LINDA HEADRICK

Dr. Fitzhugh Mullan,
interviewer

Mullan: The date is January 14, 1996. I'm interviewing Linda Headrick. We're not in her office, but sitting in front of the Senesta Resort Hotel in Key Biscayne, Florida, following a Robert W. Johnson Generalist Initiative Project, so this is not her office.

Good morning, Linda.

Headrick: Good morning.

Mullan: What I'd like to do is start with a little bit about your background, and why don't you just tell me about where you grew up and a little bit about your pre-medical life.

Headrick: I'm from Missouri, and I grew up in fairly rural small town Missouri, and call what became my hometown is where the family moved when I was in the seventh grade, so I did junior high and high school in Chillicothe, which is a little town of about 10,000 people, 100 miles northeast of Kansas City. My father worked for the University of Missouri as, initially, a county agent. He started that way after the war.

Mullan: Agricultural or no?

Headrick: Had a very agricultural orientation at that time, although the University Extension Service, as I think occurred in

the land grant colleges around the country, expanded into helping community business and community development in general and so on. So when we moved to Chillicothe was when he was promoted to be director of an entire nine-county area.

Mullan: You were there from what age to what age?

Headrick: Twelve to when I graduated high school at seventeen.

Mullan: What had you thought about then as a career? Medicine, science anything that appealed to you?

Headrick: We went through an exercise when I was in seventh grade where we did one of those vocational aptitude tests, and we all sat around and talked about it and thought about what we wanted to do, and I realized I really liked science, but I also really liked people, so medicine seemed to be the perfect match of the two. It was in seventh grade I decided I wanted to be a doctor. There were no doctors in my family, but I came from a family where it was, "Sure, whatever you want to do. Education is important, and if you want to go for that, that sounds good." Except my grandmother, interestingly enough, who got this downcast look on her face and said, "Linda, I always thought you'd be such a wonderful nurse."

Mullan: What then proceeded from there? Did you stay in Missouri?

Headrick: Yes, I stayed in Missouri. I went as an undergraduate to the University of Missouri-Columbia, got a degree in chemistry and met my husband there. He was a year ahead of me, a molecular biologist. So when I started looking for medical schools, I was trying to go follow him where he'd gone to graduate school, which was at Stanford. That actually worked out, so that's how I wound up in California.

Mullan: You went to Stanford?

Headrick: Yes.

Mullan: As an undergraduate, did you find a chemistry major to your liking? I gather you liked enough to do it. What are your reflections on what you did with your college education and how it relates to your practice today?

Headrick: Well, I chose chemistry for what I'm embarrassed to say now were pretty typical, because of advice I got about being pre-med. This was 1973 to '77, and at that time the competition for medical school was such that--actually I went to a meeting, one meeting, that's all I could tolerate, of the Pre-Med Society, University of Missouri at Columbia, and they had us, all the freshmen, stand up and look at the people on either side, and they said, "Only one of the three of you will actually get into medical school." I thought, "I'm not going to be part of club where the first thing you do is identify your competition. That's crazy." But that was the competitive atmosphere, and particularly coming from small town, being at a university which

is not exactly Ivy League, it was unclear to me how competitive I would be for medical school, so I followed advice of, "Get a degree in chemistry." It looks rigorous, it's a science degree. I liked it. It was fun. I like the puzzles associated with it, and I found some really great--actually one in particularly--really great mentor there.

Mullan: You found an important mentor at the University of Missouri?

Headrick: Yes. A professor named Ed Kaiser, who was an organic chemist. I took a class of his early on and really liked him, and he also had a reputation of being the best pre-med advisor in the department. So I sort of showed up on his doorstep and said, "I want to switch advisors. I want to work with you." Why he was important was because he helped me. I was pretty directed. I was a very serious student, all through high school and in college, and got involved in other activities, but clearly studying and doing schoolwork that was the absolute purpose of what I was doing. Kaiser made it possible for me--he sort of jiggled, try to jiggle that mold I was in.

I specifically remember one conversation in which I had an opportunity to take a leadership position in the student government during my junior year and really had concerns about that because I knew it would cut into my study time. He did a couple of things for me. One is that he laughed at the possibility that I would not get into medical school. I was really an excellent student and he sort of said, "That's ridiculous, of course you're going to get in, so chill out."

Two, "There are lots of other things in life besides studying, and this is a great opportunity, so go for it. Even if it costs you a couple of points in your GPA, that's okay." That I thought was a real important influence.

Mullan: What was your notion as well as your memory about what kind of doctor you were going to be then?

Headrick: I clearly was going to be a primary care doctor.

Mullan: What did that mean to you?

Headrick: I was going to take care of folks over time. I was going to be sort of the person that was going to be there for them, kind of the first contact person, whatever it was they needed, because I liked the science, but it was the relationship part of medicine that I thought was most appealing and where I actually thought I had skills.

Mullan: Was there someone you had in mind that you either had experienced yourself or seen?

Headrick: Well, coming from a small town, most of the docs, by definition, were primary care docs. But I didn't have any particularly close relationship with any physicians.

Mullan: Did you have a sense you would go back to a small town as they did?

Headrick: Yes, maybe, although I was pretty unformulated at that point, and not really thinking that far forward. More like the typical young student who's just thinking about the next step ahead.

Mullan: How about your dad's influence, his work?

Headrick: I actually didn't realize it had that much of an influence until I was talking with a medical student, actually a fourth-year medical student at Case now, and a couple of years ago I had a conversation with him. He was a science journalist, a medical writer for the *Plain Dealer* before he went to medical school. So while I was in a conversation with him, I realized he was interviewing me. He was asking me all these questions about my background, and he asked me about what my folks did, and I told him about what my dad did, and he had never heard of University Extension. I tried to explain what that was. I said, "Well, he basically was part of the community and used the resources of the university to try to make things better."

Doug looked back to me and said, "Oh, that's kind of interesting. That's sort of like what you try to do." It was like this huge light bulb went on, and I realized that that ethic was a big influence.

Mullan: I'm not familiar with the University Extension. I mean, I was familiar with the agricultural Extension [Service], which is the federal link to the land grant university. Is this something that's unique to Missouri, the University Extension?

Headrick: You find that's pretty much in rural states and land grant colleges, maybe part of the land grant deal. What most people remember is the old TV series "Green Acres." Do you remember that show? Well, anyway, there was a county agent in there. He basically sort of wandered around, and was a nice guy, and kind of did what he could to help people make a living as farmers.

University Extension got started right after the war and you had a lot of vets come back, many of them returning to farmlike family situations, trying to make a living at that, with a very changing economic environment. What the university wanted to do was to help them succeed by transferring knowledge about how to do it better, sort of recovering from the farming practices that led to the Dust Bowl in the thirties, and a bunch of things that people had learned about how you keep your land fertile all the time and that sort of thing. So that's where it started out.

Mullan: It definitely has the flavor of more the cooperative movement or more of a collectivistic approach to community life than we see often today or in other walks of life, which I gather is typically Midwestern.

Headrick: Yes.

Mullan: Typically state university focus.

Headrick: Yes, I think that's right. And also Protestant ethic. My mother's influence is very important there. Her father was a Baptist minister. Our family was Methodist. Actually, I heard

an analysis of Hillary Clinton, the fact that Hillary Rodham Clinton is Methodist, and somebody offered that as a reason why some of things within the health care reform package were there. I don't remember what the exact principles were, but I remember looking at those thinking, "Doesn't everybody believe in those things?" [Laughter] That's how I grew up. One of them is responsibility for the collective good, and responsibility to the other guy. Clearly that's how I saw my role as a physician, is that that was a way I could go out and do things for other people. It was much more important, and that benefit would come to me by way of that.

Mullan: Were there doctors that you saw, growing up, that were not to your liking? Were there images that were counter-images at all?

Headrick: Oh, a couple of minor examples of people that didn't communicate well or didn't take time, people had frustrations with, but my contact with physicians was actually pretty minimal.
Mullan: So what was Stanford like?

Headrick: Oh, boy, what a change. [Laughter] I had a pretty humble view of myself, and so to show up in this class of eighty people, many of whom had very different backgrounds than mine, prep schools, Ivy League, somehow or another, and cultural experiences I hadn't had. Some way or another, everybody in the room knew who was Jewish and who wasn't, and I had no idea how they knew that. I mean, I didn't really care, but I thought that was the strangest thing that they could tell. [Laughter]

But Stanford, their admissions policy at that time was to try to get a diverse class, so that there were several of us.

Mullan: Which year are we at now?

Headrick: 1977.

Mullan: You were born what year?

Headrick: '55. So there was a fair cohort of us who came from other kinds of backgrounds, and we used to joke that I was the girl from the farming community in Missouri, and that one of my best friends was also from a small place in Michigan, and another friend of mine was an undergraduate at Arizona State, so it was a mix of people. Also a mix of people, some people had gone off and done other things and then come back to school. So it wasn't like I was completely on my own, but it was really a mind-expanding experience.

But also, it was a little odd, because Stanford has a reputation of being a very anti-primary care school. I didn't feel that so much, because it was not difficult to find people who shared the same interests I did, among the students and among the faculty. They had a growing group of general internal medicine people who I liked a lot, and they had a small but valiant group of family medicine folks.

Mullan: No department or no division?

Headrick: There was a Department of Family Medicine at that time.

Mullan: Was Cal Gibson still there?

Headrick: I think so. Yes.

Mullan: Yes, that was community medicine.

Headrick: Oh, maybe. Yes. Maybe so. You know, you're right, it might not have been a full-fledged department. So I don't remember a department chair in family medicine. Very few students went into family medicine from classes at Stanford, but I didn't feel particularly discouraged in my interest in primary care, except for the fact that I clearly didn't match the specialty and research focus interests of many of the faculty. The other thing, too, is that I was not at all interested in research at that time. I just wanted to go out and take care of people, so it was a little odd to have that attitude at a research university. I think it was only because of their expansive admissions policy that I got away with saying that in the interview.

Mullan: How did you find the first two years versus the last two years. Did getting into clinical medicine make a difference?

Headrick: Oh, hugely. I found the first two years difficult and all encompassing, because I was used to being a really good student who could get all my homework done and understand

everything. That wasn't possible anymore and it drove me crazy. I didn't have good skills for how to--there was 500 pages of reading, how to extract it in an efficient sort of way. I did okay, certainly held my own among my classmates, but I felt like I sort of blossomed in clinical areas because I could then draw upon all of my skills, not just my ability to read a book and regurgitate the stuff there.

Mullan: What about both at the pre-med level and the medical school, being a woman in an epoch when women medicine students were less common than today? Was that an issue, and if so, what kind of an issue?

Headrick: We talked about the fact that we thought it would be more of an issue than it was.

Mullan: "We" being?

Headrick: My fellow female students. Thirty-two percent of my class was women.

Mullan: At Stanford.

Headrick: So there were enough of us that we didn't feel like quite the minority that many women felt, I think, at other schools at the same time. Likewise, there were a fair number of women house staff and a few women faculty. We did run into stuff, and I wonder if I was a little bit clueless about it, just because now, in retrospect, some of my classmates report

experiences that they interpreted as being difficult and problematic and related to their sex. I don't think I would have interpreted such an experience the same way if it had happened to me. But in general, I felt like I was pretty well treated, and at no time ever felt that that got in the way of my doing what I wanted to do or receiving the education that I wanted.

Mullan: Did it influence what you wanted to do on the other side? I mean, it wasn't detrimental, but did, or does, being a woman, do you think, have impact on your decisions about your medical career, primary care in particular?

Headrick: I find that a very difficult question to answer. If you'd asked me that question back in 1981, when I was making decisions about what specialty I would do, I would have wholeheartedly said no. Life experiences taught me that there may be influences there that I was less aware of. So I don't know. I don't know the answer to that.

Mullan: It hasn't been overriding?

Headrick: Not at all.

Mullan: In terms of medical school, were there experiences you had, either curricular or extracurricular, personal or vocational, that crafted or influenced your decision-making about what you were going to do next?

Headrick: Very much so. A couple of very specific things. I wanted to do primary care. I needed to make a decision. At that time, my choices were family medicine, general internal medicine, or general pediatrics.

Mullan: Were you using the term "primary care," for instance, at that point? Were you saying, "I'm interested in primary care. Now which flavor am I going to choose?"

Headrick: Yes. I remember that being a concept, and that those were the three choices that I had. Med-peds--if that was an option at that time, I wasn't aware of it. I don't think it was an option in '81. I might have done that, because I like taking care of kids a lot, being board certified both in medicine and pediatrics.

So my major decision turned out to be between general internal medicine and family medicine, and clearly the experiences I had are what caused me to choose general internal medicine. I did a rotation in family medicine. The only one that was sponsored by Stanford was in Santa Clara County. It was down in San Jose at a community hospital there, which I thought would be a great experience. I had an attending who was excellent, a person who had been a general internist and had been one of the people who had been a founder of family medicine in Northern California. But everybody else wasn't very good. The house staff weren't very good, the other faculty weren't very good, and the level of discussion was not what I was used to with others. I realized that it was probably due to the fact that I was at Stanford, so then it came down to, I thought at the time,

I still think that that was true, that in order to get the best training in family medicine, I needed to go to the best family medicine departments, and I thought it was likely that those were going to be places where they didn't have to insert themselves into already pretty full academic medicine structures like Salinas, California, or some of the other ones that were in outlying areas.

My husband's a molecular biologist and needed an academic environment, and I felt like I had more geographic flexibility than he did. He decided he wanted to do his post doc at the Carnegie Institution in Baltimore, so I needed to be in the Baltimore-Washington area. It was clear to me that if I did family medicine in that area at that time, I would compromise my training. It didn't bother me to give up OB. That didn't bother me. I didn't want to spend any time in the OR. I wanted my patients awake and talking to me. Somebody else can do the technical stuff. But it was hard to give up taking care of kids and taking care of whole families.

Actually, in the practice I've had since then, I've been very comfortable taking care of adolescents. I get a lot of joy taking care of, in some instances, three generations of people in the same family. I like the family orientation of family medicine. I've had a number of family medicine people remark on the fact that, "Gee, it's kind of funny, you're not a family doc." [Laughter]

Mullan: But you went to Maryland in internal medicine.

Headrick: Right.

Mullan: What was that like? That was what, '81?

Headrick: '81. That was a different environment. I actually ranked Hopkins first, and didn't get in. My friends were appalled that I ranked them first, thought that that would be a really bad thing for me. I think they probably were right. It was really hard for me not to take a shot at what, from a standard academic point of view, was the best, but that place was crazy. I mean, I had friends who were there at the same time, and I also have a colleague now who went through that system, a very similar background to mine, and at the very same time, and got pretty beat up. So I think that even though it hurt my ego a little bit for the first time in my life not to get my first choice in where I wanted to go, I think it probably was a good thing for me.

But Maryland suffered a little bit by being the other place across town. It was much more parochial than Stanford was, not so much in the house staff. Actually, it was better from that point of view. The house staff, only about half of them were locals. But among students, they were all locals, and I was used to much more eclectic, diverse, frankly, interesting, group of students.

But having said all that, I really liked it, because it was a house staff-oriented care situation, where we had a lot of ability to make decisions and do things on our own. Faculty who were right there for us, but we had a chance to make decisions before somebody else made them for us. We worked both at the VA and at the university hospital. I found really wonderful faculty mentors there, and wound up being chief resident there. It was

my chief resident year that made me realize how much I loved to teach, and that despite my image of myself, always having been to go out and take care of folks, that actually I wanted an academic job.

Mullan: Until then you had not been clear on that?

Headrick: As a matter of fact, when I graduated from medical school, I probably would have told you very clearly that I was not going to do that. I certainly wasn't going to do any research. [Laughter] We'll get to that.

Mullan: Were there, along the way, other options, particularly specialty options, but any other options, that occurred to you or appealed to you? Did you think that you wanted to go into infectious disease, or did you think you wanted to drop out and do public health or anything else?

Headrick: Yes. Not seriously. I mean, a lot of the people I liked to work with, one of my closest mentors was a cardiologist. Infectious disease, as a matter of fact, is, I think, for many generalists was very appealing. Endocrinology was really interesting and appealing. Maybe occasionally I would have thought, "Gee, it would be nice to be really expert at something," but I never considered that very long. It was really clear to me that what I wanted was to take care of people over time. That was pretty much a constant through this whole story.

Mullan: It was the fourth year that you decided, as a chief resident, that you wanted to go on in academics. What happened then?

Headrick: Yes. Well, a couple of things happened. Six months before we started the chief residency (it was a shared position--we flipped back and forth between UH and VA) we had a new Chief of Medicine. John Kastor came down from Penn, and he wanted to whip the place around a little bit. So he came in without any preconceived notions about how things should be, and we started meeting, my fellow chief residents and I, in February before we started being chiefs in July we marched into his office with a set of reforms we thought ought to occur in the way the house staff program was run. He said, "Makes sense to me." So that was really fun to actually start to have an opportunity to create and craft educational programs for house staff, and I saw myself, as chief resident, very much as a house staff advocate.

I also really enjoyed teaching medical students and having them around, because I found that they helped keep me on my toes. They invariably asked me questions I couldn't answer, and they were often things that, "Boy, I really ought to know that. I need to go back to the books." It was just fun.

Mullan: So you enjoyed teaching and you were at a decision point about what to do next. What happened?

Headrick: There was a Division of General Internal Medicine at Maryland that included clinician teachers, so I had role models to look at. My husband was also looking for faculty jobs at that

time. Again I felt like I could let him define the geography, because he was going to have a lot fewer choices than I was, so we looked at several places and wound up looking seriously at Cleveland. I remember the time that I was chief resident and was visiting Cleveland with him. They'd offered him the job, this was the second visit where they bring the wife and try to find the wife a job. Interesting position to be in. I remember I looked at some practice-based jobs, even at that point. So academics wasn't something that I was real committed to, but that I was interested in exploring. But even as I was thinking about being more concrete about the next steps, that emerged as being more and more important to me.

It worked out really well, because I wound up joining the Division of General Internal Medicine at Metro (Cleveland Metropolitan General Hospital). All of the physicians at Metro were full-time faculty of Case,(Case Western Reserve University) and a major ethic of that place is to teach and be part of the teaching program at the medical school. So I took a job where I was a half-time practitioner and half-time educator, helping to run the residency program and running a fourth-year primary care clerkship.

Mullan: This now was 1985?

Headrick: Yes.

Mullan: Or abouts. And your husband found a job as well?

Headrick: Yes, he's in the Department of Molecular Biology and Microbiology.

Mullan: So that was a decade ago. How do we approach the decade? What was it like? What was it like to begin with, and how have your priorities, and how has your mission, your personal mission, evolved?

Headrick: It's a continuing evolution. It's exactly the word that came to mind when you asked me how to approach the decade, was evolution. I started out in practice, was pretty successful, and developed a mature panel of patients very quickly. I wound up having to close my practice within a couple of years. Had a great time doing that.

Mullan: Closed in the sense of close it to new entrants?

Headrick: To new patients, right. I also continued my role as, some would say troublemaker, I would say innovator, in that I couldn't leave things alone. There were lots of opportunities to do things differently, and I was in an environment that supported that, thought that was a kind of fun idea. "Great, good idea, go do it," sort of got out of my way and gave me some resources. At that time Case had a requirement for a two-month primary care clerkship in the fourth year, which the students could elect to do either in internal medicine, family medicine, or pediatrics. I walked into Metro when it was one of the most favored sites, because students got to do a lot and the folks in the clinics treated them really well. So that was fun. I worked on that.

I also created the first ambulatory block rotation for our house staff in general internal medicine, which other people around the country were doing at the same time. I did a bunch of stuff trying to work with others to improve the residency program, and was pretty satisfied doing that for a while, but then I realized that even though I thought I was making things better, I didn't really know. Five years down the line, I realized that, number one, nobody remembered that I was the one that had created the ambulatory block rotation, and in the bigger scheme of things that's okay, but that was sort of a product of mine. And without having written about it, there was no product, really, that was clearly mine. I found that a little frustrating.

Also I realized that somebody could very well come along and make cogent arguments about how some of the things that I did that I thought were important, were not so good anymore, and take it right back to the way that things were the old way, which ten years later they would seem new, and there would be no evidence to support one thing or another. So I realized that all the stuff I was doing I thought was important was real vulnerable to being blown away in the wind over time. So that's when I changed my mind about research, and realized that I wanted to find ways to be able to look at what I was doing, and do a better job of saying whether or not it was better.

Mullan: Have there been any research expectation in your hiring, in your contract?

Headrick: Actually, that was problematic. At the time, there is a clinician educator track at Case, which is not a tenure track, and when I was hired, I was specifically told that that did not include a requirement for research or writing, but that was from the point of view of the department chair at Metro. The reality has turned out to be that from the point of view of the Promotion and Tenure Committee at the university and the medical school, they wanted to see papers there. Now, by the time that I got to that point, I had had enough of this interest that I'd started writing a bit about what I was doing. So I didn't have a problem there. But several of my colleagues who were hired around the same time wound up being faced with a reality which was much different than the expectations that they thought they had.

Mullan: At the outset in these first years, from a family care perspective, did you have a sense of being either an embattled citizen, or an embattled type, or a dissonant type, or a misplaced type? I mean, going to a research university as a primary care aficionado, with this tenuous relationship to academia, what kind of problems did that present, and what kind of world view or self-precept did that give you?

Headrick: Being at Metro rather than at university hospital at Case has protected me from that somewhat, because Metro is much more community oriented.

Mullan: Metro is the city hospital?

Headrick: It's the city hospital, right. The aim of the hospital is to take care of people, provide care no matter--it's mission is to provide care whatever their ability to pay, and it tries to be, it wants to be more of an--or used to want to be more of a academic health center from the point of view of tertiary care, but it really wasn't. It had some aspects of that, but it was much more of a primary care-oriented sort of place. So that, where my clinical work was, was a very friendly environment for primary care. I was actually a very valued person from the clinical point of view, because in this general internal medicine practice group, I was the third member of a group that had been started about two years before, and everybody wanted us for everything. The specialists wanted us to take care of their patients because once they controlled a chronic problem, they said they really didn't want to manage that, plus all the other problems that the patient had. They were delighted to send patients to us. The surgeons grew to value our contributions in doing perioperative consultation. The house staff said that they thought that the generalists were the best teachers in the wards.

Mullan: So you were valued in the Metro setting.

Headrick: Valued at Metro.

Mullan: And you were buffered from the larger university setting to some degree.

Headrick: Right. Then as I got more and more involved in the medical school education per se, through the clerkship, my

involvement there was protected a little bit, because I was a clerkship director in the primary care clerkship. So when I went to meetings at the medical school, initially, it was with other primary care types.

But when I got involved and started getting a little bit more senior, and therefore involved in some of the construction of larger educational programs outside of primary care, that's when I started running into some of the more negative things that you're talking about, particularly from people in basic sciences.

Mullan: What were they? Describe that, the environment, those phenomena.

Headrick: I'm trying to think of a specific example, but because I'm bull-headed enough, it really didn't bother me too much. Often it had to do with being surprised that they didn't care about the same things I did. How can you say that it's not a good idea to teach physical diagnosis in the first year so people can be learning with patients at the same time they're learning in the classroom? That's not a primary care-oriented thing at the surface, but it has a very primary care-oriented kind of flavor to it. How can you say that having people spend time learning from generalists as well as specialists is not a good thing? How can you say that what I do is loosey goosey and what you do is really wonderful, because you can isolate one little particle and have sixteen controls in your experiment? The stuff that I'm interested in looking at is harder to control, harder to experiment with, but so important, so critical to the problems

before us. How can you say one is more important or valued than the other?

Mullan: Was there a changing, I'll call it political precept in your mind as you got further into this? Because now you're very articulate about the mission changing, institutional change toward primary care. What I'm after is when did that develop as a self-conscious mission and as a more discrete charge in your mind?

Headrick: Well, it was always a part of what I was interested in doing, and particularly interested in helping people who were interested in primary care get a better education and better preparation for it than I had. I mean, that came from day one. Being able to think about how to do that intelligently and articulate that, that's pretty recent. That's just been in the last few years that I've been able to hook up with and learn from others who've helped me learn about that. Before that, it was believing I was doing the right thing and trying to use common sense, and use the interpersonal skills that my mother had taught me.

Mullan: You were a few minutes ago talking about feeling a mission run out in front of you about getting more discrete and definitive about documenting what you were doing and what others were doing. Play that on out. How did that develop?

Headrick: I started writing about a couple of specific projects that we had done, specific education projects that we had done,

that people seemed to think were interesting and unique. I was frustrated by my inability to do that very well, and particularly by my lack of preparation with respect to the kind of quantitative methods and research methods I needed in order to be able to do that well. Early on, I started going--national meetings were really important, like particularly the Society for General Internal Medicine, because it helped me to see that people were defining careers for themselves in academic general internal medicine that were education-focused.

So I started thinking of myself as an educator, a primary care physician and educator. I actually dabbled for a while in lipids, because a couple of people had recommended that I develop a particular area of clinical interest. Well, actually, those particular concerns were a clinical interest, as an area of contribution to an organization and to the patient care, and something that I might get a kick out of knowing more about than other people, give me a little bit of a focus. Actually, I think that that's good advice for generalists. Although I would think much more broadly about what that purpose might be.

Mullan: You sound like you did it and then didn't do it.

Headrick: Yes.

Mullan: Why? What happened?

Headrick: I started a lipid clinic. That was all occurring right after the first study that showed that treating cholesterol makes a difference to people in 1983. So probably in '86, I got

interested in this. That was just when the first national recommendations about cholesterol education management came out. Was that '87? I don't remember now. It was a while ago. I got involved with the American Heart Association locally and doing some teaching about that. That gave me a focus for teaching for house staff. I created this lipid clinic, which was a teaching clinic. It was really fun. It was nice, one-half day a week, to have one specific thing to focus on with respect to patients I was seeing, the things I was teaching about, rather than have to do everything for everybody. So it was kind of a nice balance. But when I got interested more in education per se, and particularly when I got interested in teaching people about how to think about quality and improving the quality of care, it became clear that I had too many projects. I couldn't do it all. I couldn't maintain expertise in all of it, so I dropped the lipid stuff.

Mullan: And you proceeded on with other things.

Headrick: Right.

Mullan: Tell me more about that.

Headrick: Through an education project, I got hooked up with Duncan Neuhauser at Case.

Mullan: He's in the school of--

Headrick: He's in School of Medicine, Department of Epidemiology and Biostatistics. It was back in this primary care clerkship that for a while I actually had responsibility for all the medicine sites throughout the university, not just my own site, and also was paid by the school a small amount, in order to run a didactic series that all the students from all the sites came back to the medical school one half-day a week to get a core curriculum. It was my job to define it.

So I called up Duncan, who somebody said knew something about cost issues, and I said, "Well, we really ought to be having the students think about and learn about costs of care in the context of primary care. Can you come and do a lecture?"

Duncan said, "I don't want to lecture. Maybe we could come up with something more interesting to do, but I'd like to do it with you, because I need a physician to do it with." He was leading me down the garden path. I had no idea what I was getting into.

Mullan: He's an epidemiologist by discipline?

Headrick: He has his Ph.D. in business administration, I think, and had been at Harvard for a long time working in the Department of Medicine there, and is interested in health policy and making health care better, actually, is about the best way to describe it, I think. In the Department of Epidemiology and Biostatistics, he teaches decision analysis and health policy stuff.

So anyway, we came up with a project in which students did case studies of patients with asthma, and shared what they

learned about how to think about measuring quality and cost of care in asthma. Initially, we focused on cost, because we had the students just simply go out and find out how much it cost for the things they prescribed for this patient with asthma that they saw, and that was astonishing. Students had no idea it cost $40 for a steroid inhaler, for instance. They still don't. Years later, they still don't know, although they're a little more friendly to the idea about how they need to know.

Duncan kept saying, "You know, Linda, it's a very interesting thing about cost. We can't think about it. We can't tell our class without teaching them about quality."

I said, "How in the world can you think about quality in health care?"

This was probably '87, '88. So I started learning how you think about quality in health care. I got really interested, as you know, in the methods and principles in continuous quality improvement, because all of a sudden I found some things that allowed me to get to some of the systems problems that kept us from doing things well, both in health care and in education.

I actually did a randomized controlled clinical trial, an education trial of teaching about cholesterol screening and management at Metro using the Firm system. I don't know if you've ever run into the Firm system, where we have three parallel group practices where the residents and the patients are randomly assigned, and they're similar. So I did three different interventions about the first set of cholesterol recommendations to see, it was pretty classic, do you just teach them, or do you teach them and give them feedback about what they're doing, and what can you get away with?

Mullan: By "firm," you used a different approach.

Headrick: Right. And I was sure that this very intensive education and patient-specific feedback that we did in the experimental firm would work to change behavior. I can't believe now I was sure of that, but I was sure of that. Boy, it's really expensive, what we did in that arm of the study, versus just giving these people stuff to read. None of it worked. None of it worked. I thought, "I wonder what happened." The residents would pick up a chart and there'd be this bright yellow piece of paper on the front that said, "Patient's last cholesterol was 270. According to the guidelines, the next thing to do is--" and all they had to do was fill out a form to do it. So I surveyed the house staff. I said, "Was the yellow form there?"

"Yes."

"Do you agree that this is an appropriate thing to do with your patients?"

"Yes."

"Do you agree with the recommendations?"

"Yes."

"How often do you do it?"

They thought 75 percent of the time. The real answer was only half the time, which was no different than the controls.

"When you didn't do it, why?" It was all systems stuff.

"There wasn't enough time." "There were other agendas." "I didn't have enough help." "I couldn't find the form."

I was stuck. So until I learned about quality improvement, I had no way of getting at the systems things that keep us from

being able to do what we know how to do, and we'd like to do, but just can't done consistently, patient-to-patient.

Mullan: Tell me about learning about quality improvement. What was your journey? What was your saga?

Headrick: Well, I have to think about that. Duncan gave me some stuff to learn and got me interested, and then introduced me to a man named Edward McEachern, who had actually been a medical student at Case, even when I was on the faculty there. Edward has a kind of complicated story which may not be pertinent here, but at any rate, he, at that time, was working for the Hospital Corporation of American, under Paul Batalden, as a resource person for hospitals trying to improve quality. His most successful project during that time was working with a hospital in Atlanta that, using quality improvement methods, got community docs together and decreased their C-section rates from 22 to 18 percent in a year. Now it's down to like 13 or 14 percent.

Mullan: This was in Cleveland?

Headrick: This was in Atlanta. This was the group that Edward was working with. Edward knew Duncan, so, through Duncan, got introduced to me. Edward shared my interest in improving medical education, and interested in the possibilities of taking the stuff he was using in health care to improve education. So we sort of became a team, and he really taught me a lot, gave me the right stuff to read, helped me get in touch with some appropriate authors. Then Duncan got me hooked up with Don Berwick and the

Institute for Health Care Improvement, which has sponsored a lot of our work in using quality improvement and teaching quality improvement in medical education. So I've sort of been learning like crazy every since.

Mullan: Tell me, as if I don't know at all, and I don't know as much as I should, but for the record, tell me what that vision is. What is the course you're embarked on in terms of bringing new knowledge to bear on health care?

Headrick: In that context--

[Begin Tape 1, Side 2]

Mullan: January 14, 1996, side two.

Headrick: In that context, what I want to do is to figure out how to have a medical student finish medical school, or a resident finish residency, a new physician be ready to actively improve the health care that they're delivering. So not only be able to deliver excellent health care, but be able to actively improve that as they go along, and have that as part of what they see as their job. That includes being able to work as part of a team, in a meaningful way, with people from other disciplines, nursing, health administration, and so on, because you need that team in order to make improvement in health care in the systems that we work in now, and also be able to use the scientific method to improve what they do every day, whatever that is,

whether that's teaching, or doing research, or doing patient care.

There's a few role models out there, people who are practice-based people. This is not a new idea. David Greer talks about how he did some of the same things when he first became a general internist in Fall River, Massachusetts, in the 1950s. But he was the exception. What I'd like is to have students that work with me come out with an expectation that part of their job is to seek evidence that what they are doing is good for the health of the individuals and communities they serve, and to use that evidence to show themselves that they're doing it better over time.

Mullan: What labels do you put on that now, realizing that concepts have changed a bit over time? What is the pedigree of those concepts? I mean, "total quality management" is obviously a term that's been thrown around a lot, etc., etc.

Headrick: The language is difficult. I think it's because it's a field that hasn't matured enough in medicine to have a common language that everybody agrees on. The course that I teach is called "The Continual Improvement of Health Care." So more and more I'm using the words "continuous improvement" or "continual improvement," but not everybody's satisfied with that.

Mullan: What receptivity have you found both locally at Case and in general to this world view of this paradigm?

Headrick: Oh, it's all over the map. When we first started talking about this, like when we first started the asthma project back in 1988, we had students who were having a fit about guidelines, ▒cookbook guidelines▒. "Don't tell me what to do. Every patient's different. You can't give me guidelines about how to take care of patients." That kind of reaction.

That's gone away, because I think people have gotten comfortable with the idea that a guideline is a place to start. Then you use your professional judgment to apply to the individual patient. People now seem to be fairly accepting of the idea that cost, though they like it or not, is something they're going to have to deal with, but this set of methods allows them to deal with the cost issue by focusing on quality, and people like that.

But many physicians, and particularly academic physicians, are still very negative about the idea of thinking of the people we serve as customers. They don't like the idea of transporting business ideas into medicine, don't think it belongs. That's really changed over time. It's a much more friendly environment than it was a few years ago. I'm finding now that a lot of the people who've been very successful in academic medicine, for whatever reason, are asking for this information now, whereas they'd think I was crazy if I tried to talk to them about it before. I'd find myself hesitating using even any of the words. "Gee, Linda, what are you interested in?"

"Well, uh," and I'd try to find some way to describe it that didn't have the word "quality" in it. I don't have to do that anymore. I think environmental factors have caused people to need this information.

Mullan: What are those environmental factors?

Headrick: Well, that they do have to think about cost, that they're having to make meaningful partnerships with managed care organizations and others who said, "This is the way we're going to do business, because we think this is the right way to do business." There's a growing literature which is starting to gain some respect that shows that it can be of benefit to patients. This is not just a bunch of mumbo jumbo, that number one just focuses on costs, a hidden way of focusing on cost, and you're just saying quality but don't really mean it. Demonstrable outcomes are being documented, like the one I told about with Edward's experience with C-sections, that are in addition to, and magnify the improvements in health care that we've gotten over the years, with more classic applications of the scientific method.

People seem more friendly to the idea of thinking in systems, and I think it's because they recognize in their everyday lives now that they have to work as part of the system, otherwise the system's going to roll right over them.

Mullan: Is that palpable at Case and in your environment? Has your stock risen because of this, and how so? The answer to those questions by your shaking your head is yes.

Headrick: Yes. I'm sorry. I'm thinking. And it's not like it's real high. It's quite variable. At Metro, for instance, the leadership, leadership in the sense of the department chairs, the clinical physician leadership, and the administrative

leadership at the hospital seem to be delighted with the fact that I'm interested in this stuff and doing it, but they haven't asked for my help in making things better at Metro. Initially I excused that initially their lack of attention to continuous improvement, the argument that they made was, "Well, there's a change in leadership," they were sort of getting the pieces in place. It's been two years now. So I don't know what that's about. They say the right words. They say they subscribe to this and say they think it's wonderful that I've developed a national reputation in this area, but they don't ask for my help. I think that's very interesting.

Mullan: How about elsewhere? Have you been asked to consult elsewhere?

Headrick: Yes, all over the place. I primarily turn down the clinically oriented stuff and have mainly been focusing on helping people who want to improve education programs. Actually, I'm on a couple of family medicine grants, where they specifically want to include teaching and using quality improvement in their education programs at the residency level. At the Medical University of South Carolina and Maine Medical Center, and there was recently another grant cycle where I wound up being included as a consultant on three different places around the country.

At the medical school, some of the leadership, like the vice dean, David Stevens, got very interested in this stuff and started to use it, and has used me in the way I used McEachern in the sense of learning from me, and adapting, and I can see an

adaptation of some of the ideas into how he administers his part of the shop. The dean says he's interested and thinks it's kind of interesting what I do, but he doesn't do any of it.

But again, elsewhere around the country, there are other places that are starting to invest in this in a very big way. Texas A&M, interestingly enough, medical school, now has a whole curriculum reform process, or a kind of formal review process which is based on quality improvement principles. Wright State did their LCME review using a quality improvement paradigm. Very interesting stuff that's going on. Because of those outside influences, because the local leaders see people they respect elsewhere, using some of the stuff successfully, then my value has gone up, but it's not like I have an endowed quality chair yet.

Mullan: In this aspect of your work, what would be climbing the mountain for you? Where would you like to see it go, personally?

Headrick: What I want to do for the foreseeable future, the next five years, is continue to be in a situation where I can continue to experiment and learn. Right now, because of support from the Institute of Health Improvement, from the Bureau of Health Professions, and a couple of other projects, a big part of my time as a faculty member is protected in order to experiment in this area, like the interdisciplinary course we do at Case, like running the four site interdisciplinary Collaborative for IHI. I want to continue doing that for a while.

Mullan: What percent of your time is spent with that?

Headrick: Let's see, between that and also running the primary care track at Case, which is quite consistent with this theme, it's 75 percent. Right now what I do, I do one day of clinical work a week, and the rest of the time I teach in primary care, or I teach and do work in quality improvement in medical education. And that's what I want to do for now.

I feel like we still have some work to do in terms of getting models. I need to work with others to learn about how we can do this, and find some good places to continue to experiment. By this I mean teaching medical students to work with nursing students and health administrative students to do quality improvement, and also using quality improvement principles to make crackerjack education programs.

My current personal mission statement--I actually have a personal mission statement, which I just rewrote, I'll see if I can do it from memory--is that I want to make a demonstrable contribution to the development of systems of health care that are clearly aimed toward meeting the needs of the individual communities they serve, and that my contribution to that system will be by developing educational programs and education models that feed into those systems, so that those systems have people working within them who can accelerate the improvement work, all focused on the aim of being clear who they serve and what those people's needs are. I'd love to be part of a system and help build the system in which you have a community, have a health care delivery system that serves that community, and have an education system which is part focused in the same direction.

Mullan: What's the prognosis for your vision?

Headrick: I don't know. I think, clearly, parts of it will be achieved. Parts of it have already been achieved. Clearly, for those students who are interested, and particularly students who are interested in primary care, because the core role of the primary care physician in leading these kinds of systems, the general physician clearly has important role to play in this, for those people who are interested, we'll be able to teach them how to do this, and they will make important contributions. I'm already seeing that happen.

Mullan: I want to double back and ask about the link between primary care and quality or systems-building, which is to pursue for the moment the question of the prognosis. Is the environment changing enough, both without and within medical schools, or particularly in the country as a whole, that it is going to create a circumstance in which your kind of skills and your kind of vision arise, get to the front of the pack, or not?

Headrick: I can see the next couple of years, actually within the next year, what I described is going to happen in small ways already, for defined populations. For instance, the same fellow, Edward McEachern, just accepted a job as the senior medical person for a new managed care product for Blue Cross-Blue Shield in Cleveland. Along the way, I helped him go back to residency, and he's now a general internist. He'll take his boards this fall. So anyway, he'll have that position. He's very interested in using the resources of that managed care organization and connecting with the partner health care delivery institutions, including Metro, and connecting with the medical school and

making exactly that kind of system, building a kind of system, of developing the kind of health care providers that the community needs under their rubric. Whether he can actually pull that off in that organization, it's too early to tell, but that's an interest.

Paul Batalden is doing something very similar at Dartmouth, working with Steve Plume, who's the CEO of Dartmouth-Hitchcock, working with the leaders at Dartmouth Medical School.

Mullan: That's more focused on the services side than the education side?

Headrick: Well, Paul's job, when he moved to Dartmouth, was to bring the education side along.

Mullan: Is that happening? Because I know half his salary comes from the hospital, clearly paying to make the hospital more functional in a primary service delivery sense, as I understood it.

Headrick: Yes.

Mullan: Actually, the hair I'm trying to split here is my answer to the question of is the environment changing the way that it will validate or upscale the value of systems thinking is, "Yes, it has to." Medical education can't stay where it is. Hospitals can't stay where they are, and they're moving. What is less clear to me is that medical education's embracing of systems thinking, which is where your career is pegged, and that's what

I'm trying to get at, do you think that is going to be an important part of the future formula of what is valued in medical education?

Headrick: I don't know the answer to that. I'm obviously staking a good part of my career on the belief that it's going to happen somewhere, but I don't know whether it will become mainstream. I don't know the answer to that. I think it's too early to tell. It's almost like building a movement, and you just don't know at the beginning whether or not the other forces that need to be in place are going to help support that movement.

Mullan: Tell me about the link to primary care. Why is systems thinking, quality improvement, a particularly close sibling to, without putting a word in your mouth, the primary care movement, and why different than other aspects of medicine or medical education?

Headrick: If you think about the ideals of primary care and the role of the primary care physician, you think about what I was thinking about in seventh grade, when I thought about what kind of doctor I wanted to be, and why a primary care doctor. What I wanted to do was to take care of people all the time and help meet their needs, whatever they were. In order to be able to do that, I, as a primary care physician, need to be able to help the patients through the system, so I need to understand the system and help them through it. I need to be able to help coordinate that system. I need to make sure that my patients have access to that, whatever part of the system it is. I found for myself,

personally, and for a lot of primary care physicians I think the same thing is true, in order to have it be the way I think my patients need it, I wound up feeling like I needed to have a leadership role in that.

I think that the natural leaders of systems in health care are generalists, because I think they have the broad view you need in order to be able to have a systems view. The same personality types and the same sort of world view fits both places. But even if you're not a leader, even if what you're doing is being part of a practice, you're still going to have a group of people that you have to take care of, and even if your system is nothing other than your--I don't think this is going to exist anymore, but if it's only your office, your office nurse, your receptionist, and the pharmacy the patient goes to, etc., etc., you're going to be better off if you can be thinking about that as a system and figuring how to deliver better care in that system. And you have to, because people are going to be asking you for what your outcomes are. Why should you get this contract again? You're going to have to know how to do that.

Mullan: What's the prognosis for primary care?

Headrick: As a specialty?

Mullan: As a disciplinary enterprise, both in terms of how you see it prospering in the future, and also, is it going to remain the multi-headed hybrid that it is now, or will it change?

Headrick: This is complete conjecture, but I don't think that I'm the only one that thinks this. I think that just as when you think about a system of care, all of a sudden, that the classic academic disciplines that came from completely different historical precedents, just as those disciplines don't seem to make as much sense anymore, like in the health care, you have a health care delivery system, why do you have a chair of medicine and a chair of family medicine? What's those people's role? I think that if you're thinking about delivering the best primary care, it's completely nonsensical to divide it up between medicine, family medicine, and peds. We have to sort of scramble, depending on the environment we're in, to define how we're different from one another. I also think that it's nonsensical and, frankly, foolish not to take advantage what our colleagues in nursing and other disciplines know about doing primary care. So that my desired future state is one in which a new kind of primary care provider emerges, that takes the best of all those fields.

The thing that is frustrating is that when I talk about bringing nursing into that mixture, an awful lot of people equate that with discounting the value. I don't mean that at all. I think that that person will be very highly valued and should be a leader amongst health care professionals. I just don't see any reason to divide it up the way we have. That doesn't make any sense to me. I'm a general internist. There are things that family medicine people know, that pediatricians know, that nurse practitioners know, that physician assistants know, that I'd be a much better primary care physician if I knew those things. So why are we not teaching them together, and why are we not

combining our strengths rather than splitting them up, in order to make the kind of primary care provider that the country needs?

Mullan: Let's pursue the nursing/medicine interface for a moment, because it seems to me easier, albeit land-mined, to talk about the melding of general internal medicine and family medicine, and perhaps even pediatrics, or moving to a Canadian model where essentially the family doc is the generalist, and your internist or pediatrician, is a consultant trained to deal with the more esoteric and the more intensive care. But when you move to nursing, which is a different educational model, a different history, and a different intensivity of training, a different applicant pool, that surely at this point in time, by the time you talk about the nurse practitioner, has winnowed out a fairly smart, fairly well-trained, and in practice fairly experienced individual, how do you see, or do you see, melding those, or do you see a continued differential function within some sort of team structure? If so, what are the good roles as you've seen them, and what would the role be in the future?

Headrick: I think that for the foreseeable future, for political and historical reasons, I don't see a melding of the two. The immediate future, it's hard for me to imagine how we'll transcend the very different historical, cultural, language, the difference between those two disciplines, to actually do something like that together. But if we were going to clear the deck and start all over again, that's what I would do. So given that, then I start thinking about, well, if that's really what seems like it would make sense, the rational thing to do without all this other

baggage, then how can we approximate that eventually? We may do that, but I think it would require a fair amount of time and a lot of cultural change.

Mullan: If someone can reach a same or very similar level of competence with, say, two post-baccalaureate years, as opposed to seven post-baccalaureate years, why are we doing seven post-baccalaureate years?

Headrick: Well, that's actually not what I said.

Mullan: What did you say?

Headrick: What I said was that there were things that nurses do that I think that the ideal primary care physician of the future would be better off if they knew how to do.

Mullan: Such as?

Headrick: Listen, counsel, think about families, think about the caring part of care. I think nurses do a better job at that than physicians do. I think they have better training. Nurses have better training in management than doctors do. It's core part of the curriculum of most of the nursing schools in the country.

Mullan: Management as in patient management?

Headrick: Management as the management of health care. Not just case management, because that's an important potential career in

nursing. So what I was talking about was taking the things that a primary care physician needs that nurses do well, and that sophisticated nurses do well, and blending that in. I don't think that that means that the person I described can get by with less training. There is a difference between a nurse practitioner and a physician in terms of depth of knowledge.

Mullan: Your meld, if it were possible, would be to incorporate skills and competencies, strengths of nursing curriculum practice into the medical curriculum.

Headrick: Or define something completely different, and have the docs and the nurses get together and say, "Who should this person be?" It would probably be a good idea to call it a physician, because that has the most respect, although I'm not sure the nurses would put up with that. We may have to come up with a different term altogether for what this person might be. I mean, this is real pie-in-the-sky stuff.

Mullan: Yes, but this is very important stuff that I'm personally puzzled about a lot, because the gap between the rhetoric and the political possibilities, and even the educational possibilities, is enormous. Even as you get individuals, and nurses in particular, moving out on the front line and saying, "I can do 80 percent of," or 90 percent of, or all of, or most of, if you sort of peel that back and say, what of that is true, what of that is rhetoric, and if you take the validatable part, well, how do you recalibrate in order to produce it, it's a real conundrum.

Headrick: It's tough because of all of the anger, other emotion, and inability to talk to one another. Through this interdisciplinary project I've done in IHI, I've become extraordinarily sensitive to these issues. When one of the speakers got up yesterday and talked about how physicians need to be part of a team, but we needed to--what was the wording?--we needed to be confident of the physician's role as the leader of that team, I got hives, because I knew that my nursing colleagues, that I respect a lot, would walk out. They would not be able to listen to that person. My argument would be, well, who leads depends on what the team is doing at the time. The only way I found that makes any sense to think about this at all is to think about what it is you're trying to achieve.

Mullan: This is a systems question. Are there evidences of floating hierarchies?

Headrick: Good question.

Mullan: Health care, for better or worse, is a hierarchical activity, like many activities in life, and seniority is granted for presumed experience, competence, etc. The physician both historically and given the amount of training is put out in front of that team. You make, and others make, the good argument that there are certain areas of competency and enterprise and health care enterprise in which others might be better than the physician. So could you have a team which on certain days or under certain circumstances was led by or the decision flow went to a given individual position, and on other days or other

circumstances to another? That seems counter-intuitive or counter-experiential to me, but I admit quickly to limited experience, and, I'm sure, physician blinders. But are there examples in other walks of life or work or enterprise with what I would call a floating leadership?

Headrick: I think if we reframe that a little bit, we might come up with the examples. From an organizational point of view, and from a salary point of view, and a "who's the official leader" point of view, the answer probably is, no, it's too difficult. It may be too difficult for organizations to make those switches. But when you look at a functional point of view, let's say, can you think of a team, an interdisciplinary team, where in a meaningful functional way it has been a fairly level playing ground, in the sense that depending on what the patient needs, the work is divided up and somebody's in charge. I can think of examples like that in the sense of I'm not in charge because I don't have to think about that, because I know that my nursing colleague is going to lead that effort to deliver that service to that patient, and I'm not going to tell them how to do that, because they know a hell of a lot more about it than I do. So at that functional level, I think we can think of examples. I agree with you, that's problematic when you start to try to figure out a way to translate that into recognized leadership, recognizing people outside the team. It's very interesting.

Mullan: Yes. If one could develop, or at least point to models, it would help my thinking, and then again, I'm speaking not just personally, but as a kind of would-be, open-minded physician, I'm

willing to entertain other models if one could suggest how they might work. The standard nursing line strikes me as opportunistic in the sense of they're looking for similar recognition, similar salary, similar advancement, for reasons that one can respect, but without a reality, it seems to me, with good arguments in terms along the lines you've given, but without a human systems reality that seems to me viable. If one could find that, it would help.

Headrick: Yes, it would. And there is a huge gap between what makes sense and what would be ideal, and in the examples that one can see now. Even in the interdisciplinary collaboratives that I run, I was really struck by--I'm working on this paper right now that talks about the first year of the collaboratives' work, and I did a table that talks about different aspects of the four teams. At the top of the table is who the leader is, and in three out of four of the teams, the leader is the physician. There was no reason why that had to be that way. In the fourth team, the leader has a doctorate in medical education. In no instant is the nurse the recognized leader of that team, even though there's some very strong nursing leadership being exerted within the teams. I was really struck by that.

Mullan: Yes. In there, you're sort of moving, as well as I understand the collaboratives, into definitionally neutral ground, or DMZ, between the disciplines, so that potentially you've got democracy of leadership. Where you're working on medicalized turf to begin with, where the physician has always been the leader, and then you propose that we're going to have

someone from a different culture, called a nurse, an interactive culture, a sibling culture, if you like, but a different one, and you've got this enormous cultural history baggage coming with you, which is why I think your answer is both right and hopeless, that is that you'd have to create a new culture of the "primary care-ologist" that would draw from people that heretofore would have been physicians, and heretofore would have nurses, and train them together. But in the mind of what I see as the foreseeable future, where the physician has this very high and well-established place, you would immediately cede that ground to the specialist, and you would create what would functionally, systemically be perhaps a more effective provider culture, but it would be a discounted culture.

Headrick: Why does that have to be true? If you started out with something brand new, created a new kind of health care professional, why couldn't you pay that person, and put that person in leadership positions in such a way that they would be the boss of the specialist? I have no idea how you'd get there.

Mullan: But I think you're punching the right buttons. Could you pay him more then, and could you put them in charge? You can push those buttons. Are those buttons connected to anything? Are they wired to anything real? I don't know.

Headrick: I didn't pretend to say that I knew how to get there.

Mullan: My guess is no, because the physician in general, and the specialist in particular, is positioned so far out front, you

will not be able to create anything as a culture and as a genus that will be able to compete with that. You want to be able to afford it, and you won't be able to create the prestige in name.

Headrick: So you don't think that the specialist stature is going to be discounted in the future.

Mullan: I think that the generalists will make a good run at reining the specialist in, in both stature, and particularly in income. My guess is that we will see more of an equalization, goaded particularly by managed care or integrated systems, which seem to me have to be a strong part of the future, in which the generalist is much more the quarterback and not the wide receiver or the water boy. You will see a system in which the generalist will be more respected and more remunerated, but the abilities and the scientific imperative linked to the reductionist technician, it still will require high skill, high training, which will go with, presumably, high recompense, and high prestige, or high recognition.

Headrick: How about the high skill, high training in areas that are becoming the purview of the generalist, that are very much in need, looking at outcomes, thinking about populations, thinking about quality?

Mullan: I think those will escalate in terms of their appreciation and their remuneration. I say this, I mean, bloodied, and continue to bloody my hand to try to get around this, and partly this very project, it would be easier to write a

book for the general audience about the making of a transplant surgeon than about the making of a generalist because of the inherent drama and the like. It will be hard, even for me as an apologist for, and backer of, the population scientist, it will be hard for me to say--I mean, there may be certain population scientists who are revered for their epidemiologic know-how, but as a matter of course, every community having its cardiologist and its cardiac surgeons who are or will be revered members of that community because of the semi--my father just had a valve transplant last week--valve replacement. I found myself looking at this humble-looking, 5'4", white-haired guy and thinking, "Wow, he knows how to do things I can't imagine. He's been places I'll never be." I found myself as a primary care-ologist having a bit of just reverence.

Headrick: Seduction of technology.

Mullan: Yes.

Headrick: And deserved in that case. Absolutely deserved in that case.

Mullan: And there has been a priesthood of learning. This guy devoted, from twenty to forty, his life learning how to throw these micro stitches in a desonguinated heart, with seconds counting, and that will retain a respect that it's going to be hard to run up against with the family physician or the population scientist.

So my answer is containment. You've got to get the specialist mythology and function under control, and that the generalist potential for doing that and managing that, and interacting that, is much greater than it has been, but it'll never supplant it, and I don't think you can create a non-physician category of provider without abdicating or seating a huge and impressive historical role that you'll never get back.

Headrick: Interesting.

Mullan: Those are all questions I wanted to ask you.

Headrick: This is a wonderful conversation.

Mullan: Maybe I'll quote myself in your oral history. [Laughter]

Headrick: [Laughter] There you go, that's very good. I think one of the critical tensions that's going to be a big part in my lifetime as a health care professional, is going to be, is the tension between reductionist and systems thinking in medicine. We have been at the altar of reductionist thinking, and we have mined enormous benefits in that priesthood, as you said, carrying the analogy. But we've also lost of bunch of opportunities because of the fact that we ignored, we don't balance that. We devalue the importance of working with systems, and we don't know how to do it. We have no idea how to do it.

For a while I was trying to learn how to play the banjo. I was very serious about it for a while. My teacher was trying to

get me to learn how to play from ear, and, as an example, I had picked a couple of songs on record that I really liked a lot, and so in my typical reductionist way, what I did was try to listen very carefully, write down the song so I understood the chord structure, exactly what the notes were, as if I were going to write it down on a piece of paper. I was going to try to tape it and break it down into pieces, learn the pieces, and put it back together again. I completely blew him away. He thought that was the dumbest approach to learn how to play a piece of music he ever heard in his life. He was trying to get me to try to think of it as a system, to really hear the music and have it come out in my fingers. And he had no better way of describing to me what it was I needed to do, and I had no idea how to do it.

Mullan: That's a very interesting thought. I mean, I always talked about reductionist thinking versus generalist thinking. Generalist thinking is kind of a non-specific concept, and systems thinking has a texture to it that's much clearer.

Headrick: I would argue that a generalist, an excellent generalist, needs to able to do both, because it depends on the problem.

Mullan: Both systems thinking and--

Headrick: And reductionist thinking. Depending on the definition of the problem.

Mullan: But I was just arguing that systems thinking is a refinement and a crisper concept than generalist thinking. It's a crisper contradiction to, or dialectic partner to the reductionist thinking than generalist thinking to reductionist thinking.

Headrick: Yes. Yes.

Mullan: Time is getting short. I wanted to ask a few other things.

Headrick: Better get back to your interview.

Mullan: Where do you see your career going? Where would you like to be in ten years?

Headrick: I want to be in a place where I continue to have the freedom to explore and learn, and have a laboratory in which to do that. I really think that I'll stay in academic medicine because of my devotion to education. I really see that as being a big part of my career, and I want always to be around medical students and residents, but what the role will be in that, I'm not sure.

Some days I think I'm better off staying as a fairly independent faculty member, and developing an area of expertise, and staying as sort of a free agent that way. There are other times when I think that pursuing additional leadership roles, more and more central or mainstream in the same organizations I'm trying to influence might be a way to go. And there are other

days when I think that, well, maybe it would be useful to spend some time outside of those institutions.

I had a very interesting conversation with Gary Filerman about just this. I was asking him about his career and how he wound up to where he is. I could ask you the same question, actually. Gary sits on lots of interesting boards and has been involved with lots of important organizations and has a fair amount of influence, even though he's not the official leader of anything right now. So I don't know.

My department chair thinks I should become a department chair, and my dean thinks I should become a dean, and that to me is just a great compliment that they want me to do what they do. I worry about those standard organizational leadership positions which would be the expected career course for some of my interests, because of the fact that it's so easy to spend time on other people's agendas.

Mullan: That's for sure. Don't join the government if you don't have time for other people's agenda. That's for double sure.

Headrick: Right. On the other hand, it's like there'd be some value in being someplace where I control the budget and I help set the mission and the vision of an organization. So I don't know the answer to that.

Mullan: We touched on this a little bit, but I'm talking ten years down the road, what do you see as the circumstance of primary care then as compared to now?

Headrick: I think in the foreseeable future it'll get stronger, just because the need is so great.

Mullan: By stronger, what do you mean?

Headrick: More influence, better people choosing that as a career choice among physicians. I see the places, the kind of research areas that generalists tend to be interested in seem to be the areas that have money--outcomes management, epidemiology. So I think that the research is going to improve, because it's going to be supported, at least in directed ways, by organizations who need that information. I think that health services researchers, for instance, are going to be smart enough to figure out a way to do contracts in such a way that they contribute to the general knowledge.

I'm disappointed by the abdication of leadership that government is taking with respect to a lot of these issues, and I think that as a society we'll lose because of that. Because this turning things over to private interests, some people argue that it's okay, because private interests are going to drive the things that we need, but who's going to be there to represent the interests of the public at large?

Mullan: Does that means that you're against managed care?

Headrick: No, not at all. I actually think that a good managed care company, good in the sense that they have a mission that I agree with, that they are in business to improve health and to provide good health care, and have boards that include the

communities that they serve, I don't think I can find a system to work with to achieve my mission that I'd rather be part of. Developing a system of care that really is pointed toward--I don't think you can do that in our current environment without having a managed care environment, because it's only then you can control the resources and you will able to do things for populations, and not just individuals.

Mullan: So it would be fair to say you are for managed care?

Headrick: It depends on the managed care. I'm for managed care and the ideal that is like, I think, best embodied by Group Health of Puget Sound, or by the best Kaiser organizations. Politically, I've been very much in support of one payer, despite all the problems with that. I'm jealous of some of my European colleagues who can be really clear about who they take care of and what they're there for.

Mullan: Could I ask on the personal side, does this work well as a marriage in terms of your career and your husband's, and have children ever been an issue?

Headrick: That's actually pretty complicated stuff.

Mullan: If you're not comfortable, that's fine.

Headrick: Yes. It's interesting, because my stuff that I'm interested in is way out there sort of at a systems level, and I'm married to a molecular biologist, who's interested in the

precise factors that control our RNA transcription. It's just crazy. He's a good bellwether for me, because he is a very thoughtful guy who cares about the world and shares my values in terms of what would be good for the community and for the country, but he doesn't get what I do. Even when he tries to talk to me about it, he doesn't even really understand what health services research is, and I don't understand his papers either, but if he works at it, at least I can understand it because I have some background in it. But the kinds of thinking I do is just so different than what he does, he doesn't get it at all. So he's an important reminder to me about important parts of my audience in the academic medical community. But he seems to like and respect me, and is willing to tolerate what he otherwise would be very suspicious of in terms of where my personal interests, my professional interests have led me.

Mullan: That's good. In terms of others that I ought to speak to, are there people who come to mind immediately? That's something we could talk about more, but just while we have the tape running, that I ought to do oral histories with. Particularly, I was thinking with your experience with what I call non-position writers, I'm not going to go further afield with that, but at least PAs--

[Begin Tape 2, Side A]

Mullan: We're talking about there might be other good subjects for interview. Colleen Conway-Welch at Vanderbilt would be one.

Headrick: She was part of something going on in D.C. and would be able to answer these questions.

Mullan: In terms of literature on what I'll called, loosely, systems thinking, are there particular documents or books? I know there's a huge literature. I can see an important, from our discussion, and I suspect discussions I'll have with others, that the intersection between primary care and where there's TQM or CQI or systems thinking in health care, the intersection is a powerful one and should be developed, and in doing that, I ought to get more fluent, or be able to quote, cite, discuss. Are there documents that would help me do that, that you could either cite for me or send to me?

Headrick: Actually, there's an article that I wrote with Paul Schwab, David Stevens and Duncan Neuhauser. It was in *Academic Medicine* a couple of years ago, on continuous quality improvement in the education of the generalist physician. That article per se might not be so helpful, but the reference list from that article might be helpful, because it provides some core thinking, some core pieces, as we try to sort of build the argument that these two things fit together pretty well.

Gail Povar wrote a piece for the *Primary Care Fellowship* Newsletter that related to QI and COPC. Did you see that? That was a couple of years ago.

Mullan: Must have. I don't know.

Headrick: Which I thought was really neat, because she talked about how--

Mullan: I was a fellow, I think, when she came back the next year and taught.

Headrick: That's right. She and I taught together, and we wrote a little piece that went with that. We were invited to write something for the newsletter that went with that, and her piece was that. I thought that was very thoughtful.

Mullan: I do remember that.

Headrick: It talked about how CQI is a way of holding our feet to the fire to show that we've achieved what we really say we want to achieve in COPC. So I thought that was a thoughtful connection. In terms of the background of the field, I'd start with that reference list and I'm trying to think of fast ways to get into the literature.

Mullan: Is there anything else you'd like to say before we retire this interview in terms of you and your career and where you're headed?

Headrick: The only thing that's going through my mind now is that if you interview me in five years, I would say, "Gee, what naive things she was saying in 1996."

Mullan: Maybe we'll get a chance to do it.

Headrick: Because things are changing so rapidly. I met Don Berwick for the first time in 1993. I mean, that's just astonishing. And I would have never, three years ago, seen myself doing what I'm doing now.

Mullan: Really? Because this journey started in '87 or '88.

Headrick: Yes, but the focus of it has varied a lot. What I'm doing now in terms of sort of the national presence I seem to have, and the national leadership that has emerged as being an important role for me, I wouldn't have predicted that.

Mullan: So you don't know what to predict for the future.

Headrick: So I don't know what to predict for the future, although one thing I do know in that, is that I'm hopeful of being able to do what I heard David Greer describe to a bunch of medical students when we had lunch with them a couple of days ago, in which he was talking about his career and all these different paths he has taken, and he did so with so much excitement about every step of the way. I was sitting there listening to him thinking, you know, I think I can do that. I think I can sit at age seventy and be excited about the things I've done, because so far what I've been able to do is get excited by new questions and go down paths that I think are important and worth spending time on, and that will I continue learning a lot all the time. So that's the one thing that I absolutely can be sure about, that I'm going to be an avid

learner, and having a lot of fun in doing that. That's the only thing that I can predict for sure.

Mullan: All right. Well, it's been great fun.

Headrick: Thanks, I appreciate it.

Mullan: Thank you.

[End of interview]

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