Name of File: Joann_Albers

DWM: So today, it is Wednesday, September 16, 2009, and I am in Bellingham, Washington at the home of JA. Mrs. Albers is a nephrology nurse, and she was the head nurse at the Northwest Kidney Center when it began chronic outpatient hemo-dialysis on January 1, 1962. Thank you for letting me come today to talk to you about this history of dialysis, and I want to start today just by talking about where you were born and raised, and that'll get us to where you got interested in kidney disease.

JA: Well, I was born in Hattiesburg, Mississippi in 1937, and lived there until I went to nursing school at Hotel Dieu School of Nursing, affiliated with Loyola University in New Orleans.

DWM: Say the name of the nursing school again.

JA: Hotel Dieu, it's like the Hotel Dieu in France, it's the daughters of charity.

DWM: How did you get interested in nursing to begin with?

JA: Well that's very interesting; I was totally disinteresting, I knew nothing about nursing, but I had a brother two years older, and those were the days when boys could work and make plenty of money in the summer, but girls could do nothing but work retail in a bakery, which I did, and my parents really couldn't afford two university tuitions, so my brother had saved money, and he went to a university, and I wanted to be a teacher, interestingly enough, and I knew absolutely nothing about nursing, but I researched all sorts of things, and I discovered that at Hotel Dieu you had a year at Loyola University, which was unusual, 98% of the programs were just diploma programs in those days; so my thought was I'll go for a year there, and get advantage of this, because it was very inexpensive to go, because they used you really for slave labor is why it didn't cost very much at all, and you could also work on the weekends and make money, their R.N. levels were very, very low in these schools of nursing; so I thought, well, I'll have a full year of college credit to transfer, and by then, I'll go to school; but interestingly enough, I became totally in love with nursing, it was strange to me too, so I had no desire to leave after that. My family was very not knowledgeable about medical things at all, so I really did know very, very little; but it was just fascinating to me, and these of course, was a very different work, and Hotel Dieu was very old, and it ran a full very big city block, and the nurses' station would be down at one end of the hall, and it wasn't even air conditioned, you can imagine, we wore heavy white cotton stockings and starched uniforms and starched caps, so I'm surprised looking back on it that I ever could have really like it.

DWM: Yeah, what did you like about it? What was good about it?

JA: I think, for one thing, because I knew so little about anatomy or anything, that I just became fascinated with all of the knowledge that was presented. I was very ignorant, I knew so little that, well I think it was quite true of my generation, but especially in Mississippi, and I had three brothers, and she wasn't very communicative about physiology, and so I recall, you were put immediately on the units to just give a bath or something, even though we knew nothing; and the first person was a Hispanic lady who said to me, she was crying, and I didn't know, here I am 17, almost 18 years old, and thinking, I asked her what was the matter, and she said, "Oh, I can't go to Communion anymore because I'm using contraceptives." I had no idea on God's earth what contraceptive was, so when I went back to the dorm, the more sophisticated girls that had grown up in New Orleans were much more worldly, they laughed and laughed at me, so that was my level of knowledge; so you can see it all became extremely

interesting because I was learning about life, and I think that maybe what really attracted me, but I found that it was just something I just liked tremendously. So then after I graduated from Hotel Dieu, I worked at the United States Public Health Service Hospital in New Orleans, primarily because it was the only integrated facility in the city, and I had become quite a liberal, for whatever reason, I don't know, but you felt it was important to be there where they were caring for black patients, because things were so very stratified, it's very hard for anyone to believe how horrible it was in the United States, particularly in the South, and New Orleans was much, much better than it was in Mississippi, which of course, was awful. But the jobs were totally stratified in the hospitals; there were only, if you were black, you were a male orderly -- a male and black, you were an orderly; if you were a nursing assistant, you were white and female; if you were a kitchen worker that hauled the trays, you were black; if you a dietitian or whatever, of course, you were white; it was just a tremendously stratified. Now there was a black university, Dillard University, and I think that might have had some influence on me, because the Nurse's Association, the local one, the Student Nurses Association, we for the first time, had a get-together; it was outrageous, of course, according to society, with the black students at Dillard University. Now I'm backtracking, I think where my original orientation to racial issues happened was when I was a junior in high school in Mississippi, we went on a trip, it was a sodality organization, we went to Chicago, and on that trip, there was a black girl from one of the Catholic black schools in New Orleans, and she was a fabulous singer, in fact, she won the talent contest of the 3,000 people that were there, and I had become very close friends with her on that trip; when I came home, she wrote to me, and I wrote her back, and then suddenly I didn't hear from her, and I found out later that my mother destroyed the letters because she thought it was just so absolutely horrible that I would be communicating with a black person; so I had started this feeling that I had then. So then we set up this thing to have a tea with the people from Dillard, we had it at their campus, of course, because Hotel Dieu wouldn't have been allowed, and we did start a dialogue there, so by the time I graduated, I had enough of that kind of business; so I went to the United States Public Service Hospital, which was a federal institution, and couldn't discriminate.

DWM: Was that in New Orleans? What year was it?

JA: They were, in fact, in that day called the Marine Hospital, because they serviced actually the people who worked in the federal Marine services, but then they became --

DWM: What year would that have been?

JA: That was 1958. It's hard to believe that only a few years later, the civil rights thing started in full force, but --

DWM: So was this your first job?

JA: That was my first job out of nursing school. I graduated one month and went to --

DWM: Was nursing school in two years?

JA: Three years, yes and it was three years around the --

DWM: And did you get that year at Loyola that you were --

JA: Yes, that was an interesting thing, Hotel Dieu was very forward, I had researched that, I don't even really know, because I was an avid reader, had I not been, I would have known nothing about this, but they were very unusual; it was grueling, we would get bussed to Loyola in the mornings, and we took a

full roster of classes, and then we would go back in the afternoon and do some basic lab stuff, and then spend days in the -- so we took our classes with the regular university classes, which turned out to be a real asset to me when I went back to school later, because the same content that they taught at Loyola was allegedly taught in the schools of nursing, but you couldn't get any college credit for those, but with ours, we got the full university credit for those, so that was a very good thing, and very advanced for those days; usually the hospital schools, I think that Hotel Dieu was the only one that had that kind of affiliation in New Orleans, there were some degree granting institutions even then. But in any event, I worked at the Unites States Public Health Service Hospital for a very short time, and decided I wanted to leave New Orleans and see a little of the world, and again, I'm not sure how I got on to Atlanta, because it was too, too terribly far away, but I applied to Emory University Hospital, because what my intention was to go somewhere where I could begin working on a degree, and Emory like many universities offered free tuition for a class if you worked at the hospital, so I lived in a little dorm right across from the hospital, and right on the university campus, and took some classes there, and worked; but only for, I can't even remember how long I was there, you know, time was very different when you're in your 20s, but I was there probably a year and a half, I guess, or maybe just a year, because when I was working at Emory University Hospital and a person who had been the Head Nurse on the unit where I was working was away, and there was an interim person, and when this person came back, her name was Shirley Kimball, she had been out in Seattle, I had never heard of Seattle, which is very interesting, she had been in Seattle getting a Master's degree in nursing, and when she came back to Emory to resume her job, she immediately decided having been there a month or so, that she'd been offered the Director of Nursing job at Harborview in Seattle, and she wanted to return; so she asked me, I think I was like the Assistant Head Nurse or something, you didn't have to do anything to be these designations, but she asked me if I wanted to come out for the summer with her, and in those days, she wanted someone to drive out with her to Seattle; she showed me an article called the Emerald City of the Northwest or something, and that was the first I even knew about Seattle, of course, it was the opposite end of the --

DWM: Atlanta to Seattle.

JA: So, I said sure, because in those days, you could get a job anywhere. If you'd been in a hospital, basically, you'd seen one, you'd seen them all, so there was very little technology at all, we had just really nothing, ventilators were just beginning, because before that, they had the iron lungs, and that was about it in New Orleans, but in Atlanta, at Emory, which was quite advanced, they had some kinds of very elementary ones, so you didn't need to learn a lot of stuff; and so I knew, because it was the way things were, you could walk in, as soon as you got yourself licensed, which wasn't too difficult, you could just get a job for any period of time, because they didn't have to invest a lot of training in you; so I knew that I would be able to get a job, so I guess I wrote to the University Hospital, which hadn't been opened for too very long, and --

DWM: The University of Washington?

JA: University of Washington Hospital, yeah, but the hospital had just been there a short time, and I just walked in, I mean, I had written and then I walked in, and of course, she said come to work tomorrow, because the way things were in those days, and I told her, I'd probably just going to say the summer, but nobody cared, because that's high vacation time; but 5 East, which was the clinical research center, it was under construction, it was not open, but they knew they were going to put this service in --

DWM: And what year was that, the summer of?

JA: This was May of 1960, because dialysis had just started down on the rehab unit in March, although I was unaware of that fact, so I arrived early May at the University Hospital and started work immediately, and they sent me to the Intensive Care Unit, which is kind of funny to think about nowadays, because I had also done that at Emory, they did some kinds of open chest surgery there, and what was always the case in hospitals, they took the bathroom, and there would be adjoining rooms, so they'd convert the bathroom to a little nurse's station and either side, but of course, University Hospital was new, so they had an Intensive Care Unit, and I oriented there, and they were doing acute dialysis --

DWM: So did you see acute dialysis in the Intensive Care Unit?

JA: No, I can't remember, but I don't think so, because remember, it didn't occur very often, because we didn't have procedures that, I mean, nowadays you do it because you do so many things to the patients, but then, you didn't start anybody if they had any chronic conditions, so it was only for a very few people that had some temporary something.

DWM: So you were still not seeing dialysis?

JA: No, I hadn't really seen any dialysis, they just didn't do any in those, I'm talking, a couple of weeks, and then 5East was opening, and there was a big orientation to the research unit; and the research unit, of course, had a number of different things on it, and not dialysis, the very first; and we were taught how to do a metabolic day and all the research measurements and stuff; but we were also told, and this was very unusual in nursing, because you were busy really just doing drudgery work, I mean, it was very hard work --

DWM: So tell me, though, before we talk about the unusual part, tell me what the drudgery work, the daily work was like.

JA: Well, the drudgery work was you just, there were no, you just did, well you did everything, we didn't have people to bring sterile supplies; for one thing, the syringes were made of glass, you had to rinse them out when you were done, because they would get stuck with the medications, and then they would go down somewhere and be sterilized; but everything, there were no disposables, so you can imagine bed pans and cleaning up soiled, you just didn't have the equipment and things that we have now; so the drudgery was simply that it was like doing housework before there were washing machines and dryers and dishwashers and such.

DWM: So your work was not very technical, it was --

JA: No it wasn't, because at the university hospitals, and we weren't even allowed to hang blood, though we might have been at Emory, but at the University of Washington, we didn't because there were all the interns and residents who were practicing things, so the nurses did very little technical things, because that was pretty much what --

DWM: Would you have done the routine things that we think of, like vital signs and things like that?

JA: Oh yes, we did blood pressures and temperatures, those were routine.

DWM: And you were giving some medicines, but --

JA: Oh, we gave all the medications, but then there were very few IV medications then, there were very few IVs administered, now you get one the minute you go in the hospital, but IVs were only really mostly used for hydration of stroke patients and such, they were getting more sophisticated, mind you at this

time, but during my period in nursing school, you mostly did them for hydration, and then a few medications were administered that way, but I can remember very few. Medications are interesting, because this is the University hospital, we had stock supplies of everything on big cabinets, so you didn't have the pharmacy delivering you pills, if the doctor wrote an order for a drug, things like Darvon and Valium, they were just stock supplies on the shelves, and the doctor wrote an order, and you just went up there and picked out your medicine out of all of these bottles, which I know would sound very weird to a nurse today, the way we are with drugs; so it was drudgery in the sense that you did everything, and remember, we had no computers, the charting was laborious, and also even thermometers were not disposable, they were glass, so you had to wash those and put them in solutions, I mean, everything just had to be done; and truly, even things like vinyl gloves and such, those didn't exist for us, I mean, it makes a big difference having all of these things that you throw into the trash, so it was just very labor intensive. When I had left New Orleans, we still had to stand up when the doctors came into the nurse's station, and you also had to always give them a seat, and you stood; but it was quite a bit different at the University settings, because there was just a different culture there, although you still were told you couldn't share any information with the patient until the doctor gave you permission; I always found that so interesting, the patient's burning up with fever, and obviously knows it, and says, "What's my temperature", and you were supposed to say, "You'll have to ask your doctor", and you know it was 103, but I was never too great about it, but you could get into really serious trouble with some people, so I tried to be that way, but a lot of us would know the patient well, we'd say we weren't supposed to tell them, but it's 103 or something. So that was the culture, it was the doctor owned the patient, that was the way it was, and the nurse was often referred to as the doctor's hand maiden, which was kind of the way it was; I always used to laugh, because you had on a white uniform, people were very polite, I mean socially, if you were a woman, the door would be open for you, but if you had on a white uniform, the doctor could knock you down with the door, and he'd walk in front of you and up the stairs; and I say he, because I did not know a female doctor until I went to Emory in Atlanta, where there was a doctor from somewhere in the Far East in training, and that was the first woman doctor I met; now there were, of course, many, but they just didn't happen to be Hotel Dieu School of Nursing in Louisiana, but it was a very male profession, and women were almost 99% of nurses were women; and so the few male nurses would be in the OR, you just rarely ever see a male nurse anywhere. So it was not only just the doctor/nurse thing, it was the male/female thing that existed in the country at that time; it was before NOW organized, and women became something in their own right; so it wasn't just the medical thing, it was the way it was with women in general; you couldn't get a credit card, if you were married, the credit card could not be in your name, it had to be in your husband's name, I mean, women were just not fully members of society. I had realized much later that it had only been 40 years since we'd had the right to vote at that time, so it was very different.

DWM: Hard to believe.

JA: Yes, it was a very different time. So society was very stratified in general, I mean, it was just the way the world was, but this nurse/doctor thing was really troublesome, because the doctors were just in charge of everything, even though they were here only for brief periods, and their word was law, whether you agreed with it or not was beside the point, and it was very, very hard to ever challenge anyone, because it was just not done. So this was the environment, and coming from Emory to the University of Washington Hospital, this transition was really interesting because the doctors that formed the group for this research committee, had realized that the number one problem for some of their studies was going to be keeping the patients happy enough to stay on the unit and finish the research project, because it was boring, you know, we had a t.v. in the lounge, and that was it, and really --

DWM: And they would be coming to stay maybe for a week.

JA: Yeah, sometimes weeks, depending on the nature of the study; there were some pancreatic ones that I recall where the patient stayed a very long time, because they had to eat an exact diet and we measured everything, every drop of food, so it was one of those the metabolic day you measured all the outputs and everything, so if the patients left in the middle of the study, that was a problem; so we were told, and this was a very unusual situation, we had a very good staffing, and we were told that one of our primary jobs was to keep the patients happy, so that they did not leave in the middle of the study, and so we met some very interesting people along the way. But anyway, so we were actually encouraged to play cards with them periodically, and do things like that, as well as doing of course, the work we had to, but it was way much easier then working on the regular units, and this was all quite new to me, but it was very good because it began to give me some ideas about how research was done, and how careful you had to be about data and whatever. So my first introduction to dialysis was one night the clinical research center -- no, it must have been before it opened, because I was like a float nurse being oriented, and I didn't even know this was happening, but apparently dialysis had started in March down on the rehab unit, which was on 4 East, the floor below where we were going to have the research, and I was called in the middle of the night - well, it was the way things were, there was a supervisor at night, and the supervisor, I was probably still orienting because that's the only reason I would have been free, I guess, and she said that she needed me to go down to 4 East, which was the rehab unit, and sit with a patient, because the doctor needed a break, because the doctors stayed with the patient during the entire dialysis, which I knew nothing about; so I went down and went into the room, and the person was Bob Heckstrom, I don't know if he would appreciate my saying so, but he was sitting with the patient, it was the middle of the night, and obviously, he needed a break, so he was never a man of a lot of words, but he said, there was a chair by the drip chamber of this, I mean, all of the equipment was sitting there and I had no idea and it was Clyde Shields, and so he said, "Just sit here in this chair, and look at that blood dripping through that chamber, if it stops, call me immediately", that was my entire orientation. I was terrified, because I had no idea on earth what would happen if the blood stopped, it was just unbelievable, and Clyde was awake and he had big brown eyes, and we just sat sort of staring at each other; and later, he told me that he remembered that night so well, and he said, "There you were with your big brown eyes", and he said, "I couldn't figure out who was more terrified, you or me", but I thought it was probably surely me. So, I sat there just hoping he would come back some time soon, nothing happened, and he did appear back; so I did not even know what the name of this procedure was, or what it was, or anything, it was just a total mystery to me. But interestingly enough, about two weeks later when the research center opened, I discovered we were going to get these patients from the rehab unit, and that was then Roland and Harvey and Clyde, and I can't remember when that happened, but there was a fourth patient whose name I know but can't remember at the moment --

DWM: But the thought was that the chronic dialysis patients who were coming in regularly were not going to be on the regular part of the hospital, they were going to start coming into the clinical --

JA: Yes, because later, I know this from years later, there was all this stuff going on politically about the cost of this procedure, and so there was funding on the research center, so I guess he had written a proposal and that was the way he was going to get to keep funds for the patients on that unit, because it was a big, and those patients truly received so many, were the focus of so many research studies, it was unbelievable. So they came to that unit, for the purpose of research, and I had had this one brief episode, so I had at least seen what this was, so when they came up to the unit, of course, then we received some kind of orientation, and the doctors decided that they were going to have to have the nurses start to monitor the patients, because they couldn't continue, we were just a couple of months in, of course, at this point, they had started in March and this is sometime in May; so the patients came

there and I believe Clyde was going back and forth from home; but Roland Hemming had very severe neuropathy, and he stayed in around the clock for those first few weeks and months; and Harvey was actually, I think, he was working, he was a shoe salesman at that time, and he also was gone, and he often dialyzed overnight, because I think he was trying to work in the day time; but anyway, there were those three, and then a fourth patient, I don't remember when that person started, I think Jack Capaloto is his name, but he died sometime in those first year, I can't remember how long, he didn't live too terribly long; in any event, those first three patients would come in and out on the research unit, and Roland stayed there.

DWM: So when they said the nurses have got to start being involved in the monitoring, what did that mean, what did you all have to do then?

JA: Well, we had little paper sheets that we wrote down, you know, I'm trying to think back, because it's so difficult to remember what we did. We would call the doctor, obviously, if the blood clotted or anything, and we would monitor the Heparin doses, of course, because that was being infused all the time; and of course, you had to monitor with little, remember there were these big tanks of dialysate, and they were cold, I'm remembering how labor intensive this could be, they were kept very cold so the bacteria didn't grow in the tank as the urea and such all re-circulated back into this big tank, and so the blood patients would be freezing, and the tubing was very, very long and wrapped around coils inside of a metal warmer, and we had to watch the temperature of the warmer, because it could coagulate the blood, or the patient get too warm, so it was a constant monitoring of all these things; and because of the way this thing was around and around in the containers, the tubing would get hot and it would kink and it would break the flow, so we had to pull the whole center piece out, water dripping everywhere, and rewind these coils and put it back in; so it was just a lot of stuff to do all the time with it, and of course, there was no electronic monitoring, so we also would dip, I can't remember if then we had the little blood strips or not, or how we measured, because at one point, I think we actually had to take something and put it on, but to see if the color changed to find out if there was a leak, because we couldn't do really any other thing, but to check visually, which would could see if you watched the dialysate coming out of the kidney, you could see obviously if it were grossly, but a small one you might not see; so there was a lot of constant monitoring.

DWM: I wanted to go back to, say one of the patients was coming up for dialysis, what did it take, who was setting up the machine, who was starting the dialysis, what was that like, and talk to me also specifically about the accesses that you all were using and how they were working.

JA: The accesses, when I first was involved, were very firm Teflon, they had a metal plate that was taped onto the patient's arm, and then there were little plastic screw things to attach them, but you had no way of stopping the blood flow when you took them apart, except to put the blood pressure cuff on and make a tourniquet.

DWM: Because once you opened up that, there was no clamping the shunt off.

JA: Right, so you had to pump the blood pressure cuff up, and of course, if it lost pressure at all, you had blood everywhere --

DWM: And blood everywhere really fast.

JA: Yes, and so that was a very difficult of the procedure, putting them on and off, because of that problem; but the nurses had nothing to do with the set up of the equipment, the technician, Jack Cole, was the primary person, I recall, they had a lab down in the basement somewhere, and they would

prepare the dialyzer, they were the Leonard Skags we were using, which were two stainless steel kind of steel metal contraptions with black rubber mats in the center, and I think it was Cooperfine, I don't remember what the product was at that time, but they formed the sheets of envelopes and the tubing just attached to that, and then they also rolled up these big tanks full of the dialysate and put them behind the bed, the patient was surrounded by equipment, and then the big warmer had so sit with the tubing all, they would bring it up all wrapped and whatever, but of course, we had to frequently had to undo it, and so there was a lot of monitoring; and on the other hand, there was also a lot of down time, someone had to stay in the room, I think we had 3 beds in that room, and so we could potentially have 3 patients, but usually we only had 2, but you stayed in the room, we never left, I mean someone relieved you, but you never left them alone in the room, because of course, they could bleed or whatever, and often did.

DWM: Bleeding from?

JA: Well, if anything came apart, of course, you just had massive, and things could, because we basically just used little -- well, I can't remember, that might have come later -- but we used to tape the shunts together with just, I think we had plastic tape even then, you know, a lot of these things didn't exist, paper tape didn't, but things could go wrong, and you could have a leak in the dialyzer, which could be massive if it happened, and you had to get them off right away, and we didn't take patients on or off in the very beginning.

DWM: And there were no alarms, something's bleeding, it's just all visual --

JA: Right, right, everything visual and just looking at it, so you had to kind of keep an eye on things; of course, the patients got to the point where they kept on eye on things too, because they knew too what could go wrong.

DWM: How long were the treatments generally?

JA: You know, they were 12 hours, twice a week, by then. I was reading something not too long ago, and I believe initially, when they were down in the rehab unit, they were doing a 24 hour, but I don't think that lasted probably more than a month, because by the time they were at 5East, which was just a couple of months later, they were on 12 hours, twice a week.

DWM: Was there a blood pump going?

JA: No, that was what we were famous for, as opposed to the cuff title, we were the low flow people, so there were no blood pumps then, this was all just gravity flow - not gravity, blood pressure, and that was also made it less hazardous, of course, because leaks weren't nearly as bad as if you had the blood pump going, so it just make the fluid loss and such not nearly so great either, which was another big problem, because if the patient lost too much fluid, the pressure was suddenly gone, and somebody had to give him saline, and I think we did that at least, but there was really no monitoring, I mean, the monitoring was all just labor intensive monitoring, there was no electronic of any kind whatsoever, that I recall, and no buzzers or alarms, there's something to be said for that, but what really happened on that unit, looking back, I think it was fortuitous for the development of dialysis that the patients were moved to this clinical research center, because the nurses, there was a very stable staff, you couldn't float in there, because you had to have learned all this metabolic day stuff; and the other thing is and this was unusual in nursing, I know it sounds strange to nurses with their psycho-social orientation nowadays, but there was no psycho-social, I mean not that nurses weren't that way, but you didn't really have time to spend a lot of time with patients, and on this unit, that was the focus, you were supposed to keep the

patients happy, and I think that made a huge difference because, remember nurses never called people by their first name, I mean, you were taught that you had to call everyone Mrs. and Miss, and you know, it was the way the world was at that time; so patients, you didn't call patients by their first names, and they didn't call you, usually you didn't even have your name available to them; but this situation made it so that the nurses and the patients bonded in a very different way than if it was just in a room somewhere, because you were assigned to that room and you just stayed there, so you began to know the patients in a very different way than you would a patient that you took care of on the unit somewhere, and we met their families and their children, and it was just a very different thing, and I think that that was what really pulled some of them through psychologically. Harvey was always just a very self-contained person who didn't want any being taken care, he was really a very independent and did what he pleased; the other thing that a lot of people resented about Harvey was that he didn't follow rules very well, but truly that worked to his advantage; I think he ate things he wasn't supposed to, you know, some of these things seem like heresy, but it's not always exactly following doctor's orders that keeps you in the best of health, and Harvey was just determined to just live his own life, and that worked for him in many ways, he kept his job, but he was also very resentful of any of the dependency things, which was very hard; and Clyde, when I look back and realize he was something like 29 years old, I was 22 I think at the time, and he seemed like, well because he was married and had children, he seemed like an older person to me, I just have to chuckle at that now, he was just what I would call a child now, but he was very mature, and he had a wife who was a saint, Emmy, she was just always there, and he had been a very good provider, but he couldn't work, and he had children, and he was very, very sad about his loss of the role that he had had in the family; but we had time to listen to those things, and I recall once his saying, we would talk a lot about how they felt, and what it was like, and I don't know why some things stick in your mind, but one day he was very depressed when he came in and I asked what was the matter, and later he said, "You know this morning when I was leaving the house, I saw Emmy's underwear hanging on the line, and there were holes in it, and I was so sad because I couldn't buy her new things", and that always, I think it was that getting to know the patients in that way that began to make us realize what they were going through, it was very different than when you just meet somebody and they'd go home the next day; but anyway, Clyde was a very hard working, and he used to get quite annoyed with Harvey because Harvey was what he called a spoiled brat, you know, these little interactions were kind of funny; and Roland was the saddest of all, Roland had grown up in a little small town in eastern Washington, and he had older sisters, and he was I think now we would have called him menopause baby, because he was way younger than his sisters, and not a very educated person, and he was in a coma, this is before IRB's were ever heard of, he just woke up and found himself on this machine; now I wasn't there at that time, but he told me about this later, but he woke up angry, he had no idea on earth what was going on, he had no scientific background, he was just bewildered by the entire thing, and he had terrible peripheral neuropathy, he could not walk, and he was just angry, he used to say to me, "There couldn't have been anything wrong with my kidneys, I used to drink beer all night and never have to go to the bathroom", and I thought to myself, yeah there was something wrong; but anyway, he just became a huge challenge and if you asked what really got me hooked on dialysis, I think it really was my relationship with Roland Hemming, because Roland, this is summer, they started in May and there was no air condition in University Hospital, nothing like Louisiana, but it was hot, and you still wore the white caps and the starched uniforms, and it was a very hot summer, which is unusual here, but you know, taking care of patients physically, baths and changing their beds and everything, was physically very difficult, and Roland stayed all the time in the hospital for those months, because he couldn't walk and his parents were elderly, they would take him out in a wheelchair sometimes, but they couldn't really handle it very well; but anyway, he was on the research center, and Roland's way of coping was that he just was very angry, and he would ask for the most, it's hard to describe how incredibly difficult he was to take care of, because someone would just be assigned to him, because it

was difficult, we didn't have lifts and all that, I think we did have one higher lift or something somewhere in the hospital, but you would have to move him out of the bed, he wasn't very heavy because he had lost a great deal of weight, but he had this notion that he could feel any wrinkle, maybe that was true with his peripheral neuropathy, but he would decide that the mattress on his bed was uneven and he would want you to change, bring a new bed in the room and you might have just finished, and he had to be propped all up with pillows, it was just an incredible nursing adventure, he demanded constantly, if you would get his tray up, he would eat, but then there was always something wrong, he'd demand it be sent back down and get something else, you were just going constantly; and he wasn't violent in any way, I mean, there was never any of that kind of ugliness, it was just this quiet constant demand, and it was maddening to the nurses, so when we come in for report in the morning, you'd get assigned your patients, every day people were dreading if they were going to get Roland; so one day, I just said, "Listen, I am going to volunteer for one week, I'm going to take care of Roland every single day, and then I don't want to be assigned to him, I'm not going to go through the rotation for a while, so I know I can come to work and have a break." Everybody was thrilled, they didn't care, a week was wonderful; so I had been working with him, it's hard really to describe how he was, but this one day, it was so very hot, and you would just get him all fixed up, and it took hours, and he would then say, "I want to get up and have a cigarette", people of course, smoked in the hospitals and everywhere then, and he would use cigarette holders and he would have about 5 different brands, and you'd say do you want a Lucky, and then you'd give it, and he'd say, no I decided I wanted a whatever, he was just amazing; but this day, I think it was about 3 days in, I really was exhausted, and again, you never sat on patient's beds or anything, but I just sat down on the edge of his bed, and I just looked at him and he said, "What are you doing, you're going to get fired,", and I said, "I don't care, being fired would be a joy right now, I am exhausted from taking care of you." He never called anyone anything but nurse, nurse, so somehow or another, I don't know what happened, but he just suddenly we started to kind of, he thought that was amazing that I would sit on his bed, so we developed a relationship and actually -- oh, the other thing he did, his cannels had to be, the bandage, he would just want it cut into this design, it just could take you hours really to take care of him, but this day, he was so genuinely amazed at this, and I really didn't care, I was ready to be done, and he decided he started calling me by my name then, and we started a relationship, and really he became our very favorite patient, he had such horrible neuropathy, but he became the nurse's kind of pet after that, and I began to realize really what life, he began to tell me about what had happened and how angry he felt, and we all became so attached to him, it was just amazing; the doctors paid no attention to him, because of course, he was horrible to them, he asked a million questions, he never wanted to agree, I remember even after I left and went back one day at a meeting, and I dropped in to see him, and again Bob Hegstrom was trying, they wanted him to have an EEG, there was a series of studies, because these patients had to be, they were on the clinical research center, and they had to have these studies done, and Roland was protesting that he wasn't going to have another one, and I remember he was shaking his finger and saying, "Now just tell me one thing, what is this going to do to help my kidneys", and I thought, that's sort of irrelevant, but he was just very funny; but the nurses became incredibly fond of him, and he just changed completely, we would do things then, we took him and let him look at every bed, I did, every bed there was on the floor, and I said, "Now Roland, you're going to look and see which one is level, and then once you select that bed, we're done, we're not changing them", so I became very attached to him, and realized that, I think I just began to see what their life was like in a very different way than nurses had, so because it was kind of a miracle to get Roland to work well, I just kind of became identified as the dialysis nurse, I mean, I wasn't, but I was always then assigned to the room where the dialysis patients were, mind you, I had days off, so I wasn't, and there was three shifts, but nevertheless, I was frequently in there, I mean, almost all the time I worked, I was in the dialysis room from then on. You know, the time goes by so quickly for me now, it's amazing to me to look back and see that there were just these

few months of these things that had seemed years really, because now three months disappears, but it was not very long really, when I realized that I left in September of 1961 to get ready to open the Northwest Kidney Center, which was originally called the Seattle Artificial Kidney Center, and so it was really only from May of 1960 until September of 1961, that all of these things happened.

DWM: So let's look real closely from that May of 1960 til September 1961, which patients came and went during that time? And what happened, because dialysis was changing so quickly during this time.

JA: Yes, well we had those three, and we had Jack Kapaloto who died. There was also another patient, whose name I cannot remember, he only lived a very short time, but he had a hyper-clotting, his cannels could not stay open, and he died, and I do not know; none of these were ever mentioned, but I don't remember what his name was, but he was there in an interim, and Jack died, and it seems to me that there was also another patient who lived a very short time, but my memory is gone on that one, so we had those patients; and then, this is all very confusing, because I didn't know the political things that were going on at the time, later I did a number of them because Dr. Scribner wrote letters to Jim and I about some of the political stuff that he wanted us to support, but apparently it was all this commotion going on between the University Hospital administration, who was worried sick about the financial cost, and Scribner who could outrageously ignore anything like that; and so, I don't know how it happened really, there are all these different stories, Scribner had seen my husband, Jim, he was not my husband at the time, as an outpatient, and Jim was working on his Ph.D. at the University of Washington in physics; so Jim had a dialysis in March of 1961 to try to tide him over, it was supposed to be, I don't whether it did or didn't, but anyway, he continued working for his Ph.D. and didn't begin permanent dialysis until December of 1961, but Scribner had already told Jim he was going to go on dialysis, but the University administration knew nothing about that, and so I guess there was a big knockdown, drag out between Scribner and the administration when they discovered yet another patient, who he wrote in a letter to me said that well, he thought that the University would let him do that because it was his own private patient, which I thought was a little funny; but anyway, in the meantime, the Kidney Center was going to open, they had the Hartford Foundation grant, and there was a woman who started on dialysis, who I believe went through the committee, Jim Albers never went through that selection committee, although in another letter Scribner wrote that he was the first one selected, well that isn't true, because Jim never went through any selection committee, he was on dialysis at the University of Washington, and when the Kidney Center was going to open, this other woman patient started, Kathy was her name and I can't remember her last name, but in any event, she was the one selected to go to the Kidney Center.

DWM: So all of that was part of realizing that they had this chronic treatment and there was going to be very limited resources, they had set up the selection committee.

JA: Right, well I was unaware of that, of course, at that time, but in any event, Kathy was supposed to go to the new Kidney Center, but she didn't want to and Jim did, so they just changed places, even though Jim didn't have a legitimate position at UW, I guess they weren't going to now take him off, I think they threatened Scribner with his life if he took another one at that point, because there were no funds, and no insurance paid for it at all, so Jim then went to the Center when we opened in January; John Myers was the first patient who started, I mean, he had the first dialysis there, but Jim had been on dialysis, and I don't think, I believe John must have been at the University, too, because I don't really remember how that happened, but --

DWM: Who talked with you about moving out to open the Northwest Kidney Center?

JA: John Murray was one of the renal fellows, or I guess, I don't remember what his status was, but he was going to be the director of the Center.

DWM: John Murray.

JA: John Murray, and he was one the person, I should backtrack here a bit -- the person who became our sort of touch person, the grunt work person, was Jerry Pendrith, and from the nurse's perspective, he was the go-to person because Jerry was a Fellow, so he was in training, so to speak, but he was just kind of the person that dealt with this all the time; and one day, he came in, and I can't remember when this was, but it wasn't too very long after, well it was when we already knew the new Kidney Center was going to open because at some point because Jerry came in one morning, this is how nurses were so consulted, he came in and said, well we had a meeting, and we've decided that we're going to teach the nurses how to put the patients on dialysis, and so you're going to do that today, but of course, we'd watched it hundreds of times, well I mean not hundreds, but it was a big thing, and so he then just stood there, again nowadays, there just weren't all these rules and regulations about policies and procedures and stuff, you just did whatever the doctor said, that was acceptable; so, I learned to put the patients on dialysis and then we taught everybody else, sort of learned or a number of people learned, not everybody, and so Jerry was the person we really worked with the most; John Murray was in and out, but he was more of the scholarly type, but it had been decided that he would be the Director of the Kidney Center, so he came to me one day and said that he wondered if I would go over there and be the whatever, the head nurse, I think they called it, the only nurse is what it was of course, so I said yes, because I was really very interested in the whole, and I think Jim and I, well Jim and I weren't married then, but I think we were going to be married, and so I --

DWM: And you had just met him as a patient?

JA: No, well I met him when he was an outpatient of Scribners, we were both going to the University, I was working on by Baccalaureate degree, again because you had free tuition for the University of Washington, and Jim was doing his Ph.D., and he asked me to have coffee with him one day on the campus, and so I had, it's now very unprofessional of course, but things were very different, lots of nurses were married to their patients, and Jim was just an incredibly brilliant person, and a very unusual person, just not only was he extremely bright, but he just was interested in everything there was in the world, but he was also a very quiet and, I just don't know how to describe him, but he was just a very unusual person, and I was just incredibly fond of him; so anyway, we planned to be married, even though everybody thought that was insane; Emmy Shields was very concerned for me, when she heard that too --

DWM: Because he had his kidney disease and he was going to be on dialysis.

JA: Right, so anyway, so John Murray approached me and asked if I would go over there, and I said yes that I would; so in September, I resigned at the University because they began paying me to write the policies and procedures and work out a relationship with Swedish Hospital, because the Kidney Center was in a nurse's dorm across the parking lot from Swedish, which was very small in those days, so I had to work out all the support services for the Kidney Center, the housekeeping and all of the things that Swedish was going to do, so I got oriented to Swedish Hospital a little bit.

DWM: Why did they pick Swedish Hospital?

JA: I think that was probably some kind of a community thing where Scribner was looking for a place that could accept the Foundation grant; Swedish had closed their School of Nursing, so they had the big

empty dorms, so really I think it probably was that they had adequate space, of course, you had to cross the street to get to the hospital and it we used to push patients in their carts up to the hospital if they needed to go there, I mean, we were going to be located having in the University of Washington Hospital, we were going to be totally no doctors around or anything, I mean, no doctors except coming in and out, that was very different.

DWM: So I mean, you're going a year and a half in the time where a doctor sat at a bedside through the entire time, to where you were not going to be located in a hospital with a doctor on site.

JA: That's right, but that's the only way it could be afforded, see that was the whole thing, it was way too cost prohibitive anyway, and so they were trying to do everything possible to make it, I think Scribner knew that if they couldn't make it in an outpatient setting, they couldn't make it, because no one could afford the traditional hospital care for the patient, where a doctor has to be there all the time, and doing all of these things. You know, I believe if I hadn't started out just being 22, I would have thought it was crazy, too, but you know, when you're young, you just don't pay much attention to that. I thought, years later I was the nurse executive at the hospital here in town, and I look at all these rules and regulations, and I thought, nobody paid any attention to us, we just did whatever, I mean, it was kind of strange when you think about it, but it all seemed like perfectly, and I'd done it a whole bunch, and I was -- in the interim, I didn't think about this, was the declotting of canulous --

DWM: Yeah, talk to me about that, because it sounds like the Scribner shunt, clotting was a definitely issue.

JA: It was a huge problem. It was the one thing that Jim had, Jim had his first shunt lasted 11 years without any revisions, which was an amazing thing, but the other patients were losing them all the time, of course, Jim had the first Sylastic Cannula, others had the Teflon, which clotted much more often, so we were taught to do that procedure, too.

DWM: So what was the procedure for declotting.

JA: Oh well, it was interesting, because we had no equipment whatsoever, we just got little tiny pieces of, I don't know what kind of plastic they were, but there were flexible of some kind, and we had glass syringes and metal needles that were not disposable at that time, and we would just insert them into, I think we got the blunt edged needles, and we would insert them into this tubing, and just use sterile saline and just pull the clots out and irrigate it through; it's a wonder no one died from a clot, but it's just what we had to do. The initial cannuls were put in at surgery at the University, but later we did cannulations at the bedside in the Kidney Center, I mean, it was very different, I mean, later they started going to surgery again when they realized, I think, that it was not an appropriate field to do, but it was just what happened sometimes.

DWM: And the procedure for declotting a cannula, did you just write that up?

JA: Well yes, because not only did we write it up, but we had to figure out, well not me, particularly, but the doctors had to figure out how to do it, and of course, the nurses had a lot of input because we were taking over this thing, so I think that we had more time to dwell on procedures; so very early on, the supply people would come in and we started talking to them about all the problems we had, you know, when we were totally out of money at the Kidney Center, there was a time when they thought it was, well I don't know what they thought would happen, but there was a newspaper article with the 13 patients that were there, they were going to have to close, but the nurses tried everything that we could think of to reduce the costs and to reduce the amount of nurses that we needed; and so we would

brainstorm ways that we would make our work so much easier, and these of course are things that wouldn't even pass inspection now, but we decided that if we pulled up all of the Heparin syringes, this big glass 50cc syringes, and loaded them up and put them in the refrigerator, we got it so that we could, remember there were just no disposable supplies hardly then, and we didn't even have disposable bedpans, I mean, they were metal bed pans that you had to wash and clean and re-sterilize, so everything was so labor intensive, and we began to talk to the suppliers about things that they might make, and one of them were declotting kits, because if everything, we realized was in a nice little package and you could open it up and have it all sterile and ready, and plastic syringes right around that time started be in vogue too, disposable things were just coming out, so the really labor intensive thing was because there wasn't anything disposable, so we began to then talk to them and they would make products for us; if we'd say, well gosh it would be so great if we had something that would do this or that, and so that made things very much easier for everybody.

DWM: Who were the suppliers at the time?

JA: Well, Kobe was one of the big ones, the ones that we dealt with the most, and they were the most responsive to us, as well, I must say, we got to be very close to some of their people, and of course, somewhere in there, Dr. Drake started that little machine which was so easy to operate; Jim and I used to travel, we would haul it in the car, you could repair it, that was so, of course no monitoring or anything on it, but it was a great little machine; but we had then at one point, well when we opened --

DWM: Yeah, tell me about the equipment when you opened, what you were using?

JA: Now, my memory begins to fail me. At that point, we had, I believe, we had the Keil Dialyzers then, though I'm not positive about that, they were so much simpler, I'm fairly certain we did, they were so much easier for the technicians to assemble; and we had a central dialysate delivery system, I think the single pass system at that point because my Jim had done a paper, he'd done some research to find out whether the clearances, what they were like on the single pass versus the size of the tank, and I think that the Kidney Center was originally plumbed with the central system, though I can't fully remember that, whether we originally had -- no, I'm wrong, we had tanks, because now I'm remembering the huge tanks again, but at some point -- so initially, we had the big Harvey Swenson Sweden Freezer Tanks, and yes, you had to stir up the dialysate and keep the temperatures, and we had all of that, because the beauty of the single pass system was you didn't have to have the heaters anymore, so no, we started out with just the very same equipment.

DWM: So how many beds, how many chairs did you have?

JA: That was interesting, there were no chairs, we had beds, hospital beds, and we had 3, and that's an interesting story also. Not being aware of what all the political stuff was, I don't know, but we had 3 beds, and one evening, John Murray came down and said to me, "It's awful, there's this lady, she's already been selected, but --", you know, they used to select people so that if you had a bed, but he said, she was going to die because she was just getting too uremic, and she was, we didn't have a room; and we had this room and we had 3 beds in the room, took 3 across this way, and so John came down, he was really bummed that evening, he was just sad about the fact that this woman was going to die, and he said, it's too bad we don't have a bed, and I don't know what it was, I just started looking around, and he was there, and I said, you know what, what if we - and we turned the beds, again no public health, there's probably this much room between the foot, but it added an extra bed station, and he looked at that and said, well this is wonderful, so what that did, this was twice a week dialysis, so that allowed us to take 3 more patients really, because --

DWM: By re-arranging the furniture.

JA: Which was very interesting, so that was Doris Boardman, that patient, and she started dialysis, she was only the second woman, and so I think she might have been a self-pay, I really, you know we did have some self-pay patients.

DWM: Yeah, the funding was coming in part through the Foundation --

JA: Yes, and the Foundation, but we had a few patients who were full pay patients, I don't really know how all of that worked, but she may have been, because I think she had some kind of insurance, her husband had been a major executive at Boeing in Florida or something, because somehow or another, there was a lot of money in there, and Doris herself didn't have it, but I think her aging mother-in-law did or something, but I think that may have been the thing is that she was able to afford it, but there was no bed. So whatever, the truth of it is, I don't know, but we did rearrange the furniture and that opened up another slot, so that was just the way the world was. So we did have, at first, all of this big cumbersome equipment, and then not too very, I can't remember when, but when we got the single pass system, which turned out to be a disaster of course because we had an accident with that --

DWM: What accident did you have?

JA: And I don't know what year that was, but it was very early on, the system, they called it the monster was built in the thing and it was great because now you didn't have the big tanks, but in the middle of the night, I got a call from the nurse that was on duty saying that there was something wrong and the alarm had gone off, and I said, well just don't even stop a second, get them all off dialysis immediately, and I'll be right in; so I went in and I took a couple more people off dialysis, but I remember, that was the other thing we did, we did our own, the way we'd found out if we had minor leaks we would spin the blood in the centerfuge, and we would do our own gramatigrids, and also we could tell because the serum didn't clear up in the centerfuge, so I centerfuged a vial of blood, and there was blood all in the serum, so I knew that there had been some terrible thing that had happened, and I called Jerry Pendrass, who was the doctor and he came out, and by the time he was there, we'd already spun that down, so he knew that there had been a problem with the dialysate, so ultimately that is what it had turned out to be, the concentration was just too high; so three of the patients were hospitalized, one died, but he died because he became very hypertensive, and they couldn't get his blood pressure down, the other two recovered, and I don't know how many, I think at that point, we probably had 5 beds, because we were in the newer wing, I can't even remember, there weren't very many patients on in the middle of the night; but anyway, that was a terribly dramatic thing that happened, because then of course, we didn't want to use the central system anymore, and that was when we, I don't know what we did, I can't even remember what we did as the alternative, I'm sure we went back to tanks, but we didn't want to use that system again.

DWM: Let's talk about, you know, one of the issues about dialysis today is mortality. So you all are starting this chronic outpatient unit, and were people surviving long, were they doing well on dialysis?

JA: Well, you know, very well, but remember they were highly selected, they were not 80 years old, and they had to be in very good health. We had patients, this is the part that is so amazing to me, we had patients like Frank Smith who drove 3 times a week from near the Washington/Oregon border for his dialysis; we even had a patient, this was a self-pay patient, though, who drove from Oregon and would stay up just for a couple of days and go back, he owned big apple orchards in Oregon, so the patients were highly motivated, they all worked, everybody worked, it was sort of the criteria; and I mean, Jim he

had already finished his Ph.D., but he fortunately was teaching at Seattle University, which was just a block away, so he would get off, we were doing 3 times a week dialysis then --

DWM: When you first opened, were you doing 3 times a week, or when did you change to that?

JA: No, we were only doing 2, because that's how we fit the beds in; but then we went to 3 times a week later, which made a big difference in people's ability to work because they were shorter dialysis, but Jim would go in at night, I mean, he would go in after work and dialyze all night long, and then get up in the morning, and go across the street to work, that was just life for those patients, nobody just slacked around, so everyone worked; and they did very well, actually, but again, because they were medically, they began of course, to start them on dialysis way sooner, that was the other problem, of course, you start people when they're at death's door, these people still had muscle mass left, they hadn't been through the terrible uremia, so they were in much better shape; and there were a few patients, of course, who didn't do well, but mostly, I think that was our first death, was the central system, the first 13 patients, there were no deaths for a very, very long time in those patients.

DWM: Which also is an issue with the selection committee, I mean, you've got people waiting and spots are not opening up, I mean, people are living a long time on dialysis.

JA: Yes, it was a very tough, of course, fortunately, we the staff, didn't have anything to do with the selection, we didn't know anything, it was pretty much kept, I mean, we knew it existed, but it was nothing that we were ever involved in, so we didn't have to deal with anything like that.

DWM: Did you all feel the pressure to try to steadily expand your program?

JA: Yes, and we rapidly did; down in Eckland Hall, we were expanding constantly, it seemed like we would just get one place set up, and then we would figure out a way to do some more room, and then we expanded into a bigger room; of course, remember the single pass system created so much more space, because you didn't have all of that enormous, we didn't have all the warmers that had to sit by the bedside, and the great big tanks, so there was a lot more room once we went to a single pass system.

DWM: Did you realize that you all were doing something that the rest of the country was looking at; did you start to see people calling or coming?

JA: Oh yes, all the time, but you know, strangely about that, I thought of that so many times when I was older, I thought, it didn't seem like any big deal at all, it never seemed history making, it just seemed like what we were doing; but yes, we did have visitors from everywhere, I mean, just, but that was exciting, we met so many people, and people from all over the world, it was a very; and then there was the yearly meetings that we would all, everybody who did dialysis practically knew everybody, I mean, it was just; and then there was the famous, you know, we took one of Dr. Cough's patients, an original 13 patient that were at the Kidney Center, was a patient who was on dialysis there and allegedly, he and Dr. Scribner had argued about the effects of the slow dialysis versus the big high fluctuating cough, and this patient was doing very poorly, he was an unmarried young man, and I don't know how Scribner did it or what he did, but this person came out and he kind of just became a ward of the Kidney Center, but he did great, and he got well, and he started teaching school, I mean, really it was an --

DWM: So he had been in the East, dialyzing on a cough rotating drum --

JA: Right, and doing very, very poorly, and he was just a wreck when he came here, I don't have any notion how that happened, Mark Murdoch was his name, he was the patient who died as a result of the central system accident, which was very sad because we had really totally rehabilitated, I mean, the nurses had invested hours with Mark, so it was, well it would have been sad with anyone, but that was a particularly bad; but anyway, yeah, it didn't seem like anything unusual, truly it didn't, and I think that's how, when young people live through history, it doesn't like seem like anything history making at all, it was just your days work, it was just the way life was; looking back on it, I realize that if we'd been more cautious, we would have never done some of the things we did, but you just -- the whole environment for medicine was so different, though, it just was -- all of the stuff about the malpractice, none of that kind of stuff was very serious issues in those days, and with patients who were dying anyway, I think you felt like you had to take chances to learn things, and so we did; but it was amazing, we had so few deaths, and Roland, Harvey and Clyde lives a very long time; Harvey got a kidney transplant after I think about 8 years, and he lived though quite a long time; and I don't remember how long Clyde lived, but I know they had their 10th anniversary, because that was in the newspaper, so I mean, they all really did exceptionally well; some of the people, we had a couple of deaths in the early years, but they were always from something that the patient had developed that was quite different, it was never about dialysis, the only really related to equipment was that central system accident.

DWM: And remarkable to have taken, I mean, Clyde Shields just a couple of months before would have died from his chronic kidney disease, so it was dramatic in that sense. Talk about the meetings you were going to, and the people you were talking to. You typically think of meetings as physicians go to certain meetings, and nurses go to other meetings, it sounds like you were all going.

JA: Well that's the way things worked, except you know what happened that kind of benefited nurses, too, was the original United States Public Health Service got involved in some funding, and when they did, the nurses became much more involved because they funded the nurses meetings and such initially, also; the nurses were always very heavily involved, although that doctor/patient relationship changed so dramatically, of course, because in the hospital it was still that you didn't tell your patients anything, but we were running the Kidney Center, and the doctors just came in to see the patients, so we had to make all our own decisions, and the doctors depended upon us, so we had a very different relationship than the hospital; we didn't have any supervisors either, I mean, I look back on that, and I thought, here I was 23 years old, I think when the Center opened, and I just look back on that and think, what was I thinking, it didn't seem like any big deal, and then when I stopped and thought, we didn't have, you know I was used to directors of nursing and supervisors, well no, we didn't have any of that, but that made it really, we could be so much more innovative, because we didn't have to get permission from anybody to do anything, it was just sort of we could be as innovative as we wanted to be.

DWM: Did you then see daily, like you were taking care of patients, and you could see something that made a difference, and you could implement that.

JA: Oh absolutely, that minute. I think that was the beauty of it, if we could 4 or 5 of us that were working, we could sit down, make a decision about something, and go and begin it immediately; I mean, the doctors really didn't care what we did as long as -- I mean, they cared of course, the quality of it -- but to them it wasn't their problem as long as the patients did well, and if there was anything that there was a medical question about, of course, we would consult them; but I'm talking about just changes and procedures or things that were not going to have any real medical implications, but just made work so much easier. I think if we hadn't had that freedom, we wouldn't have progressed as rapidly as we did, because there was simply no barriers to innovation for us, we were just literally given the freedom to do anything that we thought would work; and the patients were so much a part of it, I mean, the patients

often contributed lots of ideas, because you know, they could see things too, some of them were engineers, these people were very smart, of course, patients weren't supposed to be smart in those days, you didn't listen to them, but that was one of the big differences in the Kidney Center is we listened to the patients, we told them everything, and they told us everything, and so really we kind of all grew together; I think it would have been very different had we been in a tight hospital situation, we simply couldn't have done so many of the things we did, there were just no barriers for us; I think that community center was the thing that got the innovation just going like crazy because you didn't have to answer to anyone.

DWM: Who were those early nurses that were there?

JA: Audrey Schibley was one that worked with me at the University Hospital; and then Maggie Colon was a nurse, she moved from New York, and I don't remember, I hired her very early on, she's still working in dialysis, and she's my age, I believe, but I think she's now at the CTAC Kidney Center, but she's had years, but Maggie was never a person who liked to do anything in administration of any kind, she just like doing her job, so she just never got involved, but she was very early on; and there were several nurses, we didn't have a very big staff because for a while we only operated days and evenings.

DWM: So what were your hours of operation?

JA: When they were doing 3 days, we were only open 6 days, because if they were doing twice a week dialysis, everybody had to have two days; but we got on to the two shifts very early, of course, so that you could do, remember with 10 hour dialysis, you could only do 2 anyway, so when we opened overnight, we were doing 2 shifts of patients; and Sundays, we had someone on call to declot calluls and that sort of thing.

DWM: But you were doing 10 hours dialysis, Monday through Saturday, 2 shifts Monday through Saturday.

JA: Right.

DWM: But some people would come and run all day long, and some people would come and run all night long.

JA: Right, and so that's just how, I mean, the thing is when you talk about schedules, they were constantly changing, it was just so fluid, because it depended on what the patients needed; that was the other thing, we could just do what we could accommodate just about anything, and we tried to, because our whole goal at the Kidney Center was to keep the patients working, because if we couldn't do that, you couldn't really justify the cost to society, which people really cared about in those days, I mean, it was a big deal; and in fact, some of the early funding came from the Department of Vocational Rehab, because when it was the case that we could get jobs, I mean, the patients could actually go back to work, then that was something they would pay for in order to get them working again, so there were a lot of things like that that happened; but work was our main focus for our patients, that was something we did everything to accommodate their work schedules, so if they needed to be off, we would do whatever we could to get them on a schedule that worked with their job; and then of course, it wasn't too very long before we started home dialysis, I mean, that kind of --

DWM: Home hemo-dialysis, were you involved in that?

JA: Well, Jim dialyzed for five years at the Center, and he never dialyzed in the Center after that, of course, but after I left, see I continued to be involved in dialysis because Jim, and Jim was the sort of person who would travel the world, we took a suitcase kidney to Europe, we just did whatever with that, there were all these little things that came up, there was the Ready Unit, and it --

DWM: Tell me about the suitcase kidney.

JA: The suitcase kidney was great, because --

DWM: Who put that together?

JA: The Brooklyn doctor, Eli Friedman, he and his crew put that together, and --

DWM: What was the whole thought process?

JA: It was in a little stainless steel, oh it was the greatest thing in the world to me, of course, totally unmonitored of any kind, but it was great because they had these collapsible containers to hand mix the dialysate, and you had to change them 3 times, but it was just great, you could take it on the airplane with you because it was built into this thing, and Eli Friedman knew we wanted to go to Europe, and so he was trying to get the thing worked out, and it came down to the wire, we had our tickets and he sent a patient, she flew it, brought it to us, because he didn't have time to ship it, and we went off; that was all very fine, there was only one problem, you know, the Hepatitis thing had become a big deal, and so there were dialysis units in England, you could not do travel dialysis, because they had a lot of deaths with Hepatitis, but mainly because of an immigrant population, I mean, so they would only dialyze people at that time that already were there, so you could do it in Holland, that was the one place that would take people in, so we kind of knew we could always just fly over to Amsterdam or something, but otherwise, there weren't very many centers, but we never had, I mean, we just used that thing, it was wonderful, because it was so small; the Ready Unit was good, but it was big and cumbersome, and I don't know whatever happened, well I don't know why the suitcase kidney n ever took off, I think because most people couldn't really innovate, I mean, Joe was a physicist so he knew everything about dialysis, he just was that sort of a person, and he was technically quite capable; I never was very tinkery person, I was during the dialysis time because you know so much about it that you could just improvise something, so we would do that suitcase kidney was absolutely wonderful, but we frequently just took machines, we ever took the great big Drake Willick with us when we would load it in the back of the station wagon, or a camper or something, because you really otherwise just couldn't go anywhere, because there weren't very many dialysis centers then; but the innovation that was going on all the time, it happened so fast, that it's hard to even remember those steps, but as more people became involved, of course, the improvements just were dramatic, I mean, nobody would recognize the early dialysis the way it is today, because everything is self monitored, and it's just so very different.

DWM: Funny, just looking at the suitcase kidney to imagine that Eli Friedman could put together a suitcase kidney and send you all off with it. There's no patents or --

JA: That's what I'm saying, innovation thrives in a non-conformist situation, because otherwise people couldn't have tried all the things they did, and truly patients didn't suffer, I mean, people were very careful, and I don't want to sound like we were reckless, it's just that you had so much more freedom to give things a try that you wanted to see if they would work, and I think yes, it's much harder when you're in a very tightly controlled environment, but yes, it was a wonderful idea, the suitcase kidn ey was I thought, just one of the most marvelous, I had to laugh though, because going through Customs, you know, you could never do it today, but bags of the dry mix because we were going to be gone 3 weeks,

and so we all just took a little backpack with our personal belongings, but we went through Customs with the cart just loaded, of course, we got less and less and the only thing that really made that trip possible were the disposal dialyzers, because we didn't have that for many years.

DWM: So by that time, you had a hollow fiber disposable --

JA: No, but that would have been - the hollow fiber we waited 20 years for the hollow fiber, truly it was 20 years from when we heard the first talk about that until we actually had it, that made travel fabulous because those were, as you know, just tight - no, these were rectangle, I can't even remember, what the name of those were, but they were, well, they shouldn't have been disposable, they were huge, but you did dispose of them, they were a flat plate, but they were stacked, I mean, very narrow and long, and they were, I think they were the first disposable dialyzers we had, and they were absolutely wonderful because you couldn't travel where you had to build them, I mean, we did that for years where you wash the boards down in the shower at home, and you put the Cooperfane sheets down and you sterilized it, and ratcheted it all back together, I mean, when the first home dialysis you had to assemble your own dialyzers, and they were plastic, rather than the old metal Leonard Scaggs, so there were great, because they were lightweight, well relatively, and the trouble was you would build them and you had to pressure test them and often you had to take them apart and rebuilt them, I mean, home dialysis was a major deal in the early days, it was not easy, I mean, I couldn't believe in the last years that Jim was alive, dialysis was so simple, you get these little polyfiber things, throw them in the garbage can, I mean, you didn't have to build anything, everything was monitored, it was just an amazing difference from all the very, very labor intensive stuff in the beginning, I mean, it was home dialysis was a major chore, it was a lot of work, but the patient, our first patients were taught to take care of themselves, to build their own, Jim could build his own dialyzer and then the other nice thing is they all, like he dialyzed in those days, he would dialyze overnight, he just would go on dialysis at bedtime, and just go to sleep, and he'd sleep all night, get up in the morning, take it off, and he'd go to work; but the nice thing about that is it increased, Jim always believed that the longer you dialyze the better off you would be, and we fudged, he always dialyzed longer than he was told to, which is probably why he lived for 35 years, but he would, when he was supposed to be on 3 dialysis a week at home, he always dialyzed every other day, it was just, and he would stay on longer, and of course, it didn't cost any more to stay on longer, but it was more expensive to do it more often; but he said always he knew that the more you dialyzed, the better off you were going to be, so he never minded being on dialysis, and I think now we're seeing with the daily dialysis, that certainly is the case, but it was just an amazing, when I look back on it, it seems amazing, it did not seem amazing at the time; the thing that was quite wonderful, going back to the United States Public Health Service, once there was a lot of, you know, where the nurses all got to know each other at meetings, we began finally to organize, that the --

DWM: What year would that have been that you all began to do that?

JA: I don't know, but I have it somewhere here, I can give it to you later, it was in the 60s, anyway, that was about the time shortly before that when I was trying to see when this was published, because the Public Health Service funded this, and --

DWM: And what we're looking at here is?

JA: What we're looking at it was called the Seattle Artificial Kidney Center Dialysis Teaching Manuel for Nurses, there was nothing available for people, we trained most of the nurses in the very early days, we trained nurses from all over the world, and certainly all over the United States, either here or in Brooklyn, well we trained the Brooklyn crew when they came, but then they started training also, but

there was nothing, this is so rudimentary when I look back on it, but this was the Public Health Service funded this, it doesn't even have a date in it, which is typical of those days, but this was the first time that somebody tried to put the procedures down, the Constitution and Bylaws adopted April 1969 in Atlantic City, New Jersey. The nurses had been getting together informally for a very long time, well for those years, I mean from 1961 to 1969, we had been meeting, and we talked a lot about forming, we went to the SIO meetings, and then we would just have these little gatherings in somebody's hotel room, and this particular time, we all knew each other very well, and we got together in a hotel room and decided that we would form an organization, so I think we called it the American Association for Nephrology Nurses or something, I don't know if that was the original name, yeah, because it's what it says in here; and we at that meeting decided to start this organization, and I became the Secretary/Treasurer, and so --

DWM: Who else would have been the big officers?

JA: It seems to me O'Neill, I'm terrible with names, I have these all written down somewhere, but Beth O'Neill, I think she might have been the first President.

DWM: And where would she have been from? Where else were --

JA: I can't remember, but it's the East Coast for sure, in the papers that I have, I can certainly find that out; but anyway, we formed this organization and some of the companies gave us some money to kind of do, I mean, we're talking tiny bits of money, and we adopted this Constitution and Bylaws, or I don't think it probably was at this meeting, I think this was the first official meeting that we had; this other one was just in a hotel room where handwritten notes were taken, so that was probably the year before, in 1968; so we decided to start this organization, and I don't know how, I just recall that we must have published this in the SIO or somewhere, we encourage nurses to send us their names, we were absolutely stunned at the number of people who responded; we had thought that just a handful, because not huge numbers went to these meetings, but the thing that was kind of funny that makes me laugh about it now, I was the so-called Secretary/Treasurer, so it was my job to, I think I did that because I probably knew more of the heads of the dialysis units than anybody, because we had trained them there, so I wrote letters to all these people, and it was from those initial letters, we just got back literally hundreds of applications; but the strangest thing was that I was supposed to be, we decided to charge I think $10.00, I can't remember, it seems to me that's what it was $10.00 for the membership, and we got all of these checks from Canada and there was a big discrepancy in the value of the things, so I had the horrible time trying to, we didn't want to send them back and say they had to send more money, so we just accepted the $10.00, but then when we had to do the resolution of the number of people we had, and the number of Canadians that we had, we had a loss of funds from that source, but we got some from some of the companies that gave us $500, so that's how we had the postage to do this initial mailing; and then from there, the first real formal meeting, I think, was this one in 1969, when we actually adopted a Constitution and Bylaws, and I wasn't on the committee that did that part, so they came out with this little very simply Bylaws, but from there the organization began to grow; but then I left Seattle in 1971, so really after that I didn't have anything to do with the official organization, which went on to develop into the Nephrology Nurses Association; I continued to be involved in dialysis, and a few years later we opened a dialysis center in Bellingham, but I was the chief nursing executive at the hospital, so I wasn't involved, although Jim was on the board of that, and I've been on the board of it for a number of years now, since I retired.

DWM: This first meeting in 1969, what would the nurses have been talking about, what would have been high on their agenda?

JA: Well it had gotten to the point that dialysis was growing so much, many of them were hospital based, and people were looking for support systems, and it had gotten to where the doctors were so much more detached from the daily doing of dialysis, so there were many issues that the nurses had that the doctors didn't really any longer care about.

DWM: What were some of those?

JA: Well, just things like training other nurses, for example, and more getting down to procedural things that some people knew how to do things better than other people, big SIO meetings were usually all about nephrology, and they didn't really deal with the daily practical problems that the nurses were dealing with; so we really needed a forum where we could share the practical ideas that we had about making dialysis more efficient or easier or whatever and how to train people, and that's really what the impetus of that organization initially was; it was no longer the -- in the early days, we knew every detail of what everybody was doing, but that no longer became the focus of the interest of the nurses, I mean, in the sense that we didn't especially care about the next molecule that they had found, we were really now very much interested in making the work that we did better, and getting better equipment.

DWM: So there really was in that first decade, you and the physicians and the new technology would have been very much aligned in what you knew, and what you were trying to do, and then over that decade, a lot of divergence as the knowledge base grew.

JA: That's right, and the doctors got to the point where they didn't, most of them never put a patient on dialysis, there was no need, no reason.

DWM: So in 1961, when you're opening the unit, you would say a Nephrology Fellow could put a patient on dialysis, and had been through an entire dialysis.

JA: Oh absolutely, oh yeah, Jerry Pendrass, of course, the doctors did it initially; yes, in 1961, the doctors could do just about anything the nurses could do, that changed very rapidly because when they didn't even have to do anything but just come in and see the patients, medically, then they lost their skills to some extent, but yeah, the early fellows they could all do that.

DWM: Bob Hegstrom yesterday was talking about the time where they used to do everything, and one of the things they gave up pretty early on as physicians, was declotting the cannuls, and his comment was that Joanne Albers could declot a cannul much better than he could.

JA: That was certainly very true, because I had a lot more experience, I mean, when you were there doing it all the time, I remember when Tom Sawyer came which was a number of years later to the Kidney Center, I taught him to declot cannulas, Tom was always very interested in what the nurses did, so he kept himself kind of at the bedside a lot, he didn't like a lot of political stuff, so he really spent a lot of time at the bedside, but by then most of the doctors wouldn't have been able to do it, but the community physicians began at some point taking care of their patients, well they started visiting the Kidney Center, which didn't happen early on, the Kidney Center doctors took care of all the patients, no matter who their Nephrologists was, the Nephrologists didn't do dialysis, the patient became a patient of the doctors at the Kidney Center; but when that changed, the community doctors would come in and really they did not know anything about the technical part of the procedure, they were just at a loss, they would just come to, and if they needed to know anything, they would ask the nurses, I'm talking not about the medical issues, but just about the technical dialysis.

DWM: Well, also, we were talking yesterday in some of the interviews about the fact that when chronic dialysis started, people were dying from their kidney disease, and they could start dialysis, and they were living with their kidney disease; and once they began to keep people alive with their kidney disease, they began to see issues related to anemia, calcium phosphorous metabolism, neuropathy, and it does sound like some of the medical issues began to be, not so much the dialysis procedure itself, but the medical conditions that we were seeing in end stage renal disease.

JA: Exactly, because then people began to see people were going to live, and so they needed to learn how to take care of all these other issues that came up, so the doctors would have a whole lot more to do in terms of the work with the medical aspects of it, and then the research part that was going on; EPO is the other thing that we waited for, I mean, Joe Eshbach talked about that for years and years and years, and it was absolutely, though my Jim refused to have blood transfusions anymore, he just decided, of course, he was a scientist, he decided that you could just accommodate yourself to a hemadocrit of 18 and you could just learn to live with it, because he could see the problems that people were going to have from the iron overload, and all the problems that came with, so he simply quit having blood transfusions, and low and behold, he did just fine; I think later they decided that that was probably a good idea and they let people's hemadocrits just kind of settle down, but they were getting blood, some of them every dialysis, I mean, it was just --

DWM: In the outpatient unit, you were hanging blood.

JA: Oh all the time, people were just getting blood all the time, but then Jim decided he was going to stop and just let it just, because he said well before I went on dialysis my hemadocrit was super low, and I was still hiking and whatever, so you know, it was interesting because you do kind of accommodate to it, so then of course, he lived for years waiting for EPO, and when it came, of course, it was fabulous, his hemadocrit was up to 30, I mean, it was unbelievable, that was many, many years, but he never had another blood transfusion, in fact, he was so bad when he went on EPO, he had a transplant for 2 weeks before he got a perforated bowel, and he didn't want to do the transplant, but when he did, but my point about this was blood, he was so anemic, because the EPO was just, he was on the research, so he couldn't have it when he was in the hospital, so as soon as he got out, he had to drive to Seattle, and he could hardly breath, his hemodocrit was so low, and the doctors wanted to give him blood before he went to Seattle, and he refused, so he went down and got his EBO and got his hemodoctrit back up, but he was a firm believer that blood transfusions were not good for you, and truly, that was a big problem for us in those days because blood was expensive in its own right, and it was a constant hassle and the people would have reactions and they started using the washed cells to try to make them less sensitive to them, so it was a big issue; and when they finally did decide to stop the blood transfusions pretty much and let people's hemodocrit's settle down, I think that made a huge improvement for people, and I don't remember when that happened, but it did at some point; and then of course, the EPO made all the difference in the world, that was a fabulous thing, of course, then what happened as dialysis became easier, they had sicker people going on it, and as soon as that happened, of course, the mortality rate is going to go up, because truly whatever kind of a society we lived in, if we had the ability to not put people on who were really medically unsuitable, the survival rates would go way up, because certainly if someone is 85 years old and in terrible health, they are not going to do well on dialysis, they're not going to do well in general; and it would have been inconceivable to us in the early days that you would haul people who were not even in their right mind back and forth to a dialysis center in an ambulance, that was just so out of the question, because the cost would have been just prohibitive, so I don't know what the future of all of that will hold.

DWM: One of the big changes came in 1972, when the selection committee, when the government added the funding to Medicare to provide funding for end stage renal disease, no matter somebody's age, and so money was not as much an issue.

JA: No, but even then in the earlier days, people realized how - well, dialysis was so much more difficult, I mean, for our patients, there were so many things that they didn't know still that people hesitated to take really very seriously ill patients on because they knew what the outcome would be; of course, later the equipment became so much easier and actually people survived longer because with EPO, the survival rate, I mean, you had healthier patients because you had other things to treat them with, and I do think, well it's a problem in our society in general, but more of a problem with something that's chronic and goes on and on for years like dialysis, and at some point we'll have to wrestle with that as a society, but then I have to look back and think, how just simply people simply just went on with things in those days, there was no money, but somehow or another, we just thought if we just kept going it was going to be okay, and that was Scribner's schizophrenic part, and it was good, because if he had looked at things totally rationally and decided to just do what seemed doable, none of this would have happened, because you simply had to just have the faith that you could keep going, and somehow we just did, I mean, you would come and say we're going to run out of money in 3 months, it was true, and the nurses would just work harder and harder to try to cut the cost down, and have the doctors do less, and do it with fewer people, and it did work; now of course, with the funding I sometimes laugh even sitting at board meetings, you see what the nurses feel like they have to have, and I just want to chuckle, but yeah you don't have to, but I do understand the world is just very different; but the nurses were I think they took a huge responsibility, because we knew that the patients would die without the treatment, I mean, there was no place for them to fall back on, so we took it very seriously, and I think the nurses were very dedicated, and they really had very long tenure, I mean, the nurses didn't leave, we really had very little turnover.

DWM: And certainly we see today, I think, working at a dialysis unit you can get a lot of burnout from that, and so it's harder to think about working in a dialysis unit for 30 years, the work is hard. Let's talk about Scribner, what kind of guy was he, and did you know him really well?

JA: I'm sure you just have hundreds of opinions of that. I knew of course, Dr. Scribner well in the sense that he was always around, and think my Jim was very close to him because he had been his patient, and Jim thought he was absolutely wonderful; my impression of Scribner, he had his head in the clouds most of the time, he knew virtually nothing technically, I mean, if he walked into a dialysis patient, the last person you would have assigned to take care of that patient would have been Scribner, that's when the other doctors, of course, could do everything, I mean, he just -- and I remember chuckling, well he was of course, a wonderful clinician, and I don't mean in any way mean to put him down because of course, he was wonderful, but he had his head in the clouds all the time; and I remember once, even Jim thought this was quite funny, because we were -- no it wasn't Jim because it was before Jim, I think it was some other person, you know, we always had these measured containers, like a metal basin that had a thousand cc, so it's really early days, and Scribner said something, I wonder how much volume of dialysate that actually holds, and even me, I was thinking all I have to do is just clamp that and drain it out into the pitcher and you could see; but he wasn't focused on insignificant little things, he was never in my mind the person, he was the idea person, the person who had the guts to do, but he was as I say a wonderful Nephrologists, I'm talking now just about technical daily dialysis, that was not Scribner's thing, I don't think the equipment was anything he had a great huge interest in, he knew who to go to though, I mean, he had wonderful people, like Wayne Quintin and Jack Cole, and those people who were just fabulous at what they did, but he was never around as a tinkerer person, I mean, Bob Hegstrom, Bob Hickman, Jerry Pendrass, John Murray, they were the people the nurses, the last person

you'd ever call for anything would have been Scribner, but then of course, that wasn't his role, he was a --

DWM: Well it did sound like he created this remarkable group of people from Les Bab and --

JA: The Les Bab was later, in the very, very early days.

DWM: Yes, Quintin and Jack Cole and --

JA: And David Dillard, the surgeon, who was fabulous too, I mean, yes he had a way of getting all these very, very people.

DWM: Multi-disciplined people.

JA: Exactly, so I wouldn't take anything from him, but in terms of knowing him as a --

DWM: Nuts and bolts, sit at the bedside.

JA: That wasn't his thing at all, he was all, and he would always have sometimes these ideas that even we thought were just off the wall, but he was certainly, and you know, he wasn't really, he was very busy nationally trying to get an agenda for getting money, and you know, none of this would have happened without him, I mean, the Hartford Foundation grant, we couldn't have gone any further, the University of Washington was not going to put another penny into dialysis, so yes, he was an absolutely wonderful person, but he was not the day to day go-to kind of person, he was the renal fellows were really and the staff there were the people that Bob Hegstrom was sort of our God for a long time, and Jerry Pendrass was sort of the flunky person, but he was the person that technically, we dealt with, John Murray was sort of a cross, he never was all that interested in the technical part, but he was a very find Nephrologists, and did a lot, he was easy to work with, too, but and oh Bob Hickman, he went on to do the Hickman Catheter, he was really a pediatrician, but he was one of our favorites, too, just somebody that you could always count on and depend on, and I was trying to think who the other early doctors were, most of the others came, Chris was later, he was at the University, and of course later was at the Kidney Center, but that was a number of years later.

DWM: Well you know, it's a little scary when I listen to you talk today, because I just take dialysis for granted, I just think, well of course, most people saw that it was saving lives, it was definitely, but it just sounds so fragile in those early days.

JA: It was incredibly fragile, I mean, truly we didn't know how we were going to operate from month to month, it was always just, and then something would happen like the Department of Vocational Rehab decided to put in money, and then the state Medicaid, I've noticed that the Kidney Center here in Bellingham, they're always talking about how well our Medicaid pays compared to other states, but that's because there was this long historical period in which Medicaid, they knew that the patients who had started here weren't going to live, and so Medicaid began paying much earlier than any other state; and that was the thing, Scribner was wonderful at putting together this coalitions where you could, but really they didn't know from week to week sometimes where the money was going to come from, and it was very, I mean, it was truly a serious issue for us, it wasn't like you, I mean, we really didn't know what was going to happen, it was frightening for the patients too, because the home dialysis, of course, would never have gone as rapidly as it did, except for the funding, because again that reduced the cost tremendously.

DWM: It does sound like there was a lot of pressure to do the peritoneal dialysis and home hemo dialysis just to move people out of this center.

JA: Right, the peritoneal started quite a bit, in my later in the sense that well Henry Tinkhoff of course, was wonderful in that field, but that group of -- we, peritoneal dialysis all we had prior to the hemo dialysis, I mean, for acute patients, and it was not real easy to do, I mean, again, this is before disposable supplies, it was a big deal to do peritoneal, so I had seen that even at Emory, that wasn't something you thought was great, of course, it was very different than the peritoneal that later became, when you had the insertions and all of that sort of thing, but we didn't do any periodniel dialysis in the early days at Seattle Artificial Kidney.

DWM: It sounds like even Dr. Tinkoff's permanent catheter was 1964, so you would have been --

JA: Right, and they were beginning to just start that which, of course, turned into a big program, but it was not the hemo dialysis was the big focus; for one thing, I don't know what it was about periodniel, but the people didn't, they had to be, before you had the cyclers and whatever, it was labor intensive and it took hours, and people couldn't work because you were dialyzing them almost all the time, I mean, talking back way back in the early 60s, but they hemo was always a touch and go, I mean, it just wasn't anything that anybody could count on for funding, until Medicare, and then after that, of course, it was pretty much -- and also that was one of the reasons we moved here, because Seattle University they would let Jim go on their insurance program, but of course, King County Medical only started paying for dialysis a long time in, but a state institution, which is what Western Washington University was, so Seattle was a private institution, there was no dialysis in Bellingham, but Jim decided he was moving here because they would put him on their retirement program and their insurance program, and so he was very practical person and he thought, okay, they're not going to let me have King County medical through work, so we're going to move; of course, I had it through, as soon as they covered dialysis, the employees at the Kidney Center were, but Jim didn't want that, he wanted his own, and he wanted what he was supposed to have, so that's why we moved here, because he was determined to just get what he needed, and it turned out to be fabulous actually to be in a smaller town, but was very hard for him.

DWM: You were doing home hemo once you came?

JA: Yes, well had been for years, Jim dialyzed in the Center from the beginning the Center wasn't even opened of course, but his first 5 years were in the Center, and as I said, after that he never went back to a kidney center after that, of course, he knew himself how to take care of himself very well, and he for years, continued to see Jerry Penderson in Seattle, but then later there was a nephrologists here that he saw the last few years; but the truth is, by then we hardly, I don't mean to be arrogant, but we certainly didn't need a doctor for dialysis, but there were other medical problems, obviously, that he needed a doctor for, but the dialysis I could do as well and he could do as well as any, Jim knew as much about the technical equipment as anybody did, so it was not troublesome in that sense.

DWM: What do you think in the future of dialysis is going to make a difference for dialysis patients? What are you waiting for to come along?

JA: For one thing, I can't believe that we ever let it get to the place where we let home dialysis go along the wayside, because and now I hear people are beginning to realize that; first of all, you have a much more normal life, there is no comparison to being in your own home, and your friends, Jim's last years, when his friends from the University would come and sit with him sometimes until midnight talking about their research or what problems they were having, you just can't do that kind of stuff at the

Kidney Center, so your life is so much more normalized. I guess my thought is that at some point someone's going to be clever enough to have a dialysis equipment and such reduced to the point that, of course, I don't know how that's possible with ultra filtration, but somehow if the equipment were very, very automatic, and the patient could, I think there's no question, but going to kidney centers is not the way; first of all, you're exposed to all kinds of infections that you will not be exposed to at hom e, and the statistics show that the longer you're in a hospital, the more chance you have of getting sick again, with something else; I mean, we all know that, so it just makes sense that home dialysis is the thing to do; plus, I think the feeling that people have, independence is so different, and the idea that you can take care of yourself; so in my mind, I really don't think we can keep doing what we're doing; now of course, that doesn't answer the problem for the elderly or really sick patients, I don't know what we're going to do about that, at some point, we're simply going to not be able to afford, we may be going back to selection committees, where we don't dialyze people who, well of course, I believe that about so many procedures, if you can truly at least believe that you can do something to improve the person's life, then of course, we should, but there seems to be a point at which doctors and nurses know with a high degree of certainty, you never know absolutely, that someone is really not going to benefit, and by benefit I mean, their life benefit, not just will their chemistries look better, but that their life will benefit, and I believe when we got to the point where we're going to have to deal with that; you know, to do no harm, in my mind we do harm, when we do procedures on patients that they're suffering from and not, I had an experience with a patient person whose daughter-in-law was a close friend of mine, he was in his mid-80s, an old farmer who was just the most independent person in the world, and his kidneys failed, and he came and talked to me, and said, well I don't know, they want to put me on dialysis, what do you think, and I was very honest, I said, I have to believe if it were me, I wouldn't do it, because I just know what your life is going to be like, and he pondered but finally he did go on and two years later when he was dying in the hospital, he said to me, it's been nothing but misery for two years, and I wish I had listened to you; I mean, I'm not trying to play God here, but you just know what's going to happen, I mean, we just shouldn't be doing things to people that are going to make their lives worse, not better, and to me, that's what's happened in dialysis, as soon as we have this idea that you just everybody that could medically have this chemistry's benefit by dialysis should have it, but some of those people live miserable lives, and I just think that it's time for us to look at that and realize that as a society, and it isn't just of course, a dialysis where we have to deal with this, it's with many other things, but I do think that's the sad part is seeing the early patients who wanted to do everything they could to show that they could work and they could show that this was worth spending the money on, and then we just kind of lost all sight of whether it's a societal benefit or not, and now of course, we're in the middle of the big health care discussion, which God knows where that's going to end, but I do think it's one of those things that will, I read, someone sent around to our board an article recently about the really bad outcomes of so many patients, and that is sad, I mean, it doesn't make a lot of sense really to keep doing it that way, and then of course, I have very strong feelings about proprietary care, I see no of course, I see that in almost nothing because if I had to choose, I would choose a much more system like Canada or England has, I do not believe that we make good decisions when they're based on people trying to make money on illness, which is one of our major costs, I mean, it was that way, the best health care of the dialysis patients ever had was when it was funded by grants and people who really just wanted the patients to do well; the thought of making money on a very expensive procedure, just strikes me as not in our country's best interest, but then everybody has their own view of these things, but clearly, I just don't think we could ever have better care than the patients did when it was totally controlled by somebody that wasn't trying to make a profit, but rather trying to make the procedure just as cost efficient as possible for the patient's benefit, not for economic gain, so I do think that the proprietary takeover of dialysis is a real problem, because what interest does anybody, I'm not talking about individuals because each individual obviously cares about the patients, but sometimes that just

kind of goes by the wayside when you, okay, so it's one more patient, and I think that it's just not necessarily in that patients best interest, an individual patient, so who knows where it'll go.

DWM: Well, it's very interesting. I greatly appreciate you talking to me today, I'm happy to be able to look at our historical perspective of where we're been, and I think it will help us in our discussion of where we need to be today. So I really appreciate that.

JA: Well, I thank you for coming all this way, it's been interesting to talk to you.

DWM: Fantastic.

[End of Recorded Material]