Policy and Epidemiology: Financing Health Services for the Chronically Ill and Disabled, 1930–1990

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I PROPOSE A NEW INTERPRETATION OF THE HISTORY OF health insurance in the United States: that there is an epidemiological context for the history of conflict and compromise about financing personal health services. In earlier publications I described how strongly held beliefs about the effectiveness of medical science and the consequences of those beliefs for the logic of organizing health services shaped political struggles among interest groups about government ("compulsory") or commercial and nonprofit ("voluntary") health insurance (Fox 1986). Now I argue that a third force strongly influenced *both* the perceived self-interest of groups (of physicians, hospitals, insurers, employers, and workers) *and* their beliefs about the logic of health care organization: the rapidly increasing incidence and prevalence of chronic disease and disability (see note, p. 25).

The activities of interest groups concerned with compulsory and voluntary health insurance and the growing epidemiological pressure of chronic disease and disability occurred simultaneously during the past half century. This article is a first attempt at addressing the connections among these events. My goal is to stimulate reflection upon past and present health policies and to encourage others to explore further the history and policy effects of the gradual disentanglement of disease from aging, the translation of medical research on the biology underlying chronic disease into medical practice, and the behavior of interest groups around pertinent issues of health policy.

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Chronic illness and disability have become central concerns of the major institutions of the health policy in the United States during the last fifty years. By the late 1980s the institutions that comprise the health polity—health professions, hospitals and long-term-care facilities, research organizations, government agencies, and health insurers—allocated most of their resources to studying, diagnosing, preventing, and treating chronic illness. The epidemic of HIV infection and related diseases seemed at first to be an anomaly to a health polity focused on chronic illness and disability. As it did with tuberculosis in the early decades of the century, however, the health polity is increasingly addressing the problems of preventing and treating AIDS as analogous to those of managing chronic illness (Fox, Day, and Klein 1989).

The institutions of the health polity have accommodated in different ways and at different times to the increasing incidence and prevalence of chronic disease and disability. Beginning in the 1920s, scientists and public health officials articulated the significance for their work of growing mortality from chronic disease. By the late 1930s, a few leaders in these fields had begun to persuade their more reluctant colleagues to change their priorities in order to take account of increasing morbidity and mortality from chronic diseases (Fox 1989). Trustees and executives of voluntary hospitals and leaders of most medical specialties accommodated more gradually to changing epidemiology. Not until the late 1940s—a decade or more after chronic disease became the most frequent reason for hospital admission among adults—did most physicians and hospital managers decide that managing the care of patients with chronic diseases should be among their major responsibilities.

The reluctance of physicians and hospital leaders to accord priority to chronic disease was largely a result of the history of financing personal health services in the United States. I describe below the gradual accommodation to chronic disease of the organizations that finance health care in the United States. My thesis is that chronic disease has become the principal focus of public and insurer payment for personal health services since the 1960s, after national health policy for the first time made age and income, as well as employment, criteria for entitlement to health care the costs of which were spread over a large population, through insurance or taxation. I summarize here the political history of the accommodation of the institutions that finance personal health services in the United States to the challenge of chronic disease and disability.

The Problem of Chronic Illness and Disability

The definitions of chronic illness or disease and disability in the history of health policy have, often by design, been ambiguous. I use these words the way the people who created my primary sources did. They used imprecise and overlapping definitions of the words acute, chronic, illness, disability, and disease. "Acute" has usually described particular stages of infection, injury, and chronic disease. The phrases "chronic illness" and "chronic disease" are interchangeable in most sources. "Disability" has usually meant inability to work as a result of a chronic impairment that resulted from diseases, injuries, or genetic defects; but it has frequently been used as a synonym for chronic disease.

Definitions of chronic illness and disability have often been ambiguous for political reasons. For example, most public health officials in the 1930s and 1940s excluded tuberculosis and mental illness from the definition on the grounds that states traditionally appropriated funds separately for hospitals dedicated to these diseases. Most advocates of greater public concern for chronic illness excluded congenital or acquired physical impairments, sometimes called handicaps, for similar reasons. Others included these conditions in their definitions in order to raise the priority accorded them in public budgets. When the policy stakes were particularly large, all these disorders could be described as chronic illness. In a typical all-inclusive definition of 1947, chronic illness was "illness due to chronic disease or long-term illness from any disease" (New York State Temporary Legislative Commission to Formulate a Long-range Health Program 1947, 20). Definitional ambiguity was a deliberate choice of the subjects of this history. It was part of their struggle to influence policy, and not, in general, a result of the undeniable complexity of physicians' perceptions of the vague boundaries between the acute and chronic phases of illness in particular patients.

The imprecision of these definitions creates problems for those who would analyze or propose policy. My colleague Rosemary Stevens (personal communication 1989) bridges the chasm of understanding that too frequently divides historians and policy researchers. She observes that the evidence in this article "brings out . . . the need for new functional definitions of chronic disease; does it mean incurable? noninfectious? expensive? One of a list of proscribed diseases?" In the contemporary world, she continues, "to talk about chronic diseases is to talk about a health service." Yet, there may be good political reasons at present, as there have been in the past, to maintain flexibility in defining disease for the purposes of policy.

This article concerns the impact of perceptions of epidemiology over a fifty-year period on policy to finance health services. Three important qualifications about what follows derive from this statement of purpose.

The first qualification is that the behavior of interest groups on matters of perceived self-interest remains important. This behavior has been the subject of a large literature which will not be summarized here, except as it bears on the accommodation to the perception of the growing importance of chronic illness and disability.

The second qualification is that strongly held beliefs about the power and potential of medical science have mattered a great deal in the history of health policy in this century. I have not summarized here the literature on these beliefs except as it bears on accommodation to the perception of the importance of chronic disease and disability. It is, however, largely as a result of these beliefs that acute care has been given priority in financing policy and that only in the past decade have the effects of successful acute intervention on the incidence and prevalence of chronic disease been subjected to critical scrutiny. Moreover, the power of these beliefs has made polio an attractive model for policy to finance care for disability. In the case of polio, investment in research led directly to a vaccine that sharply reduced the incidence of the disease and, therefore, disability and its costs. The model of historical change derived from the polio experience has strengthened the belief that most interventions to manage chronic illness and disability are undesirable "halfway technologies" that will be replaced by cheaper technologies if the right scientists spend money and time.

The third qualification is that recent disputes about the relation between the rates of incidence and prevalence of chronic disease is important for contemporary health policy, but not to the history in this article. This issue is addressed, in part, by Manton (1989) in this volume. For most of the last fifty years, however, the central problem for policy has been demand for health services that was rising as a result of a combination of factors that include changes in the incidence and prevalence of chronic disease. If my thesis is correct, the debate about the extent to which the incidence and prevalence of chronic disease can be modified may soon become the central issue for health care financing. My purpose here is only to describe the history that precedes current dilemmas of policy.

Chronic Illness and Health Care Financing in the 1930s

During the 1930s a few officials of the federal government, several states, and a number of voluntary agencies sought policy to address chronic disease in general, moving beyond traditional concerns with public provision for the tuberculous, the mentally ill or deficient, and the blind. Since the mid-1920s a few medical scientists, physicians, public health officials, and statisticians had been publicizing the growing mortality and morbidity from chronic disease (Fox 1989). Now leaders of prominent organizations tried to respond to the new epidemiological situation. These organizations included the Metropolitan Life Insurance Company, the Rockefeller Institute for Medical Research, the Massachusetts Department of Public Health, and the Montefiore Hospital for Chronic Invalids in New York. Individuals prominent in advocacy on behalf of chronic illness included such notables in American health affairs as Alfred Cohen, a cardiologist at the Rockefeller Institute, Ernst Boas, an internist at Montefiore, and Louis Dublin, the chief statistician of Metropolitan Life.

The leaders of the coalition pressing for policies to respond to chronic disease encountered considerable resistance. Although heart disease, cancer, stroke, and complications of diabetes were rapidly becoming leading causes of death, and arthritis a major cause of lost income from work, most people's attention was focused on other causes of illness and disability. Infection and research to prevent and cure it continued to get the most attention from the press and from most state, local, and federal health officials. Injuries and toxic substances elicited the greatest concern among workers, unions, and employees. For most Americans, the unsolved problem of health policy was money to pay for hospitalization for injuries, acute episodes of infectious disease, and childbirth. Long-term care for chronic illness or disability was either provided by family members, or by private or philanthropic agencies, or by state and local government; it was not a major personal expense for most people.

Early in the New Deal, federal relief policy began, without intent, to change the political environment of discussions about chronic illness. Until 1933 medical assistance to veterans of World War I for illnesses that were not connected to their service was the only federal program of direct payment that included chronic disease. Between 1933 and 1936, however, the federal government became increasingly involved in financing care for chronic conditions as a result of policy to address the effects of the Depression. The first modest steps became, in retrospect, important departures from precedent. Beginning in 1933 federal relief money subsidized physicians' services for unemployed workers and their families, paid for under contracts between states and medical societies. The regulations that governed this program stipulated that this care should be primarily for acute conditions and limited the number of reimbursable home visits to patients by physicians for the purpose of managing chronic illnesses. In practice, however, state relief agencies authorized services, as one federal eyewitness claimed, "more on the basis of available funds than on the type of illness for which care was received" (Falk 1939). Similarly, from 1934 on the Resettlement (later Farm Security) Administration financed prepaid medical care in rural areas; a major goal of this program was to reduce the number of farm foreclosures that were a result of chronic illness and disability (Williams 1939).

Two events in 1935 signaled the beginning of a deliberate national policy to address the cost of chronic illness and disability: the Social Security Act; and the decision to conduct the first National Health Survey. Since the 1920s such leading advocates of according higher priority to chronic illness as Ernst Boas of Montefiore had insisted that old-age pensions were a precondition for any policy to address the costs of health care. The Social Security Act was even more explicit about chronic illness. It stimulated the establishment of nonprofit and proprietary nursing homes by mandating that federal aid to the blind and the needy only be paid when they lived in their own homes or in private institutions (Vladeck 1980). The act also authorized federal grants to the states for assistance to crippled children.

That same year, officials of the United States Public Health Service (PHS) organized the National Health Survey in order to create the "factual basis" for federal and state programs to care for the chronically ill and disabled. Almost three million people in 737,000 households in urban communities in 18 states and in rural areas in 3 others participated in the survey. Each family provided demographic data and information about the "kind and amount of medical care" they received. These reports were, wherever possible, checked with physicians. Compliance with the survey among family members and physicians was high, in part because unemployed white collar workers from neighboring communities conducted the interviews (Perrott, Tibbitts, and Britten 1939).

The most frequently quoted finding of the survey was that 22 percent of the population had a "chronic disease, a permanent orthopedic impairment, or a serious defect of vision or hearing." PHS officials reported that cancer, diabetes, and tuberculosis were the most disabling and costly diseases (Perrott 1939a; Perrott and Holland 1937; U.S. Public Health Service 1938).

The National Health Survey also provided statistical confirmation that acute general hospitals were treating more patients with chronic disease, contrary to their stated policies. The chronically ill poor had traditionally been treated in municipal hospitals. Those with more income had access to special hospitals offering long-term care, or received care at home. Now, some voluntary hospital managers discovered, from their own studies as well as from the National Health Survey, that patients with chronic illness generated more than one-half the cost of care in their general medical wards (New York Academy of Medicine 1934; Jensen and Weiskotten 1944; Perrott 1939).

Hospital leaders had difficulty paying these costs, particularly during the Depression. Some of them were persuaded by Haven Emerson (1937, 43), the director of a hospital survey in New York City, that voluntary hospitals should openly admit long-stay patients with chronic disease in order to provide them more comprehensive treatment. But this was a minority opinion. Most hospital leaders agreed with S.S. Goldwater, the foremost hospital administrator and theorist of his generation, that care for the chronically ill was the "function of public institutions." Yet, even Goldwater (1947, 152, 209) was changing his mind in the mid-1930s, calling for the affiliation of voluntary and municipal hospitals in order to coordinate treatment of the acute and the chronically ill.

Blue Cross, Compulsory Insurance and Chronic Illness

This dispute about the role of voluntary hospitals in treating the chronically ill coincided with the organization of the first hospital prepayment plans, soon to be called Blue Cross. These plans responded to the need of hospitals for predictable sources of revenue and of consumers for security against large and unexpected costs. The organizers of the first plans were cautious about the scope of coverage, primarily in order to insure their solvency but also to avoid becoming involved in the debate among hospital and medical leaders about the proper role of voluntary hospitals. Thus, the first plans excluded treatment for both chronic and communicable (or "quarantinable") diseases. In New York, for example, the committee that planned the city's Blue Cross, chaired by Goldwater, excluded without debate chonic disease and disability from coverage. This exclusion was even supported by Louis Dublin (1933), a committee member and statistician of the Metropolitan Life Insurance Company, who for more than a decade had been publishing evidence about the increasing importance of chronic illness as a cause of sickness and death.

Dublin and a handful of influential people, however, wanted the modest new hospital prepayment plans to become the basis for more comprehensive programs for paying the costs of medical care. In 1934 Dublin wrote privately that the proper result of hospital planning and prepayment should be to integrate health services "into one unified structure with health insurance binding all the parts together." Treatment for acute and chronic illness could, he believed, be properly coordinated in such a structure (Dublin, 1934).

C. Rufus Rorem, a leading theorist and organizer of the National Blue Cross movement, believed that chronic illness could not be addressed by voluntary insurance that was subscribed to largely by groups of employees, whether they paid a simple community rate or one based on the experience of their group. In 1932 Rorem insisted that the limit of payment by nonprofit hospital plans to 21 days "protects the hospital against large expense for chronic or incurable disease." But he was interested in more than hospital solvency. Treatment for chronic disease was most expensive, he argued, when the patient had ceased to be a "self-supporting member of his own community." Moreover, the "proportion of individuals" in any insured group "suffering from these problems would not be uniform." The remedy was clear: payment for treatment of chronic disease "should be made the responsibility of the entire community," not just those enrolled in Blue Cross plans. The cost of treating chronic illness should be shared by the largest political group: taxpayers (Rorem 1982a).

For the next decade Rorem worked to achieve this goal through collaboration between Blue Cross plans and government agencies at the federal, state, and local level. In his assessment of contemporary politics, physicians and hospitals would not accept payment schemes that were dominated or even strongly influenced by public funds and officials. Expanding the group paying for care to sufficient size to meet the cost of chronic illness would, for the foreseeable future, require voluntary action.

Unlike Rorem and Dublin, the officials of the federal Social Security Board who designed what became the National Health Program of 1938, and their allies outside government, endorsed compulsory insurance—that is, government-mandated coverage using public funds to subsidize insurance for unemployed and low-paid workers. The advocates of compulsory insurance did not distinguish between care for patients with acute and those with chronic conditions. The coverage they proposed would, however, like Blue Cross and medical society physicians' service plans (soon called Blue Shield), be restricted to care during acute episodes of illness (Reed 1937).

Also unlike Rorem and other Blue Cross leaders, the advocates of compulsory health insurance in the federal government foundations and universities assumed that legislation to finance health care could be passed during the second Roosevelt administration. They were determined to seize what they regarded as an unprecedented opportunity to enact compulsory insurance. The problem of financing care for chronic illness and disability in hospitals or other facilities seemed to be a distraction from that goal. Many of the problems of medical care for chronic illness could be addressed, they argued, through a separate program of disability insurance under Social Security (Falk, Reed, and Sanders 1939; Reed 1939). The National Health Program that they proposed in the summer and fall of 1938 also included a hospital construction program, federal support for the temporarily disabled, the blind, and crippled children, and grants to the states for preventive and treatment services for mothers and children (Fox 1986).

In confidential negotiations with federal officials about the National Health Program, Rorem, speaking for the most powerful interest groups, proposed a compromise policy on health insurance that addressed chronic as well as acute care. On behalf of the American Hospital Association (AHA), and with the concurrence of the American Medical Association (AMA), he described a voluntary "ward service" prepayment plan "coupled with physician's fees." City and county hospitals would treat people with low incomes and chronic disease in their wards. Government agencies "might subsidize a portion of a plan for those who are unable to pay" (National Health Program 1938, 15).

Rorem's plan threatened most of the members of the federal Interagency Technical Committee on Medical Care, which was dominated by advocates of compulsory insurance. I.S. Falk, a staff member of the Social Security Board, attacked Rorem's plan, charging that voluntary insurance had already failed. Enrollment in group hospital plans, he said, was "levelling off in some states" (National Health Program, 1938b, 17). He ignored the vastly expanded population that would be entitled to hospital services either without charge or at low cost as a result of Rorem's proposal.

Because the members of the interagency committee believed that the principle of compulsory insurance was too important to compromise, they recommended against accepting Rorem's proposal. The AHA and the AMA had been prepared to endorse the National Health Program if it did not include compulsory insurance (National Health Program 1938a). Their alternative insurance plan, presented by Rorem, would have begun to finance the management of chronic illness. But they now opposed the entire program. In the absence of consensus, and distracted by more pressing domestic policy problems, President Roosevelt sent the National Health Program to Congress without his endorsement. Despite the efforts of Senator Robert F. Wagner and others to enact it, the program languished in Congress in 1939 and 1940 (Fox 1986, chapt. 5). Two years earlier, however, a plan that would have addressed both chronic illness and the perceived self-interest of members of the AMA had been defeated by ideologues in the federal bureaucracy.

For the next quarter-century, voluntary insurance, along with the health and welfare budgets of states and cities, would pay, however reluctantly, the increasing costs of chronic illness. State and local governments increased their already substantial commitments to public hospitals in the late 1930s, but facilities remained inadequate in number and quality (Fox 1986). Without governmental subsidies of premiums for the poor and for low-paid workers, the underwriters of voluntary insurance–Blue Cross and Blue Shield and, from the late 1930s, commercial companies—were forced to put solvency ahead of social need.

By 1939, despite—in fact, because of—rapid growth in enrollment and utilization across the country, voluntary insurance was in financial trouble. The expansive enrollment and underwriting strategies of the early Blue Cross leaders, even with limited coverage, created financial distress for several plans. The utilization of services exceeded premium income and threatened reserves. The largest plan, in New York City, came close to bankruptcy. As a result, Blue Cross plans, pressed by their boards and by state insurance regulators, retreated from their initial goal of being voluntary social insurance and became more businesslike and, therefore, restrictive (J. Maxwell personal communicaton). In New York City, accepting changes recommended by an actuary whom the plan had hired at the insistence of the state Department of Insurance, the board of Blue Cross agreed in May 1939 to "establish waiting periods for chronic disorders" after enrollment (Associated Hospital Service 1939). A few months later, an official of the federal Social Security Board, after attending the first annual convention of group health plans, complained about the "mercenary attitude" of executives who seemed most interested in "how the amount of medical care demanded by some of the clients could be controlled and reduced" (Klem 1939).

This charge was unfair. Without government subsidies to pay for the hospital and medical care of the very sick and the very poor, as Rorem had proposed, the plans had to be mercenary—that is, to restrict benefits—if they wanted to survive. When staff of the Social Security Board surveyed hundreds of prepayment plans in 1941, they found that each of them excluded "chronic disease generally and particular chronic diseases (tuberculosis, mental disease, venereal diseases, disease peculiar to one sex or the other . ." (Klem 1942). As this quotation suggests, the operational definition of chronic disease had become more intensely political than ever before as a result of debates about how to finance medical care. The phrase now meant, in practice, any condition with a long, uncertain course that required treatments of variable duration in facilities of different levels of sophistication.

Accommodating to Chronic Illness in the 1940s

During and after World War II pressure increased on voluntary insurance plans to expand coverage for chronic illness. The number of subscribers to both Blue Cross-Blue Shield and commercial plans grew in response to wartime wage-control regulations and to amendments to the Internal Revenue Code that encouraged employers to provide fringe benefits. After the war, the federal courts upheld the right of unions to bargain collectively for health and other benefits. Many of these new subscribers to hospital plans—and the unions that represented them—wanted more comprehensive coverage, particularly for managing chronic illness and disability. Moreover, hospital leaders were eager to expand their institutions to meet this new effective demand.

Voluntary general hospitals had already begun to retreat from the orthodoxy that they should admit only patients needing care for acute conditions. During the war a broad coalition of hospital leaders, supported by philanthropic and federal funds, promoted a new consensus about the mission of voluntary hospitals. According to this consensus, medical care should be coordinated among hierarchies of institutions within broadly defined geographic regions. Hospitals should be the leading institutions at each level of a hierarchy which included facilities—including units of general hospitals—that treated chronic disease. This new consensus about how to organize care was a major theme of the report of a commission on hospital care financed by the Commonwealth Fund. It dominated an influential Public Health Service report issued in 1944 (Fox 1986).

The consensus was embodied in the Hill-Burton act to subsidize hospital construction, which was negotiated during the war and became law in 1946 (Fox 1986, chapt. 7). The authors of the Hill-Burton act, the first result of the new consensus, assumed that the state planning process mandated by the act, because it would force attention to the care given within regional hierarchies dominated by hospitals, would address the problems of patients with chronic disease (Bourke 1947; Bluestone 1953).

During and immediately after the war, voluntary insurance plans responded to increasing effective demand from employee groups for expanded coverage. In 1942 the largest Blue Cross plan, New York City, for example, yielded to pressure from subscribers and physicians to cover surgical treatment for pulmonary tuberculosis. The next year, it expanded the basic subscriber's contract to include coverage for congenital anomalies and venereal disease (Associated Hospital Service 1943). In 1946, however, the actuary reported to the president that mental disorders could not be covered unless the plan increased what it charged its subscribers (Associated Hospital Service 1946a).

The actuary's reservations about covering mental illness exemplified a major dilemma for insurance plans. Many subscribers, their union leaders, and the growing number of physicians who specialized in treating the acute manifestations of chronic disease wanted coverage to expand. But broader coverage would also make insurance more expensive. The health insurance market was becoming increasingly competitive as private companies marketed more aggressively against Blue Cross and Blue Shield. Competition to offer the lowest premiums, which required insurers to limit benefits, conflicted with subscriber pressure for broader coverage. It also contradicted the political goal, shared by the Blues and the insurance industry, of making voluntary insurance more comprehensive in order to make compulsory insurance less attractive to politicians and voters. Moreover, higher premiums that resulted from additional coverage for chronic illness encouraged younger and healthier workers to drop their insurance, making it even more expensive for older and sicker members of community or employee groups. In 1945, even though the scope of coverage had increased only modestly during the war, Blue Cross plans lost one-quarter of their healthiest subscribers (U.S. Senate 1946, 20).

In 1944 Rufus Rorem, still speaking on behalf of the Blue Cross movement and hospital leaders, again proposed a combination of government and insurance industry action to protect voluntary insurance while expanding coverage for low-income people and especially those with chronic disease. Under Rorem's new proposal, the federal government would legislate a national minimum of entitlements to health and welfare services, and would finance hospital construction and programs of disease prevention. The national minimum would require the extension of existing Social Security coverage to the entire population "before including new benefits for those already protected" and public funds to pay for medical care for the indigent. Voluntary insurance plans would, in turn, expand their coverage to furnish "protection against catastrophic illness among the employed workers and ther dependents" (Rorem 1944).

Rorem's plan attracted considerable support from hospital and medical leaders. A New York version, promoted by Louis Pink, the president of Associated Hospital Service, called for state government to pay the cost of voluntary insurance for the poor, the state and employers to pay for low-earning workers, members of "mid-income groups" to share costs with employers, and the rich to pay for themselves. The Medical Society of the County of New York and the science editor of the *New York Times*, among many others, endorsed this plan (Pink 1945; Associated Hospital Service 1946b).

These proposals to combine public and voluntary plans became casualties of the prolonged and bitter conflict among interest groups: between the advocates of compulsory insurance and the radically conservative physicians who took control of most state medical societies and of the AMA in the mid-1940s (Fox 1986, chapt. 9). The combination of mandate and voluntarysm, as proposed by Rorem and Pink, satisfied neither welfare-state liberals nor their implacably conservative enemies. As a result of this political stalemate, the problem of paying the growing costs of medical and institutional care for people with chronic disease remained unresolved.

The potential conflict created by this lack of resolution was exacerbated by a newly perceived problem: the growing number of elderly retirees—people who either had not or no longer paid insurance premiums as members of groups of employees. The problem remained that Rorem and others had recognized in the 1930s; voluntary health insurance based on employment spread the costs of managing chronic illness over a population that was too small to absorb them without unbearable financial pain. The problem now grew more intense as a result of the pressure on workers to pay the costs of their retired colleagues and the reluctance of employers to share this burden.

Financing Chronic Illness in the 1950s

Although the political stalemate on health policy precluded a comprehensive approach to the cost of chronic illness during the 1940s and 1950s, the insurance industry and the federal government attempted to address aspects of the problem. By the late 1940s, commercial health insurers and the Blues had equal shares of the market. The commercial insurers were eager to continue expanding what, to their surprise, had turned out to be a profitable product line. Because Blue Cross had been organized by hospital leaders on a social rather than a liability insurance model it paid service benefits; that is, up to the limit of coverage, the subscriber did not share in the hospital bill, which the Blue plan paid in full, at a prenegotiated price. But Blue Cross was social insurance that was limited to subscribers in particular communities. Without subsidies from government, healthy and generally younger subscribers and their employers subsidized the service benefits of older workers or those of retirement age who could afford to pay for health insurance. Commercial health insurance, in contrast, paid indemnities: a fixed amount for each covered unit of service. Moreover, the price of commercial coverage was determined entirely by the experience of the covered group. Indemnity coverage, since it paid only a portion of each bill, could be extended without making premiums prohibitive by inviting subscribers to share more risks through deductibles and co-insurance. Indemnity health insurance could be marketed on the same basis as coverage for automobiles or homes.

To insurance underwriters, the chronic illnesses and disabilities of particular people were, like fires and accidents, catastrophies waiting to happen. Unlike fires and accidents, however, epidemiology and common sense made plain that they would happen to everyone. Insurance companies, beginning in 1950, took commercial advantage of this situation by offering major medical coverage. These policies, which included deductibles and co-insurance, paid for treatment for all diseases both within and outside hospitals up to a large dollar limit. By 1955 major medical insurance had been sold to two and a half million people, about 1 percent of covered Americans; by 1961 the number had grown to 6 percent (Andrews 1956; Wheatley 1957; Skolnik 1963).

Major medical insurance threatened Blue Cross and Blue Shield. Some plans began to offer similar policies. Others, like the Blue Cross and Blue Shield plans in New York City, insisted that service benefits cost less and provided more benefits for the average family (Blue Cross Commission 1954; Blue Cross Association 1961). In 1953 Rufus

Rorem claimed that "coverage for chronic illness" was one of seven standards for measuring the comparative adequacy of the commercial company plans that were challenging Blue Cross (Rorem 1982b).

The Blues began to compete with commercial companies in other ways. Most of the plans subsidized benefits for elderly subscribers in their community pools with premium dollars paid by younger subscribers (Associated Hospital Service 1961). Almost all the plans added benefits to meet the competition. Blue Cross plans created "extended benefits," a term that described the covered costs of nursing home and home health care following periods of hospitalization. Many plans extended hospital benefits for up to 120 days. Plans extended eligibility for service benefits to hospitals that offered care mainly to convalescents and the chronically ill (Metzger and Van Dyk 1960). In a memorandum justifying the federal income tax exemption for health insurance premiums (whether commercial or Blue Cross-Blue Shield) Randolph Paul, the nation's leading tax lawyer, who was acting for the National Blue Cross Commission, insisted to the Internal Revenue Service that premiums for health insurance should be excluded from income for purposes of taxation because of the vast increase in chronic disease, the costs of which his clients were helping make bearable (Paul 1953).

Many Blue Cross officials continued to advocate that the federal government and the states subsidize coverage for chronic illness for the elderly and other people with low incomes. A prominent Blue Cross executive, J. Douglas Colman, was an officer of the Commission on Chronic Illness (1956–1957) created in the late 1940s by the AMA, AHA, American Public Health Association, and American Public Welfare Association to advocate greater attention to chronic illness in every arena of public and institutional policy. In 1954 Blue Cross and Blue Shield plans enthusiastically supported a proposal by the Eisenhower administration to reinsure the costs of catastrophic illness underwritten by voluntary insurance—a proposal that was opposed by commercial insurers (Maxwell unpublished). Blue Cross executives joined with officials of the Public Health Service and the American Hospital Association in the late 1950s to promote community health planning for chronic disease (Colman 1958).

Federal and state policy in the 1950s also accommodated to the growing epidemiological pressure of chronic disease. State expenditures grew for medical care for people on old age assistance. Beginning in 1950 the federal government authorized grants to the states to pay vendors of medical services to the major recipients of categorical welfare payments—the needy aged and the permanently and totally disabled. Several states passed disability insurance acts in the 1940s which provided some health coverage (Segal et al. 1950). In 1956, after a bitter political debate, insurance against permanent disability for people over the age of 50 was added to the Social Security program (Berkowitz 1987). Social Security disability insurance (SSDI) gave its recipients cash to purchase services rather than explicit health benefits.

The most visible federal subsidies for chronic disease in the 1950s were for research and the construction of new health facilities (Strickland 1972; Fox 1987). The Eisenhower administration did not want to alienate the American Medical Association and its allies by embracing any form of compulsory health insurance. Its abortive reinsurance plan and reluctant presidential approval of SSDI were as far as the administration dared to go to subsidize medical care. But two of the most powerful members of the administration, George Humphrey, secretary of the Treasury, and Marion Folsom, undersecretary of the Treasury and later secretary of Health, Education, and Welfare, were committed to hierarchical hospital organization, the need for more capital expenditures to build health care facilities, and the federal role in medical research. They had become advocates for these policies as a result of their service on the boards of university hospitals (Folsom 1964). In 1954 Folsom and Humphrey persuaded the president to endorse amendments to the Hill-Burton act to authorize subsidies to construct outpatient departments, nursing homes, and rehabilitation facilities. Two years later they successfully advocated a program of federal grants to assist medical schools to construct facilities for research. Throughout the Eisenhower administration, and particularly after James Shannon became director of the National Institutes of Health in 1955, they endorsed growth in the budget for research, most of which was spent to learn more about the underlying causes of chonic disease. A small fraction of the funds that were appropriated for research and research facilities were spent to treat patients.

The Hill-Burton amendments of 1954 were an important stimulus for expanding facilities that could be used to treat chronic illness. In 1956 Public Health Service officials estimated that only "14% of the country's need for chronic disease beds has been met by existing acceptable beds." They called for the construction of more than a quarter of a million new beds for patients with chronic disease—in contrast with less than 10,000 built since the act was passed in 1946 (Abbe and Baney 1956). Over the next decade and a half, almost 100,000 beds for long-term care were constructed with Hill-Burton funds. More than one-half of these beds were units of general hospitals; the number of special hospitals for chronic disease continued to decline. Mental hospital construction accounted for an additional 20,000 beds (U.S. Department of Health, Education, and Welfare 1973). Federal construction policy was, however, ahead of medical behavior. Most of the beds in general hospitals that were constructed with Hill-Burton funds for long-term care appear to have been used for patients requiring acute care.

The problems of financing care for the chronically ill and disabled remained unsolved, however, at the end of the Eisenhower administration. National health insurance had been removed from the agenda of practical politics after the bitter debates over it in the administrations of Franklin D. Roosevelt and Harry S. Truman. Although more than a hundred million Americans had voluntary hospital insurance, most of them were still not covered for medical or institutional care associated with illnesses of long duration.

The politics of paying for health care for the chronically ill were far from stable in 1960. Although the Blues and commercial insurers were reluctant to risk losing market share by raising coverage and therefore premiums, they had been accommodating benefits to the rising prevalence of chronic illness throughout the decade. In a steadily growing economy, employers cheerfully provided more comprehensive health benefits to their workers as long as the costs could be passed on to consumers in higher prices. Although organized labor advocated compulsory health insurance as a national policy, each union bargained for the most comprehensive coverage it could get, consistent with its wage demands, thus eroding or precluding rank-and-file support for a national health insurance. Nevertheless, union leaders worried about paying for health care for retiring workers, who were becoming an increasing burden on those still in the labor force, through both rising insurance premium costs and pressure on family budgets. They were eager to solve this problem at public expense. In addition, by 1960 older Americans were becoming a visible political lobby, on behalf of medical care as well as Social Security in general.

Leaders of powerful interest groups in health affairs were impatient with the fragmentary coverage, and for millions of people the lack of coverage, for chronic illness. Trustees and managers of teaching hospitals—many of which were public institutions or voluntaries serving inner cities—wanted to be reimbursed more generously for the care of the medically indigent elderly, who were rapidly becoming their largest group of patients. Many medical specialists, breaking with the AMA, whose membership and power had been in decline for a decade, now believed that a federal program of hospital insurance for the elderly would bring their institutions substantial revenue (Fox 1986; Marmor 1973).

Federal participation in paying for hospital care for the elderly was a significant issue by 1960. In the early 1950s advocates of comprehensive national health insurance within the Social Security Administration decided to focus on hospital insurance for the elderly as an initial step toward comprehensive national health insurance (Marmor 1973; Cohen 1985). A recommendation for such a program was adopted by the President's Commission on the Health Needs of the Nation (1952, Vol. 1, pp. 3, 13–14, 38) at the end of the Truman administration. Pressure on the federal government to participate more extensively in paying for medical care for the needy elderly increased during the decade. As a result of the growing prevalence of chonic disease, more of the elderly were becoming needy. In particular, they lacked sufficient funds to pay for hospital and medical care during the acute stages of their illnesses. Congress debated bills taking different approaches to this problem: social insurance (Forand), subsidy of voluntary insurance (Javits), and welfare programs for the needy (Kerr-Mills). The latter became law just two months before the election of 1960 (Marmor 1973).

The 1960s: Accelerating Accommodation to Chronic Illness

The rate at which health policy accommodated to increasing morbidity and mortality from chronic disease accelerated in the 1960s. Although the members of the coalition that made new federal policy during the decade had identified each other by 1960, they lacked both presidential support and majorities in the Congress. This coalition included organized labor and the elderly and, within health affairs, leading hospital trustees and administrators, many officers and members of medical specialty societies, and many academic physicians. The coalition received technical and tactical support from senior career officials in the Social Security Administration and from many middle-level appointed officials and civil servants in the Kennedy and Johnson administrations. In the Congress, the coalition had the support of a newly powerful group of liberal senators, many of whom had been elected in 1958, and of several prominent Democrats in the House.

Until Lyndon Johnson's landslide victory in 1964, however, proponents of more federal spending for medical care for chronic disease were more successful in mounting programs to increase the supply of services, often for acute care, than to subsidize demand for them. New programs were created for the mentally ill, retarded, and developmentally disabled. The Division of Chronic Disease in the Public Health Service, funding demonstration projects for the first time, established coronary care units in teaching hospitals. In 1963 the first legislation that explicitly subsidized medical education was justified in part by the projected demand for care as a result of chronic disease.

The administration insisted, however, that the most important health legislation of the decade, the amendments to the Social Security act that created Medicare and Medicaid, would solve the need of the elderly and the poor for acute care. Anthony Celebrezze, secretary of Health, Education, and Welfare, for instance, insisted that Medicare was not a program to pay the costs of managing chronic illness in short-stay general hospitals. The administration claimed to be horrified by the suggestion of Russell Long, chairman of the Senate Finance Committee, that the proposed Medicare amendments incorporate a "catastrophic or long-term illness system" (David 1985, 134).

This insistence that Medicare was a program to cover the costs of acute episodes of precisely diagnosed diseases, not the growing problem of care and social support for long-term chronic illness, was a political tactic—another event in the long history of gradual accommodation to the prevalence of chronic illness by the institutions that paid for health care. Administration strategists feared that they would lose supporters in Congress, especially in the House Committee on Ways and Means, if the program appeared to be uncontrollably expensive. Nevertheless, Medicare, from the outset, covered considerably more extended care than most voluntary health insurance: up to 60 days of nursing home service and 240 days of home health care in a calendar year. This coverage, which would be used mainly by people suffering from chronic illness, would only be available, however, following discharge from a hospital. Wilbur Cohen (1965), the principal administration strategist, insisted that Medicare would pay for chronic care only when it substituted for hospitalization. Nevertheless, Medicare paid for considerable care for chronic illness, even though it officially limited coverage to acute episodes of precisely diagnosable chronic diseases and their aftermath.

Medicaid was conceived as a program to provide basic medical services for recipients of categorical welfare benefits and people whom the states would define as medically needy. Within a few years, however, Medicaid provided enormous support for people with chronic illness—financing long-term care in nursing homes and at home for many people who had exhausted their savings by paying for medical services. As the first historians of Medicaid wrote in the mid-1970s, the program "positively encouraged elderly persons to go to nursing homes after a period in hospital. . When Medicare benefits stopped, the bill (for those eligible) landed in the lap of Medicaid" (Stevens and Stevens 1975, 1988).

The differences between Medicare and Medicaid sharply exemplify the thesis of this article—that history and, in particular, the cumulative historical experience of epidemiology shapes politics. Medicare was the culmination of a history that reached back to the early decades of this century. As social insurance, it was the outcome of the accommodation of politics and epidemiology I have described in this article. Thus, it adapted a definition of chronic disease which required diagnostic precision and relatively high acuity. Medicaid, in contrast, emerged from a public welfare rather than an insurance tradition. In the welfare tradition, benefits are responsive, not to a diagnosis, but rather to the need for care as demonstrated by economic and social criteria. Chronic illness created chronic poverty and thus eligibility for welfare programs. Chronic disease, the contrasting Medicare or insurance standard, could be defined in ways that limited the liability of public and private insurers.

Since the 1960s: Chronic Illness and the Politics of Health Policy

By the early 1970s Americans had considerable third-party coverage for chronic disease. Medicare, supplemental insurance (written by the

Blues and commercial insurance companies), and Medicaid, in combination, paid for most of the care required for illnesses of long duration among the elderly. As a result of the Social Security amendments of 1972, everyone with end-stage renal disease, and beneficiaries of Social Security disability insurance (after a waiting period) were entitled to Medicare. Recipients of categorical assistance–federal aid to families with dependent children and the blind and state disability programs—became eligible for Medicaid. Most employed workers had health insurance which covered substantial costs of managing chronic illness.

Critics emphasized the limits of this coverage and the gaps in it. Fiscal intermediaries—the Blues plans and insurance companies that administered Medicare—often interpreted federal regulations for nursing home and home health care in ways that withdrew or withheld services from people who believed that they still needed them (Leader 1986; Fox et al. 1987). "Spending down," the process by which people achieved medical neediness, was often demeaning. Some lawyers advertised that they could help people to protect their assets while qualifying for Medicaid. Voluntary health insurance was inadequate for many workers; many others had no insurance at all (Sullivan and Lewin 1988).

Nevertheless, a new principle of health policy had been established during the 1960s and 1970s. Access to medical services in the United States was no longer a result of either personal wealth or employment or, in their absence, the availability of public or private charity. Old age, disability, and poverty now triggered entitlements, however limited they were in comparison to those in other industrial countries. In a society in which the burden of chronic disease and disability was increasing, this principle was a significant innovation, although many critics considered it to be inadequate and belated.

The coalition that had sustained the innovations in health policy of the 1960s and early 1970s almost immediately began to break apart. The rising cost of medical services became alarming in an economy disturbed by both inflation and recession. Moreover, the comprehensive coverage provided by Medicare and many insurance policies stimulated demand for medical care and thus inflationary pressure on the price of health services. The supply of services—especially of beds, equipment, and specialists—grew in response to generous third-party payments. By the late 1970s cost containment was a new goal of policy to finance medical services (Fox [1986] 1988).

The consensus that chronic illness was the central concern of policy to finance health care remained unchanged. So did the pressure of epidemiology on the institutions of the health polity. Between 1960 and 1981 the prevalence of several leading chronic conditions had increased by over 100 percent (including heart conditions, diabetes, and arthritis), and nine others had increased by more than 50 percent (Wilson and Drury 1984).

The centrality of chronic illness survived the policies of the Reagan administration. These policies included: reduced budgets for categorical and entitlement programs; restrictions on eligibility for SSDI; regulatory constraints on Medicare; and the devolution of responsibilities to the states. On the one hand, federal, state, and employer actions accelerated the "ongoing segmentation of the health insurance market, which targets coverage to the healthy" (Law and Ensminger 1986, 79). On the other, more than a dozen states organized health insurance pools to offer coverage both to persons with low incomes and those whose illnesses were uninsurable. In 1986 Congress mandated that employers offer continuing coverage of health benefits for employees they had terminated; 31 states had already done so. Researchers documented that utilization of home health benefits increased despite federal and insurer efforts to dampen demand through regulation (Leader 1986). Other studies, however, described the many limitations of coverage for chronic illness and disability—for example, the emphasis on price over performance in reimbursement for wheelchairs (Shepard and Karon 1984).

1988 and Beyond

In the last year of the Reagan administration, moreover, there was evidence that the political coalition that had gradually accommodated health policy to the pressure of chronic illness was again in the ascendancy (Fox 1988). After considerable negotiation, for example, Congress amended Medicare to provide coverage for some of the catastrophic costs of illness, even if at the expense of the elderly themselves through higher premiums. Moreover, the new legislation removed the requirement that coverage of nursing home and home health care must follow a period of prior hospitalization. This change may prove to be a significant precedent—the reversal of the explicit priority accorded to acute care in more than half a century of health insurance and public payment policy in the United States. Even before the new catastrophic benefits were fully implemented, moreover, leading groups in the center of the political spectrum advocated expanding Medicare to cover more of the costs of long-term care (Iglehart 1989).

The United States has not solved the problem of paying the costs of care for the chronically ill. Our health policy still spreads payment for the costs of chronic illness and disability, especially for the young and people of working age, over a smaller percentage of the population than any other industrial country does. Thus, every employed person finances, through the FICA tax, most of the cost of chronic illness and disability for people eligible for Medicare, and the elderly pay part of the cost in premiums and deductibles. Everyone who pays federal and state income tax finances Medicaid and care for the indigent. Most of the cost of managing chronic illness and disability for the rest of the population, however, is spread over employees and employers in particular firms or industries. As a result of the American way of distributing the costs of chronic illness, working people and their children are disadvantaged. A study published in the summer of 1988 concluded that "among insured respondents with chronic or serious medical conditions, working-age adults were much more likely than the elderly to have needed supportive medical care but not to have received it and to have had their illnesses result in major financial problems" (Hayward et al. 1988).

Moreover, people with some chronic diseases or disabilities are at high risk of being excluded from voluntary insurance plans. According to the congressional Office of Technology Assessment in the spring of 1988, of 30 conditions for which applicants for individual insurance policies were either denied coverage or forced to accept "exclusion waivers" by a large sample of Blue and commercial plans, all but one (fractures) were generally regarded as chronic illnesses, and another, AIDS, is rapidly becoming defined as one. Another 15 chronic conditions simply triggered higher premiums (Eden, Mount, and Miike 1988).

For six decades Americans have, hesitantly and amid political turmoil, created public and private policy to pay most of the costs of managing the growing burden of chronic illness and disability. During these decades, some critics repeatedly insisted that public and private insurance could, without intolerable additional cost, be made comprehensive, equitable, and efficient. Until the 1960's, however, such proposals were casualties of the conflict among interest groups whose leaders regarded the choice between compulsory and voluntary insurance as the major issue in health policy. Nevertheless, the percentage of the population covered by health insurance and the array of benefits for which they were covered gradually increased.

Since the 1960s financing care for chronic illness and disability has been the combined responsibility of social (government) and voluntary insurance, welfare programs, and individuals or their families. Changing epidemiology and demography were translated into a political pressure as potential voters submitted insurance claims or requested assistance from public agencies. Those who have advocated more rapid advance in the incremental accommodation of health policy to chronic illness, whether they worked for government, interest groups, or the insurance industry, have often benefited from having contradictory policies urged by people to their left and their right. In 1989 liberals and conservatives continue to offer alternatives. But the epidemiological pressure of chronic disease and disability also continues.

The accommodation of the health polity to epidemiology is, on the evidence of the past half century, likely to be both gradual and inexorable. In 1989 the major controversies about financing health services concern long-term care and cost containment. These issues are often presented as in conflict. But the account of events in this article suggests that they are complementary. The problem of financing long-term care may only prove to be soluble in the context of cost containment. Thus, if reimbursement policies are modified to include incentives to prevent disease and to treat it in less costly settings and with marked changes in how physicians' fees are calculated, increasing demand for care for chronic illness could be met without sharp increases in cost. If, that is, health policy lowers the priority accorded to acute care and seeks to reduce the incidence of chronic disease, then the full accommodation of interest groups and ideology to epidemiology may occur.

Note

1. Both in this paper and in my previous work I have urged revision of some of the conclusions of a large literature on the history of health insurance in the United States. Readers who want to weigh more

precisely my strictures about familiar accounts of the history of health policy in general and of insurance in particular are invited to consult my recent methodological and historiographic publications (Fox 1983, 1986).

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