**CREW:** This is Charles Flagel on cassette 1, 10/21/97. Take it away, Eleanor.

**ELEANOR HART:** I wish you would tell us how you got into the field of health services research.

**CHARLES FLAGLE:** Well, I was into the field before it was called health services research, but was there when the activities that now represent health service research were pull together and formalized. I was the Director of Operations Research in the Johns Hopkins Hospital in 1956. And the director of the hospital was elected as president of the American Hospital Association, almost at that time. He was very active in Washington, Doctor Russell Nelson. He wrote a number of letters to various people in Washington telling them about the activities that I would be involved in at Hopkins.

Those activities had to do with the problems that beset the hospital at that time, which is now 1956. There were still shortages of hospital beds. There were shortages of nursing - nurses. The shortages were the operative words that guided a lot of administrative activity. And so I was studying problems of staffing nursing departments, problems of flow of patients through out-patient services.

At that time, the most important piece of legislation that influenced our activities was the Hill-Burton Act. At the end of World War II, the nation's hospitals had been neglected for a long period of time. The population had grown, and so the important thing was to build, to renovate, to improve health facilities for the nation.

The Hill-Burton Act contained a provision that the administrators, federal administrators, should provide technical assistance to the people in the country who wanted to improve, enhance, or build new hospitals and medical facilities. At the time, there was not only a shortage of resources; there was a shortage of knowledge about how one should build a hospital in the post-war era.

And so an intramural research group was created within the Public Health Service, within the Bureau of State Services, and they were authorized to create a program of extramural research in order to develop guidelines, primarily, to those who were seeking funds for building under the Hill-Burton Act.

My own involvement there came with these letters of introduction from Doctor Nelson to a number of people in the Public Health Service. And so I was asked to join the intermural role

group as a consultant in a project called Progressive Patient Care. This was a concept that was not a new one, but it was one that it was felt, at the time, could be the basis on which future health services could be developed in the country.

Progressive care implied that when we become ill, we progress through various stages. Perhaps, from intensive care to routine hospital care, to care that could be given outside the hospital. One rationale for that arrangement was that there was a shortage of hospital beds. There were people in the hospital, according to a number of surveys, that really didn't have to be there.

So that if the hospital could build self-care, or continuation care facilities, people could be moved out of the acute hospital beds. At the same time, there was a shortage of nurses and a shortage of special-duty nurses in the community. So if you could take the really skilled nurses in the hospital and put them into an area where they could give intensive care to those who needed it, that would be another way to use these scarce resources.

And the thought was patient would progress in an integrated fashion from intensive, to intermediate, to self or continuation care. That was the government's effort. The extramural effort involved invitations, investigator initiated research in matters that had to do with the organization and the administration of health services to submit research proposals that could contribute to the development of technical assistance and guidelines for people requesting funds under Hill-Burton. Well, that was administered NIH-style, with a double review. A review committee, or a study section, was created for merit review of research proposals. And another group, the Federal Hospital Counsel, reviewed those proposals that were looked upon favorably by the study section, which had the name: Hospital and Medical Facilities Study Section of the Bureau of State Services.

Originally, as one might expect, a lot of the focus of attention was on design of hospitals. The great fear was that we would be building hospitals that were obsolete on the day they opened. So rather fundamental emphasis in research and inquiry into design, construction, organization, and administration really internal to the hospital. That was the initial focus.

But many of the grant proposals that were submitted looked beyond the hospital. They looked at the community health needs. And that wasn't surprising at all, because if your hospital applied for money from Hill-Burton to add beds, you had to do a study in the community to show that those beds were needed.

And this began an endeavor that was quite strange to many hospital administrators, to have to be concerned now about the total needs in their community, and the total resources in the community. So somewhere along the line, I couldn't pinpoint the exact date, but it would certainly be around 1960, the feeling was expressed that we shouldn't call this Hospital and Medical Facilities, we should call this the Health Service Research Study Section. And the name was changed. And I brought you some documents that show how that came about.

The study section took on a life of its own and decided that now that we have health services research, we should have some health service research centers. And a number programs were developed at Johns Hopkins, where I was at the time, and â€¦.

**ELEANOR HART:** Excuse me, before we leave the study section, the photograph that you showed me the colored photograph, was that of that early study section?

**CHARLES FLAGLE:** Well , that was taken, I think, oh, four, five years after the original study section. It was taken about the time the focus was on the term health services research, as something all-embracing. I used to think that there were two types of people in our field.

There were those who stood on the steps of the hospital and looked inside. And that's certainly what I was doing for the first few years, because that's where a lot of the problems were. That's where the shortages were. We had to do something to make the hospital work better.

In time though, as those problems were alleviated, one began to think then of standing on the steps of the hospital and looking out at what was needed in the community. About that time, in the middle '60s, another law was passed, the Comprehensive Health Planning Act, which established community planning within state health departments, and at the federal level also.

So here was another activity that enriched what began under the banner of health services research. I should say, that a number of projects under Hill-Burton, were called demonstration projects. Instead of just asking for money to add to your existing hospital, ideas came pouring in for new forms of organization.

And so some money was set aside for grants to develop and demonstrate new ways of doing things. And attached to that type of grant was a requirement for evaluation of this demonstration. And that added a new element to health services research, that is the formalization of the activity of evaluation.

To move on to another development, let's see what's the best way to do this? From a historical point of view, there were the health services research centers, about half a dozen of them, were established around the country. And then, at one of the meetings of the study section, the thought occurred, we have these centers that seem to be duplicating each other.

Why don't we have something called a National Center for Health Services Research? Why isn't there some central organization within the government, not just this little group of intramural people under the Hill-Burton program? And so, and I'm sure, the inputs came from all sides for the concept of developing a National Center.

And that came into being, formally, in 1968. At that time I had a sabbatical year, that I spent as a special assistant to the Surgeon General, who was William Stuart. At that time there was a new set of problems, this is now 1967. Medicare and Medicaid had just been passed, and there were grave fears about what would happen if these entitlement programs were put into effect. The fears that the service system would be swamped, and we'd have another set of shortages.

The thing that should've been feared, was that you'd be swamped with paperwork once these entitlement programs began. And that there would have to be all kinds of developments of information and accounting systems. About that time the study section began to receive grant applications on the application of computers in medicine.

I should add that with the formation in '68 of the National Center for Health Services research, funding had to come from research activities of a number of segments of the government. There was already a technology development group, and it was brought into the National Center, which was called then, the National Center for Health Services Research and Development.

A lot of the activities of NIH that had to do with computers in medicine appeared in the National Center. What I wanted to say about that, is that many of the computer projects that the technology projects came with implicit assumption that the technology being developed would be successful and a great contribution.

And when asked to develop an evaluation piece in their proposals, many of the people in computers and technology really didn't know what that meant. They were stunned at the thought that there would have to be formal evaluation. One of my colleagues in the field, when

we've had to give a demonstration at the National Center, set up his equipment, let out a yell at one point, it's working. Come, see.

And as we all huddled around, one of the bureaucrats said, and do you have plans for evaluating this? And my colleague whirled on him and said, what do you mean, evaluate it? It's working, isn't it? That was enough. At any rate, that was how I was drawn into medical informatics, through friendships with Morris Collen and Don Lindberg.

And that proved to be another avenue of health services research that was, somehow, incorporated into the National Center, and the various study sections that it established. The Health Services Research study section continued. But there were others, such as the Health Systems Research study section. And I had the privilege of serving on that for a few years.

So those are some of the historical things. I'm trying to think if there were any forces that were left out. Well, yes, the American Hospital Association also took some initiatives. The Health Research and Educational Trust not only initiated research programs that grew on Hill-Burton funds, but also created the Journal of Health Services Research, which I think survives to this day. And if one wishes to see what the progression of interest and emphasis is in health services research, you only need to go through the titles of the succession of volumes of that journal.

**ELEANOR HART:** I wanted to ask you-- speaking of informatics-- what relationship does the increased technical capacity have to the ability to carry out projects in health services research that maybe we couldn't have done some years ago.

**CHARLES FLAGLE:** Oh. Well, computers can be thought of in several ways. First, simply as computers, as devices for manipulation of numbers. And long before the term "health services research" was coined, there were the developments of all the statistical techniques that were required to analyze large databases. And all of us who were trained in biostatistics at the time probably developed carpal tunnel syndrome cranking Monroe calculators. So certainly, the development of more powerful computers has enabled not only the analysis of databases, but the construction of databases.

Later developments in the computer field had more to do with the communication, the storage and communication of information for active, online purposes. And most of the efforts in medical informatics are in that direction. My own efforts, at this moment, are in the area of the evaluation of digital imaging systems, filmless radiology in which all images are captured

originally in electronic form, and are stored, and are available within seconds to radiologists and clinicians.

Our emphasis at the moment is analyzing the economic justification for the large capital expenditure that's required for those systems. But in the very process of doing that, we're very much aware that one of the benefits of such a system will be in teaching and research, that images are available for the classroom. But after all, the National Library of Medicine has had its x-ray files for a long time. But now, they're in digital form, available anywhere in the world.

Research, who knows? It's inconceivable to me that with the vast storehouse of images that's being created as a matter of routine services that people who specialize in fields of pattern recognition will make contributions to diagnosis. And I hope that health services research will play the part that it has been since the formation of the Agency for Health Care Policy and Research, that is the emphasis on outcome studies that lead to the production of clinical practice guidelines.

It's quite obvious now, it seems to me, we have gone from the very origins of health services research to some very modern activities that are now looking at to the future. Technology, as it almost always does, replaces human efforts in routine services. And that has happened in the case of filmless radiology.

It appears that the productivity of radiologists, the productivity of technologists has vastly increased, increased sufficiently to justify the cost of the capital investment. But as often happens when a new technology increases the availability of the product, the demand for the product increases. And we've seen large increases in physician orders for x-rays, a far greater increase than the increase in the number of patients.

So pretty obviously, the familiar pattern in technological advances is appearing. And now the question is, are those additional x-rays needed? Are they good? We've moved from a problem of economics, financial monetary considerations, to one with implications for content and quality of care. And that's certainly a role for modern health services research.

**ELEANOR HART:** I want to ask you about some of the other-- what I would call-- pioneers in the field about your working relationships with them, the projects you might have worked on together. One person is Dorothy Rice. Did you ever work with her on anything?

**CHARLES** Well, yes. As I said, we stood on the hospital steps, and looked out, and had to consider what

**FLAGLE:** are the needs in the community. And how are those needs apt to be affected by the form of health services? And I can recall, I had a course in health systems analysis. And one of the problems that the student had to solve was, for the state of Maryland, what will happen when our conventional health care system is replaced by health maintenance organizations?

We had all the statistics from Kaiser Permanente. We had all the statistics from Dorothy Rice's shop, the National Health Interview on Utilization of Services. And we could make some guesses about how that utilization would change with the increasing prevalence of pre-paid group practices and health maintenance organizations.

So what the students had to do was project our needs for hospital beds, our needs for nurses, physicians, and so on. We couldn't have done that without the National Center for Health Statistics. So name somebody else.

**ELEANOR HART:** Oh, another person would be Kerr White.

**CHARLES FLAGLE:** Sure. Well, that's a very personal thing because at one point, about 1963, the director or the dean of the School of Public Health at Hopkins decided that his department, that had been called Public Health Administration, traditional public health, should really branch out into what would be called Health Services Research, something comprehensive, something integrated. And he said, we need some of the professions represented on the faculty of the school that haven't been here so far.

And operations research was one. And economics was another. And that was when Kerr White and I were given appointments in the School of Public Health. And at one meeting, the dean of the school, Dean Hume, said to me, I think we ought to have somebody here from this new field in public health and the American Public Health Association called Medical Care. Who's the best person in the world for that?

And I said Kerr White because we were serving on a study section. And I've been involved with him in really reviewing all of the kind of grant proposals that come in. And I don't know, you'll have to ask Kerr the inner workings, but within a year or so, Kerr came to Hopkins. And so we were colleagues on the faculty in what became the Department of Health Services Administration, has since now become the Department of Health Policy and Management.

So we interacted a great deal. And on a faculty basis, I've sat on exams for students and so on.

**ELEANOR HART:** How about in the study section? What was your working relationship there?

**CHARLES FLAGLE:** Oh, let's see. None comes to mind at the moment. Because I was thinking of someone that I was hoping you would ask me about at the time. And that was John Thompson at Yale, who was not on the study section with us at that time. But during our studies of patient classification for staffing nursing units, Don Thompson came to Hopkins. He came for a short course in operations research.

And we communicated a great deal during that period. My interests, because of the problems at Johns Hopkins, were to look at the resource needs for patient care from the point of view of meeting them on a day-to-day basis in the hospital. Thompson was doing the same thing, but because of legislation at the time that began to look at effective use of hospital resources on a per case basis, decided to look at some of the same variables that we had been measuring and estimate the resource requirements for an episode of care rather than a day-by-day use of resources.

And he developed, along with Bob Fetter, the notion of the diagnosis-related group. That is they looked at, say, bundles of resource consumption and related them to diagnoses. I know from our discussions at the time that the intended use for that was to spot outliers of, say, hospital behavior in keeping patients too long, uneconomically long lengths of stay. But as we all know now, that idea, that concept was seized upon, actually, as the basis for reimbursement and has gone through a number of refinements ever since then.

But I think of that as a nice example not just of how health services research has made a great contribution to the development of health services themselves, but how the collaboration of researchers during those processes have led to and enhanced each other's developmental activities. You asked about other study section members and working with them. Well, you'll see Phil Bonnet, his picture there. And we interacted with him in the sense of actually bringing him to Johns Hopkins and making him part of the department. And when Kerr left, he became the chairman of the department.

Others, Ray Trussell. His picture is there. At that time, he was wrestling with the problems of New York City, and the problems of the public hospitals, and the efforts to save them by partnering them with private hospitals so they could share resources and expertise.

**ELEANOR HART:** I wanted to ask you about Cecil Sheps.

**CHARLES FLAGLE:** Good. I'm glad you did because this is Cecil with lots of substance. I mentioned that in the Hill-Burton program, one of the fundamental concepts of progressive patient care was that we would have comprehensive, integrated care. There was a great concern over what were called our fragmented health services, the fact that we didn't have a health service system.

And we were greatly interested in things that were happening in Great Britain as a result of their passage of the National Health Service Act. And a number of investigators, but principally Thomas McEwen at Birmingham, had the concept of an integrated health community in which hospitals, long term care services, educational institutions, hospices, hostelries, everything-- this was quite a vision. The Nuffield Provincial Hospitals Trust funded the development and study of that concept. And we were very much interested in that here because it was a model, a possible prototype, for services here.

And the director of the, let's say, the Assistant Surgeon General in the Bureau of State Services, Dr. Haldeman, who was, really, in my view, the real instigator of much of what I've been talking about here. He, in fact, directed the activities of intramural research. He sat through all of the activities having to do with extramural research. He sat patiently while the study section turned down roughly 60% of the proposals that came to us. But when the Nuffield Provincial Trust sponsored a conference at Oxford University on the subject of operations research-- that was my field. And a lot of the activities that were done in England were done under the rubric operational research.

Cecil Sheps, Jack Haldeman, and I were invited to that conference in England to compare experiences and to make plans for the future. Actually, I think that the developments in England did not take place as rapidly as they were expected to. But nevertheless, I think pretty much inspired by that concept and the degree to which it had been supported in England prompted a lot of the work that continued to take place in the United States toward vertically integrated health services.

And I recall Cecil, to whom I am eternally grateful for my store of old jokes-- another subject-- he used to use the analogy of standing at the doorway to the hospital and resenting the fact that traditionally, in this country, the responsibility of the hospital stopped there, that our records only had to do with what happened to people inside our hospital. So that notion of someone in charge-- he was the director of Beth Israel Hospital at the time-- having a responsibility for the community somehow paralleled all the developments, not only in federal support of construction, and federal support of research, but the development of directions of

research. And Cecil then directed one of the Centers for Health Services Research. And I had the privilege of being there, a few years ago, when the center at North Carolina was named for him.

**ELEANOR HART:** One of the things you mentioned just a minute ago-- I need to get some water again-- was people working together, colleagues working together. I think one of the most significant things about health services research is it's so multi-disciplinary. And I wondered if you wanted to say anything about some multi-disciplinary collaborations that you were part of.

**CHARLES FLAGLE:** Well, that's a very interesting one. At the very outset, you'll see on that study section, the Rogues Gallery-- Nate Maccabi was the sociologist on the study section. So this was not just our study section. But as I mentioned, our School of Public Health-- the concept of health services administration was broadening into a multi-disciplinary activity. And the first people to appear in the research projects were, for the most part, health professionals, nurses and physicians who were moving in the direction of services research, industrial engineers, operations research types like me, and behavioral scientists.

And some wit, observing one of these activities over a period of time, described us as-- the engineers are observing the doctors and the nurses. And the sociologists are observing the engineers in their interactions with the doctors and the nurses. And here, I think the concept that promoted this interdisciplinary activity was the concept of general systems theory.

Dr. Daniel Howland at Ohio State University introduced what he called the doctor-nurse-patient triad. And that model was one of a cybernetic system in which the patient was being observed, the patient was providing information for doctors and nurses who were making decisions about care. And there was this continuous activity centered around the patient in which the patient was a part. But the patient was a signal giver not just in terms of what the patient said, or consciously communicated, but in terms of vital signs, other signs, and symptoms.

What were some of those interactions? There were all sorts of things at the time. I remember a saying, advice to the docs, the engineers who were developing projects in health services research, you should always have a social scientist on your team. A good social scientist can add 100 pages to your final report without even knowing what the topic is. So that sort of talk was bandied about. But gosh, I'm racking my brain now for some of the things we did together to show you how that kind of collaboration was thought to be important.

My group, the Operations Research Division in the School of Public Health, shared the floor with the Department of Behavioral Sciences. So we had a constant interaction with the social sciences.

The role of the economist is an interesting one in all of this. At the very outset, even though our great concerns were with resource allocation, and with costs, the economists weren't prominent in the field. But as time passed, and as the appropriate policy for funding research services came into play, as databases became available, more and more economists were drawn in. And all of us who had come into health services research from the boondocks, say, from working inside the hospitals, working in the clinical services-- when we would come to Washington to meetings, at some point in the meeting, someone from the agency we were visiting would sidle up and say, we have spent three years developing a wonderful database on our activities. Wouldn't you like to mine that database?

Mining the database was a common expression. We've got all this money. We have the data. Wouldn't someone try to use that data to enhance his own research activities?

I think the economists have done a better job of that than anyone else. The techniques of microeconomics have certainly moved in that direction. I know rather early in the game, in seeking collaboration, I found all kinds of collaboration in the School of Public Health with statisticians. In fact, many of the students in our operations research program came from biostatistics and epidemiology. And so there was a natural teaming up there.

There was a natural teaming up with the social scientists, as I've mentioned. Early in the game, I visited one of our professors of economics, a very famous German professor who ultimately left us, and told him what I was doing in the hospital, and invited any students from economics to join us. We were considered a bridgehead in the hospital. And people from all departments could come and work with our department, and fan out into activities of interest to them.

**ELEANOR HART:** Was that Fritz Machlup?

**CHARLES FLAGLE:** Yeah. And I wasn't going to say who that was, because the story is this. We were sitting at lunch. And I described what we were doing. And his reaction was that this is extremely valuable work, and congratulate you, and Iâ€™m very happy that this is happening. He said, but I think that students from political economy would not be interested in being involved in that, because there's a vast difference between what you are doing and the concerns of the

economist.

He said the economist is concerned-- and he made an overarching sign-- with the work of the people, Volksarbeitwissenschaft, whereas what you are doing is concerned with the work inside the firm. And he knelt as low as he could to describe what I was doing, and said, this is Verkerarbeitswissenshaft, as if that ne'er the twain should meet.

And there was, at the time, a feeling that the economist dealt with models of the firm and did not concern themselves with inner workings. That's changed quite a bit since then. And now, in some sense, if you want to do a piece of operations research in the hospital, you have to be sure that you get there before the economists do.

So I think that it points to a homogenization that's taken place. And nowadays, when you say oh, you're in health services research, and what is your discipline, and you say what your discipline is, and it generally is a reflection of where you came from. It's what you did, how you entered the field. But once in the field, you're swept up in the big act. And you're used to sitting around the tables with the economists, and the sociologists, and the engineers, and the medical informatics people.

**ELEANOR HART:** I want to mention another discipline. And that is that of medical librarian. Have you worked with medical librarians? And could you mention their significance in the field?

**CHARLES FLAGLE:** Well, where to begin there? I became a professor emeritus in 1984. And the first thing I did-- I was invited by the Veterans Administration to join their health services research activity, which I did for several years, and wore out the ability to have further intragovernmental personnel assignments.

So I returned to the university and had been, for a while, a consultant to Mead Data Central, the company that developed Lexis, the full text law library, and Nexis, which is the full text literature system for journalism. They wanted to create a medical library in a box, they called it. They wanted a medical database full text.

And they set up an advisory committee which consisted of Maurice Collen from the Kaiser Permanente Medical Research Group, Don Lindberg, who was a professor at University of Missouri at the time. And they asked me to join, too, I think because I had been a consultant to Kaiser on evaluation of their medical methods research activities. So the three of us spent a few days a month in Dayton, Ohio, going through the agonies of how one develops, both in

terms of the medical language, handling the language, and the technology transfer from law to medicine.

In the course of that, we visited a number of sources of the medical literature. We visited Williams & Wilkins, the publishers. And we demonstrated how Lexis worked, and how the beginnings of a medical library would work. And that, of course, was fraught with all kinds of implications about if you put our books out there where people can read them on a computer screen, heaven forbid, what the implications of that might be. And we went to the Library of Medicine and explored the notion that perhaps, the resources of the Library of Medicine might one day be made available on this commercial, full text database.

Well, I can't really tell you, but you might talk to Dr. Lindberg-- I think it was an outgrowth of that activity that he became, ultimately, the director of the National Library of Medicine and placed a great emphasis on the use of computerized databases. Now, I would hardly say this is quid pro quo. But hardly had he become director of the library than two of the scholar studies were occupied, on one side by Maurice Collen and by me on the other. So it was at that time that I began to study-- this was a formal arrangement-- the status of health services research literature in the National Library's collection. And was blissfully doing that when the Agency for Health Care Policy and Research was formed. And written into that legislation-- the Omnibus Act of 1989-- was the mandate that the Library-- the director of the Library -- and the administrator of the Agency should collaborate to form and develop an interagency agreement under which the Library would enhance its collections.

And so I moved over, under a revived intragovernmental personnel assignment to the new Agency for Health Service Policy and Research-- AHCPR. And the job there in the Division of Health Dissemination and Liaison was to help formulate and implement the interagency agreements. And that was how I found myself back in the Library again, taking part in doing all the things that were done to develop new literature databases for health services research and technology assessment, and developing some full text capability within the Library, and a file that contained all of the clinical practice guidelines that were developed. As the basis for AHCPR's funding and supporting that development in the Library was that this was to be the repository of the clinical practice guidelines for computer-based access.

Very interesting considerations there. At AHCPR, we were developing clinical practice guidelines. We developed them in three forms. There was the guideline itself, which was a very formal, thick document developed by an external panel. Then, there was the practical

guide, a shorter document, kind of a desk reference for physicians. And there was a patient's guide in English and Spanish. The question was how these could be incorporated into the National Library of Medicine, which, by its traditional practice, treated books as books and serial publications as serial publications. And here was a type of publication that was quite different. It was serial in the sense that they were numbered-- guideline one, two, three, and four, rather than spring of '92 and fall of '92-- so that problem was rather easy to accommodate.

There was the problem of the patient's guide, because the tradition of the Library had been really to support professionals in the health field, and not be a source to the public. I'll have to be careful how I say that, because I'm not quite sure how the Library envisioned its role. But certainly, this interaction between AHCPR and the Library would have strained that role, because new types of publications were being produced. And furthermore, here was that patient guide, a guide to the general public. Should that be in the Library's collection?

Ultimately, it was decided that it should be. And certainly one rationale-- the one that we spoke of at AHCPR-- if I were a doctor using that guideline, and all my patients were getting their guide telling them what to ask me or what to expect from the encounter, I would certainly want to have an idea what that was. So it, I think, was considered a piece of the medical literature. Does that answer that question?

The Library has come into tremendous prominence. The Library I always thought of as the cutting-edge of technology. I know whenever I have friends from foreign countries, and they say take me to something great in America, that's where I take them.

**ELEANOR HART:** Well, not only the Library, but the libraries that are part of the network.

**CHARLES FLAGLE:** Oh, yes. The one that I'm most closely associated with is the Welch Library at Johns Hopkins. Almost as the National Library of Medicine has done, the Welch Library has assumed the role of promoting computer literacy within the Johns Hopkins medical institutions. So it provides course material consultation. And it happens that because that library was the site of development of Victor McKusick's computerized continuously-updated Mendelian Inheritance in Man was already primed to play a role in computer and the promotion of it.

As for emphasis in subject matter, I think our local library has moved in the same direction that the Library of Medicine has moved, and that the country has moved. And, of course, local libraries are making great use of this. Almost all the county libraries, one can access the

medical literature very easily.

**ELEANOR HART:** Are the librarians at the Welch Library, are they often members of research teams? Health services research teams?

**CHARLES FLAGLE:** Often not - I'm trying to recall, now, situations in which we have someone from the library formally on a research team. And in the experience I've had recently, that hasn't happened. Well, for one thing, they're already there, so they're already on the team. It's almost such a natural phenomenon that we don't even mention it. There's a librarian sitting over there, but they don't cost us anything. They're there, and the most cooperative people in the world.

**ELEANOR HART:** One person I forgot to ask you about if you had ever had a professional relationship, working relationship, was Norman Weissman.

**CHARLES FLAGLE:** Yes. I think I mentioned earlier that there are really three sides to extramural research. One can be the grantee, the person requesting the funds. One can be the representative of the grantor, that is, the agency who has the funds. And one can be in this middle ground of review. And having been on all of those, as a hat-in-hander and as a reviewer, I would naturally run into Norm Weissman, who played a great role in program development. So there's always been this interplay of what are called investigator-initiated research and then directed research, where the agency decides what its needs are.

And I might add that the study sections have always played a strong role in that as well. We would sit around the table and say, where are the grants in nutrition? Where the grants in areas that need to be researched? And so would the people in the programs be concerned with that. So there's a tremendous interaction, interplay, of the administrators of the Research Center at the Federal level and the grantees and the study sections.

And I've even heard some-- not Norm, but others-- program people refer to the grantees as their stable of stars. And they would probably want to influence the members of that stable of stars, and would sometimes be teeth-gnashingly frustrated when the review committee would turn down some of their favorite grants. Tales out of school, here. Bad place to do it.

**ELEANOR HART:** Well, your secret is safe.

**CHARLES FLAGLE:** All right.

**ELEANOR HART:** Your secret is safe.

**CHARLES FLAGLE:** That secret's been out for a long time. About Norm. It's interesting. I think when he retired as Director of Extramural Research at AHCPR, he became executive director of ISTAC, the International Society for Technology Assessment in Health Care. He promptly applied to the National Library of Medicine, a contract grant, to see what could be done by that society to help the Library in enhancing its vocabulary. And Norm created a committee of Washington people, some from the library. Ione Austin was the Library's project director for that. I was a member. Norm. We had people from NIH. But at any rate, there was an interaction there that now continues, really, under the heading of health technology assessment.

**CREW:** Cut.

**CHARLES FLAGLE:** OK.