HOSPITAL ADMINISTRATION ORAL HISTORY COLLECTION

Lewis E. Weeks Series

Sam Shapiro

SAM SHAPIRO

In First Person: An Oral History

Lewis E. Weeks
Editor

HOSPITAL ADMINISTRATION ORAL HISTORY COLLECTION
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Sam Shapiro

CHRONOLOGY

1914	born in New York City, February 12
1933	Brooklyn College, B.S., mathematics
1934-1935	Columbia University, mathematics and statistics
1935-1943	Department of Welfare, New York City
1943-1944	Selective Service System, Research and Statistics
1944-1946	U.S. Naval Reserve
1946-1947	George Washington University, mathematics and statistics
1947-1954	U.S. Public Health Service, NOVS, Natality Analysis Branch, Chief
1954-1955	National Opinion Research Center, Senior Study Director
1955-1959	Health Insurance Plan for Greater New York (HIP) Associate Director for Research and Statistics
1959-1973	Health Insurance Plan for Greater New York (HIP) Vice President and Director of Research
1961-1980	Columbia University School of Public Health and Administrative Medicine, Lecturer
1972-1978	Mount Sinai School of Medicine, Department of Community Medicine, Adjunct Professor
1973-1982	Johns Hopkins University, Health Services Research and Development Center, Director
1973-1984	Johns Hopkins University, School of Hygiene, Department of Policy and Management, Professor
1978-	Johns Hopkins University, School of Medicine, Oncology Center, Joint Appointment
1984-	Johns Hopkins University, School of Hygiene and Public Health, Department of Policy and Management, Professor Emeritus

MEMBERSHIPS AND AFFILIATIONS

American Association for the Advancement of Science, Fellow

American Cancer Society, Advisory Committee

American Epidemiology Society, Member

American Heart Association - Epidemiology, Fellow

American Journal of Public Health, Editorial Board, Member 1975-1979

American Public Health Association, Fellow

American Public Health Association, Publication Board, 1980-

American Society of Preventive Oncology, Member

American Statistical Association, Fellow

Association for Health Services Research, Member

Group Health Association of America, Member

Group Health Journal, Editorial Board, 1979-

Health Care Financing Administration (HCFA)

Health Services Research, Editorial Board 1980-1983

Institute of Medicine of the National Academy of Sciences

International Epidemiological Association, Member

International Society of Cardiology (Epidemiology), Member

Journal of Chronic Diseases, Editorial Board, 1981-

Medical Care, Editorial Board, 1975-1978; 1984-

National Cancer Institute

National Center for Health Services Research and Development

National Center for Health Statistics

National Institute for Child Health and Human Development

Population Association of America, Member

MEMBERSHIPS and AFFILIATIONS (Continued)

Robert Wood Johnson Foundation

World Health Organization (WHO), European Region

AWARDS AND HONORS

American Public Health Association

Award for Excellence, 1977

American Public Health Association

Statistics Section Award, 1981

American Society of Preventive Oncology

Distinguished Achievement Award, 1985

Association for Health Services Research

Recognition of a Distinguished Career in

Health Services Research, 1985

Delta Omega, 1980

Johns Hopkins University, School of Hygiene and Public Health

Golden Apple Award for Teaching, 1979-1980

New York City Public Health Association

Merit Award, 1972

BOOKS

Infant, Perinatal, Maternal, and Childhood Mortality in the United States. (with E.R. Schlesinger and R.E.L. Nesbitt, Jr.) Cambridge, MA: Harvard Press, 1968.

Breast Cancer Screening, the Health Insurance Plan Study and Its Sequelae (with W. Venet, P. Strax, and L. Yenet) Baltimore: Johns Hopkins University Press, forthcoming.

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91. Weinblatt E, Shapiro S, and Frank CW: Prognosis of Women with Newly Diagnosed Coronary Heart Disease - A Comparison with Course of Disease Among Men. AJPH July 1973, 63:577-593.

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WEEKS:

Mr. Shapiro, I see that you are younger than I am. You were born in 1914.

SHAPIRO:

That's right, on Abraham Lincoln's birthday.

WEEKS:

Yes. Andy Pattullo, as an example, was born on that day in 1917.

SHAPIRO:

He's a youngster.

WEEKS:

You have your Bachelor of Science degree in mathematics from Brooklyn College in 1933, and then I have a note here that you continued studying math and statistics, both at Columbia and George Washington University.

SHAPIRO:

This was in the immediate post-war period when I decided to take advanced statistical theory under the GI bill. They had, at that time and for years subsequently, a very strong, excellent theoretical and practical statisticians. When I returned from the service in 1946, we moved back from New York to the Washington area. I was just about two or three blocks away from GW and it turned out to be very convenient to take courses in the evening. It was an excellent experience.

I had not planned to follow a curriculum that would lead to an advanced degree. I was just interested in the specific courses. I got what I wanted and felt I needed.

WEEKS:

This is the important thing. I had never thought of the opportunities

that George Washington University might offer in the late afternoon and evening courses. I knew that in hospital administration they had one of the larger enrollments of any of the other programs. I think they were running 60 or 70 students while most of the other schools had 20 or 25. It was just an interesting question I thought I would ask you. I didn't greatly relate it to your career.

SHAPIRO:

George Washington University, of course, is located in a central spot for many individuals who, as a result of their government employment, feel the need for either specialized or comprehensive further training. The university adapted its graduate facilities to function in that way. The evening courses that I took sounded like this was the usual way to do things.

WEEKS:

You said you returned from the service in 1946. I don't have a record of that. How long were you in the service?

SHAPIRO:

I was a naval officer for two years. Of those two years, I had sea duty for eighteen to twenty months — fortunately, no action.

WEEKS:

Good.

Then when you came back you went to work for the government?

SHAPIRO:

Yes. I went to work for the Veterans Administration. In fact, when the war ended and I had several months remaining before being discharged, I was approached by Dr. Robert Ford with whom I had worked at the Selective Service Administration. He wrote to me and asked whether I would like to join a new

group that was being formed at the Veterans Administration, whose main function would be to carry out surveys of veterans with a special emphasis on their attitudes, expectations, and use of veterans benefits -- in particular, on-the-job training and school.

This sounded very exciting to me. I joined the group which was headed by Felix Moore. You know Felix. He headed the Department of Biostatistics here at the University of Michigan School of Public Health.

WEEKS:

For a long time we were not with the School of Public Health.

SHAPIRO:

Felix Moore had established the Survey Research Group and attracted a number of outstanding people including John Clausen, John Eberhardt, Bob Ford. Then I came in and we did our thing. We did surveys. I think we broke ground in the development of mail questionnaires and procedures for increasing the response rate to a very respectable level -- high up into the eighties.

WEEKS:

Remarkable.

SHAPIRO:

Yes. Then the administration decided that it wasn't necessary to get veterans' opinions and attitudes and the group was disbanded.

The group existed for only about a year and a half, but in that short period it produced quite a few important studies. In 1947, Felix Moore joined the National Office of Vital Statistics. Do you remember that? With Halbert Dunn? Does the name mean anything?

WEEKS:

The name rings a bell, but I can't tell you...

SHAPIRO:

Halbert Dunn was the director of the National Office of Vital Statistics previously been a unit within the Bureau of the Census and later moved over into the Public Health Service. When I joined the NOVS it was already in the Public Health Service. Felix took the position of Branch Chief for Natality Analysis and I came in as his assistant. Within two or three months he went out on loan to California to develop and test the predecessor for the National Health Survey. This was one of a number of pretests and large scale pilot studies. Felix never came back to NOVS; from California he went to the, then, National Heart Institute. There I was, really a novice in the field. Even the terminology was new to me. Within a few months, Halbert Dunn said, "Well, Felix is gone. He won't come back. Why don't you become the Branch Chief?"

I said, "Okay."

That became a very interesting and stimulating experience. I was there until 1954. In those seven years the field of activity of the National Office, and the Natality Analysis Branch in particular, expanded. Halbert Dunn was a thinker. He was the man who introduced the concept of wellness, but in a very mystical way and this got him into trouble. However, he had ideas that today, in part, are imbedded in some of the concepts that we have about the quality of life. So it was a very good exposure for me. His style of leadership was to let you do your thing. He was doing his thing, and if you were Branch Chief it was your show. For me, personally, it fit in with my style. I never enjoyed supervision. Here I was an independent researcher, in a new field. We carried out a number of landmark studies, one of which established the basis for developing information on low birth weight and neonatal mortality utilizing matched birth and death records information.

That was the first national study of its kind.

One of the remarkable aspects of this experience was that during that period, Halbert Dunn established the National Conference on Records and Statistics which meant that all of the leading people in the health statistics field and many persons responsible for health and vital statistics at a state and local level would come together. I don't remember whether it was annual or biennial at the time. This provided an opportunity to gain exposure which flowered into a working relationship with a huge network of people in the health field. The activity came to an end when I was requested to leave the federal government during the McCarthy period.

WEEKS:

You were one of the victims.

SHAPIRO:

Right. This happened in 1954.

WEEKS:

What had you been accused of?

SHAPIRO:

Being a communist. Actually the accusation was that I had signed a petition for someone who was in deep trouble in the school system in New York. I had signed that petition back in 1939 or 1940.

WEEKS:

And this was the early '50s?

SHAPIRO:

It was in 1953 when the ball started rolling and in 1954 when I exited. I found a very broad feeling, not just a sympathy, but understanding among the professionals in the field. For about a year I was a Senior Study Director in

the National Opinion Research Center where I had previously been involved in the development of the first national survey on utilization and expenditures for health care and goods. This was a Health Information Foundation funded project carried out for George Bugbee and Odin Anderson.

WEEKS:

They were working on surveys too, weren't they?

SHAPIRO:

The surveys were out by NORC for the Health Information Foundation. In 1952, when NORC was working on the first series of surveys of this type, they invited me to Chicago to help them put together the questionnaire. I did that and worked closely with their senior staff. Then in 1954, when I left government, they were interested in having me split my time between their Chicago and New York office where they were developing a number of additional surveys. I worked with Paul Sheatsley when he was in New York.

I had income, that was no problem. But I did go through a difficult period, particularly separation from the family. My wife and children continued to live in the Washington area, and I was commuting three ways -- Washington, Chicago, New York and back to Washington.

While I was in New York I reactivated a friendship with Paul Densen.

WEEKS:

Was he at Harvard then?

SHAPIRO:

No. He was the director of the Division of Research and Statistics at the Health Insurance Plan of Greater New York (HIP). He knew I was interested in working at HIP. We would have lunch, and I became very familiar with the activities at HIP. An unusual turn of events finally led to a decision to

bring me on board at HIP. There didn't seem to be any closure to our discussions, so I opened negotiations with Len Rosenfeld, who at that time was in Boston on a regional planning activity. Len invited me to come up there to be his research director.

I was making rounds to say goodbye to my friends in New York and was in Dr. Guttmacher's office saying goodbye to him when he got a call from Paul Densen. Guttmacher was chairing a quality of care review committee in obstetrics/gynecology for HIP and Paul had some business with him. Guttmacher said, "A friend of yours is here to say goodbye."

He said, "Who?"

Guttmacher said, "Sam."

Paul got on the phone and said, "Don't move yet. I'll let you know tomorrow." That night the deal was closed; Len was very gracious and forgave me. I went to HIP as the Associate Director for Research and Statistics with Paul Densen in July 1955.

I would say that the four years Paul stayed at HIP -- from there he went to the New York City Health Department, as you know -- were not only productive, but very important formative years for me. We had a marvelous opportunity at HIP for a special reason. That is, there was a concept behind HIP which had imbedded within it a number of questions requiring resourceful and strong support from George Baehr, the president, for inquiry.

WEEKS:

He was still around?

SHAPIRO:

Oh, he was present at that time. The concept was that HIP was an experiment, and that it was essential to learn what this type of insurance

program meant for the care of people and for the outcome of care. It was formulated around a general question, "What difference does it make to have a comprehensive capitated, prepaid group practice instead of fee-for-service solo practice?"

The guiding principle supported by the board of directors was the need to foster research. Today we know how difficult it is to survive in a research environment unless you attract funds from foundations or government. At HIP there was a basic core of staff for whom the premium dollar met the cost. But they also carried out the basic service function of developing statistics needed by the organization to determine what was happening, and the need for modifications. There was always time to think through research that required, in some instances small, but in other instances substantial funding from the outside.

To me personally this was an opportunity to understand the organization, its philosophy and how it functioned. I would periodically ride the circuit. There were anywhere from 28 to 31 different medical groups in all five boroughs and in Nassau and Suffolk counties and I would visit them all periodically to understand them better and to have them understand me.

WEEKS:

They were all quite different too, weren't they?

SHAPIRO:

They were very different. Some of them still showed, in the 1950s, the vestiges of their early beginning with rudimentary facilities. Others were beginning either to refurbish themselves or to build new facilities, a number of which received architectural awards. So there was tremendous diversity among the medical groups.

I learned a good deal about the origins of the program, some of the strains within the program, many of the problems that existed within the program for which the only solution would be radical surgery.

WEEKS:

Would you like to talk about the beginning, the origin?

SHAPIRO:

Yes. Sure.

WEEKS:

I don't think many people, unless they do some residual readings, I don't think many people really know much about HIP.

SHAPIRO:

During the LaGuardia administration in the early 1940s, it became clear that one of the major problems the city employees faced was health care costs, and it was clear that the traditional limited insurance did not come close to meeting those costs. He turned to George Baehr to head up a committee to make recommendations.

WEEKS:

He was his personal physician, wasn't he?

SHAPIRO:

He was his personal physician, as he was Governor Harriman's. George Baehr was one of the most distinguished physicians in the city, functioning at that time as Chief Physician.

Dr. Baehr, from the very beginning, was convinced that a new form of medical practice and payment for medical care was essential. I don't know to what extent this idea came to him through his association with the developments in California. But, at any rate, this was his concept. He faced

tremendous opposition from within the medical profession who wanted to see the traditional fee-for-service, solo practice as the base for any comprehensive health insurance.

Dr. Baehr was able to carry the day with Mayor LaGuardia, and in the mid-194Øs, after the administrative structure was established, they started to develop centers around the city. One of the ideas was to have multiple centers geographically close to the people. That is why almost from the very beginning the structure consisted of some 2Ø to 25 centers distributed throughout the area rather than a single center in a borough.

Dr. Baehr tried to establish links with the major teaching institutions in the city, but despite of the fact that he had been the Chief Physician at Mount Sinai, this never really came off in the way he had hoped. However, admitting privileges for physicians were eased by the ground he had laid with the teaching institutions. The problems they ran into with other hospitals will be mentioned in a moment.

There were a number of circumstances that, from the very beginning, eased the opportunity for HIP to establish a program and make inroads into the population. Just think of it, this was the immediate post-war period with a lot of physicians being discharged, very uncertain about their futures. Worried. Many of them were young, in the service and had no practice to return to. Many had functioned on a group basis in the service and so the idea of joining an organization like HIP was not alien. As a matter of fact, for many of them the emerging program was a fortuitous, good, stroke of fortune and recruitment of physicians into HIP was not difficult at all.

Mayor LaGuardia was so convinced of the advantages of this form of practice and the need to place it on a sound financial basis quickly, that he

moved to have the plan offered to all the city employees and their dependents. Those who did not select HIP had no alternative. They either took HIP or nothing. There was no health benefit if you did not join HIP. So HIP had an exclusive. In short order HIP enrolled seventy-five to eighty percent of the city employees and their dependents. The remainder were people who felt they didn't want to have any salary deductions, were healthy or what-have-you, or their spouses had insurance somewhere else and they were covered. But HIP had an exclusive.

HIP, almost immediately, started to write contracts with other employers in the area. These were employer/union health and welfare benefit types of programs with varying amounts of money being contributed by either the union funds or the employer towards the premium, the rest being deducted from the salary. In time, contracts were also negotiated with state agencies and the Federal Employees Health Benefits Program.

What many people don't remember -- I am sure that those in the field knew it at one time -- is that for many years HIP provided only the professional services. Enrollment in a hospital insurance plan was necessary, and overwhelmingly the enrollment was in Blue Cross. Also there were self-insured programs such as District 65, a very large union in New York, which met the hospital bill. Increasingly, the contracts being written by HIP, were with funds that gave the employee a dual or a multiple choice between HIP, the traditional Blue Cross/Blue Shield type of coverage, and Group Health Insurance -- a basically solo-practice source of care where reimbursement was on a fee-for-service basis. GHI made a lot of headway because of the comprehensiveness of their coverage and they became the principal rival, competitor, to HIP.

To get back to the medical staffing of HIP, it is important to know that despite the strong support from the city government and the advantage that attracted them to the plan, most of the physicians were uncertain that their long-term future belonged with this kind of program. Further, to attract a large enough number of physicians to service the multiple centers -- and in many instances inadequate facilities -- physicians were able to have offices away from HIP where they saw both HIP and fee-for-service patients. So a very substantial proportion had split practices.

This concerned the administration where it was felt that the type of practice could, in the long run, undermine the program. Quality of care became an issue. Jerry Morehead -- do you know Jerry?

WEEKS:

Is that Mildred?

SHAPIRO:

Yes.

WEEKS:

I knew her only by reputation. I was going to ask you later about her and Trussell.

SHAPIRO:

Very good. Jerry Morehead was based at HIP. She was either the assistant or associate medical director under Ed Dailey. Her major function was to organize medical audit studies on the quality of care. The first specialty that was studied was internal medicine. Most of the internist were functioning as general practitioners, primary care physicians. We didn't talk about primary care at that time, but that's really what many were -- primary care physicians. The review committee consisted, primarily, of distinguished

physicians outside of HIP. Dr. Woodruff of Cornell-New York Hospital chaired the internal medicine review. Protocols were established for a medical audit of every physician in the program in that particular department based on a review of a sample of medical charts. Scoring systems were established, some of which rigorous methodologists would not agree with, but they were well done. Really very well done.

I had nothing to do with the establishment of the protocol. I came in, I guess, about mid-point or towards the end of the auditing procedure. Background information was obtained on training, not only where trained but the extensiveness of the training, plus personal characteristics, and how much time the physician was providing to HIP, i.e., the proportion of his professional life that was with HIP.

It was at the stage where they had this large body of information for about 400 physicians on cumbersome McBee cards that I was asked by Jerry to help. There were two tracks. One was the feedback to the medical groups and to the physicians about their ratings. And of course this created a furor within HIP. The charge was, "How can you make a judgment about a physician's quality of care based on a review of the medical record? There is art to medicine. Physicians are not accustomed to writing extensively in their records." A process got underway, initially, to undermine confidence in this medical audit process. But the results were accepted because in a number of instances where a physician was judged to be deficient and a session was held with the physician and the medical director, the medical director invariably agreed with the rating. They didn't like the review process, but they agreed that the ratings were close to the mark.

So that was one track, the feedback. A few physicians were separated

from the program, and medical directors were expected to carry out an internal medical audit periodically, giving high priority to physicians who had not done so well.

The other track was analytic. What can you learn from the background, training, and degree of commitment that would be useful for the future in HIP, including hiring of physicians? There were a number of things that came through very clearly. One was that if you didn't have two years of residency in internal medicine, you would not rate very well. Secondly, the extent to which a physician was full-time in the program was closely correlated with the quality of his performance. There were relationships between medical schools, types of medical schools, and quality of care ratings which did not lead to any program action. But the two I have just mentioned did. The medical control board of HIP established, as one of their criteria, the requirement of two years residency for physicians coming in. I don't know what it is now; it might be more.

The other was to introduce an economic incentive to have physicians become full-time. Bonuses were given to the medical groups for those physicians who moved towards or were already full-time. One of the results was a very sharp increase in full-time commitment to HIP. So there you have a medical audit that had direct feedback into the medical care system, and, from a program standpoint, affected policy.

That was my exposure to Jerry Morehead. But there is a little anecdote that goes with that.

Jerry and I -- principally Jerry -- prepared a monograph on the results and methods and effects of the review on the system of care. She was getting ready to submit the report for publication when the medical group directors

heard about it and they threatened to go out on strike. They said they had agreed to participate under the condition that the results would be kept within the system. They charged their release was an abbrogation of the verbal agreement; there was nothing in writing. The report was stopped and Jerry left HIP. I was still so new, I didn't count. But it taught me an extremely important lesson, which Paul Densen and I discussed repeatedly. That is, a program does have a legitimate right to develop information for internal consumption. But, before undertaking any research or evaluation there must be an agreement on whether the research or evaluation is being carried out for internal purposes or whether it falls into the public domain. The principle adopted was that no study was carried out without a prior clear understanding on this issue and a joint committee with participation of medical group directors had the responsibility of research proposals. Our position became strong. We had some grand ideas about research for which outside funding was going to be essential and no outside funding could come in unless results of research could be released.

Furthermore, neither Paul nor I were terribly interested in remaining in an organization where you are functioning solely for its administrative needs. I found such needs very interesting, and learned a great deal that later helped in carrying out research. So, we established the principle on internal and external release of data. It worked very well. Let me illustrate. We conducted a number of attitude studies among HIP subscribers when the city was moving into a dual choice arrangement for their employees, and when open season occurred in the other accounts. We had no access to the members in competing plans. If we had, and were able to carry out a comparative study, there wouldn't have been any problem within HIP about release of findings.

But in HIP they said, "Look, we have to look bad. If we are the only ones under the microscope on this kind of an issue, it has got to be for internal purposes." So we carried out attitude studies for HIP use. The methods and the questionnaires are in the field, but the actual results are not.

However, at HIF -- Health Information Foundation -- Odin Anderson and George Bugbee became interested in HIP and the competitor, Group Health Insurance, and they had NORC do a comparison study between the two programs on attitudes and utilization. There was no problem at HIP or GHI. Incidentally, with agreement at GHI, I did the questionnaire, but my name doesn't appear anywhere in the report that came out. The study is an example of how -- at least within HIP -- a conscious effort was made to resolve the issue of internal versus external research.

WEEKS:

I can see where that would be a big problem in institutes and organizations.

SHAPIRO:

And today it is a major problem, i.e., the extent to which they want the outside world to know how they are doing.

Let me just go on and talk about HIP as an organization and then come back to the research and why we undertook different types of research.

WEEKS:

Before you start, are you going to say something more about hospitals and their relationship to HIP -- say, Montefiore, or Maimonides?

SHAPIRO:

Yes. There were no serious problems in admitting privileges and staff appointments at the major hospitals.

WEEKS:

Either city or non-city?

SHAPIRO:

I'm talking principally about hospitals like Mount Sinai, and University Hospital at Bellevue. But there was tremendous difficulty on both scores, staff appointments and admitting privileges, in many other hospitals in New York.

WEEKS:

Was this because they didn't like the way you were practicing medicine?

SHAPIRO:

Exactly. In effect, they agreed with the American Medical Association and the various county medical societies that this was corporate medicine and would lead to the destruction of the free entrepreneural position of physicians in the community. So HIP faced problems in many areas. The most infamous situation was out in Staten Island, where they were locked out of one of the major hospitals. This became a court case, which HIP won. There was a settlement in favor of the HIP position.

Periodically, the county medical societies would introduce legislation in the New York State legislature to outlaw capitated prepaid group practice.

What did not happen was the establishment of the close organizational link that Dr. Baehr had had in mind between HIP and the major teaching institutions in the city. The failure was due to opposition by other physicians, many of whom had key appointments in those institutions. I guess the period of extreme hostility with punitive measures taken by some hospitals largely ended in the mid-196Øs. But there was always a rear-guard action, and for all I know it continues.

WEEKS:

A certain number of them feel threatened.

SHAPIRO:

Yes. They feel very threatened.

HIP had a vision of establishing its own network of hospitals, and did take over and later expand LaGuardia Hospital in Queens. I believe they, more recently, purchased Syosset Hospital on Long Island. But overwhelmingly the dependency is still on community hospitals. With the wave of interest in HMOs and the competition for patients, the attitude towards HIP and other HMOs in the New York area is different. Hospitals want them to be associated to help fill the beds, and the closer relationship they can establish the better their own survival.

WEEKS:

Was there a contract price with hospitals? Do they get a discount, in other words, over the usual?

SHAPIRO:

During the period I was at HIP, which ended in 1973, remember that the hospital insurance was covered, not by HIP but by Blue Cross or through one of the other carriers. Blue Cross did get discounts, but none of that fed back into the HIP system. Now HIP's premium does cover both ambulatory and in-hospital costs, but Blue Cross administers that program. They do the bookkeeping and management and have oversight responsibility.

WEEKS:

Administrative services.

SHAPIRO:

Right. But at that time it was not just administrative. The premium

went directly to Blue Cross and they were the ones who negotiated rates of reimbursement. During that period Blue Cross did clearly have important discount arrangements with hospitals. It was the professional side of the hospital that was antagonistic toward HIP.

WEEKS:

Somewhere I read that Montefiore had one of the centers and Maimonides, did that have a center?

SHAPIRO:

No.

At one point there were 31 medical groups in HIP serving about 650,000 to 700,000 enrollees. HIP's growth curve rate was very steep for several years because of the advantages that LaGuardia built in for the program. Then it leveled off between 650,000 and 700,000.

WEEKS:

I was trying to picture what a center was like.

SHAPIRO:

The Montefiore situation, okay. There was initially a common capitation arrangement with all medical groups for each member, the worker, spouse, children. Then in the early 1960s, an incentive program was introduced with differential capitation, depending on whether the medical group met certain criteria. One of them related to full-time physicians. Another, quality of the medical records based on an annual audit of a small sample of records. The completion of general physical examinations, the quality of these examinations, the rate of pap testing of women in a specified age range, level of utilization, and so on. I forget now how many items there were in this program. It was quite possible for a medical group, if they met all of the

criteria, to have an additional payment of, perhaps, thirty to thirty-five percent on top of the base payment.

Interestingly enough, the incentive was to increase ambulatory care utilization. It wasn't the reverse. If they went above the average, they received additional compensation. There was no criterion related to hospitalization because, fiscally, HIP was not at risk. Montefiore -- about 1965-66, shortly after Medicare came in -- felt that they just could not manage -- even at the optimum reimbursement that HIP was able to make. They prepared their budget requirements, and HIP just couldn't meet them. Martin Cherkasky was deeply involved. I don't remember whether George Silver was still there, or whether he had already left. George Axelrod was the administrator. Martin Cherkasky was on the board of directors. Do you know Martin?

WEEKS:

I just know him by reputation, by correspondence.

SHAPIRO:

Very powerful guy, and very bright. He said, "We'll just have to leave the system." It was strictly on an economic basis. I had done an economic analysis of the situation and what came through to me and in the report was that a fundamental reason for their high economic requirements was hospital-based arrangements. To illustrate what that means: they used the radiology department and laboratory departments of Montefiore Hospital under a step-down cost system with equipment costs no ambulatory facility would ever need to meet. That arrangement resulted for them -- although that wasn't the only reason; they had very high utilizers -- in a burden they just could not carry with us. They were excellent and always came out very well in quality of care

studies. In many ways, if George Baehr had his way, there would have been many more medical groups like that. So they exited from the system.

WEEKS:

Then you set up another center in that area?

SHAPIRO:

No. No, we didn't set up a competing group. The Bronx had, if anything, too many centers. It was a blow to the prestige of the HIP to lose Montefiore, with a lot of people ascribing wrong reasons for that. It was overwhelmingly an economic matter.

WEEKS:

I have heard of a so-called model center, East Nassau.

SHAPIRO:

The East Nassau Medical Group came on the scene in the late 1950s or early 1960s. It was not one of the original medical groups. It was set up and staffed to be a type of model, a medical group with very fine facilities, no outside offices, all the care under one roof, with full-time committed physicians except in some of the super-specialties. It worked. Whether it worked because of the geographic area they were in and the fact that the New York area was experiencing a large population move to the suburbs, I don't know. But the group grew very rapidly. It is by far the largest medical group.

WEEKS:

Is it?

SHAPIRO:

Oh, yes. When I left HIP fourteen years ago they had 60,000. I think they have about 80,000 now.

WEEKS:

That's more than twice the average then probably.

SHAPIRO:

Oh, yes.

WEEKS:

Could I interrupt? I was wondering if we could take a profile of an individual. For example, if a person is a city employee what group is he a member of? Is he a member of his residential area or his work area?

SHAPIRO:

There were, and still are, multiple medical groups in each borough. The member has a right to select any one of the medical groups in that borough to receive his care. But he is encouraged to select a medical group that is not too distant. He shouldn't live in one end of Brooklyn and have to travel all the way over to the other end of Brooklyn which can create problems in receiving care. I am not authoritative about the present situation but then they had maps, sort of catchment or residential areas, for in some of these areas the medical group lines overlapped. If the member decided that he wanted to go out of the borough, and was not persuaded to remain within -- at that time they were still making home visits -- he would have to give up his home visits.

WEEKS:

They did do home visits?

SHAPIRO:

Yes. They faded out of the picture during the sixties.

WEEKS:

They have quite a home-care system, don't they?

SHAPIRO:

They have contracts with the visiting nurse services. But to continue, as I mentioned, typical city employee, or any other subscriber in HIP, and his family would, with rare exceptions, elect a medical group based on proximity to his home. On joining, the member received all of the literature on benefits, some of the exclusions -- very few exclusions -- the hours, days, and how emergency services could be obtained, and was asked to select a personal physician. At one time there were two philosophies running against each other at HIP. One was that the attachment should be to the medical group rather than to a personal physician. The other was that, yes, you needed an attachment to a medical group but there should be a close attachment to a personal physician. Overwhelmingly the later is the mode.

WEEKS:

I assume that in these newer centers, at least, that there are physicians' offices in the center.

SHAPIRO:

All of the centers today have almost all of their physician offices within the center or in sub-centers.

WEEKS:

This would be helped a great deal by the fact that they are hiring full-time physicians.

SHAPIRO:

When you say hire, remember that these medical groups are in a contractual arrangement with HIP. They are independent medical groups and the physicians are, in almost all of them, partners.

WEEKS:

Something like Permanente?

SHAPIRO:

Right. The East Nassau Medical Group -- I don't know whether it is still that way -- was what we called staff HMO, meaning they were on salary. But that is not and has not been the typical arrangement.

WEEKS:

How are these other physicians paid then?

SHAPIRO:

They are paid as partners of the group. When a new physician comes on board, there is usually a two-year period before a decision is made about partnership.

WEEKS:

Like Permanente does. But in some groups they are always salaried and are not partners?

SHAPIRO:

When I was still at HIP there were two or three groups where they were salaried. I think it has changed because the direction has been towards groups of partners.

WEEKS:

Where does malpractice insurance come in here?

SHAPIRO:

It is picked up by the groups.

WEEKS:

In other words, the groups have a contract with HIP for a certain amount of money...

SHAPIRO:

On a capitation basis, which is negotiated.

WEEKS:

Then the center administers this money? HIP makes a contract, agrees on a certain amount of money based on capitation. The center takes over, hires or has partners in the group...

SHAPIRO:

The distribution rests with the group -- how they distribute the money and the criteria that they use for the distribution.

WEEKS:

There are one or two other little questions I would like to ask you.

I think it was Lowell Bellin who said that there was a great deal of difficulty on the board of directors because they had so many consumer groups represented which were labor unions or racial groups or old union members versus new union members. I mean the generation gap. So that when they had board meetings, sometimes the picketing was very intense for whatever purpose they were picketing. Has this type of board situation had much influence on HIP?

SHAPIRO:

I am not sure exactly what Lowell perceived to be the problem. Let me just give you a little history of my career with HIP so that you will understand my exposure to the functioning of the board.

Paul Densen left in 1959. I succeeded him. In 1961, Jim Brindle came in as president with Marty Cohen as the executive vice president, two very strong administrators who had been running the UAW health and welfare benefit program. Shortly after they came in I became vice president. There were only

three vice presidents, Ed Dailey, Marty Cohen and me. From about 1961 or 1962, I sat regularly with the Board of Directors, not as a member, but as an observer and resource person. I also sat with what they called the Joint Board Committee, which was an administrative structure established to provide a forum for discussion between representatives of the two medical groups organizations, and HIP executive staff. The Board of Directors, for many years, felt that HIP was theirs. Very distinguished people were on the board who had fought the hard battle to establish HIP, and to obtain the necessary funding to get it off the ground. So there were bankers and other financial interests on the board. From the very beginning, the idea of having representation from leading medical institutions was also established, not working in HIP, but outstanding leaders in the medical field who were sympathetic to this type of organization.

And then consumer groups. The consumer groups were largely representatives presidents or vice presidents, of the major contract groups. They were on the board. Much later a couple of representatives from the medical groups came on.

Everyone there, to the last person, was enormously interested in the success of HIP. But they had conflicts of interest. I'm talking now about the representatives from the unions. Those conflicts revolved basically around premiums, financing of the program. They acted as a strong brake on premium rate increases. They were also very critical of physicians. Their grievance departments heard all of the noise, justifiable complaints. Any structured organization like HIP will always experience that type of problem. If the organization has flaws within it, they will surface and there were flaws in HIP.

So, there was indeed a conflict of interest which expressed itself periodically when contract negotiations were underway with the medical groups. Within the administration -- I was not only director for research and statistics, but was vice president and involved in policy. In addition to anticipating the nature of the economic information we would need for contract negotiations. I was on all of the contract negotiating committees for over ten years.

We came to the conclusion that a major reform was necessary at HIP. There were several elements involved in this reform. One was to consolidate a number of the medical groups; build new facilities where they were still backward and put even greater pressure than had existed on having the physicians commit themselves to full-time practice. Now full-time practice didn't mean that the medical groups couldn't have any fee-for-service, because they did. Almost all of them had fee-for-service within their facilities. But this was ten to fifteen percent of the total practice, in contrast to when a physician had an office outside of HIP, HIP enrollees represented only twenty or thirty percent of the practice. We saw that many of our problems related to that kind of mixed practice.

So there were a number of reforms proposed with HIP taking over the ownership of the bricks and mortar, the buildings. To fund this kind of revolutionary change in HIP -- it would have meant tighter control from the central office over the groups -- required an unprecedented increase in the premium. This issue was fought bitterly between HIP management -- that is, the structural and program changes -- management, and the medical group representatives. They went out on strike. There were no picket lines but they cut off all communications with HIP. At the end of the struggle we had a

contract. They had agreed to regionalization within each borough and certain reforms.

Then came the other half of the deal, the money. The major contractor groups on the board that had encouraged us walked away. I always think of it in these terms -- we won the revolution and lost the counter-revolution.

Jim Brindle and Marty Cohen had to leave. Technically, they resigned. But they were fired. There was an interregnum, very incompetent interregnum, that came from the unions. I was not asked to leave. They wanted me to stay, but I just could not work in that environment. That's when I left.

Subsequently, there was a change in leadership with a lawyer on the staff at HIP as president. He couldn't function as president and Bob Biblo from the Harvard Community Health Plan was appointed president. Now the program is really moving ahead. Many of the reforms that we had laid out are in the process of being introduced.

WEEKS:

That must be gratifying.

SHAPIRO:

It is. But there is still a lot of bitter feeling. Jim Brindle, who had brought tremendous talent to the plan and was a national figure, was heartbroken over what happened. Because, in effect, we had every reason to believe that we had the board's support, and they walked away from us. There were only two or three exceptions -- Esselstyn, remember him? He stuck with us.

WEEKS:

He was a great friend of Saward's.

SHAPIRO:

Oh, yes. Well, the ideas behind the reforms we wanted introduced had been laid out in part earlier by Avrum Yedidia from Kaiser Permanente. He had been with the original program at Kaiser, and later functioned as one of their major consultants. We, at HIP, brought him in to look over the situation and give us his opinion about what changes needed to be made. The medical groups referred to his report as "that damned Yedidia report."

During all of these troublesome times, Ernie Saward was a very good friend of ours. He came in periodically to meet with us. The other person who was outstanding from an administrative/management standpoint, but also one of the most skillful negotiators I have ever run across, was Marty Cohen, the executive vice president. The Brindle-Cohen combination made quite a team.

Any any rate, we had the Yedidia report -- actually I was the one who modified it and prepared the proposal, which the medical groups never associated with me, they never said, "That damned Shapiro report." In part because, while they knew what my role was, they thought of me as a researcher. Which was very comfortable in many ways. Marty was the point man for Brindle; he was an outstanding leader, tough negotiator, and able to reach conclusions.

WEEKS:

Where in this continuum did Kaiser suggest a connection with HIP?

SHAPIRO:

No. That came much, much later, long after I left HIP.

During this earlier period Kaiser was skyrocketing in its enrollment, and was beginning to spread geographically. When I first came to HIP the difference in membership was very small. HIP grew, but not spectacularly, and stayed in one area. Whereas, Kaiser really took off and rapidly exceeded a

million -- they now have three and a half or four million members. There was a strong colleagial relationship between a number of us at HIP and the leaders at Kaiser-Permanente. Not only for research purposes, but for management and administrative reasons, I quite frequently flew out to California. I had known Art Weissman, who later became one of the senior vice presidents of Kaiser. He was trained as a lawyer, with his doctorate in law, and developed skills as an economist. Back in the late 1940s or early 1950s, he was recruited into Kaiser. I knew him from the days when he was in the Public Health Service. At any rate, we had a very close relationship. I would go out there periodically to understand better their organizational structure, and to develop insights to the productivity of the physicians and the strength that they had through a combined ambulatory and hospital-based program as compared with HIP, where they were split at that time.

There were a number of philosophical differences between the two organizations, but they were not of any real consequence.

WEEKS:

The similarities are quite -- when you look a little indepth, you can see the similarities are there, aren't they?

SHAPIRO:

Well, in a general philosophical and conceptual way they are very similar. However, I am sure you have heard from Ernie Saward about the commandments for successful HMOs. They included full-time, hospital-based group practice, right, an adequate population base, and other requirements. But HIP, except for the LaGuardia venture, and maybe now with Syosset, has not been hospital-based. From an organizational standpoint there may be closer similarities today because of the growth of Kaiser and their goal to establish

ambulatory centers in different areas, whereas previously they were often housed in the same building -- the hospital and the ambulatory -- or maybe across the street. But that was never true about HIP.

Yes, the commitment to a community-rated premium, rather than an experience-rated premium was common.

WEEKS:

It has gone the other way with Blue Cross, hasn't it?

SHAPIRO:

Yes. And who knows, maybe HMOs will go that way too. There is a lot of pressure on HMOs.

WEEKS:

When they get to a point where they can't survive unless they have more revenue, this may come about.

SHAPIRO:

Well, it could be self-defeating for HMOs to move that way because they will have to pitch their premium rates to the utilization experience. One of the major advantages, and one of the greatest appeals to this type of program was that, in effect, everybody's experience was pooled except for certain categories such as Medicare.

WEEKS:

It's really the old insurance principle.

SHAPIRO:

Yes. There is a lot of pressure to go that way -- experience-rating -- because of the competition. You take a PPO, the Preferred Provider Organization, they can write variable contracts and some worry they may be skimming off the top. From the federal government the pressure is also in the

other direction. The prospective payment system for hospital stays of Medicare patients is in effect saying that you are to be paid for what it costs on the average. That may be OK but PPS could take a turn towards a broader kind of experience-rating. Once they go to an ambulatory medical condition type of reimbursement you really have experience-rating.

WEEKS:

We had rather an unhappy experience here in Michigan with UAW when they went on experience-rating. They went out of sight with utilization. They over-utilized everything, it seemed like. Where, in Rochester, New York, I think they still have community-rating which is...

SHAPIRO:

Yes. Well, that may have been reinforced by Ernie Saward. He came back to Rochester where the existing Blue Cross/Blue Shield program was very forward-looking. They were one of the last, and may even still be, community-rating.

WEEKS:

That was true at least a few months ago.

SHAPIRO:

I don't know, but they are about the last ones.

WEEKS:

I think it was either Ernie or Dave Stewart who worked for the Blue Cross there gave me a possible reason for the success of community-rating there. It is that the major industries, immediately after World War II, were owned or controlled by a person or a family -- Eastman, Xerox, several others. So the heads, the owners, the controllers, a few persons could sit down and decide for the good of the community it is better if we stay on community-rating.

One of us might benefit a little bit if we went to experience-rating, but for the community let's think of the area. There may be something to that.

SHAPIRO:

It could very well be. In the long run, I think experience rating creates serious problems.

WEEKS:

Yes. You have no control.

SHAPIRO:

Even if you have a control what it means is that health insurance plans are competing for the lowest risk groups, you see, to be in a favored position with respect to the premium. What happens in the case of an employment group that is just loaded down with people who have poor health? Well, the employer is not going to shell out all of that money under experience rating. I see that as very disruptive. Actually, this is part of a broader spectrum of problems posed by competition, cost-containment pressures, and the growing numbers of people who have no health insurance or inadequate insurance, and now something like 35 million people in the country.

WEEKS:

I've been following -- is the premium paid by the employee in HIP now or have the unions forced the city to pay the premium?

SHAPIRO:

Do you mean unions of city employees?

WEEKS:

No. What I meant was, in the beginning it sounded as though the employee was paying on a checkoff basis for the premium for HIP. Is this still true? Or is the city picking up some of the premium?

SHAPIRO:

Well, there were different arrangements. Most of the city employees had 50% of the premium deducted from their salaries and the other 50% was from the city. What the percentage is now, I don't know. It had varied tremendously. In some union contracts, the management/union health/welfare fund picked up close to 100%. Some would go down to something below 50%. But the model was around 50%. So the employee had to meet part of the premium out of his check and the employer or the union health and welfare fund picked up the rest. At HIP, there was a three-step premium rate with a different rate for a single person, couple and family of three or more persons. You could have ten children in the family and you would still pay as much as a family where there was only a husband, wife and one child. This meant that the premium wasn't stepped up so that a single person paid one-half of what a couple paid or one-third of what a family paid. A single person paid disproportionately more. While the premium was not tied to the total number of people, the capitation payment to the medical group was.

WEEKS:

Very complicated administrative situation, I would imagine.

SHAPIRO:

Yes. It was complicated. When we have a chance to talk about some of the research, you will see how important it was to have a capitation system.

WEEKS:

Another thing that amazed me was to read that HIP -- I understood, at least -- started on one day. There was Day One and today it was offered all over the city and to all of the people. Is that true?

SHAPIRO:

It was pretty close to that, pretty close. A network of medical groups opened up. Some of the medical groups were in in lofts, or above stores -- a few rooms. But the physical status of the medical groups bears no resemblance to that today. They are fine facilities.

WEEKS:

We were going to talk about HIP research.

SHAPIRO:

Yes. I think that there are very few people who really appreciate the fact that what is now referred to as health services research and evaluation was actually going on thirty years back but not under this title. The HIP environment was an unusual one for the conduct of research. I mentioned earlier that Dr. George Baehr as well as a number of the early incorporators of HIP viewed the program as an experiment, and that it was important to learn what difference it made to the utilization of services. By that I mean patterns of care and the health of the people who are members of the program.

From the earliest days, there was introduced in the program a management information system which had at its heart several principles that still hold. For an HMO, this means having a population-based system containing certain basic information about every member of the plan, not only the primary subscriber but the dependents. This is in contrast to the usual insurance situation in the fee-for-service world where the focus is on the subscriber and whether others are covered under his contract, but with no specific information concerning the age and sex of the dependents, until such time as a claim is submitted and they have to verify eligibility.

In contrast in a capitation system it is necessary to have information on

every member. This was recognized early and was made part of the management information system at HIP.

The other component of the management information system consists of the services received. At HIP they introduced what used to be known as the MED-1Ø, a report from the physician identifying the patient seen, the date, the place, and a few items of information related to the nature of the visit, such as the diagnosis and procedures. This was a line-by-line entry for every visit in the program.

This provided a basis for developing information on patterns of utilization of services, particularly ambulatory care. Later on a special form was prepared to obtain more information on hospital utilization.

With this information we were able to determine the relationship between the utilization and the levels and types of services received from different specialists in each medical group, taking into account age and sex and family composition. The information would be examined periodically on a physician-specific basis to determine productivity of physicians.

But there were other applications of the data that made it possible to carry out a number of research projects that had a very profound influence on the field and provided a base for generating very significant epidemiologic studies.

When Paul Densen and I would hold brainstorming meetings, the idea was always to go back to the basic question, "What difference does it make to have an HIP type of system?" The first project with which I was associated -- there had been projects before I came -- was concerned with hospital utilization. There had never been any studies, to my knowledge, concerning the influence of the type of health care system on the rate at which hospitals

were used. Information was available on variation on a much more general level but the question we directed our attention at was whether this system of organization and capitation payment changes how hospitals are used, the admission rates, the length of stay.

A series of studies was undertaken. The first of which was a comparison between HIP and Blue Cross/Blue Shield members several contract groups that paralleled HIP contract groups' composition. I won't go into details about the technical problems that had to be resolved, but here was a comparison between HIP, a comprehensive, prepaid group practice capitation system with the typical -- at that time -- Blue Cross/Blue Shield benefit package which excluded primary care.

At any rate, we found what had been hypothesized, and that is, that there was a lower hospital utilization rate in HIP than in Blue Cross/Blue Shield. The basic reason for the difference was in the admission rate; length of stay didn't differ very much. Looking at the information diagnostically and by surgical procedure, the direction of the difference in hospital admission rates was what one might have expected. For serious conditions -- cancer, heart disease -- the rate was very comparable, but in the more elective procedures and in conditions where one could speculate that having available laboratory facilities for the ambulatory patient and some preventive services, there would be a reduction in hospital utilization. That's the pattern that emerged.

That hit the field like a thunderbolt. We continued and then looked at HIP versus Group Health Insurance, also a comprehensive insurance plan but based on fee-for-service to solo practitioners -- fundamentally. Again we found a very significant difference.

Then, we studied hospital utilization in HIP within the membership from a contractor group that had, as an alternative, a self-insured program which monitored hospital admissions very closely. There was no difference, but both HIP and the self-insured program had very low rates as compared with the general population.

Well, that series of studies really represented the origin of the expectation that HMOs would be less costly, primarily because of the savings in the hospital sector. Following these studies there were many others which supported the basic findings. Mind you, this had nothing to do with any economic incentive on the part of HIP to hold hospital costs down because we were not at risk. Blue Cross was covering the hospital stay. But it was accepted by most as due to the nature of the practice, and the capitation.

So, there we had a study that has become one of the cornerstones in any consideration of the economics of HMOs. It became virtually the state-of-the-art. But, as I said a moment ago, a number of other studies were carried out that tended to support this observation. And in fact, comparisons made between Kaiser-Permanente and what was going on in competing health insurance showed an even greater gap. Meaning that when you have an at-risk situation, the potential for reducing hospital utilization is even greater than in the kind of situation that HIP represented.

We felt pretty good about what was happening. Mind you, the plan was taking a risk, because they had agreed that no matter what the results showed, they would fall in the public domain. The joint research committee had argued this through -- there are risks, but that's what HIP is about -- we have to understand what it's about.

Almost simultaneously, we started talking about examining the effect of

HIP on health outcome. What we had been looking at was the process of care -- that's hospital utilization. What about the health of the membership? Because of my background in the Public Health Service, I decided that a very useful area to study would be perinatal mortality. Again, I won't go into the mechanics of how we were able to work out the details, but the long and short of it is that again the research committee said, "Yes." They agreed despite the risks -- suppose HIP turns out to have a poorer perinatal mortality experience, how is the general population going to react? Anyway, we went ahead. We did find that the HIP members had a lower perinatal mortality rate and a somewhat lower prematurity rate than patients of private physicians in the city as a whole.

Then a third study was carried out... This was stimulated by the fact that the city wanted HIP to assume responsibility for the indigent aged's medical care. We set it up as a demonstration project. They transferred all of the indigent aged who were receiving public assistance to HIP's medical groups in certain areas. In other areas they didn't. We did a comparison over a two-year period of time. The utilization of services didn't change among the aged, but we found a reduction in mortality rate among those who were in HIP. Looking at it from a trend standpoint, it looked real and not just an artifact of our having a healthier group of aged.

The results of those three studies became the linchpin for the arguments for the HMO legislation that was passed in 1972. Further, they were used effectively to end the opposition -- I should say they were not the only factors, but they helped end the formal opposition in the AMA against prepaid group practice. It so happened that these studies, particularly the perinatal mortality study, were being carried out during an investigation by an AMA

committee on this form of practice's quality of care. The perinatal mortality study results plus medical audit studies that they did at Kaiser-Permanente ended the formal opposition of the AMA. It also ended the arguments in the state legislature.

So there you have research which today would fall under the rubric of health services research, but then we were talking about research to answer the "so what?" question. It was not received as happenstance that the results came out the way they did. Other events have established that these results were real and not artifactual.

From an administrative standpoint the value of the Research and Statistics Unit of HIP was established repeatedly above and beyond the epidemiologic studies we conducted. In addition to providing data for the economic analyses required by the administration in determining appropriate levels of premiums in general, when Medicare reimbursement was being argued with prepaid group practices the existence of our research group made it possible to carry out a study on the ratio of the time per visit by an aged person compared with the rest of the enrollees. It ended in introducing a thirty percent factor in the capitation reimbursement for Medicare members of HIP. That would never have happened if there had not been a strong research group capable of launching a time and motion study. So, it paid a lot of dividends for HIP and other programs.

Our research capability also provided the means to determine whether incentives built into the reimbursement by Medicare to a capitated system like HIP would lead to a slowing down of the rate of increase in Medicare costs -- a forerunner for many of the present reimbursement arrangements. By that time Paul Densen was up at Harvard and he had the responsibility to evaluate the

results. But the origin of the idea can be attributed to the research capability at HIP.

I am making these points to indicate that in a large HMO, such as HIP, it is very important to think in terms of a symbiotic relationship between "pure" research and research that has significance for the program's functioning. I could go on and talk about the quality of medical care studies, in addition to what Jerry Morehead had done, all within the program. Again, this is one of the crucial questions today. With the large emphasis on cost-containment, the parallel question is: what happens to the quality of care? There is a resurgence in interest and concern about the quality of care that's being delivered under prospective payment systems and the promotion of alternative health care systems that take many different forms, some of whose functioning we don't even begin to understand -- let alone what the quality of care is.

Then there is still another side to the research at HIP which doesn't have the kind of feedback value to the field as a whole as an organizational and financing system, but has an impact on our knowledge about disease and prevention. By virtue of the existence of the management information system, it became possible to initiate a study of the incidence and prognosis of coronary heart disease which has been established as one of the most productive and useful coronary disease epidemiologic studies ever carried out in this country. The reason we became involved in the incidence and prognosis of coronary heart disease is that in our brainstorming sessions we would invite physicians and say, "Okay, if you were able to provide the best possible care to a man or woman who has had a first myocardial infarction, what would you expect to see happen?" They weren't sure. Meaning that there was very little known from an epidemiologic standpoint about the course of the

disease. They could always talk about individual patients and say, "Well, I have a man who is fifty-nine and he's got an office job, had a particular type of infarction and is on such and such follow, etc." But they couldn't place that in an epidemiologic context, because there was no information.

So to answer the question of what effect does different types of medical care have on the health of the population, it became necessary to develop basic information -- information that didn't exist. That's how research got started on the incidence and prognosis of coronary heart disease.

Another very large venture that was initiated back in December 1963, was directed at the question whether periodic breast cancer screening with clinical examination of the breast and mammography results in lowered mortality from breast cancer among women. That study could not have been undertaken at the time if not for the existence of many medical centers in relatively close proximity to their population, where the women could have the special examinations. It would not have been possible if we didn't have access to the MED-1Ø system and to the population-based data file.

I don't know whether you are familiar or not with the breast cancer screening research program.

WEEKS:

No, I am not.

SHAPIRO:

Well, there we really rang the bell and found that it is possible with this type of repetitive screening program on an annual base to reduce mortality by at least thirty percent in the female population. It is now established policy in this country to promote such programs. It has had an effect, not only in this country, but internationally. That was a twenty-five

year study. I left HIP in 1973, but maintained the leadership role for the project while I was at Hopkins. It was last September that the final report was written. But, of course, there had already been about 30 papers published.

WEEKS:

That really was a longitudinal study.

SHAPIRO:

Absolutely.

I came to Hopkins in 1973 because I saw no future commitment to the principle of research and evaluation that had existed up to then under Dr. Baehr, his successor, and then Jim Brindle.

Before all of that happened, I had always thought that I would remain the rest of my professional career at HIP. I had no interest in leaving, but the way events worked out I just couldn't stay -- didn't want to stay. I looked around. Ernie Saward wanted me to come up to the University of Rochester with him; Sy Axelrod invited me to the University of Michigan. We went to Baltimore. I went there as the director of the Health Services Research and Development Center, which at that time was institutionally based as a separate entity within the Hopkins Medical Institutions, and I reported to the president of the university. I had a tenured professorial appointment in Kerr White's department, Medical Care and Hospitals, at the School of Hygiene and Public Health and assumed teaching and student responsibilities, as well as the task of restructuring and building a strong research group in the Center.

It was in the early years when Hopkins was heavily committed to promoting prepaid group practice -- let me use the term HMOs -- and had been instrumental in the development of the Columbia Medical Plan and the East

Baltimore Medical Plan. The Health Services Research and Development Center was established initially primarily to look at new forms of health care systems, participate in their development, and conduct evaluation, with a special emphasis on the role of what was called new health practitioners, the nurse practitioner, physician associate, and assistant. So, I was very close to what was happening at Columbia and East Baltimore Medical Plans and spent a lot of time at both of those programs.

It became clear that largely because of the slow rate at which the Columbia plan was growing -- much slower than had been initially projected, not because people weren't interested in it, but there were a number of community development problems and so on that impeded as rapid a growth in the resident population as had been expected. The Columbia Medical Plan continued to have economic difficulties. Connecticut General Insurance Company was one of the big underwriters and they finally decided to take a firmer hand in what was going on from a managerial standpoint at the Columbia Medical Plan. In the meantime, Hopkins moved further away. If you look at the direction of the medical institutions, you would see that Columbia Medical Plan was no longer there. It became totally independent.

In a similar way there was a separation from the East Baltimore Medical Plan. In both instances, however, we had established the management information systems, maintained them and carried out a number of studies on new health practitioners and utilization of services. One of the most important was the testing at Columbia of an experimental medical care review organization on quality of primary care for which we supplemented the MIS with interview and survey data. I should add that the MIS at Columbia is still an exceedingly useful resource in investigating a wide range of health services

questions.

While this was happening, it seemed to me that there were very large issues for which a more expansive experience was needed. Also, staying within a management information system in a health care program even with its population base does not provide you with an opportunity understand the circumstances that influence peoples' behavior in seeking care. There are limitations that need to be overcame through a community-based interview survey. So the center's program expanded, and we initiated a number of community-based household surveys out of which came some rather important information from Hopkins standpoint, although we hadn't intended it that way. Hopkins' hospital and school of medicine could understand much better who their patients were, where they were coming from, and the nature of the health problems that were not reaching them but for which they had expected to be responsive. In other words, the data were useful for the effort to become community oriented in contrast to the old style of staying within the walls of a hospital outpatient clinic and. This appeared to be the future for hospitals. That is, developing a mission in primary care in distinction to being overwhelmingly directed at secondary or tertiary care. Neither Hopkins nor most other major teaching institutions has gone all the way on primary care. They are still heavily oriented to secondary and tertiary care, but the move towards primary care is a clear direction for many hospitals, including Hopkins.

The issues in health services that we became involved with on a large scale go beyond any that I could have contemplated while I was at HIP. Because now the country was our domain, the state, the region. The sources of information could be multiple, management information systems, data from

random samples of households, community-based programs, national surveys. Also the opportunity to look at what was going on in the hospital industry opened up.

The point is that in a university-based health services research program, in contrast to research that has its locus within a health program, a wider scope and breadth of questions can be examined. The dominant issues today need to be approached in terms of a diversified source of care as well as looking within a particular system as Mitch Greenlick at Kaiser-Portland does very effectively. Attention at our Hopkins center has moved more heavily into an examination of such issues as productivity of manpower in general communities. The effect of different reimbursement systems on admission rates, rates of recovery from significant trauma, the effectiveness of regionalization of perinatal services, mental health services in the community, and alternative arrangements, nursing home care. What you can do in an HIP program is examine intensively within the system -- within that one system -- how a regulation or a change in reimbursement or a change in organization is affecting the way in which health services and quality of care are being utilized. Of course, this is important and should be given high priority.

There is a complexity today in the structure of care systems that I think requires both internal and external examination. We have, in addition to the old style HMOs, i.e., both IPAs and group practice, the PPOs, networking, and various combinations within the same program. A choice is being given to people; whether they want to be capitated, whether they want to be fee-for-service with limited liability and so on, within the same program. This is heretical, actually. What the result of this seemingly bastardizing of the

system will be, I don't know. But, clearly, it is necessary to examine and understand what is happening on a timely basis, not waiting ten years to evaluate the evolutions we are experiencing. Some will become institutionalized to the point where you can't change. The major changes in direction and financing and the incentives that are being built in need a constant evaluation. In my view, such an orientation to the changes has not been operationalized. There isn't enough work going on to tell us on a timely basis what effect new systems are having on the economics of care and on health status.

I come back to health status because there is increasing evidence that with the power that medical care can have in changing a person's health status, and with the pulling -- on an economic level -- towards cost cutting, we may be in for a collision. We may not be realizing the potential of health services to contribute to the health of the population.

Some improvement is occurring, I don't doubt for one moment, on a general basis. The question is the tempo, and whether or not there will be some temporary setbacks, because the quality of emerging programs may be very uneven. How does one monitor this unevenness to be certain there isn't any significant backsliding into shoddy health care?

Many of the issues that we face today have their counterparts to what we experienced back in the fifties, and even the forties. If Ig Falk were here he would talk about the Committee on the Cost of Medical Care, some of whose recommendations years ago -- I don't know whether you have read them recently -- they sound new even now. They were really laying out a set of principles and concepts that are still relevant today. Some of those principles were concerned with primary and secondary prevention and we don't know under what

circumstance can you deliver effective primary and secondary preventive services.

A case in point is the HIP study on breast cancer screening; a secondary prevention effort. Efficacy has been established. The next big step is to determine its effectiveness in the population. How does one bring this into a community? How does one mobilize the health care resources, and how does one reach the population in a way to realize the potential indicated by an efficacy study? Those are big questions.

Let me just say one of the major overwhelming issues that exists today relates to the aging of the population. There are certain facts on the table; one is that the length of life is increasing. The big question is what is happening to the quality of life and functional status of the elderly. The answer has great implications for resource requirements. Let's assume -- take the worst case -- that all we are doing is keeping people alive in a state of ill health and high dependency on health services, either institutional or non-institutional. That has one effect on the way in which we look at the need for facilities and the need for increased expenditures for health services. The great worry that some people, political and other people, have is that this country will, because of the increased life duration, have more people who spend more years of their life in a dependency state. This would make a new balance between government's responsibility and the private sector's.

But then there is another view and that is that accompanying this lengthened span of life we have more productive years of life. That has a very different significance than the first. It's a more hopeful and a more optimistic view. We don't know the answer. Here we have a demographic,

epidemiologic issue that has enormous influence in shaping policy for the aged not only from a social standpoint but in assessing how to allocate the resources of the country.

I am deeply involved in this area as chairman of a panel of the National Research Council on Statistical Requirements for Health Policy in an Aging Society.

WEEKS:

What kind of interested me, being of retirement age and soon within five years being in the old, old group, is what effect does a program of interest on the well-being of people. For instance -- I hate to use the word hobby -- but if you have an interest that consumes your imagination and time, are you better off than if you merely retire and sit down and watch television. I don't know whether this can ever be measured.

SHAPIRO:

It's a very important question, and the research that's been done comes up with mixed answers because you can't do a randomized controlled trial. There is selectivity with respect to who continues going out on hikes, who moves from a fairly sedentary to a very sedentary way of life. There are other aspects. There has been a lot of publicity in recent years about Alzheimer's disease. Some have been extraordinarily pessimistic, pointing to the need, in effect, of major increases in institutional sources of care because of a predicted explosion in the prevalence of Alzheimer's disease due to the aging of the population.

Opinions vary on this. Others are pointing out that we are learning a lot more about Alzheimer's disease and that major advances are being made in the study of Alzheimer's disease, including the beginning of some

pharmecological controls.

WEEKS:

It seems to me that it has only been recently that we have identified Alzheimer's. It was there, but...

SHAPIRO:

We used to call it senility. When we wanted to be fancy we would call it organic brain syndrome. But Alzheimer's is one component of organic brain syndrome. As soon as you get into the psychiatric area, there is a wide range of issues, both preventive and treatment, with which I have been associated over a long period of time.

You know, when you get people like me -- and I am sure you have experienced this with many others -- there are three or four strains that run through their careers. Pregnancy outcome, for example, which has important basic significance as well as direct application for the health care system, has been intermittently for forty years of great interest to me. Right now I am once again heavily involved. In mental health there have been three major periods of research in my career. At HIP Ed Dailey and I developed an experimental program for psychotherapy. Prior to that program, the HIP benefit in psychiatry was limited to consultation. There were no benefits for treatment. This was an experiment which included treatment and evaluation, out of which came a benefit available on an optional basis at a remarkably low capitation rate. Now it is one of the basic benefits at HIP. We worked on that, and then coming to Hopkins there were other opportunities to get back into this area, most recently in an experiment increasing early recognition of mental disorders by primary care practitioners.

WEEKS:

When do you think you will retire?

SHAPIRO:

Yesterday a young man -- young man, must be pushing fifty -- came to my office. He was supposed to meet someone who was with me in my office. He looked at me and said, "Why aren't you retired?"

I said, "Do you want to suffer bodily injury?" As long as I can, I won't.

WEEKS:

I have retired several times.

SHAPIRO:

Of course. That's what Ig Falk used to say.

Interview in Ann Arbor, Michigan

June 10, 1987

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