His duties as Chief of the Division of Social Medicine and Director of the Health Insurance Plan Medical Group at Montefiore Hospital have not kept George Silver from contributing to journals both technical and general a series of trenchant commentaries on the passing medical scene. A characteristic touch has been the gem-like introductory quotation, culled from great writings in a wide variety of fields. One of his favorites comes from William Osler: “Everywhere the old order changes, and happy they who can change with it.” Silver’s first book, reporting on the experience of the Family Health Maintenance Demonstration, indicates clearly that few have perceived the tumult in science and society more sensitively than have those at Montefiore, and even fewer have shown the capacity for adapting to the changes with such zest.

The report is introduced via William James: “I think it is only right to discourage at the very beginning those dilettante readers who are searching for an unbiased dissertation.” Its conclusion accepts the sanction of Sigmund Freud: “The conceptions I have summarized here I first put forward only tentatively, but in the course of time they have won such a hold over me that I can no longer think in any other way.” The selections are those of the author, but they serve the purposes of the reviewer remarkably well. The project was a passionate work of love as well as a careful piece of research. While the data are analyzed with proper objectivity, the dissertation itself is nicely biased and the conceptions are put forward with a freshness of conviction that demand respect even when they lack full documentation.
The old order changes . . .

Our expanding population presses relentlessly upon existing re-
sources for health protection. Those called senior-citizens (to use
the euphemism which mocks their cast-off status) steadily expand
in number and in relative proportion to the working population.
Ours is an increasingly mobile people, pushing away from the rural
areas—and, more recently, out of the old city centers—into peri-
urban concentrations of row houses and shopping plazas. The auto-
mobile dominates and shapes the social scene, exacting its toll in
sclerosis of vehicular arteries, infarction of the urban heart, hyper-
trophy of suburban collaterals, and toxic alteration of the atmos-
phere. Meanwhile, the television set, that deceptively innocuous
carrier, compounds the malady by substituting pink and Saran-
wrapped distortions for the facts of life, and by isolating the crowded
city dwellers from each other and from the discovery of common
concerns.

The economy spurts, often madly, with the energy of military
production, as private prosperity contrasts strangely with the poverty
of public services. Withal, increased purchasing power and advancing
levels of education bring the effective demand of consumers
closer to the elusive value of actual need. Technology triumphs on
every side, no less in the medical sciences, while sociology pants to
catch up. The individual, isolated and alienated in a fragmented
society, is ever more dependent upon synthetic forms of social or-
organization for his personal security. Central heating fails to warm
the lonely heart.

Inevitably, patterns of illness and disability also change, as the
aging population and the mechanized society produce the burdens
of chronicity, neurosis, hypersensitivity, and chemical toxicity. The
focus of need shifts from the urgent house call and the acute hospital
case, to the periodic and long continued services of the health con-
servation team in the modern medical center.

The armamentarium of Medicine also changes. Research and
development race far ahead of social application. Advances in the
economics and organization of medical care parallel those of the
laboratory and the surgery. Health insurance and tax support lower
the traditional economic barriers to needed health service, while
group practice and health center techniques enhance the effective-
ness of its delivery.

The front of progress embraces the preventive and rehabilitative
as well as the more traditional aspects of medical diagnosis and
treatment. The resulting complexity demands both specialization and
teamwork; the inescapable costs require both efficiency of organiza-
tion and economy of design. The people are different, the society is
different, the diseases are different, the form and content of medical
care are different. How obvious would seem the need for something
fresh and new in the way of health service?

Family as health unit

A definite rebirth of interest is evident in recent years in the family
structure and community setting which condition and characterize
the individual. Voices of protest against the impersonal technology
of modern medicine have been raised by such giants of Social Medi-
cine as Henry Sigerist and Alan Gregg. Robinson's The Patient as
a Person and Richardson's Patients Have Families reflect the con-
cerns of the preceding medical generation. An increasingly articulate
group of social scientists, including Talcott Parsons, Clark Vincent,
and John Clausen, among many others, have stressed the crucial
role of the family in individual health and illness. The impact of
culture and class are equally well documented by Lyle Saunders,
Benjamin Paul, Leo Simmons and their colleagues.

Some of this turmoil is beginning to affect the more perceptive of
the American medical schools, as has been true for some time now in
British and Scandinavian university centers. Curriculum revisions to
strengthen teaching in the social aspects of medicine have been
underway at Western Reserve, Cornell, Oklahoma and other schools,
while special demonstration units in family or community medical
care are features of the new emphasis at, for example, Kentucky,
Vermont, Colorado, and Temple.

The reaction to the ultra-microscopic and intensely biochemical
emphasis of current scientific medicine is now well underway, at least
in the literature and on the university campus. Although many im-
Important demonstrations of new techniques in service organization and group financing have appeared, almost none have directed the major emphasis to the central problem of personal, continuous care of the total person, using the family as the bio-social unit, and considering the whole of the dynamic socio-economic environment in the maintenance of health.

Family health maintenance

The concepts of health maintenance and family care centers, while excitingly original in the Montefiore demonstration, have ancient roots and at least a few modern expressions. The Greeks of the heroic era of the 6th and 5th centuries B.C. gave primary emphasis to the values of physical vigor, defining health as the state of perfect equilibrium between organism and environment. Classical Rome added the concept of mental health, and stressed the common-sense importance of balanced activity in life. Human and ethical considerations as factors in the dynamics of health were contributed during the early Christian era. As forerunners of the family health center, the group baths and spas of the Middle Ages re-emphasized the importance given earlier by the Greeks to hygiene and gymnastics. With the industrial revolution and the urbanization of society, the principles of community sanitation and health education inevitably appeared.

Such historical roots nourish the tree of modern social medicine. Sigerist has offered a definition of health which serves well as text for the current efforts toward family health maintenance:

"A healthy individual is a man who is well balanced bodily and mentally, and well adjusted to his physical and social environment. He is in full control of his physical and mental faculties, can adapt to environmental changes, so long as they do not exceed normal limits; and contributes to the welfare of society according to his ability. Health is, therefore, not simply the absence of disease: it is something positive, a joyful attitude toward life, and a cheerful acceptance of the responsibilities that life puts upon the individual."¹⁰

The idea of approaching the conservation of health through
family-oriented services provided in a community health center was
given original expression in modern times by the Peckham experi­
ment in London,11 duly acknowledged in the introduction to Dr.
Silver's report. The health center idea in general, as a facility which
coordinates preventive and curative personal health services for a
community, is now receiving considerable attention in public health
and hospital circles. The Queensbridge Project in New York City
is a recent example.12 All in all, the Montefiore Family Health
Maintenance Demonstration is of enormous significance to the direc­
tion and content of medical care in the United States at this moment
in history. To what extent has the project succeeded?

The Montefiore Demonstration

The Family Health Maintenance Demonstration involved the
provision of basic health services by specially constituted health teams
to a randomly-selected sample of young families drawn from the
membership of the Health Insurance Plan of Greater New York
served by the Montefiore Medical Group. A control group of fami­
lies, similarly selected and carefully matched for comparability, was
established for research purposes. The special features of the Demon­
stration were the physician-nurse-social worker team, the emphasis
upon preventive and personal care, and the concept of the family
as the health unit.

The report of a conference of interested experts, convened in 1953
by the Milbank Memorial Fund, provides much insight into the ob­
jectives and the early planning efforts of the project team.13 As in­
dicated by Dr. Martin Cherkasky, a prime mover and first Director
of the Demonstration, the goals were fivefold:

(1) to determine the factors motivating families to improve
their health status,
(2) to determine the range and kind of services needed by
families,
(3) to record and analyze the data accumulated on study and
control populations,
(4) to measure the impact of the special services provided,
(5) to develop information on family life and health practices.
Silver identifies the basic motivation in a lively introduction to the book. The family was clearly to be the unit of service. The physician was to share authority and responsibility with the public health nurse, the social worker and, less directly, with the various consultants in psychiatry, health education, nutrition, sociology, etc. Prevention and treatment were to function in the context of the prepaid, group practice, comprehensive service program of the Health Insurance Plan, Montefiore Medical Group. The emotional components in illness and medical care were to be fully inter-related with the physical aspects.

The underlying assumptions are carefully presented, and help considerably to explain to the reader the particular conformation of the project. The psychodynamic concepts of Bowlby and Merton, stressing the primary importance of mother-child relationships and family influences in the development of both personality and health patterns, were accepted as the basis for the program design. Health education was emphasized as a fundamental factor, and the health team as the necessary organizational form.

The project, therefore, assumed from the outset the triple responsibility of service, research and demonstration. It is the opinion of this reviewer that it succeeded in all three. Yet, the services provided did not always produce the results expected; the research data did not always confirm the original hypotheses; and the demonstration was not always a positive one. In all, the project elucidated most of the important questions. It provided, however, more questions than answers. This, as Dr. Silver would be the first to argue, is pure social value. . . .

The study population ultimately comprised 144 families, counting the original pilot sample. Of this total, some 103 families completed the final evaluation process at the end of four years of health services. A similar number of families were selected as controls; 132 were available for initial evaluation procedures and 70 completed final evaluation. (The exact number of study and control families at various stages of the Demonstration is somewhat difficult to determine from the report; the tabulations in the text and in the appendix are confusing and at some variance from each other).
Two health teams of internist (plus pediatric consultant), public health nurse and social worker provided basic health services— including personal doctor care, preventive and educational services, home visiting, and family counselling to all members of the study families. Consultants in psychiatry, psychology, health education, nutrition, and social science were available to the teams. The full services of the Montefiore Medical Group (medical specialists, laboratory, radiology, hospitalization, etc.) were also available, since all families were already Health Insurance Plan members.

Initial evaluation procedures took two years to complete; the demonstration services extended over a four-year period; final evaluations also consumed two years. The extensive services provided to families in the project included initial home visits, physician’s health evaluation, social work interview, team and family conferences, psychological testing, nutrition review, socio-economic information, and freely available services of any member of the health team on request. No charges were rendered for these services. Control families contributed initial information by mail (in a compromise effort to establish a baseline and yet avoid the “Hawthorne effect” of influencing controls), and received complete final evaluatory examinations and interviews in the same manner as did the study group.

Findings of the study

A mountain of data—medical, demographic, sociological, psychological—was accumulated and subjected to detailed analysis. While this reviewer is not competent to judge the quality of the statistical methodology, he is well impressed by the diligence of the effort, the use of top-flight consulting talent, and the rigorous self-discipline manifest in the interpretation of the findings.

In general, the impact of this complex of services upon the study population was surprisingly small. Indices of physical health, nutrition and housing were shown to be somewhat improved in study over control families, but measures of over-all morbidity, mental health and family adjustment were essentially unchanged. (Actually, ratings for inter-personal adjustment as recorded by the social worker declined for the study group over the project period). Not much
“new” disease was detected which had not been previously known to the Health Insurance Plan physicians, although the intensive investigation brought emotional problems to light in 44 per cent of the families studied.

With respect to the design of the team services themselves, the analysis of findings indicated much of positive value and also that patient perceptions differed in some regards significantly from those of the staff. In general, the health team was well received and used by the families, with close personal relationships developed.

The families made their own clear-cut revisions in the original blueprint. Despite the fact that the project protocol indicated that doctor, nurse and social worker were co-equals on the team, the patients quickly made the physician the captain. The nurse was accepted and used far more readily than was the social worker, on both teams and with different individuals. The role of social class in the differential use of various team members provides a fascinating commentary on the varying “image” of professional health workers.

Most significantly, from the public health point of view, the findings offer little support for a number of long-cherished tenets of preventive medicine, and, indeed, require the rejection of a few of the basic hypotheses of the project itself. The most disturbing casualty is the periodic health examination, which, although applied diligently, failed to demonstrate a measurable health value. More effective, it is claimed, was a careful examination at the time of initial symptoms, plus the periodic family health conference. A related victim of the appraisal was the standard set of health education techniques: group meetings, bulletins, exhibits, etc. These seemed to the evaluators to be less effective than the natural “community network of influence” which did not operate in this dispersed group of randomly selected families. Finally, much doubt was thrown upon the usefulness in the front line of the health service team of the social worker, whose functions, it was suggested, might well be added (with special prior training) to those of the public health nurse.

These are unsettling observations, and deserve the most careful scrutiny by all concerned with progress in medical care.
Utilization experience

The Demonstration provided a unique opportunity to study objective need and articulated demand for health service in the same population. The utilization experience is fascinating in this context. Despite the fact that few new conditions were detected and that gains in overall health status were modest, study families used almost twice as many physicians' services as did the controls. The personal team doctor provided more direct diagnostic and treatment services and made less referrals to specialists, in contrast to warnings that the reverse would be true in a prepaid, group practice setting. All services declined sharply over the four years of the Demonstration. A very high proportion of all persons in the study group, 80 per cent, reported positive symptoms (the Cornell Medical Index was routinely used), although only 15 per cent were evaluated as failing properly to "cope" with their life role. In general, the demand for service correlated with the plethora of subjective symptoms rather than with the existence of objectively determined medical need. Two-thirds of the sample had the same Cornell Medical Index score after four years of service as they had at the onset!

A nagging question began, at about this point in the report, to insinuate itself into the reviewer's consciousness: do health maintenance services as currently constituted really affect the health of the recipients?

Patient satisfaction

One of the strengths of the Demonstration effort was the skilled and perceptive work of the social science consultants. Eliot Friedson has contributed an important analysis of the much-discussed doctor-patient relationship, both in the volume prepared by Silver and in a separate work of his own.¹⁴ His studies of patients' reactions indicated overwhelming satisfaction on the part of the "consumers" and much responsiveness to the warmth and obvious concern of the team members. In interesting contrast to the findings of the medical appraisers, some 40 per cent of the patients reported that their health had been improved, and almost half thought that treatment of specific health problems had been instituted for the first time.

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Nevertheless, 45 per cent of Demonstration families used outside physician services at some point, and only a minority took advantage of the available services of the social worker or participated in the health education activities. Friedson suggests that the explanation for much of this utilization pattern is to be found in an understanding of the clash between lay and professional referral systems operating within the culture. He places great stress upon the powerful dictates of the community on the one hand, and the barriers created by tight medical group organization on the other. Food for much thought here for the health professions. . . .

**Evaluation of the Demonstration**

It is necessary to distinguish quite carefully between the effectiveness of the services offered and the validity of the evaluation system used. It is equally necessary to differentiate between the quality of the Demonstration itself and that of the report which describes it. Attention is given first to an appraisal of the services as provided during the course of the project.

The essential components of the Demonstration were (as stated by its architects) the health team, the integration of preventive and therapeutic services, and the emphasis upon emotional as well as physical components of health. Yet, the final data indicate, and Dr. Silver emphasizes, that (1) the team was not used by patients in the manner contemplated by the project designers, (2) classical techniques of preventive medicine did not demonstrably improve health status, and (3) the measures of mental health reflected some decline over the four service years. The author readily admits the failure of the hypotheses involving preventive medical techniques. However, his convictions regarding the health team and the effectiveness of psychiatrically-oriented services remain unshaken. (Freud, cited by Silver: "I can no longer think in any other way.")

Evaluation of the evaluation is more difficult, especially for a reviewer inexpert in statistical methods. Overall, Silver and his colleagues have done a highly commendable job of seeking maximum objectivity and analytic comparability in the research aspects of the project. The problems are more those of the difficulty of
applying experimental methods to the health service field than of shortcomings in actual research techniques.

The first question is that of feasibility as a demonstration. Does it make sense to set two fairly elaborate health service teams to work for a period of eight years in order to provide and appraise a set of special health services for 144 families (and to observe comparable controls), over and above the full medical care benefits already available to them through a comprehensive group practice prepayment plan? The report does not present cost figures for the Demonstration, an unfortunate omission, but one can assume that per capita expenditures must have been considerable. A companion question is that of study group numbers: the four-year experience of 144 families is a narrow base upon which to erect an elaborate structure of health evaluation. The significant proportion of both study and control families that did not complete the final evaluation is an additional factor in this connection.

Is change in health status measurable? The value of the research component of the project rests largely upon the answer. Health eludes easy definition; it relates closely to the norms and concepts of different eras and different social classes. Physical, psychological, functional and cultural "health" do not usually move along the same scales in the same direction and at the same pace. Indices of measurement are imperfect instruments. (Does the I.Q. measure intelligence?) The perceptions of doctors, sociologists, statisticians and patients do not coincide. (Nor, as Silver has shown, do those of nurse and social worker on the same team!) The highly subjective character of the evaluation technique used in this study raises further questions of validity.

The research group understood these problems as can only those who wrestle with them. Yet, evaluation scores for individual members of a family presented no consistent family pattern. The predictive value of the initial interviews was not high in comparison with later findings. No clear-cut correlation emerges between the use of health team services and improvement in health status, although the analysis on this point is admirably detailed and suggests that physicians' care early in the time period may well have had a salutory
effect upon later need for medical attention.

With respect to the service (rather than the research) aspects of the project, the contribution is far more solid. While many questions are yet to be resolved concerning the ultimate nature of the ideal health team (internist vs. pediatrician, role of the generalist, nurse vs. social worker, captain or co-equals, etc.), there can be no question regarding the importance of the role of teamwork in medical care nor of the essential nature of the no-longer "ancillary" health personnel. Similarly the ability of the person-oriented physician in reducing specialty referrals and in increasing patient satisfaction should convince the most skeptical.

In the opinion of this reviewer, the two additional concepts of greatest value for future health service efforts are those of the family health conference and the close association of the public health nurse with the medical practitioner. In a program now being developed by the new Cleveland Health Foundation, the effort will be made further to test and develop these important contributions of the Montefiore Demonstration.

What of the Demonstration over-all? Were the stated objectives met? The assumptions validated? Does the design fit the needs of the day?

If Cherkasky’s early statement of goals is used for the test, the answer is unclear. Friedson’s observations do throw some light on family motivation; the range of needed health services has been clarified (or, at least, extended to include the health maintenance techniques); much new information on family health has been made available; the impact of the special services has indeed been deftly measured, even though the results are equivocal.

Silver’s basic assumptions must also be appraised. The hypothesis that the mother-child relationship is the primary conditioner of later personal adjustment (if not of health status itself) was, in a research sense, really not tested by the Demonstration. The assumption that health education can positively affect the family relationship and, thereby, the family health was rejected by the author. The concept of the health team does emerge strengthened and defensible—but altered by the experience of the project to a form
significantly different from that projected at the outset.\textsuperscript{15}

The final question must relate the project to the society in which it operated and to the benefit of which it hoped to contribute. Despite the problems of defining or measuring health, despite the questionable evidence for "improvement" in the study as against the control families, despite the difficulty of applying formal research methodology to the field of family health service, despite the controversial assumptions about the role of maternal influence in maturation, despite all of the assorted problems in an effort as complex as this one—the Demonstration offers an essential new component to the spectrum of health service. What is more important, it offers a vital concept.

The component is, of course, that of family health maintenance itself, as distinct from classical preventive and rehabilitative services to the individual. The triad of health team, family conference, and integrated public health nursing emerge as the significant elements.

The concept is both old and new, in that its ancient wisdom has been so long forgotten: that prevention and treatment are one, and that no health program which hopes to have meaning for the families it serves can ever again ignore this unity.

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REFERENCES


10. Sigerist, op. cit., p. 100.


