Interview with Linda Aiken
University of Pennsylvania
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Conducted by Edward Berkowitz

Berkowitz: Let me start by asking you a little bit about yourself. Looking at your *vita*, the thing that really jumps out at one is the fact that you went into nursing originally and then went into sociology. I see that your nursing degrees are from Florida. Is that where you're from originally.

Aiken: Yes. Gainesville, where the University of Florida is. Everyone who was anyone in Florida was at the University of Florida. There's no Ivy League. We're all University of Florida.

Berkowitz: What kind of background would you say? Middle class, lower class, upper class?

Aiken: Middle class. My father was a business man who eventually became a high school math teacher, and my mother always taught. They were both college graduates--from William and Mary--and both career-oriented. They were from Virginia.

Berkowitz: You decided to be a nurse at some point. Was that early on?

Aiken: Early, yes. As a kid. I also was a woman of the generation where, for some reason, we only thought about traditionally women's occupations. My mother and I often muse

about that, but I only thought about being a teacher or a nurse, and I knew I didn't want to be a teacher. It's odd, looking back on it, but I never thought about going to medical school or doing anything else but being a nurse. I was always interested in nursing.

Berkowitz: And to become a nurse, at the time you did it, you went from high school into a nursing program. Is that how it worked?

Aiken: Through the University of Florida. I would probably not have been a nurse had there not been a College of Nursing at the University of Florida, because my more compelling motivation was to go to the University of Florida. As it turned out, they had a brand new College of Nursing and a brand new Health Science Center there that was very much on the cutting edge of the development of the whole new development of university-based, integrated, inter-disciplinary health sciences. I think they probably had the first denovo Health Science Center at the University of Florida in Gainesville. It started in 1958.

Berkowitz: Was nursing equivalent to an undergraduate major?

Aiken: Yes.

Berkowitz: So just as one went into business school, one could go into nursing school as an undergraduate?

Aiken: Right.

Berkowitz: The idea being that you would be an RN at the end of this?

Aiken: Yes. Actually, it was a fairly forward, futuristic nursing program for its time. It was totally integrated into the university. There were no courses for nurses, so nursing students were like any other students. You went into your major courses, but everything else you took with all of the other students, like chemistry, etc. So it was very sort of mainstream university program.

Berkowitz: And then you stayed on and also got a master's in nursing the next year?

Aiken: Right.

Berkowitz: The purpose being that you wanted to be in administration, or what?

Aiken: No, no, no. I wanted to be a clinician and my master's was in a clinical specialty in thoracic surgery. The University of Florida program was very academic on the one hand but very clinical on the other. It was very much of a focus on clinical nursing being a systematic, scholarly activity in addition to being clinical in nature. That was my whole beginning in nursing, and I wanted to get my master's degree so that I could move into advanced practice. I became a clinical nurse specialist.

Berkowitz: This was 1966?

Aiken: Right.

Berkowitz: So in 1966 that was before the expectation that it was as easy for a woman to become a doctor as a man, well before that.

Aiken: Right. Not many women were in medical school still at that point. But I wasn't really interested in medical school anyway. Nursing was always very different. The two fields are still very different today; I'm more interested in nursing than in medicine *per se*, although I'm really now a health services researcher which goes across them anyway. But from the clinical aspect, I'm more interested in the nursing side than the medical side.

Berkowitz: Is there a difference between the South and the North in terms of the relations between doctors and nurses? Are they more courtly and deferential in the South? Probably in Florida they were from the North anyway, a lot of these people.

Aiken: Yes. Florida is not too particularly southern, not too many people born in Florida. I don't consider Florida deep south in the traditional sense of Alabama, Mississippi or Georgia.

Berkowitz: So you actually did nursing for a while? Emptying bedpans and really doing nitty-gritty stuff.

Aiken: Well, yes, that, but saving people's lives too. I was a

nurse at the Shands Teaching Hospital (Shands is the major teaching hospital at the University of Florida), a staff nurse for about a year before I got my master's degree, and then I worked as a clinical nurse specialist.

Berkowitz: The next obvious question is that at some point you decided that--in some kind of big disconnect--you decided to go into sociology and to go to Wisconsin. What happened? Were you lured by a grant?

Aiken: No. Actually, there were sociologists that were involved in the University of Florida Health Science Center and in the nursing school, so from my very beginnings of socialization into nursing, I had contact with sociologists. It was a very unusual program, a very inter-disciplinary, very social-science oriented. As it turns out, all of the major health science deans and the provost at the University of Florida became my life-long colleagues, which is very interesting when you look at it from the point of view of an eighteen-year old undergraduate. A number of them actually came to Pennsylvania. Sam Martin, for example, was the provost of the University of Florida Health Science Center. Sam Martin and I knew each other when I was a student and he was the provost, and he eventually ended up here at Penn when I was here and also worked with me at the Robert Wood Johnson Foundation. The same was true for the School of

Nursing dean, Dorothy Smith and George Harrell, the Dean of Medicine. For some reason, I got to know those people. It was a very unique environment at the University of Florida. I think I had a very unusual socialization there in the broad inter-disciplinary aspects of health and medicine. So I think from the very earliest times we had sociologists working with us. I was interested in sociology. I actually went to the University of Missouri with my husband, who was working on a degree there, and there was a very influential nurse/sociologist couple there, Hans and Ingeborg Mauksch. Ingeborg Mauksch was a professor of nursing at the University of Missouri, and her husband, Hans Mauksch, was a very famous medical sociologist. I was actually the first clinical nurse specialist at the University of Missouri Medical Center. I could see all of the inherent problems in organizing a hospital to provide professional nursing care to people. I decided, after spending a couple of years there, that I wanted to basically be the dean of the nursing school and the chief of nursing practice in a hospital and have a whole totally integrated program, which is what we had at the University of Florida where I was trained, where all the faculty and the students and the nurses in the hospital were all in the same organization, so that you create in practice in your hospital what theory and research would suggest is the best practice. And

you taught students that. You try to create an institution that advances the field. So I decided I had to have a PhD to do that--at my age. I kind of jumped over the queue. I was still in my 20s at that time, looking for a doctoral field that was relevant, and sociology seemed to be it. I was very, very highly influenced by Hans Mauksch. So that's why I went into medical sociology.

Berkowitz: That's really very prescient of you. That's something that most people who were clinical nurses would have trouble seeing the big system like that. Carolyn Davis, whom I'm sure you know--a very different political orientation--her career is somewhat like that too. That same thing of being a nurse and trying to see the bigger picture. Not too many other people I can think of that are like that.

So, you were at the University of Missouri, which had a regular four-year medical school at that point. One of the heads of the Institute of Medicine, Fred Robbins--you may remember--started medical training at the University of Missouri.

Aiken: I remember. He was there when I was there. They also had a four-year university nursing program there, which I taught in while I practiced at the hospital.

Berkowitz: This would have been when that you were there?

Aiken: I went there from '67 to '70.

Berkowitz: This would have been after the 1960s money had caved in there.

I guess it's not so unreasonable then, that if you're going to get your PhD in sociology, that you'd go to Wisconsin. That makes sense.

Aiken: Well, I actually got my PhD at the University of Texas.

Berkowitz: You did? Tell me how that happened.

Aiken: I did a post-doc at Wisconsin. I ended up going to the University of Texas because I followed my husband there. I actually got an NIH nurse-scientist award to pay for my doctoral education. This was one of those fellowships you can take anywhere. I systematically reviewed all the great medical sociology programs and applied and got into all of those. And then my husband got a good faculty job at Texas, so I went to Texas. But in the process, I found out that the University of Texas had quite a strong sociology program, one of the top-ranked sociology programs in the country. It wasn't so strong in medical sociology as it was in demography, which is what they were really well known for. So I ended up, even though I had an interest in medical sociology, doing most of my work in demography, which is a part of sociology that is important, I think, in my health services research career because it's very quantitative. It deals with large data sets, which was not

exactly the norm in sociology as a whole or in medical sociology.

Berkowitz: Melvin Tukey, is that one of the people in that field, demography?

Aiken: Yes.

Berkowitz: Yes, it's very quantitative. A lot of people at Princeton do that. A guy whose name starts with W.

Aiken: Westoff(?). The University of Pennsylvania, where I am now, has the top-ranked population studies program. I'm a part of that here.

Berkowitz: You could do that stuff? You had the facility to do the quantitative work?

Aiken: Right. And that's probably the strongest type of training contribution to me, being able to both a user and a contributor to health services research, is that strong quantitative methods, statistical analysis preparation I got at the University of Texas. The reason I got to Wisconsin is that I hadn't really had as much grounding in medical sociology or health care as I wanted to. So after I got my degree, I was interested in going to the University of Wisconsin because they had the strongest medical sociology, from my point of view, that had a focus on policy and was quantitative and was health services oriented. So that's how I got to the University of Wisconsin.

Berkowitz: I see. There's a footnote on your *vita* that you did these papers with a Charles O. Bonjean. Is he a Texas guy?

Aiken: Yes. He was one of my professors at Texas.

Berkowitz: He's an editor of a journal, the *Social Science Quarterly*.

Aiken: Yes.

Berkowitz: He has some connection with mental health in fact.

Aiken: He is now the president of the Hogg Foundation.

Berkowitz: Who was your major professor at Texas?

Aiken: Frank Bean was the chairman of my dissertation committee. He's a demographer.

Berkowitz: So the year at Wisconsin was just a post-doctoral year?

Aiken: I worked very closely with David Mechanic there, and that's when I started moving more specifically into health services research.

Berkowitz: Other than David, were there others in medical sociology there at Wisconsin?

Aiken: Jim Greenley was there at the time. His area was more in the mental health field. I worked with him peripherally but mostly with David.

Berkowitz: Who was already a fairly big deal in the field.

Aiken: Yes. I would say he was the leading person, and I had

really wanted to work with him because his work, for a medical sociologist, was highly relevant to services research. Many other medical sociologists really didn't work in the services area. They were more interested in phenomenological kinds of issues and socialization of medical students and so forth. I wasn't very interested in that. I was really, from the beginning, interested in services, access to care, improving the quality of services, how to make hospitals better institutions. David Mechanic was much more focused in that arena and the policy side.

Berkowitz: He also focused on mental health, right?

Aiken: Yes.

Berkowitz: More than you.

Aiken: Yes. Although when I was at the Robert Wood Johnson Foundation, I got very much immersed in mental health, probably because of David's influence on me. But it's not an area that I've worked in. I'm very interested in health services. I guess I must have some higher priorities, because left on my own I go another direction.

Berkowitz: From Wisconsin you went to the Robert Wood Johnson Foundation in New Jersey. I'd like to talk about that. The Robert Wood Johnson Foundation is clearly a big player in health services research. It must have been reasonably new in 1974 when

you went there. It was started, what, a couple of years before? '71, '72?

Aiken: I think it had actually been going maybe 18 months when I got here.

Berkowitz: And David Rodgers was there when you got there?

Aiken: Yes. And Bob Blendon.

Berkowitz: Robert Blendon? Tell me about him. He's another one whose name I've heard a lot. I know you've written articles with him.

Aiken: Yes. He probably, of all the people in my career, had the most influence on my health services research. I think I learned most of what I know about health services research from Bob. He actually recruited me there. I got to the Johnson Foundation because the post-doc that I was on at Wisconsin was funded by the Johnson Foundation. So Bob Blendon came to Wisconsin to specifically look at David Mechanic's post-doc fellows as potential hires for the Robert Wood Johnson Foundation in the research area. That was how I happened to get to the Robert Wood Johnson Foundation. So I went there specifically to work with Bob Blendon. He's a very brilliant guy, has a real sense of policy. He, prior to going to Hopkins with David Rodgers, was actually in Washington working in the Nixon administration.

Berkowitz: What's his educational background?

Aiken: He has a doctoral degree from Hopkins, the School of Public Health and Kerr White was his major professor

Berkowitz: And of course David Rodgers was Johns Hopkins.

Aiken: Right. That's where they met one another.

Berkowitz: OK, so you come to the Robert Wood Johnson Foundation. I'm curious about that. It's always kind of opaque to me, what they do there. They had to sort of figure out what they were going to do, like the Institute of Medicine actually. It was somewhat the same type of thing. They had millions of dollars. I've read that David Rodgers once said that he had a staff, but the staff didn't do that much, in the sense that they gave grants to other people, but it wasn't like a Brookings situation where the people were doing research on their own. How did that actually work?

Aiken: I don't know that I would agree with that. I think the Foundation in its early years was sort of like a quasi-university, actually. So it's interesting that he might have characterized it in this sort of way. To give you an example, Bob Blendon and I both went there as relatively young people. I don't know if Bob was ever an assistant professor at Hopkins or not. He might have been, but I was never even an assistant professor anywhere, and when we left the Robert Wood Johnson

Foundation 13 years later, we both went into endowed full professor chairs in Ivy league universities. That's how much publishing we did while we were at the Johnson Foundation. A huge amount. So it turned out, because of the nature of the folks that David recruited--it was mostly David and Bob and I--that we did a huge amount of research and publication that we were doing for the programmatic goals and objectives of the Foundation, but that we took more of a role that I would say was a little bit more like a Brookings role.

Berkowitz: In subjects like about access to care?

Aiken: Yes. We were commissioning these big studies and the investigators that were actually doing the research--like Ron Anderson--Ron was publishing his books on access, while we were taking those data and asking broader kinds of public policy issues or different kinds of questions than Ron was dealing with in his work. We were always trying to take the research projects that the Foundation was supporting and use them in the broadest possible way to provide a perspective on public policy, combining them in different ways. For example, we did these National Access surveys, but then we were trying to figure out how can you use this to evaluate public policy. One of the things we did, for example, before Arizona developed its new Medicaid program--it was the only state without a Medicaid program--we used our

National Access survey as a base line of how Arizona compared to the nation as a whole when it had no Medicaid program and the rest of the country did. It allowed you to have an empirical study of the impact of charity care versus insurance. Then when Arizona's new Medicaid program came in, we did another survey. Nobody else was ever looking at this issue from the perspective of trying to understand the role of health insurance. Ron Anderson and other people were doing these big surveys for us, basically commissioned by us, and writing books describing the nature of problems in access. They weren't sort of thinking about how can you use this strategically to learn something about a specific public policy. That was Bob Blendon's genius, thinking about things at that level. I would say most of what I consider to be the influential work we did was of that nature. Our most cited paper in health services research is a paper in the *New England Journal* that I did in '79 with Blendon and some other folks. I looked at this famous Mendenhall study that the Johnson Foundation had supported. That was one of the first things that I did when I got there is that we supported Robert Mendenhall to study what physicians in twenty-four specialties were doing. He published a lot of descriptive work on what are cardiologists doing and this, that and the other. We had this idea that we could use this to really address this issue about

whether we had enough primary care physicians in the country by looking to see how many people taken care of by specialists really got their primary care from specialists. We used all that detailed information to empirically document there was a hidden system of primary care provided by specialists. That paper is still debated to this day. Every six months it will come up again because we are still having the same debate now, do we have a shortage of primary care physicians.

Berkowitz: And the idea being that if the specialists were to provide primary care then there was a misallocation of resources?

Aiken: No. From our point of view, it was the national capacity that was underestimated.

Berkowitz: Then we had more primary care than one would think?

Aiken: Right.

Berkowitz: And therefore didn't need quite as much as people were saying?

Aiken: Yes.

Berkowitz: That earlier study that you talked about with Arizona that you found that there are less patient visits, right, in the non-Medicaid place. Is that right?

Aiken: Right. In a population that didn't have Medicare.

Berkowitz: So one could make a generalization that uncompensated care is less adequate in some sense?

Aiken: Yes. Children only got half as many visits in Arizona as poor children elsewhere, even in states that had the least generous Medicaid program, and you had big urban-rural gaps in receipt of services in Arizona as compared to the rest of the country, because public hospitals tend to deliver charity care in cities. So if you have no insurance, folks in rural areas had to travel all the way to public facilities or they don't get care. So there was a very big difference in average utilization, particularly for kids and particularly for the rural areas, but no difference to people 65 years of age and over, which again reinforced from a bit of a different perspective the fact that universal coverage by Medicare provides you with pretty much the same access wherever you live, whereas Medicaid and charity care don't because they're not universal in their coverage. So it was kind of using a particular opportunity to try to get a new window on some questions that people were very much debating at the time. Also under debate was what does it mean that Mississippi puts so little money into Medicaid versus New York. It draws a little bit of bead on looking at access to care in states in the highest third and the lowest third of medical benefit levels. You could that from these National Access surveys. There was not anything particularly new about our access surveys. Basically the government had been doing these utilization studies before

the Robert Wood Johnson Foundation came on the scene, but I think what we contributed to health services research in general, because this has become much more common—using these access surveys more strategically to try to evaluate specific public policies.

Berkowitz: It's hard for me to grasp that. Of course, in New York state and New York city, they also do provide a lot of uncompensated care because not everybody's covered by Medicaid, so that the quality of uncompensated care might be better in Arizona than in New York city, even if the people on Medicaid do better in New York city than the people getting uncompensated care in Arizona.

Aiken: But we were looking at the entire population. We are looking at people that have Medicaid versus people that don't in all these places, because it was a national sample. It wasn't just a sample of Medicaid patients.

Berkowitz: Oh, I see.

Aiken: So, in all of these states Medicaid is only covering 50% of the poor on average. It would look at poor people in New York who didn't have any insurance and also look at the benefit levels in New York.

Berkowitz: This was also at a time when the Health and Hospitals got the law passed to increase the compensation, right, for

uncompensated care?

Aiken: Right. One of the things that made this all so exciting right at the beginning when we were at the Johnson Foundation is we all thought National Health Insurance was coming in. We thought our work was paving the way for National Health Insurance. We really thought we were doing this research to create the best universal health insurance coverage possible for the United States. So there was a lot of excitement and a sense of purpose in these studies.

Berkowitz: I see. That was clearly a focus of the early Robert Wood Johnson Foundation. Did you have other special portfolio kinds of projects that were your input to the Foundation?

Aiken: My responsibilities, from the very beginning, were to develop the evaluation program of the Foundation. Bob Blendon had this idea--and again, I think it was part of his genius of strategic thinking--that the foundations should really systematically evaluate their programs, particularly a foundation like the Johnson Foundation that was wholesaling these ideas and putting millions of dollars behind a single idea. The bread-and-butter strategy of the Foundation was to take an idea that had been shown to work in a controlled environment or a hot house, maybe a single site, and see if you could replicate it in twenty different sites in more of a mainstream environment before then

moving it on into the mainstream with National Health Insurance coming behind it. So Blendon had this idea that we ought to systematically and scientifically evaluate all of the big projects there. I think it was probably the first time that a foundation made a commitment to do that. For every one of these demonstration programs the Foundation funded, I commissioned an outcomes evaluation of their impact. In a sense, that put me in a very strategic position at the Foundation because I was involved in evaluating every program they ever did. Over time, I started myself designing the programs. Once you get so far into the nitty-gritty of the programs, you realize why they work and they don't work. Then I started designing some big programs myself. Actually the biggest program I ever did there was in the mental health area, which was a big hundred million dollar huge initiative in nine cities to try to integrate housing and health care and mental health services and welfare together in a consolidated, public authority. A type of organization to have a sort of seamless care around the seriously mentally ill, trying to specifically target the homeless mentally ill.

Berkowitz: The homeless was another problem at the end of the '70s. That was the big thing they were interested in also, the Foundation, right?

Aiken: Yes. One of the things.

Berkowitz: That's interesting because that project of giving away this money to these nine cities, if you had just heard that proposal you would have said that it came from HUD or HEW or HHS. It seems like a government initiative, but I guess by that time the government had so retracted itself that it was not doing things like that. Is that how the Foundation saw itself, as somehow entering this opportunity or wedge or whatever?

Aiken: Well, the government was not doing any more experimentation. I think when the Foundation came to be, the government had moved out. The National Health Insurance was gone.

Berkowitz: And also they were ending the Negative Income Tax experiment.

Aiken: Right. So the government was really out of the experiments. There wasn't any sort of venture capital for ideas. Medicaid was in and they were paying for services, but they weren't developing new ideas. I think it was this sort of timing issue that made the Johnson Foundation both influential and important, because what they did was they saw themselves taking the ideas and trying to create ideas that the government could fund through a third party payment. So Johnson would take an idea that had been tested some place, try it out in a more diverse set of circumstances, and my job as the evaluator was to

show that it would work if it was mainstreamed, and to mainstream it in a way that Medicare and Medicaid would pay for and private insurers following suit.

Berkowitz: That required legislation, yes?

Aiken: This was always one of those difficult things at the Foundation because the government was our major purchaser of our ideas, but because of the foundation legislation that was passed foundations were prohibited from lobbying and getting involved in voter registration; the Robert Wood Johnson Foundation was formed right after those Congressional modifications were passed.

Berkowitz: In fact, that's one of the reasons it existed at all. The Johnson family could have kept all its money and given it away at their discretion, but those laws made it that they had to reveal things. That's all from the 1960s, I think. That's where that disjoin occurs. Obviously the objectives of the Rockefellers and the Fords and the foundations are totally different.

Aiken: Yes. Well, anyway, the Johnson Foundation was very sensitive to this role of government and foundations. Literally, foundations can't lobby the government, but since they were the major buyers of the ideas, this had to be sort of a carefully constructed collaboration. That's what it was basically, a collaboration. It was part of everything we did in public-

private partnership in one way or the other.

Berkowitz: That's also part of the late '70s notion, too, public-private partnerships as being the way to go. In the '60s it would have been a government initiative.

Aiken: Right. But there were still a lot of reformers left in the federal government but without any portfolio, and they wanted to test somebody's ideas. And some of us over in the foundation world were all of the same generation and the same cohort, and many of us were trained in health services research. I think this is linked back to health services research. So you had people like Cliff Gaus who was in the government. At the time we were in the Johnson Foundation, he was running the research program in HCFA.

Berkowitz: Right. But his background's similar to Robert Blendon's.

Aiken: Yes. They were friends before all this. All these connections and bridges from pre-existing personal relationships with some people in the government, us in the private side, and then the development of health services research that knitted new relationships kept this public-private thing going, because of the people on both sides. Even though, from a legal point of view, it was a little bit dicey, and our board at the Foundation was always concerned about it.

Berkowitz: Right. In the '60s they wouldn't have been these people at the Robert Wood Johnson Foundation. They would have been in the government. It starts as one of the largest foundations in the country, which is sort of unusual, to go from nothing to being one of the largest over night. Would you say the Robert Wood Johnson Foundation was kind of a leader of the health foundations?

Aiken: Definitely.

Berkowitz: Did you used to talk among yourselves with the other foundations, like the Commonwealth Fund? Was there a mechanism for that kind of collaboration. "We're doing this and you're doing this. This is something that needs to be done. You're the biggest foundation and you ought to do it." I always hear about Margaret Mahoney.

Aiken: Yes.

Berkowitz: She seems to have been in a lot of these circles of the various health foundations. Was she in the Commonwealth Fund when you were at Johnson?

Aiken: She was at Robert Wood Johnson at the beginning. She came from Carnegie Corporation and came to the Robert Wood Johnson Foundation, went to the Commonwealth as its president. The Robert Wood Johnson Foundation was the biggest entity in health care and dominated health care I would say for the entire

period that I was there. There was nobody else. And that was the intellectual life of the health foundations. They tried to spin off some of these ideas and worked a lot with other foundations, but most of the ideas were coming out of the Johnson Foundation. It was really the Johnson Foundation that led to the Pew Foundation's health program.

Berkowitz: Again, they started as being very reactionary--Sunoco, the Pew Family--and they've become very liberal now and are now liberal activists. They used to just do things in Philadelphia. Was it in the '70s when that happened?

Aiken: Right. Becky Rimel was a grantee of the Johnson Foundation. The Johnson Foundation sort of found Becky Rimel when she was a nurse doing research on head injuries. When Becky Rimel went to the Pew Foundation, we worked closely with her and gave her her entire program. Her entire program at Pew was given to her by the Johnson Foundation. Over time she's kind of gone off and done her own thing, but the whole health program of Pew is a spin off of Johnson. Kaiser, certainly in recent years, is an outgrowth of the Johnson Foundation.

Berkowitz: Was that Alvin Tarlof?

Aiken: Al Tarlof was there, and Al Tarlof came to Kaiser from this big project that we supported him doing, the Medical Outcomes study. He was the main designer of the Outcomes study

John Ware worked on, but then he went to Kaiser and was followed at Kaiser by Drew Altmann, who was at the Johnson Foundation.

Berkowitz: That's another name I've heard a lot, but I' don't know exactly what he does. Is he also in health services research, Drew Altmann?

Aiken: He's a political scientist but generally in the field, I guess you would say.

Berkowitz: You stayed at Robert Wood Johnson for a long time. You stayed there 'til 1987.

Aiken: Thirteen years.

Berkowitz: David Rodgers died. Was he president or had he already retired?

Aiken: Actually David and Bob and I left pretty much at the same time, within a year. There was a big upheaval at the Foundation.

Berkowitz: Lee Cluff became the head of it?

Aiken: Right.

Berkowitz: Presumably he wasn't a player in that. He was brought in from outside.

Aiken: He was there. He was executive vice president.

Berkowitz: So he was a player.

Aiken: Well, he was the interim holder of the place.

Berkowitz: Can I ask what the issue was that was divisive?

Aiken: The major problem had to do with the board. It's kind of

interesting if you read Wally Nielson's analyses of the big foundations. He did an early book--I think it's called *The Big Foundations*.

Berkowitz: Twentieth Century Fund study?

Aiken: He had his characterization of the new foundations on the block, and he had 10 reasons why the Robert Wood Johnson would never succeed--like all the board was from Johnson & Johnson and the Foundation was in the field of Johnson & Johnson, etc., etc. It looked like some miracle had happened and these things were not going to come to pass, but they all came to pass at about year 15 of the birth of the Foundation as a national philanthropist. The main thing that happened was that the original chairman of the board got sick, and he had never created anybody to take his place or made any provisions for a successor. And he had pretty much run the entire Foundation himself. Other board members were pretty much in the shadows. So when he was no longer a player this kind of mass chaos broke out, and lots of dissension between the staff and the board.

Berkowitz: Interesting.

Aiken: All of this business about the close connection with the government, for example. The staff were all Democrats; the board were all Republicans. The board didn't like all this kind of activism and the connection with the federal government. They

didn't like publishing. They didn't like research. Everything that was a part of the Foundation under David Rodgers, they didn't like. There was no leadership and the whole thing just fell apart.

Berkowitz: It's also true though that the Robert Wood Johnson was very business-like, at least on the surface. They were big on asking people to account for money, bigger than any other foundation, as I well know from my own personal experiences. They had these accountants that would come and look at things, but I guess that was on the operational level, not on the ideological level.

Aiken: Gus Lienhardt was an extraordinarily unusual person. I think that's exemplified by his choice of David Rodgers. He chose David Rodgers who was quite a controversial leader for a foundation. David Rodgers--everywhere he'd been he'd been controversial. He was very much of a liberal in every way. He'd taken a stand on civil rights, you name it and he'd been there. So for Gus Lienhardt to choose him showed some vision and some capacity to see a larger picture. One of the things that was the most fun about being at the Foundation in the early years was that it was a very intellectual environment where ideas were everything, and Gus Lienhardt was a part of that, even though he was a businessman, so to speak, from Johnson & Johnson, a self-

made man who had come up through the ranks from being an accountant. You often had to debate your idea directly with Gus Lienhardt. He was as smart as a whip, but if you could convince him that your idea was sound, he'd go with it. But when he was no longer there, then nobody wanted to debate the ideas. In fact, it became this idea that it was a foundation like a corporation and there was a CEO, and it wasn't a president. It was the chairman of the board. That had never really been the case before. It was always understood that the staff was a very integral part in the intellectual decision making.

Berkowitz: There's always that tension in all those foundations. They're wildly liberal beyond their original money. The difference, I guess, is that the Rockefellers are mostly dead, and at Ford they're dead.

David Rodgers also was a protégée of Walsh McDermott, who was an advisor at the time you were there, who also started the IOM. That's another interesting connection. The IOM didn't remain true to the Walsh McDermott model. So the Robert Wood Johnson becomes another way of carrying out this notion of activism in public health.

Aiken: Robert Wood Johnson was very important to the development of the Institute of Medicine. The Robert Wood Johnson Foundation and David Rogers and Bob Blendon and I, in particular, who were

members of the Institute of Medicine--this was another aspect of the Johnson Foundation that its staff were nationally recognized people, so they were elected members of the Institute of Medicine. That's a very unusual thing for a foundation, because it usually doesn't have those kinds of people on the staff. So in our roles with the Johnson Foundation, we really convinced the Johnson Foundation that they should put up the endowment for the Institute of Medicine and, I think, that's made a big difference in the development of the Institute of Medicine.

Berkowitz: And particularly when Sam Thier was president, he says that when he tried to raise the endowment he went to Johnson and Robert Wood Johnson was the lynch pin, even though he got money from other foundations like MacArthur and so on.

Aiken: But Johnson was the first one in.

Berkowitz: And once they were in it kind of made it OK. They were seen as the signal sent. Were you involved in that?

Aiken: Yes. See that was an example of some of the things that took a toll on us with our work, because we had a policy of not giving endowments and there was never all that much support of the Institute of Medicine. We held the line, but I think those things stacked up over time. The Board didn't want to do it.

Berkowitz: Of course, the IOM also had its fights with Robert Wood Johnson. There was a big fight about overhead, the expenses

for the fellows that were there, the Johnson Fellows, I guess they were called.

Aiken: Well, Johnson has a policy of paying 9% overhead, and the IOM had this much higher overhead.

Berkowitz: Yes, as part of the National Academy of Sciences they have a huge overhead.

Aiken: Same fight with the RAND Corporation. RAND Corporation was up there at 60% overhead.

Berkowitz: Were you involved at all with those educational programs like the Johnson Fellows. There were several programs like that. There were Clinical Fellows, Fellows in Health Care Finance. I was a fellow in Health Care Finance.

Aiken: Oh, were you?

Berkowitz: That was not a great experience. That was also Robert Wood Johnson. It was really a major commitment. They spent a lot of money on those. Was that also your bailiwick or somebody else's?

Aiken: I was involved--to the extent that we try to evaluate, I was involved. And I myself designed the nursing ones and I was very involved in the Clinical Nurse Scholars and the Dental Scholars.

Berkowitz: Chester Douglas was the guy in dentistry. Do you know that name? He became a big person in the IOM.

Aiken: That dental program—well, we had a big difference of opinion on how important these fellowship programs were. But I think, in retrospect, some of them were very important—the clinical scholars program.

Berkowitz: The policy program?

Aiken: I guess the policy one. The policy one because it was more of a presence in Washington than, I think, the people that went through it. The clinical nurse scholars, the clinical scholars and the dental scholars—the people themselves became important. I think you look back at the people that have been health policy scholars...

Berkowitz: Carl Schramm? I don't know how important he is, but he was one. I can't think of too many others.

Aiken: That's the point. But you can think of a lot of people who were clinical scholars. Almost every health commissioner in a big city came out of the clinical scholars program. For example, a lot of the major researchers in nursing schools today came out of the clinical nurse scholars. A lot of those dental scholars became leading dental researchers, health services researchers.

Berkowitz: So you left the Robert Wood Johnson Foundation in 1987 was it?

Aiken: Yes. The beginning of '88.

Berkowitz: So what do you do here at the University of Pennsylvania? You've been here ten years.

Aiken: I have a 50% appointment in sociology and a 50% appointment in nursing. I'm a professor. I started this Center for Health Services and Policy Research when I came here. It's now a multi-million dollar operation with a lot of huge studies in a number of different areas, but it has as its theme really services research.

Berkowitz: The Center for Health Services and Policy Research. That's a little bit like Kerr White's thing was originally, not so much now. You started that. When you were hired was it in part because you knew your way around the foundation world, you knew how to do this? Did that prove to be a big advantage? Creating centers can't be easy. I guess it would have been harder even in the early 1980s to get grants, but still it must be very hard.

Aiken: They probably hired me because they thought I could raise money, and I was also a very prominent nurse. I'm sure Penn wanted me for that reason. I also had a very prominent name in medical sociology. Sam Preston, who was chairman of sociology at the time, wanted me.

Berkowitz: He's a demographer.

Aiken: Yes. I'm a demographer too, so we had those connections.

Berkowitz: What are your lead projects in this Center for Health Services and Policy Research?

Aiken: We've been primarily interested in how the organization of services affects patient outcomes, in different areas, but that's the theme. A lot of work on hospitals. I've all my life had an interest in hospitals. Lots of our studies are focused on why there is such a large variation in outcomes of care in hospitals, particularly things like variation in mortality rate that you can't explain in terms of the level of illness of the patients. And I've been very interested in trying to figure out how much of that variation has to do with the way hospitals are organized. That's my sociological background. I've been doing these big organizational studies of hospitals, trying to link patient outcomes with organizational attributes. When I first started doing it, I think folks in general were not so sure exactly why I was doing it. Everything at that time was kind of moving out of hospitals. Everybody else was interested in communities, primary care. I've always been interested in hospitals because that's where the majority of the nurses work. It's also where the sickest people are and I've always been interested in the sickest people. Now, it's like one of the hottest issues around, because with all of these financial pressures on hospitals, they're experimenting with major reforms in their organizational

structure. So we've been doing large, multi-hospital studies in the United States, looking at the impact of restructuring and reengineering on patient outcomes. Now we're going do to a huge international study of five countries where we're looking at all the hospitals across these five countries, the relationship between organization, staffing and patient outcomes. You know there's a big debate these days about nurse staffing, whether there should be federal regulations with regard to standards for staffing in hospitals just like there are in nursing homes. Why a public turmoil about hospitals and whether people are safe? There are lots of reports from nurses that things are not safe. So we're a major empirical evaluator of what's going on in hospitals.

Berkowitz: Can you give me an actual, more applied example of a change that's going on and what it means to the staff?

Aiken: Hospitals would like to use substantially fewer nurses and to replace nurses with nursing assistants without any formal preparation, changing the staffing ratios, and also changing what they call the skill mix so there are more lower level people and fewer professional nurses.

Berkowitz: How's that working out?

Aiken: There's definitely a relationship between nurse staffing and outcomes. The better the nurse staffing, the better the

outcomes. We're providing a lot of documentation, big studies, that that's the case. But what makes it more interesting to me is that we, I think, are on the frontiers of health services research in characterizing the organizational traits of hospitals. We're interested in how the organizational traits of hospitals mediate staffing ratios, because we can see that there's a huge variation in hospitals in staffing. There's also a variation in outcomes but not as big as you would expect if outcomes were directly the result of staffing. What we're finding is that the organization of hospitals is the major mediating factor in how much staff you need in order to achieve good outcomes.

Berkowitz: Tell me that again.

Aiken: That organizational factors, particularly as they affect what nurses do in hospitals, are the major mediating factor in explaining why nurse-staff ratios are associated with patient outcomes. We've had twenty years of research that shows that the more nurses, the better the outcomes, the lower the mortality. Nobody ever looked at whether any of these organizational factors that vary a lot across hospitals were important.

Berkowitz: What's an example of an organizational factor?

Aiken: At the most macro level, lots of studies have shown that teaching status, for example, of a hospital or ownership or size,

which could be considered organizational characteristics of a hospital is associated with outcomes. These are not too useful from my point of view because they are relatively immutable. You can't do anything about them. I'm interested in trying to reduce the variation in outcomes, so I'm looking for something you could change. I'm looking at what are the manipulable factors in hospitals that could be changed, that are open to change, that could improve outcomes. So we're looking at factors like the amount of autonomy that clinicians have in hospitals to practice and the discretion that they have in clinical decision-making. We're looking at the amount of control that clinicians have over the resources that exist. In terms of targeting amount to patients, we're looking at the kinds of organizational attributes of hospitals that influence the nature of their relationships across different professional groups, particularly between doctors and nurses. Different organizational forms create better working relationships between doctors and nurses than others. I think it's pretty intuitive, but the better doctors and nurses communicate, the better the outcomes with patients would be when you've got really sick people. So those are the kinds of things that we're beginning to look at. We're even looking, in general, across big groups of hospitals to show that in hospitals where nurses have more autonomy, for example, the outcomes are better.

And we're taking groups of hospitals that have been designated in some way or another, like America's best hospitals as designated by *US News and World Report*.

Berkowitz: This hospital, presumably, is one of America's best hospitals.

Aiken: Right. So we look at those hospitals that have been designated by some external process and we see what they have in common and whether they're different organizationally from other hospitals. Out of that, we try to pull out these lessons.

Berkowitz: That's very much like management literature, "excellence" literature which is also about that, right? Why is the Coca Cola Company better than others? Of course, the biggest explanatory variable for why you get to be America's best hospitals is you were on the list before, right?

Aiken: Well, yes.

Berkowitz: Johns Hopkins is always on the list and it's not clear whether it's a better hospital than the University of Maryland downtown, but it's always on the list. There's always that phenomenon. If Harvard had twelve empty suits in history, it would be ranked 10th.

Aiken: This method we're developing, though, is going to give you a more empirical idea of what America's best hospitals *really* are. These are those lists that come from reputations. We take

those lists that have been derived from reputations and we re-rank the hospitals in terms of their outcomes, on which ones really achieve the best outcomes. Those rankings are not based really on outcomes. They're more based on reputations. So we see the extent to which these reputations are really reflected in their outcomes. And then, if they are, then try to explain why in terms of these organizational attributes. It is shown, for example, that this group of hospitals that was selected in the early '80s by the American Academy of Nursing, as having national and regional reputations for being excellent from a nursing perspective, the research that was done on them suggested that the nurses were more satisfied and these hospitals were more able to keep nurses even in times of shortage. Nobody had ever looked at patient outcomes, so we went back and got all those data and reanalyzed them and we've been studying them prospectively as things in health care change, and we were able to show that indeed those hospitals that were known for good nursing care provide better nursing care and their outcomes were better. Then, as this big restructuring of the hospital industry has been occurring, particularly in the last five years where you have mergers and acquisitions, and a very big thing *within* hospitals, this notion of reengineering that's been brought in by the management consulting firms where they've redesigned the jobs in

hospitals. They have multiskilling and changing of the staffing mixes. Then we're looking at these hospitals that once had good outcomes to see whether they are adversely affected by these changes.

Berkowitz: That's very interesting. They're very external to the profession of nursing, they're just buzz words that have come in.

Aiken: Oh, yeah.

Berkowitz: But they have effects. That's very interesting.

Aiken: Definitely.

Berkowitz: That's a cross of cultures isn't it, that the hospital administrators tend to pick up a lot on this managerial stuff and they're affected by it. Universities now are having that same stuff about the quality of care. There are a couple of words I hear at GW. But they're going into another culture that is set in different ways. That's very sociological too, isn't it?

Aiken: Oh, yes. It has to do with how that structure affects outcomes. That's a major issue.

Berkowitz: Let me ask you one last question about this field of health services research. Is that your field? I see that you're a big player in the American Sociological Association. You have an appointment in the sociology department. Would you also identity yourself as a health services researcher?

Aiken: That's really my field. My association I most like to go

to is the Association for Health Services Research. That's my real peer group. Actually, sociology as a field is more peripheral to what I do these days than the health services community, so I think that what I do is really more health services research than sociology.

Berkowitz: What is it that you find at this meeting when you go there, this meeting for health services research?

Aiken: You have people from different disciplines, which is very stimulating. You know, policy and services research is all about looking at things differently, and that's one of the things that keeps that field alive, that's problematic in fields like sociology where you're looking through one paradigm. In health services research you always have a debate between the economists and everybody else, or even the managerial folks and other people. And you also have the clinicians and the researchers together.

Berkowitz: You haven't talked much about economists. There are economists here at Pennsylvania too, right? Mike Pauley? You work with him?

Aiken: One of the reasons I came to Penn is because Penn has, capacity-wise, I would say has to be one of the top universities in the country in terms of health services research, throughout the whole university, and it also has a culture of

interdisciplinary research, so we all know one another and work together.

Berkowitz: Unlike, say, Harvard.

Aiken: Right.

Berkowitz: Although the people are quite famous, like Joseph Newhouse, he has a lot of trouble putting the people together.

Aiken: Yes. We have none of that here.

Berkowitz: I see. And you find that same thing on the association level with the Health Services Research Association?

Aiken: Yes.

Berkowitz: So where's the field going to go? What's happening in the field. It seems to me that its history is very dominated by a couple of these academic centers like Johns Hopkins where there's Kerr White, and there's this guy in North Carolina, Cecil Sheps, who's a very big deal.

Aiken: I think that was earlier. I don't think it's really dominated any more by any single institution. I think that this idea of the blending of clinical outcomes with economic issues is—something that's very big in the field right now is clinical outcomes research—and I think we're going to learn a lot about the cost-quality trade-offs in care, what really makes a difference and what doesn't, and that is a valuable contribution. Lots of folks in different arenas will find it valuable and

continue to support the field. Health services research has had a lot of problems over time in its financial support because it's too much in the middle of policy. You don't know whether you're offending the people that are creating your budget.

Berkowitz: Isn't that true of clinicians also, they're very suspect of it? They see it as a cost-cutting field.

Aiken: But this merger, I think, of outcomes research is, from the point of view of the viability of the field, and as a person that's doing this myself, it enables you to move over into the NIH. The NIH has a very stable source of funding. Most of my money, even on the health services research, comes from the NIH. They say they don't do health services research, but you build it on the outcomes model, so you get it in through there.

Berkowitz: That's interesting. Your whole career—you begin in this period when it seems like National Health Insurance is imminent and therefore the question you want to ask yourself is about access and health design. And this is an implicit admission that that's not going to happen, so therefore let's take the system we have and try to improve it. Where in the start of your career the big players were HCFA and the Social Security Administration, but now it's the NIH. It's a period of contemplation and thinking about the clinical care and how it's given, rather than reforming the finances. Does that sound

reasonable?

Aiken: Yes. You know the audience is very different for the results of the research. The federal government is nowhere in this, as far as I'm concerned. You talk about the policy implications. Well, there aren't any policy implications to this work in the usual sense. All of my results I'm trying to send to the public and to the management infrastructure and the whole corporate overlay that is now orchestrating how everything is organized. And you want to get to the public, because you use the public to try to influence these managers. So the government, in anything I care about, is not a very important actor any more except in funding it.

Berkowitz: That's ironic isn't it, they're the biggest single funder. That's an interesting outcome, isn't it? They end up the biggest single funder and yet unable to move the system.

This is very good. Thank you very much.