Interview with Joseph Newhouse
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Conducted by Edward Berkowitz

Berkowitz: The first thing one notices looking at your *vita* is that your were Harvard educated all the way through.

Newhouse: Yes. I had a year in Germany on a Fulbright scholarship in between, but it was pretty much Harvard.

Berkowitz: When you were an undergraduate were you an economics major?

Newhouse: Yes.

Berkowitz: And where were you from? What part of the country?

Newhouse: Iowa.

Berkowitz: Iowa. So you went to Harvard just because it was a good place to go?

Newhouse: Yes. When I was seven years old I asked my mother what the best university in the country was. She said after a while that she supposed Harvard was, so I wrote away for a catalog.

Berkowitz: Were your parents academics?

Newhouse: No. My father was a salesman and my mother was a housewife.

Berkowitz: You were in one of the commercial centers of Iowa?

Newhouse: A town called Waterloo is where I grew up.

Berkowitz: Does it make appliances of some sort?

Newhouse: They make John Deere tractors there. There used to be a large packing company as well, but it's no longer there.

Berkowitz: So when you went to Harvard did you work with Martin Feldstein?

Newhouse: John Dunlop was my undergraduate thesis advisor and my graduate thesis advisor. Marty Feldstein came back to Harvard from Oxford the last year I was in graduate school. He was the second member of my dissertation committee. Marty was two years ahead of me as an undergraduate.

Berkowitz: Oh, I see, so there's not much difference in your ages. How did you meet John Dunlop?

Newhouse: I took his class as a junior. I got into economics somewhat by default, because I thought I wanted to be a math major. In fact I had no idea when I took my first course what economics was. If you'd have asked me, I suppose I would have said it was about making money in the stock market. Then when I decided I didn't want to be a math major and I didn't want to be a science major because I didn't like laboratories—or didn't like the smell of chemistry laboratories—I by default, then, wound up in economics as a sophomore and found I liked it very much. I took my first field course, which was labor economics, from John Dunlop. Then I was looking around for a thesis topic as a senior, an honors topic. John suggested I write about strikes at

missile sites, which John was chairing a Presidential commission about. So he gave me a bunch of material to read. I took it back to Iowa for the summer, and I came back in the fall convinced that wasn't going to be a thesis topic. Then I was a bit at sea and I looked around for a topic, and I ran into a woman named Mary Lee Ingbar who was somewhat loosely affiliated with John and working on a project on hospital costs in Massachusetts. She suggested to me that the labor market for nurses would be a good thesis topic. So I did that and kind of fell into health that way. John Dunlop had been running an interfaculty program on health economics and health care at Harvard at that point and there was a seminar. I took that seminar as a senior.

Berkowitz: What year did you graduate?

Newhouse: In 1963.

Berkowitz: So he was already doing health stuff in 1963. That's interesting.

Newhouse: Even earlier, yes. He'd gotten into it—you might well want to interview him—in his experience with health as an issue in collective bargaining.

Berkowitz: I was going to say that maybe he got into it with the War Labor Board stuff.

Newhouse: He was also on the War Labor Board and he'll point out

that he had a hand in the decision to grant health insurance as a fringe benefit. He also was Secretary of Labor when ERISA was passed. Of course, this was much later. But health was beginning to be an important fringe benefit by the late 1950s and early 1960s in several industries.

Berkowitz: Even before, of course.

Newhouse: Yes.

Berkowitz: So you graduated in '63 an economics major and decided to go away for a year.

Newhouse: Yes, I had a Fulbright to Germany for a year.

Berkowitz: Was that just sort of unrelated, sort of a year off, or what?

Newhouse: Well, in practice that's what it was. It was a year, I think, to grow up and to learn something about Europe. I'd never been to Europe. I was working as a research assistant for a visiting American faculty member. German economics at that point was still suffering the effects of the war. Even as an undergraduate I was used to people around here walking around with computer output and drafts of journal articles under their arms. One just didn't see any of that at that time in Germany. And I think I needed a pause also between undergraduate and graduate school. It was a very important year in many ways, but I didn't really do anything about health care while I was there.

Berkowitz: Then you came back to Cambridge?

Newhouse: I came back to Cambridge and John still had a program in health care, but during my first two years in graduate school, I was taking course work that was similar to all of my other colleagues. Then I wrote my dissertation in the health area.

Berkowitz: You were at that time in economics and had enough quantitative skills to do the work. John Dunlop is sort of a transitional figure in that regard. Did you see yourself then as an applied micro economist?

Newhouse: Yes. Exactly. I never expected to get into health care as deeply as I ended up doing. First of all as an economics student, one was somewhat socialized *not* to specialize in a particular field like that. The mark of distinction was that one could take micro economics and apply it to a whole variety of topics.

Berkowitz: Gary Becker was writing at that time, applying it to all kinds of topics.

Newhouse: Yes. Had I not, I think, fallen into the RAND Health Insurance Experiment, I don't know what would have happened. But after I got involved with that, health became a full-time enterprise for many years. In effect, I had dug myself so far into health economics that I was never going to escape.

Berkowitz: What was your PhD thesis about?

Newhouse: It was generally about resource allocation in health care. It produced one fairly well known article, which was a theory article about non-profit institutions that was in the *American Economic Review*. There was an empirical piece that was in a health economics conference volume in 1970, and the rest of the dissertation is consigned to the back shelf.

Berkowitz: Yes, like most dissertations. Were you recruited from graduate school to RAND?

Newhouse: No. RAND is an interesting story. When I was an undergraduate, Richard Zechauser, who is now a colleague of mine at the Kennedy School, was a year ahead of me and as a junior he encouraged me to take a graduate seminar, which I think I would not have considered otherwise. And the seminar he was suggesting was Tom Schelling's seminar in defense economics. So I took that and I became interested in that topic. We read, of course, a number of things from RAND because defense economics in those days was largely dominated by RAND. Then when I interviewed for a Rotary fellowship during my senior year in college back home in Iowa, I remember telling the people, the local Iowans who were interviewing me and asked me what I wanted to do when I grew up, that I wanted to work at RAND, even though I had never set foot in Los Angeles County. But then as I got on into health, that vision faded and I didn't think much more about RAND. But one of

my advisors for my dissertation—who'd actually been one of my teaching fellows from my undergraduate labor economics course—was Gerald Rosenthal, who later went on to be director of the National Center for Health Services Research. This was 1967 and RAND had decided on its own that it wanted to get into domestic social policy. It, of course, had been known for defense policy, but this was the heyday of the Great Society and it was thought, perhaps somewhat naively, that some of the techniques that had been developed for defense could be applied in the social area. The first two areas RAND chose to enter were health and education. They called up Jerry Rosenthal and said they were thinking about getting into health. Would he like to come out for the summer? And he said no, but he had this graduate student, namely me, who might want to come out. So off I went. RAND had at that time and continued to have a graduate student intern program. In fact Graham Allison, who crossed my life later as Dean of the Kennedy School, was there that summer as a graduate student. I got there and asked them what they wanted me to do, and they said, "You can just work on your dissertation." That was wonderful. Harvard in those days had batch computer runs, so I would turn in a run one day and get it back the next. If I made a mistake, I lost a whole day. Moreover, the computer consultants here, from *my* point of view, didn't speak English,

whereas I could get about eight runs a day in at RAND and the computer consultants were very helpful. So I would say I made about 80% of the progress on the dissertation that summer at RAND. RAND wanted me to stay, and I said no, I was going back at Harvard. In those days it seemed like if you wanted to stay at Harvard and you were a Harvard PhD, you pretty much could. There were an enormous number, I think close to 50, assistant professors of economics. It's amazing to think about it now. Besides, my fiancee, who's now my wife, was back here. So I came back. Well, unbeknownst to me there was a new department chair that year at Harvard in the economics department who decreed that no Harvard PhDs would be hired, a rule that's survived to this day. But I, being somewhat out of the loop, didn't hear about this until a few days before Christmas when my fiancee and I were supposed to go home to Iowa for Christmas. The style in economics, which persists to this day, is to hire new assistant professors at the economics meetings which in those days were between Christmas and New Years.

Berkowitz: I'm familiar with that.

Newhouse: I thought I really didn't want to get all the way out to Iowa and turn around and drive back the day after Christmas to New York City, which is where the meetings were that year, so I called up RAND and said if they were still interested in me, I

was interested in them. They said fine, and that's how I got to RAND.

Berkowitz: I see. So when you got to RAND your portfolio was to work on health?

Newhouse: Well, and applied micro topics. I actually did a book on the economics of public libraries that was based on a project I did on how to buy books for public libraries. I did a few papers in the econometrics area that RAND supported, but my intention was to spend about half my time in the health area and half in a variety of other things. But, as I say, very shortly I found myself into the RAND experiment and that was a full-time endeavor.

Berkowitz: So you arrived at RAND as a full-time employee when?

Newhouse: In 1968.

Berkowitz: Why don't we talk about the Health Insurance Experiment just a little. Let me tell you my sort of vague impressions. First of all, this was one of a number of social experiments that were done in that time. Again, a lot has to do with the transfer of people to the Defense Department. I think Stuart Altman probably had some defense background.

Newhouse: He did. He started out working on defense manpower, but the first social experiment efforts actually were the Negative Income Tax Experiments. Those had partly to do with an

econometrician named Guy Orkin, who was at the Urban Institute, and the people at the Office of Economic Opportunity. Some of the latter came from RAND, especially Joe Kershaw—who thought this was a good idea. Several other people, including Harold Watts at Wisconsin, also thought it was a good idea. So I would say not a lot of influence from defense, more from social science.

Berkowitz: I always think of the Health Insurance Experiment as in parallel with the Negative Income Tax Experiment. The idea being that somehow you would get data that would guide policy in some way.

Newhouse: No, the Health Insurance Experiment was part of the second generation of experiments. I think there's always a hope, at least among applied social scientists, that data might be used to guide policy. The issue was how valid were the inferences that one could make from non-experimental data. The hope was that a controlled experiment in the social sciences could do what the controlled trial had done in medicine.

Berkowitz: Which in retrospect seems incredibly naive, doesn't it?

Newhouse: Well, yes and no. Yes, in the sense that the adoption of findings is obviously going to be influenced by a whole variety of other factors. But no in the sense that I think the

findings, at least from the RAND Experiment, are generally accepted in ways that findings from non-experimental research both *were* not and probably inherently *couldn't* be because they just weren't persuasive enough.

Berkowitz: Although to the outsider, just to persist on this for a minute, you give somebody some more money and he reduces his hours of labor that he supplies, that's not that startling, you know. Yet what I get from some of this is that that's the kind of thing they established. In the Health Insurance Experiment, for example, if you increase the cost of the health transaction, you'll have fewer transactions or use health less.

Newhouse: That was certainly one of the findings, but more can be said. One is that the magnitude of the response and even whether it existed at all was in considerable dispute when we started. There was Congressional testimony by reputable academics saying, "We don't think there's any response," and other people saying implicitly that there's a much larger response than we found. But also, the real crux of the debate, I think, other than the distributional side of the debate, was whether the additional services were necessary or unnecessary. It would have been more felicitously phrased, as what was the mix of necessary and unnecessary services, because it is unreasonable to think it solely one or the other. The Experiment, I think, made a great

deal of headway in both its substantive conclusions on that point and the methodology it developed for measuring outcomes, which has survived to this day. In some ways it led on to the outcomes research movement.

Berkowitz: Let me take you back just a step. The origins of the Health Insurance Experiment, were you involved? Did you respond to an RFP or did you influence the process by which people thought that this would be something to undertake?

Newhouse: I had submitted a grant to the National Center for Health Services Research, which was ultimately funded, to study the question of whether and how utilization responded to insurance from non-experimental or observational data. One of the economists at the Office of Economic Opportunity saw that and suggested to me that I might want to think about the desirability and feasibility of an experiment. That led to my submitting a design to OEO for the experiment and then they issued a Request for Qualifications. It may have been called something different in those days. But there was a competition to see who would run the experiment.

Berkowitz: Let me get a sense of the time. When you did this design for the Office of Economic Opportunity, that was about when?

Newhouse: I think that was late 1970 and early 1971. As I

recall, in the spring or summer of '71 or so, I think it's about that time they, decided to have the competition.

Berkowitz: And that happened when?

Newhouse: In the spring of '71 as I recall.

Berkowitz: Before the McGovern election.

Newhouse: Yes. Or non-election.

Berkowitz: Right. And this was going to be run by OEO? Or by ASPE?

Newhouse: Yes. It was originally run out of OEO and then two things happened. Now we're talking about 1973 or so. First, the Nixon administration decided to dismantle OEO, and its research authority was transferred to ASPE. Second, the Nixon administration was contemplating a form of National Health Insurance. I as a researcher, of course, was interested in that. OEO had a restriction that it was supposed to study the poor and the near-poor, and in the original 1971 design, as I recall, we were going to study a group of people that had incomes below the median or somewhat below, lower than that. With the interest in National Health Insurance, the transfer to ASPE, and OMB's interest in effects in a broader population, the population that we studied was then broadened to almost all of the income distribution up to $25,000 in 1973 dollars, which was about 97% of the population.

Berkowitz: What was Stuart Altman's involvement in this?

Newhouse: He was Deputy Assistant Secretary for Health at ASPE at the time that the experiment was transferred from OEO to ASPE. The experiment was controversial in a number of quarters, and at that point it was very controversial in the right wing of the Republican Party. There were articles, for example, describing the experiment as the Nixon administration plot to introduce National Health Insurance. This was sufficient political noise to get the attention of Vice President Agnew. There was enough controversy that Stuart decided he would have an independent review panel. We were now two years past the initial award and had gotten up a pilot sample in Dayton, Ohio, and there was a decision to be made as to whether we should go forward with a regular sample in Dayton. That decision was ultimately yes, we should go ahead. Stuart was quite central in that decision, as was Bill Morrill who was the Assistant Secretary at that point.

Berkowitz: Who later went to Mathematica.

Newhouse: And, in fact, because of the political nature of this, I ended up ultimately having to go and explain to Casper Weinberger, who was Secretary, what this was all about.

Berkowitz: Was he sympathetic?

Newhouse: My perception was that he viewed himself as kind of judge or an arbitrator, and he took in the facts as I presented

them and didn't give me much feedback one way or the other.

Berkowitz: He can be kind of cold, I guess. That's interesting. So you eventually did this and it was great, a very elaborate project. Were you the main person in charge?

Newhouse: Yes.

Berkowitz: That's *quite* a task. Had you ever done anything like this before?

Newhouse: No.

Berkowitz: This involved real people, real live people, right?

Newhouse: Yes, right. 7,700 people.

Berkowitz: RAND must have had lots of support for you.

Newhouse: Yes. I could not have done it in a university, I don't think, because of all the support I required and the management skills that it required. In fact, in addition to running a research team, in effect I ran a small insurance company, and I was subcontracting for surveys with the National Opinion Research Center, and I was running a small screening exam operation to get physiologic measures of health—that was subcontracted too. But I had a deputy director, Rae Archibald, who was the COO of the operation, and did a magnificent job with operations side of the experiment.

Berkowitz: Did you have people in Dayton that you were employing?

Newhouse: Some, though not a lot. The people in Dayton were mostly employees of either NORC [National Opinion Research Center] or of the firm that was doing the screening exam. We had an office in every site. To the families the experiment was known as the Family Health Protection Plan, so there was a Family Health Protection Plan office in each of the sites that essentially would function like a Social Security office to answer people's questions. At the outset there was quite an investment in each site in terms of explaining to people at the site what we were about and what we wanted and whether we could operate. For example,there was a question when we started in Dayton whether state insurance law would apply to us, and in particular whether we would have to come up with reserves. (As a federal research project, state law did not apply.) There were various interest groups to whom we had to explain what we were about, including physicians. So there was a lot of up-front work that went into each site.

Berkowitz: This was done in Dayton. What were some of the other sites?

Newhouse: There were six sites. The second site was Seattle. There were two sites in Massachusetts, Fitchburg and Franklin County, which is the area around Greenfield. We were supposed to have a northern rural site and a southern rural site. So

Franklin County was the northern rural site. The remaining two sites were Charleston, South Carolina, and Georgetown County, South Carolina, which is a coastal county about an hour north of Charleston.

Berkowitz: Is it black?

Newhouse: About half black, and very poor. About 20% of the population had, I think, less than a fifth grade education.

Berkowitz: What did you tell these people?

Newhouse: The offer we made to them depended on what plan we had assigned them to. Let's take first a simple case. At one extreme we provided free medical care, and medical services were here defined very broadly, so they included almost every kind of medical service.

Berkowitz: Free medical service. No co-pay.

Newhouse: No co-pays, that's right.

Berkowitz: No money, no premium. Free medical services.

Newhouse: For those people, if you signed up you got free medical care. You were always going to be better off by signing up.

Berkowitz: Were those people already on Medicaid?

Newhouse: Some were. This was a random sample of the population under 65. In all of the sites but Seattle there was some over-sampling of the poor, but the poor for these purposes were defined as the lowest third of the income distribution. So that

led to a little over sampling in Medicaid. But Medicaid was only about 5% of the population in those days, so it was not a very Medicaid-intensive sample.

Berkowitz: So one group gets free medical care.

Newhouse: Right. And the other group got varying degrees of cost-sharing, although all of the people with cost-sharing had a ceiling on their cost-sharing of, at most, $1,000 a year, and for the poor that was scaled down to either 5, 10 or 15% of income. So if you had no income, you had no cost-sharing even though you were in a "big deductible" plan. Let's take a case where you were going to have a $1,000 maximum out-of-pocket and then the plan would take over. The offer to those people depended on the insurance they already had. Now I'm over-simplifying in the interest of getting the point across—it was really more complicated than this—but those people would get $1,000, in effect, in side payments paid monthly through the year. Then they would get the insurance policy on top of that. Now, if they had, say, a policy with a hundred dollar deductible, then they would get $900. The idea was that they could never be worse off from signing up with the experiment. In almost every case they'd be better off. So that was the offer. At some point pretty early on, I realized that what I was going to be doing was marketing insurance to these people. And, of course, in low

income areas insurance is frequently a scam. From the point of view of marketing, I thought my main problem was to actually convince people that this was a credible offer. I wound up getting a lot of quotes from various local officials and Congressmen and Better Business Bureaus and so on, and I gave people a list of telephone numbers they could call and check to see that this was a legitimate offer. Of course, I employed a number of local people to act as enrollers. They had to be trained in what all this was.

Berkowitz: Who are you then? Someone doing a social experiment or were you somebody offering them health insurance?

Newhouse: Both. The project went through an institutional review board protocol and was approved by the RAND board. The protocol specified that participants had to be informed of the general purpose of what this was about, which was to learn about health insurance and its effects on people's use of health care services and their outcomes.

Berkowitz: And you guarded against a self-selection problem by?

Newhouse: The main guard was the offer itself, in the sense that it was always in the participant's interest to enroll and remain enrolled. In fact, the refusal rate overall, as I recall—this was published—was on the order of 15% among those to whom we made an offer. To be able to make this offer, we'd have to do a

preliminary interview where we'd get what insurance you had, and then we had to go verify that with the employer, get the details from the employer, and then come back and make the offer. So there's some refusal early on, but of the offer itself, I think it's around 15%. And it's higher, interestingly, in the big deductible plans, but as far as we can tell we can't relate the refusal rate to any observable characteristic such as how you rate your health status or how many physician visits you had the previous year, your income, or your education. It seems to be random.

Berkowitz: If you got this free health care could you say, "I have cancer. I want to go to Sloan-Kettering Hospital"?

Newhouse: Yes.

Berkowitz: It really was Cadillac health care.

Newhouse: This was unmanaged care, although we didn't have that term in those days.

Berkowitz: Totally unmanaged care, yes.

Newhouse: But that was the indemnity insurance, of course. That was the prevailing model. There was a part of the sample that was in an HMO, the Group Health Cooperative of Puget Sound. One of the purposes was to learn about an HMO. Maybe it's still the case that this is the only time a general population has been randomized into an HMO.

Berkowitz: As I recall you found some sort of adverse results of that HMO experience, or unexpected.

Newhouse: Not for the average person. In fact, for the average person the results looked remarkably like cost-sharing. They differed only in the fine grain of detail, as the magnitude of reduction in use over all was about the same. There were really no measurable health consequences. What you're thinking of is that, again in both systems, both cost-sharing and the HMO, there was some indication that the people who were both poor and sick suffered ill effects. Now the evidence is stronger for the cost-sharing than for the HMO, partly because we just don't have that much statistical power with the HMO sample. The HMO was always a secondary aim. Moreover, it's only one HMO, so it's hard to generalize. And if you didn't want to believe the adverse affects on the sick and the poor, it's certainly not a compelling statistical case at the HMO. But it's suggestive, I would say. I did try to get HEW to support a second HMO. The HMO I had in mind was the Harvard Community Health Plan [HCHP] which we would have run out the Fitchburg site. But HEW felt this was already a pretty rich project, and they didn't want to put any more money into it.

Berkowitz: HCHP wasn't at Fitchburg already, or were they?

Newhouse: I would have had to have pulled a sample from closer in

to Boston, and I might have had to alter where I was running the fee-for-service experiment partly too, to have a geographically matched sample. But it never really got that far. It was pretty clear I wasn't going to be able to afford a second HMO.

Berkowitz: So the HMOs came in the middle of the experiment?

Newhouse: You mean the HMO part of the experiment?

Berkowitz: The HMO act was 1973.

Newhouse: Oh, yes, that's right.

Berkowitz: It became a very trendy thing for a while for people to talk about.

Newhouse: Yes. Of course, that was right when the experiment was started and we didn't get to Seattle until 1975—partly because of all the politically-induced delays. Secretary Weinberger said he was only going to authorize going ahead in Dayton and there had to be another review to go to the other sites. So that induced another delay. It was not really, I think, until December of 1974 that we got the go-ahead for the other sites. I think we brought Seattle up in 1975, as I recall, and Fitchburg came along maybe three to six months after that. South Carolina was maybe three months after Fitchburg. There was a limit, in terms of logistics, to how much we could handle at any one time.

Berkowitz: At each one of these places were all these options present except for the HMO?

Newhouse: Yes.

Berkowitz: What varied is the place, not the options, except for the HMO.

Newhouse: Yes. We tinkered in very minor ways after Dayton Year 1, but to a first approximation the plans were the same across the sites.

Berkowitz: This experiment is presumably over now, right?

Newhouse: Yes. Long since. There's a Harvard University Press book that summarizes it, as well as a lot of journal articles.

Berkowitz: Right. Does anyone look longitudinally at the sample today? Was there a learning experience from it?

Newhouse: The only thing I did about that was to ask permission at the exit interview to keep the Social Security number with the notion that I would at some point go back to the National Death Index and look at mortality. I've never done that. I don't recall what the refusal rate for that request was, but it was higher than I would have liked to keep in touch. And as I thought about it also, these people were on this insurance for three years or five years, and the idea that somehow this would affect their mortality seems a bit like looking for a needle in a haystack.

Berkowitz: What would be interesting would be social learning, things like financial arrangements for paying for health care.

Newhouse: Other than keeping the Social Security number to go back to the National Death Index, we promised the people—actually when we enrolled them—that they were not going to sign up for their lifetime. I don't remember the details, but we basically said we won't come back and hassle you after the period of the experiment.

Berkowitz: Were people on the Hill talking to you throughout the time? Did they have interest in the results? How did you handle that? That was one of the Negative Income Tax's big foundering points. They'd find out one little piece of evidence, like Hispanics divorce more, and they'd use that immediately for whatever partisan purposes they had at the moment. Was there something similar there?

Newhouse: No. We were, maybe in some ways, from a research point of view fortunate that by the time we started to get some results that were publishable, we were at the beginning of the Reagan years and there was no interest in National Health Insurance in the federal government, at least in the Executive branch. The results came out in a very different atmosphere than what we started from. I think the private sector,however, picked up on them. If you look in the first half of the '80s, there's actually a big increase in initial cost-sharing, meaning things like deductibles, in private health insurance.

Berkowitz: You think that's related to the RAND experiment?

Newhouse: I tried to make the case in the book that that's at least plausible. There's also a considerable increase in so-called stop-loss provisions. The number of private employers, at least medium and large private employers—this number is in the book—in 1980 or so that had no deductible for hospitalization is like about 70%. Four years later it's 30%. The number of major medical policies with a stop-loss goes from 78% to 98%.

Berkowitz: Stop-loss means?

Newhouse: It means your liability is capped.

Berkowitz: The employers liability.

Newhouse: No, the beneficiary's liability is capped, which is what you want in an insurance policy. That would be like our maximum dollar expenditure. I found a few instances of where employers are actually citing our results when they do this.

Berkowitz: You mean they'd like to reduce their costs and this was justification for doing it? And their health care costs had been going up a lot.

Newhouse: They did the natural thing, yes.

Berkowitz: That's the cynical perspective. You could say that you have some evidence this really informed that decision in some way.

Newhouse: Yes.

Berkowitz: The Chrysler Corporation or some other corporation.

Newhouse: Yes. The quote I have in the book is from Xerox.

Berkowitz: And they said, "We know this is not going to make much difference in terms of health outcome"?

Newhouse: Right. Or "based on the research"—I've forgotten exactly how they worded that. Yes, they do talk about the outcome.

Berkowitz: That's an interesting direct link. I presume there are lots of methodological links, too.

Newhouse: Yes. I think a couple of things methodologically come out of it. Two large research projects have been direct follow-ons. One is the Medical Outcomes Study, which was partly done at RAND. It was started by Al Tarlov, who is here now, when he was president of the Kaiser Family Foundation—it even started in some ways when he was at the University of Chicago, then he went to be president of Kaiser. And that followed up a couple of things from the Health Insurance Experiment. One, it followed up the notion that there might be some effects of HMOs by having three HMOs, and comparing them to large fee-for-service groups and small fee-for-service groups. It also followed up the notion that any adverse effects are, if there are any from cost-sharing and HMOs, probably among the chronically ill. And methodologically it goes on to develop further the outcome

measures that were used in the RAND experiment. One of the common measures around today for self-assessed health status is the SF-36 or the SF-12 [Short Form]. John Ware was instrumental in developing that as part of the RAND experiment, and then went on to the Outcomes Study. The other large project that is related was a project called the Health Services and Utilization Study, which was done by Bob Brook and Mark Chassin. (You should also talk to Bob if you haven't. He's still at RAND and UCLA.) One could interpret the experimental results as showing that cost-sharing was a fairly blunt or non-specific tool. That is, the evidence from the experiment was that it tended to reduce both medically appropriate and medically inappropriate utilization. Bob concluded that if we were going to try to get at inappropriate utilization, we needed a more specific kind of instrument. His notion for that ultimately evolved into what became known as the guideline movement. But he and Mark and others developed, as part of this research project, a set of indications for appropriate and inappropriate use of, initially, three procedures, coronary angiography, endoscopy, and carotid endarterectomies. Then subsequently many other procedures. They then applied these indications to charts to ask what was the percentage of appropriate and inappropriate care, and discovered that in Medicare, which was the charts they had access to, there

were both fairly high absolute percentages of inappropriate use of these procedures and, surprisingly, that the rate of percentage of inappropriate did not vary by the overall rate. That is the high rate areas, high total rates of procedure, did not have a higher percentage inappropriate.

Berkowitz: High total?

Newhouse: If you did a lot of coronary angiography in Area A relative to Area B, the percentage that were inappropriate was about the same, which suggested potentially underuse in the low rate areas. In any event, as I say, this gave us tools for assessing appropriateness and that all evolved toward guidelines, and the general outcomes research movement as we know it today partly came out of the Medical Outcomes Study.

Berkowitz: That's a very lucid explanation. I've been talking to people and have no idea of what they're talking about. That's the first time I've actually vaguely understood these things. That makes a lot of sense.

Let me ask you about your work with the Association for Health Services Research.

Newhouse: Yes, I'm a past president.

Berkowitz: Tell me about that. Were you there when it started?

Newhouse: I wasn't a member of the board. I went to the first meeting but just as a member. There was one person from each

institution on the board. There would be no more than one.

Berkowitz: Each institution being?

Newhouse: A university or center, or in this case RAND. The person from RAND was Bob Brook, who was on the board. He was on the initial board. I came along later. Shortly after I came to Harvard I went on the board. I think I was president in '93-'94.

Berkowitz: What does the Association for Health Services Research do?

Newhouse: They do, I would say, several things. The two principal things they do, in my view and other people will differ—is first of all, they do lobbying or "representation," to use the polite word, for health services research in Washington. And then they serve to some degree as a professional organization for the field of health services research, much as the American Economics Association or the American Historical Association serve for their disciplines. Health services research is a little different in that it's not really a discipline, but still there are a number of people around the country who view that as their professional home.

Berkowitz: Do you? Or are you really an economist?

Newhouse: I certainly want to keep my ties to economics so, yes, I view myself as a little of both. It depends on how you define health services. Some people define it as in a sense excluding a

disciplinary orientation, kind of a-theoretic. What works.

Berkowitz: In order to do the numbers you'd have to have some kind of discipline.

Newhouse: I agree, so I think of myself as using economics. Indeed, I think of myself as a health economist. I edit the *Journal of Health Economics*. I think there's a role for economics in health services research, but I don't want to get pushed too hard on exactly what the boundaries of the field are. It doesn't serve much of a useful function, I think. The Association also does some research of its own.

Berkowitz: Through it's foundation?

Newhouse: That's how it was set up initially. It's now actually been legally combined into one organization. That was primarily in some work for the VA and for the mental health and substance abuse agencies. That was kind of a separate activity. From the point of view of the Association, the Association couldn't really afford to compete with its members for research work.

Berkowitz: A common dilemma.

Newhouse: It did some things that very few of the members would have wanted to do. Although it didn't emphasize that as one of its main aims, in terms of the budget of the Association, that actually was a considerable part of the budget. One of the things that the Association for Health Services Research was

instrumental in doing was putting in a mandate, along about the time I was president, that 15% of the money of NIMH and NIAAA and NIDA would go for health services research in their fields. That considerably increased the money available for services research for those fields. In fact, the total amount of money from that mandate in some years was approximating what was to have been the AHCPR's budget [Agency for Health Care Policy and Research]. That Agency evolved out of that National Center for Health Services Research along about 1989.

Berkowitz: That's part of the Public Health Service, right?

Newhouse: Correct. The administrator now is John Eisenberg.

Berkowitz: It's hard for me to place what he's done exactly.

Newhouse: He was chairman of medicine at Georgetown immediately before that, and then he was at Penn for quite a few years before that. He's an MD and an MBA. The National Center for Health Services Research had developed a reputation of being of a backwater agency, and it was also very *far* below the Secretary in terms of any real input into decision making. So the intent of the act, in 1989 I think, was to pull up the agency in the hierarchy of Health and Human Services, putting it on the same footing organizationally as NIH and FDA and CDC, although its budgets are much smaller than those agencies. It's an agency that, to the people in the field certainly—it's an "is the glass

half full or half empty" situation-it's much better than it was before the founding of the agency, but it wasn't nearly what the people had hoped for or what, in real terms, anything like what the budget of the National Center for Health Services Research had been when it was started back in the late '60s.

Berkowitz: Yes. Of course, always with these set-asides, you can play a labeling game.

Newhouse: That's certainly right. I'm now not talking about the set-asides. I'm talking about the agency itself. But, no, you're certainly right that one can play the set-aside game with the mental health mandate. But it's a little bit harder to play that game here—it's little bit harder trying to label biochemical research or biomedical research as *services* research than it is within biomedical research to target a particular disease if there is a set-side for that disease.

Berkowitz: But those particular agencies were always the sort of socially oriented ones.

Newhouse: That's right. There's no doubt that if you don't want to reallocate your monies, you're going to try to find ways to relabel.

Berkowitz: OK, the hour is getting toward a close, but I want to ask one more thing. You're at Harvard now, so you must have decided to leave RAND and come to Harvard. Can you talk about

that for a second?

Newhouse: Sure. I mentioned at the outset that my going-in assumption when I was a graduate student was that I would stay at Harvard as an assistant professor. Then I thought I would go somewhere and be an assistant professor of economics, so when I got to RAND in 1968 I was pleased and pleasantly surprised that the change of environment was very intellectually stimulating. I realized, after I got there, that I'd actually gotten into something of a rut at Harvard. I more or less knew who everybody was and what they were likely to say. All of a sudden I had a whole new cast of characters that didn't think the way the people at Harvard thought.

Berkowitz: Harvard is very self-referential.

Newhouse: Indeed. I then concluded I shouldn't spend my whole career in one place. At the time I thought I would stay at RAND for at least three years. I thought I owed them at least that, but I thought I would stay at most five years and then I would go back to academia. Of course, I couldn't at that point have foreseen the Health Insurance Experiment. So I wound up staying twenty years, but I still had the view that I shouldn't spend my whole career there. When the Harvard offer came along I said to myself, although I was very happy at RAND, that if I turned down that offer I couldn't figure out what offer would get me out of

RAND. So I decided I should take the Harvard offer.

Berkowitz: And your title now? You're the head of this department?

Newhouse: My professorial title is John D. MacArthur Professor of Health Policy and Management. I have two rather illustrious predecessors in that job, David Hamburg and Julie Richmond.

Berkowitz: Both of them are big IOM people.

Newhouse: Yes. Indeed David was president.

Berkowitz: I knew he came to Harvard.

Newhouse: I'll come back to that briefly. I head something called the Division on Health Policy Research and Education, which has now become an interfaculty initiative. It's an effort to try to make the university more than the sum of its parts in health policy. As you probably know, Harvard is arguably the most decentralized of all the major research universities. This initiative is an effort to have the university do something more collaboratively. And that goes back to when David Hamburg came here. He, I think, had in mind—I'm inferring now—setting up something that looked like an academic version of the Institute of Medicine. He set up six working groups that corresponded to the six boards, at that point, of the Institute of Medicine. And Julie Richmond carried on that work. I decided when I got here I wanted to emphasize education, because I thought the university

worked fairly well in doing research. One thing that had changed from the time David and Julie were here was that, when I came here, there was a newly-founded department of health care policy in the Medical School, whereas before the Medical School was all over the place in various clinical departments, so there was no common meeting ground for people in the Medical School interested in health policy. Anyway, my first initiative was a PhD program in health policy, which partly grew out of some of my frustration as the head of the economics department at RAND trying to hire economists who were interested in health policy, which was a very hit-and-miss proposition. There was nobody I could call and ask who was coming out this year on any kind of a regular basis. So I started the health policy PhD. It was very definitely not just a health economics program. There were five and are now six disciplinary tracks, one of which is economics. But that was something that had the collaboration of all four of my faculties and has gone very well. I'm also trying to do some executive education that goes across my faculties and working on undergraduate initiatives as well.

Berkowitz: The executive education, is that through the Kennedy School primarily?

Newhouse: It's a collaborative. In executive education at Harvard, the Business School is the eight hundred pound gorilla,

though they haven't done very much in health care. Physically, the course is given at the Kennedy School. The School of Public Health does the marketing, the Medical School grants continuing medical education credit for the MDs that come, and the faculty are from all the schools.

Berkowitz: Very good. Thank you.

Newhouse: You're very welcome.