studies helped establish the importance of programs like Medicare, Medicaid, and community health centers in improving access to health care services for the poor and the elderly. At the same time, they stressed the incomplete nature of the progress to date and the need to continue to expand access to health care.

New studies in the early 1980s updating some of the early work of the 1970s with more recent data found that substantial disparities among Medicare and Medicaid beneficiaries had been reduced. Long and Settle (1984) reported in the *Quarterly* results of an analysis of utilization of health care services by the elderly in 1977, using data from the Current Medicare Survey. They found that no significant differences continued to exist across income groups in use by the elderly of hospital and physician services. Elderly whites in the South continued to receive more hospital care than elderly blacks, but the differentials in use were sharply reduced from the 1969 levels I had found (Davis 1975a). A parallel study by the authors using 1977 Health Interview Survey data found similar results (Link, Long, and Settle 1982b).

In an important analysis of utilization of health services by the elderly in the *Quarterly*, Wan (1982) conducted a multivariate analysis of the factors affecting the use of ambulatory care and short-term hospitalization by the noninstitutionalized elderly based on interviews conducted in five neighborhood health center service areas. Indicators of the determinants of access used as independent variables in the analysis included regular source of care, health insurance coverage, and family income. To adjust for health status, Wan included a number of episodic illnesses within a year and limitations in major activities resulting from chronic conditions. He found that the elderly who were more likely to use private physicians included those over 80 years of age, white females with higher levels of education, minor chronic disability, and private supplemental insurance. Elderly users of neighborhood health centers were more likely to be black, female, less educated, annual family income less than $5,000, persons with moderate disability, and those with Medicaid to supplement Medicare. The elderly with severe chronic disability were more likely to be older, nonwhite, with lower incomes, and to have Medicaid coverage. Wan found that for ambulatory care utilization, chronic disability and acute illness were the most predictive of use. For hospitalization, he found that usual source of care, number of episodic illnesses, and chronic disability determined admission. Those with a regular source of care had more hospital days and more physician visits. Insurance coverage also correlated with more frequent physician visits. He found that, for a given level of health, elderly blacks with a regular source of care had more physician visits than elderly whites, but blacks had shorter lengths of stay in the hospital. This may be the result of racial disparities in insurance benefits, greater use of outpatient services, or discriminatory practices of hospitals.

Link, Long, and Settle (1982a) replicated my earlier study of the distribution of Medicaid benefits among beneficiaries using 1969 Health Interview Survey data and contrasted those results with data from the 1976 Health Interview Survey. They found that between 1969 and 1976 Medicaid beneficiaries increased their use of physician services to a greater extent than the nonelderly U.S. population, and that this was true for Medicaid beneficiaries regardless of race, region, or health status. By 1976 they found that nonelderly blacks on Medicaid used physician services at a rate comparable to nonelderly whites on Medicaid. Only in the South did blacks on Medicaid receive lower hospital services than whites. This effect, however, was not statistically significant for those with serious health problems.

Kasper (1986b) also investigated health status and utilization of Medicaid beneficiaries compared with others. Using 1980 data from the National Medical Care Utilization and Expenditure Survey, she found that Medicaid beneficiaries in poor health used health services at the same rate as those of similar health status who were not poor. Those poor not covered by Medicaid, however, were less likely to see a physician or to purchase a prescribed drug.

The Uninsured and Access to Health Care

With the finding that disparities in benefits among beneficiaries of Medicare and Medicaid had been reduced, if not eliminated, in the first ten years of the programs, attention shifted to examining barriers to access to health services for the uninsured. Some argued that Medicare and Medicaid had not only achieved equity in access for covered beneficiaries, but had also eliminated inequities in access to health care services generally (Aday, Andersen, and Fleming 1980).

This view was challenged by Kleinman, Gold, and Makuc (1981), who found that more sophisticated approaches to adjusting for age and health status using 1976–1978 Health Interview Survey data still revealed significant differences in use of services between the poor and nonpoor and between blacks and whites. They also found that even among the elderly in fair or poor health, blacks and the poor had lower utilization of services.

Given the conflicting views on whether public policy efforts to date had been adequate to achieve equitable access to care, my colleagues and I conducted a review of the literature in the early 1980s (Davis, Gold, and Makuc 1981). We concluded that, although gaps had been narrowed in access to care, significant differentials still existed.

Increasingly, the research focus shifted to the uninsured—those without coverage under either private health insurance or public programs like Medicare and Medicaid—as the group continuing to experience the most serious difficulties in obtaining health services.

The President's Commission on ethics highlighted the degree to which those without health insurance coverage continued to lag well behind others (President's Commission 1983). Analysis that I conducted for the President's Commission with Rowland was published in a *Quarterly* article (Davis and Rowland 1983). Using data from the 1977 National Medical Care Expenditure Survey, we found that the poor, minorities, and young adults continued to be the groups most likely to be uninsured. People with health insurance received 54 percent more ambulatory care and 90 percent more inpatient hospital care than those without health insurance coverage. Race and geographic location were also important independent determinants of differences in health care utilization, but were of less important than insurance coverage.

The nature of health insurance coverage also became a focus of research concern. In a *Quarterly* article, Farley (1985) stressed the importance of examining the adequacy of health insurance coverage, not just the existence of any coverage. Using data from the 1977 National Medical Care Expenditure Survey, she found that approximately 13 percent of those with private insurance are underinsured. The underinsured are most likely to be poor, a member of a family that does not have a worker, a woman and her dependents, a person with nongroup health insurance coverage, between the ages of 55 and 65 in fair or poor health, and reside in the South or outside metropolitan areas.

Turnover in Medicaid enrollment is also a growing source of concern. Recent studies have shown that a high fraction of Medicaid beneficiaries are covered for relatively brief periods of time (Short, Cantor, and Monheit 1988). For example, only 43 percent of Medicaid beneficiaries at the beginning of a three-year period were still covered 32 months later. Over one-third were enrolled less than eight months. Change in employment and earnings are major factors affecting Medicaid enrollment. The majority of newly covered Medicaid enrollees were uninsured before qualifying for Medicaid, and the majority of individuals leaving Medicaid were subsequently uninsured.

Vulnerable Subpopulation Groups

The importance of more disaggregated analysis spurred health services researchers to focus their attention on the particular problems of vulnerable subpopulation groups. Access to health care services for children became an especially important focus of research (Dutton 1985; Kasper 1987; Newacheck 1988; Orr and Miller 1981; Wolfe 1980). Using data from the 1980 National Medical Care Utilization and Expenditure Survey, for example, Kasper (1987) found that children who were poor or without insurance coverage were less likely to see a physician. Medicaid children, on the other hand, saw physicians slightly more often than other children (4 percent)—holding constant for multiple determinants of utilization. Rosenbach also found that low-income children without either private health insurance or Medicaid were the least likely to receive physician care (36 percent), which made them considerably worse off than Medicaid children (25 percent) (Rosenbach 1985).

Concern with barriers to health care for children was heightened by a growing body of literature documenting the importance of medical care for health outcomes of children (Starfield 1985a, b).

Research also began to focus on the importance of established relationships with a primary care physician. Having a usual source of care both increases the amount and kind of care used as well as satisfaction with care (Andersen, Mullner, and Cornelius 1987; Hulka and Wheat 1985; Kasper 1986a,b, 1987; Walden, Wilensky, and Kasper 1985). Kasper (1987) found that children who used a physician's office as their regular source of care had lower health expenditures than children who relied on hospital outpatient departments or emergency rooms and had no regular physician.

Rosenbaum and Johnson (1986) examined the contribution of Medicaid, especially its Early Periodic Screening Diagnosis and Treatment (EPSDT) program, in improving preventive care among low-income children. They found that Medicaid has played an important role in improving access to care for poor children, but that only one-third of poor children are covered. EPSDT preventive care has proven to be cost effective, yet has fallen short of reaching all Medicaid children. A Children's Defense Fund survey of 50 states analyzed by Rosenbaum and Johnson found that no state had a supplemental funding program for children to guarantee coverage beyond Medicaid eligibility. The absence of national standards for EPSDT was also found to be a barrier to effective preventive care.

The problems of access to health care in rural areas also received greater attention in the research literature in the 1980s. Rowland, Lyons, and Edwards (1988) found that residents in rural areas were more likely to be poor and uninsured. Coupled with the reduced availability of health services in rural areas, rural residents receive fewer physician and hospital services than urban residents.

A further analysis by Patrick et al. (1988) of the interplay of poverty, health status, and health services in rural America was published in the *Quarterly*. They conducted a cross-sectional analysis from interviews at 36 rural sites of users and nonusers of community health centers and found that symptoms of mobility impairment increased with poverty. The poor uninsured in poor health had fewer visits than the poor with insurance coverage (typically from Medicaid). Patrick et al. found that providing equal access through community health centers, however, was not sufficient to eradicate the differences in health status between poor and nonpoor, and called for additional steps to alter the disparity.

In a special supplement to the *Quarterly* devoted to the issue of the health of black Americans, several authors investigated health status differentials, health insurance coverage, and the contribution of private insurance and public programs to improving access to health care (Andersen, Mullner, and Cornelius 1987; Baquet and Ringen 1987; Davis et al. 1987; Ewbank 1987; Gibson and Jackson 1987; Long 1987; Manton, Patrick, and Johnson 1987; Miller 1987; Schlesinger 1987). The issue identified the gains in health status made by blacks since the early 1960s and the contributions of Medicaid, Medicare, community health centers, and federal minority health professional programs to those gains. However, the authors note the gaps in these programs and how recent cuts in funding threaten any further progress in improving the health status of blacks (Davis et al. 1987).

More recent work in the *Quarterly* has highlighted the barriers in access to health care of Hispanics (Wolinsky et al. 1989). Based on National Health Interview Surveys from 1976 and 1984, Wolinsky and co-workers found that utilization of hospital care is somewhat more equal between Hispanics and non-Hispanics than ambulatory care. Significant differences exist among Hispanics in number of disability days and frequency of hospital use, with Cuban Americans showing relatively better health status and lower hospital utilization.

Competition and Cost Containment

In the 1980s greater emphasis was placed on containing health care costs through competition among health care providers and increasing emphasis upon cost containment measures. This squeeze, coupled with rising unemployment and poverty in the early 1980s, caused a deterioration in access to health care for many low-income persons.

In an important *Quarterly* article, Feder, Hadley, and Mullner (1984) examined the role of hospital charity care for the uninsured at public and private hospitals using data from the American Hospital Association/Urban Institute surveys on hospital finances in 1980 and 1982. They found that, although the number of uninsured increased between 1980 and 1982, the amount of charity care essentially remained unchanged. Public hospitals made more of an effort to maintain care, but those facing financial difficulties only modestly expanded their charity care. They noted that hospitals may ration free care by directly discouraging use by those unable to pay, and by cutting the services used most by uninsured poor, such as outpatient clinics. They suggested two ways to improve access to hospital care: expand health insurance coverage or pay hospitals to provide free care. Although they found the first option preferable, they note that public policy is doing neither and it appears most politically feasible to patch the system of charity care by providing special aid to hospitals providing a disproportionate share of charity care.

Schlesinger et al. (1987) also examined in a *Quarterly* article the impact of competition and cost containment pressures on access to care. They analyzed a 1984 survey of physicians by the American Medical Association and found that physicians reported that they were discouraged from admitting unprofitable patients to hospitals. The findings for Medicaid and the uninsured were similar, but stronger for the uninsured. Access was particularly discouraged at for-profit hospitals and health systems where there is increased competition. The authors cautioned that the study is largely based on physician perceptions, but the results are consistent with other studies suggesting that the trends toward greater cost pressure will lead to decreased access for the uninsured.

Other studies found that hospitals reduced care for Medicaid patients in the early 1980s as Medicaid hospital payment rates failed to keep pace with that of other payers (Davis et al. 1990; Rowland 1987; Rowland, Lyons, and Edwards 1988). For-profit hospitals markedly reduced their share of Medicaid patients over the period. In general, the impact of cost containment efforts was largely to make health care less accessible to the uninsured and, to some extent, those covered by Medicaid.

Freeman et al. (1987) found that access to health care deteriorated substantially between 1982 and 1986. Using national surveys of access to health care, they found that the gap in utilization of physician services between the insured and uninsured widened over the period, as did the differences between blacks and whites. A minority of uninsured with serious health symptoms sought health care from a physician in 1986.

Cutbacks in Medicaid funding at the federal and state level also markedly curtailed access to health care (Blendon and Moloney 1982; Rowland and Gaus 1982; Rowland, Lyons, and Edwards 1988). States not only failed to increase income eligibility levels with inflation, but they also cut benefits by limiting covered services. Swartz (1988) found that, between 1979 and 1983, poverty among children increased 35 percent whereas children on Medicaid increased by 4 percent. Similarly, although poverty among women aged 18 to 40 increased 60 percent, the number of young women on Medicaid increased by only 20 percent.

States instituted a number of measures to encourage Medicaid beneficiaries to enroll in health maintenance organizations or other managed care systems (Anderson and Fox 1987; Spitz 1982). Although early studies (see Berkanovic et al. 1975) found little to distinguish care received by Medicaid beneficiaries in prepaid health plans from that provided to the fee-for-service sector, later studies suggested that health outcomes were disturbingly worse for low-income persons enrolled in health maintenance organizations (Ware et al. 1986).

Rosenbaum et al. (1988) conducted a nationwide survey of states that provide managed care plans in their Medicaid programs. They reported in the *Quarterly* that, of 41 managed care contracts reviewed, none guaranteed continued coverage for pregnant women if Medicaid eligibility stopped, few expedited enrollment, few provided high-risk specialists, and only five had specific quality-of-care controls.

Health Outcomes and Access to Care

The most recent development in the health services research literature on access to health care is the trend toward more disaggregated studies that look at specific services and the link between access to health services and health outcomes.

Lurie et al. (1984) found that low-income persons who were dropped from Medi-Cal coverage experienced a marked deterioration in access to health care. As a result, the incidence of untreated diabetes and hypertension increased, and the probability of death was significantly greater for those losing coverage than for a control group who retained coverage.

Hadley, Steinberg, and Feder (1991) found that the uninsured who are hospitalized are less likely to get specialized services and are more likely to die while hospitalized. Using hospital discharge abstract data on almost 600,000 patients from a national sample of hospitals in 1987, they found that the uninsured had a 44 to 124 percent higher risk of in-hospital mortality at the time of admission than did the privately insured. The actual in-hospital death rate was 1.2 to 3.2 times higher among uninsured patients than privately insured patients, after controlling for their poor health status upon admission. The uninsured were less likely to receive high-cost or high-discretion procedures.

In an important *Quarterly* article, Baquet and Ringen (1987) analyzed data from the National Cancer Institute/SEER program. They found that the incidence and mortality of cervical cancer is two to three times higher in blacks than in whites, and that the distribution of cases mirrors other inequities in the health care system. Between 1975 and 1984 the incidence of invasive cervical cancer declined in both black and white women, but black women continued to have much higher rates. The age-specific rates for elderly black females was highest. Those least likely to have received a Pap smear are poor, black, and reside in rural areas. The major reason for differentials in rates are inequities in the distribution of health resources, not genetic or biological factors. The authors recommend better delivery of services, quality improvements, programs targeted to high-risk populations, and better data collection and monitoring.

Contribution of Research to Policy and Future Issues

Research on inequalities in health outcomes and access to health care services in the last two decades has made an important contribution to the public policy debate. Research documenting the success of Medicaid in improving access to health care for covered beneficiaries at a cost comparable to that of privately insured people helped lead to political acceptance of Medicaid as an essential and effective program that ensures access to needed health care services for millions of impoverished Americans.

Research on access to health care for children and the importance of prenatal care and well-baby care in improving health outcomes also contributed to legislative expansions of Medicaid to greater numbers of low-income pregnant women and children. Documentation of the disparities in use of health services of the elderly by income highlighted the need for legislation to expand Medicaid to supplement Medicare for all poor elderly—a legislative change that was enacted in the late 1980s.

Research on the adverse impact of cost-containment measures applied exclusively or excessively to health programs for the poor has also helped underscore the importance of comprehensive health system reform. Such reform needs to guarantee universal health coverage while removing or reducing differentials in the rates of compensation to physicians, hospitals, and other health care providers.

More detailed research on the consequences for health outcomes of barriers to care for the uninsured should help build the case for universal health insurance coverage. Increasingly, policy makers want to know not just that insurance makes a difference in utilization of health care services, but also what the implications are for the health of the uninsured.

The *Milbank Quarterly* has played a critical role over the last 20 years in keeping the issue of access to health care for the disadvantaged and the need for greater equality in use of health care services in the forefront of attention. Even in periods when the primary health policy concern has been containing health care costs, the contribution of the *Quarterly* has been to keep the vision of an improved health care system accessible to all from disappearing. This longer-term perspective has helped foster greater balance in the nation's health policy agenda. The coming decade should prove even more challenging as the nation turns once again to the policy goal of assuring universal health insurance coverage.

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Acknowledgment: I would like to thank Karen Collins, M.D., M.P.H. for her research assistance.

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