

American Medical Informatics Association Nursing Informatics History project

Purpose

The overall purpose of the Nursing Informatics History Project is to document and preserve the history of nursing informatics.

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Norma Lang

Interviewer: What is your name?

Norma Lang: Okay, my name is Norma Lang, N-o-r-m-a, first name. Last name, Lang, L-a-n-g. And my credentials are Registered Nurse, RN, and Ph.D., as the highest degree, I guess. And I'm a Fellow of the American Academy of Nursing, so that gives me an FANA... FAAN credential. And I'm also an Honorary Fellow of the Royal College of Nursing, so that gives me an FRCN credential. And I have a status as the Professor and Dean Emeritus at the University of Pennsylvania, and I am a University of Wisconsin Regent Distinguished Professor, and I hold the Aurora Professorship of Health Care Quality in Informatics at the present time.

Interviewer: What are you doing now related to informatics?

Norma Lang: At the... at the... at the present time, I have a really unique opportunity to lead a project that's kind of capstones everything that I've been interested in a lifetime, and that's quality, informatics, computers, standardized terminology, languages, classification, and certainly all applied to practice as well as research. And so that's called a knowledge-based nursing initiative, and it's a partnership between academia and a corporation, as... of... as well as a healthcare system. And so I have an opportunity to apply, develop and apply everything that I've been thinking about for quite some time.

Interviewer: Did you consider yourself an informatics nurse?

Norma Lang: Well, I've been involved in this for a long time, and have had a chance to think about, about this. And my career really started with quality, trying to find ways to describe quality, quality measurements. I came out of an era where quality assurance was a very, very interesting and, and exciting topic, and it was at that time that I did my first piece of research. And my first piece of research was done in the early 70's, in which I worked

with advanced nurse practitioners in pediatrics to develop criteria that would measure their practices in ambulatory care, or nurse care. It actually was for well infants. And so we developed those criteria, and then we went to the records, the written records, to see to what extent were your criteria reflected in their records. And out of 48 criteria, two were reflected. And so I became very much interested in how the very important things in nursing would ever be reflected in records. And, of course, at that time, the computer was pretty much a dream, if anything. I don't know that we talked about... everything was dependent on paper and pencil.

Shortly thereafter, I became... after my dissertation was turned into a grant for the American Nurses Association that was funded with about a million-and-a-half dollars to develop criteria for 17 patient populations that were affected by nursing. And so lo and behold, we found very similar things, and nurses could, could describe what it was that they thought was important in all these patient populations, but if you went to the records to see how any of this was recorded it was not... it was pretty invisible. So I began to know that nurses did a lot of things very well, probably create a big... I know they created a big impact on patient outcomes, but it was not to be found, and it's very hard to study something or even practice something if you can't find it, and certainly you can't get paid for it. And so later on I'll share a quote with you that was a result of, of that kind of insight.

So my, my history, then, at that point, also the issue not only of could you not find it there, but the whole issue of standardized language became something that as very much on my mind. Standardize language, I described it one way, somebody else described it another way, and a fourth and a fifth and a sixth, and we had a lot of ways of describing it. An interesting part of my story is when we did the, the PRSO project and we were looking for how to... we started out pretty much with what is known as medical conditions, and at that point, several people who were colleagues that had begun to work in nursing diagnosis asked we why do we do medical diagnoses. And I said, 'Well, because that's the way the healthcare system is, is established.' And it was Marjorie

Gordon and Phyllis Kritek at that time, who was giving me a little bit of something to think about. But I went ahead, and we did that. And when we did that for the 17 patient populations that we had described, lo and behold, under each of those medical conditions, very common nursing problems came to the... to, to light. And no matter what you had as the top term and the consideration, underneath there came things like what the patient knew, how... why... what they... how the patients manage pain, how they manage their medications. And many of my colleagues said, 'We know. We told you that's what would happen.'

And that was where I started to be convinced that there was a standardized language that would be something like either nursing diagnosis, nursing problems, and so I became the converted. And, you know, converted makes people [laughing] very, very strong in what they believe.

So that was my, my start and my belief about that there needed to be [clear throat] a standardized language. And at that time, the North American Nursing Diagnosis Association... or group had been started. At that point, we had not been thinking about how to deal with interventions and outcomes, but I was part of many of the groups that discussed that along the way. And from that, many good people, many researchers, many developers started. So I have the opportunity to be in on the ground floor with many of the groups. The, the group that developed Omaha, I was on their advisory group way back, along with Avidius Donabedian, who is known to be really one of the outstanding experts in, in quality of healthcare, and developed a structured process and outcome model. At any rate, we served together and advised Karen Martin in the DNA in... out of Omaha to develop that.

And that gave me some real insights into what happened in the home care situation, and also then became part of the discussions with the persons who ultimately developed the nursing intervention classification, the nursing outcome classification, and really felt that what I wanted to do, rather than personally developing any of these myself, was I wanted

to take on a role that would facilitate everyone who was developing these. And as such, I used my time when I was on the American Nurses Association Board of Directors to become very instrumental in how to support this development. And we started with one of the first groups, which was the leadership group, and this particular committee changed names so many times, I'm not sure I remember what it... what it was. But it pulled together people who were really concerned about the nursing nomenclature, and then ultimately in clinical information systems and informatics, as this was a developing field, right along as nursing was trying to figure out what kind of language it would use.

So we had this group, and there was much debate when we started, and I can remember people like Ada Jacocks and others sitting there and debating whether we would have a uniform language, that means one language, or would we try to go on and develop multiple efforts? And at that time, we thought we were so new in this field that we were going to support many people. So there were many researchers who, who were developing things, and thus, we, we, we have, you know, NANDA, infamously now known NANDA, NIC, NOC, Omaha, Saba's classification, and all of those, because we were... we were really focusing on the development of that. And, thus, I think the ANA ended up with wanting to support that in developing criteria for recognizing these, rather than coming up with the ANA set of terminology. And I think that probably set the ground work not only for the ANA, but then, ultimately, the International Council of Nurses when, when they began to work on this as well.

So I, I think I'm, I'm answering many things, but if, if I, I could, there's... the connections as these things move along, I think because of the work of the United States and the American Nurses Association, I think there became an interest in this internally. So I'd like to just share with you a little story, and this is probably a Virginia Saba story, and that is that Virginia was one of the key people on this committee as well, trying to keep in touch with everything that was going on. And we knew that there was the ... International Classification for Diseases—right?—that pretty much is the classification that our system in the United States and around the world uses. And so Virginia was very

determined that that was a very limiting kind of classification, and we should really have nursing diagnosis and other terminology in there. So she set about figuring out how you went about doing this. And we learned that you had to go through your... there were eight centers for classification around the world that were part of the WHO, the World Health Organization. And so we thought we would have to take this to the North American one.

So Virginia literally took and took... we worked together. And at that time, NANDA did not include very many psychological or psychiatric or mental health diagnosis, and so there was a group working there. And so we put together sort of an augmented NANDA group, and we took it to the North American Classification and said, 'We would like this to be in the International Classification for Diseases,' at which point there was like, 'You want what? And, what? What?' And... but if you know the persistence, and... the persistence and the backing of a group in, in the American Nursing Association, and this group said, 'Well, I guess okay.' And, actually, the North American Group decided they would take it forth. And so they did, and they took it to... they took it to WHO and to the classification center. And they took it to the center—the center didn't know what to do with it either. 'Where did this come from?' And, also, when new terms or, or new labels are accepted in ICD it goes through a consensus-building process, and they sort of run it through the eight under... eight other classification centers.

But what this did, and I, I just hope that people will know sometimes how a policy is changed, what it is it took the WHO over to the ICN to say, 'Does nursing really want this? What is this? Does it have support of nurses around the world?' And at that point, ICN was not quite sure. And this is the International Council of Nurses, made up of well over 100 countries. So they weren't quite sure how to respond to this either.

So at the same time, our American Nurses Association took a resolution to the ICN, and I think this was in 1989, that if we were really to advance nursing, and, and... we would need to be able to have this kind of naming, or nomenclature. And, actually, the house...

it's not a house. It's called a, a, a group of... when all the countries get together. They approved this resolution that there would be such a, a... an effort, and it would become a major program of the international council of nurses. It took until 1991 before this was really going to be implemented, at which point they asked for a proposal. And when they asked for the proposal, Greta Stiles, Dr. Greta Stiles was the Chair of the Professional Services Committee of the ICN, where this would have to have its home and support. And so it was her job to figure out how to do this. And so I received a call one day from Dr. Stiles, and she said, 'I want you come and help write this proposal,' at which I said, 'I don't think so. I've spend my whole last decade or 15 years trying to bring the groups in the United States together, and after this chairing this American Nurses Association Committee. And I think we're doing quite well, but I, I think I've done my thing,' and I didn't think... well, 'No, thank you.' But if you ever... you know, Dr. Stiles, you say no, and the next thing, you find yourself on an airplane to Geneva to, to write this... to write the proposal. And at that point, we were joined by Dr. June Clark, who was then the President of the Royal College of Nursing, and some of the staff. And the three of us spent 10 days writing the initial proposal for the International Classification for Nursing Practice.

And the reason I'm sharing that with you, it was during that time that this infamous quote that has been associated with me came to be, because I was sitting there one day and there were several people around the table, and they're saying, 'I just don't understand why we want to have this thing... this thing called Classification for Nursing Practice.' And I was getting to the point, and I said, 'Well, what you really want this for is because without it,' I said, 'you can't... you can't... if you don't name nursing you can't practice it, you can't teach, you can't pay for it, you can't put it into public policy, and you can't teach it.' And so that... and at that point, Dr. Stiles was sitting there, and she was very carefully writing this down. And I was going on and on, and describing this is why you wanted to do it. And she then read it back to me, and she said, 'Is this why we really want to do it?' And at that point, the quote became permanent forever, and now that quote, 'If nurses can't name it, they can't do this' has been so meaningful that it's been

translated in almost every language around the world, and so you'll see it there as part of it. But, truly, you have to be able to name something to be able to communicate it.

And this was not too, too unusual, or too much of a novel idea. When we went back to the archives of the ICN, the International Council of Nurses way back in, I think it was 1906 when Isabelle Hampton Robb, who was at that time the President of ICN said, 'What we would really need was a nursing Esperanto. And what that was is a language about nursing. And it wouldn't be all the languages that we speak that would be the problem, like, you know, everything from French, to, to Italian, to Spanish, but it would be that we need this common language. So I kind of think here it is almost 2006, a hundred years later, and we have it. At least we have a permanent program in ICN called the International Classification for Nursing Practice, and it's, it's... had its first version published this year, and that was after working on it for over a... over a decade.

So now you'd say, 'Well, what does... what might this have to do with, with computers?' And going back, if you backtrack into the 70's when I did my first dissertation and was looking into records, there was a... the program was twofold. There wasn't a unified language or a uniform language, and it was really hard to write all those things. If you think there were 48 criteria for well infants that nurses are going to do, that takes a lot of time to write that all out. And this was true in hospitals; it was true in home case. And so, all of a sudden, this computer, this creature called a computer was coming along, which was intended to help people who had complex data to deal with. It really wasn't intended to add one plus one, or to write very simplistic things. It was meant to, to do very complex things. And so I immediately started to think, 'Oh, wow.'

And at that point, I also had linked in with another very famous person in terms of Dr. Harriet Werley, who came... who was at the University of Wisconsin, Milwaukee, where I was the, the Dean. But I had worked with Harriet before on a couple of projects, and but when we... when she came to be a professor, a distinguished profession at UWM, and I was the dean, she was hatching the Nursing Minimum Data Set, and part of the

Nursing Minimum Data Set, which culminated in a book, and I think has been very instrumental to, to encourage nurses and others that nursing data, again, is an essential part of any kind of data set or database that needs to be developed. And so that was the beginning of then looking to see how we would be able to match this and use the computer to do it. And I think it started out really, really slow. I think... and I'm not sure that even as of today we have maxed out what we can do on the computer. We've got to bring these... all of this work together now, and that's what I think the project that I'm involved in has the opportunity to do that, is we do have standardized language, we have classification systems, we have the Nursing Minimum Data Set, we have more research right now than we've ever had, and the research and nursing that has affected healthcare has just dramatically increased. And so is a matter of how do we bring this together on behalf of the patients but through the nurse at the point of use.

And so that's where I think the... it's just... it's just tremendous that we have the opportunity now to use that computer capability on behalf of nurses. But it has to be there at the point of use. It has to be user-friendly. It has to be programmed with those things that are important to nursing, like the Nursing Minimum Data Set, like the nursing terminology. It has to be, as I said, to the point where not only does it offer decision support to the nurse in a very user-friendly way, so it's bringing research to the point of use, but it also has to drive what she is able to record, so that that, then, in turn goes into a data repository for future research, but also for reports for quality improvement. We have asked nurses to do far too much with paper and pencil. Even today when we have all of the computers that are there, and I think the technology is there to do almost anything we want. And it's a matter of what is it we want, how do we want to frame this, and then having enough people who are capable with minimal competencies to be able to turn the computer on and get started, I guess.

Interviewer: Who were some of the early influencers on your career?

Norma Lang: Well, I had an opportunity... when, when I was thinking about my, my doctorate way back... way back in the early, it, it... there was a program called the Regional Medical Programs at that time. And they were part of President Johnson's Great Society, where there was a... there was a belief that we could take the best of healthcare in the country, and if we had regional medical programs, we could have that level of care in all the places around the country. There would be a variation. And, of course, that was President Johnson's and Dr. DeBakey's association in Texas. If you could go to Dr. DeBakey for your heart problems, and why not then take that standard and have it go across the country. So let's have one of the great society programs be the regional medical programs. And I had a real opportunity at that point, I mean, that was a... there were a whole host of us who were very young and at that point, and influence... and able to be influenced, who joined a group. So I had the opportunity to do my doctorate, along with systems engineers, and physicians, and nurses, and everybody talking about what was going to be the best in heart care, and cancer care, and end stage kidney disease, and all of that. And out of that came this whole movement towards planning and quality measurement. So I started to think immediately about how, how would this... how would nursing have a piece in this. So... and that's how I developed my own dissertation, which was a model for quality assurance, and then tested it with the pediatric nurse practitioners in an ambulatory, or a community health center. And, remember, this was in the early 70's, so that's a... that's quite a long time ago when you think about it. So my, my career in quality... that's the way it became... it, it started.

And then as I took my dissertation and then changed it into the criteria development which were part of the professional standards review organizations, that only... that only took that into another step, and then I went, went on from, from there. And even though... I should say even though I've been a dean for 20 years, in that timeframe, I always maintained my own active involvement in quality, quality modeling, quality standards and, and measurement, and then into informatics. And I, I have never been totally comfortable with informatics, because it's sort of I grew up with it. So when somebody says, 'When did you become interested in informatics,' I keep thinking, I

guess from its inception. It just seemed like it was there, all of a sudden. Just like as new technology comes along, you're never quite sure. All of a sudden, you have these things—you have the telephone, you have whatever. When those computers came along I just thought, 'Well, that's a natural for us to use that in there.' Then one day it became informatics.

Then at the thinking, at the association, for the American Medical Informatics Association, I was with this group when it was called its predecessors, with SCAMC and other things. And, again, that was where people were trying to think about how can we use the computer, this, this new thing, this new... for healthcare. So it just became a natural. And then, all of a sudden, one day somebody named it informatics or informaticians or informaticists, whatever they're called. And so I guess... I kept thinking, 'I guess I'm one of those, because I've been working in this area so long.' So... and now, of course, there is many programs, educational programs, for... but for those of us who grew up with it, we sort of grew with it, and had probably not the formal training, but were part of creating the formal training for others. So that's kind of a little bit about a background of how I got involved in both quality and informatics.

Interviewer: How would you define informatics?

Norma Lang: Well, that's a... defining... that's why I said, it... I, I think a little bit earlier in, in my, my discussion, I'm not quite sure, because when you grow up with something like this, and then, all of a sudden, informatics comes in as a... as a science, and then also have been part of universities where you're trying to decide whether informatics is going to be a department, or is it... is it something that facilitates others' works, or is it a science and an end of its own. And I think there's probably a little bit of both of that in informatics and in, in, in nursing. And I think informatics is something that helps people do what they are going to be able to do. I think it's, it's the thing that bridges it, it's the thing that manages the information for them, and I, I don't know that I have a particular definition,

but I know there are some... particularly, people who have written the books on it that have very nice, nice, nice definitions.

But I like to think of it as a tool that makes practice happen. And for me, it's bridging what we know in the literature. There's a part of informatics that is very much tied to putting together the knowledge that we know on behalf of the practitioner, and then there's the side of informatics that takes it to the patient, and, and bridges it to the... to the... to the patient. And then there's the side that bridges it to making the new knowledge again. So those, those, those pieces are in this whole thing called informatics. And, of course, there's the whole bioinformatics side of this, the whole genomics side of it. And I think that that... those are very important. The imagine side of, of, of informatics, and a transmitting information that's essential.

My whole goal has been to be sure that nursing data, nursing elements, nursing information gets into that informatics. I'm very concerned that nursing, that the essential parts of nursing is still invisible. As we move into hospitals, the first thing to be in an information system has been financing data, administrative data, even the big administrative databases that we study these for research have a lot of the structural details in them, and the financial details. But if you're really looking at what constitutes care, the real care that people need, that's still not as, as readily available in there. So my... I think right now wanting to be sure that informatics as a whole has the essentially pieces that are needed, and nursing, then, is part of that.

I'm not sure in nursing informatics or health informatics or medical informatics, as long as those key things, those key elements that are important to nurses who are taking care of patients are in there. That's probably not the most scholarly definition of informatics, but it works for me.

[change tape]

Interviewer: What are some of your biggest personal accomplishments?

Norma Lang: Let's see, my accomplishments, you know, I've, I've really been very, very privileged, I think, to have so many opportunities. It seems like all the way from going to... being able to go to college, all the way getting... to starting out to be working with the regional medical programs while I was getting my dissertation done. Not too many people have those kinds of really magnificent opportunities. So, so those are always, I think, associated with achievements.

I think, if I were to look and say some of my biggest achievements, other than my personal ones with my family, of course, I have to always put those in, and being a brand new grandmother. I have to... I have to add that in. There's just nothing like... after you add all these up, and then you have two new grandchildren, it's really quite neat. But at any rate, looking backwards, I think doing the PSRO project way back before, that was the first time nursing had been able to name its, its criterion measures for... and it went right in with the interdisciplinary ones, and it made a big point. And then I was, actually, after that, named to the first council of PSRO's, and then, ultimately, to board of PROS. So the things that I did seem to then put me into a policy-making arena, and so from RMP, the Regional Medical Programs, to PSRO's, to community planning seemed to, to work. So those were... those were really very, very good achievements.

The... certainly, the International Council of Nurses achievement is, is a... one that I feel very proud of. And the fact that the ICNP has its first version, and it started out with this 10-day writing the proposal, and there's nothing like seeing that proposal come to fruition. And having the WHO no longer saying, 'What is this thing called nursing, and nursing classification,' and having them come to C... ICN when they were doing the new classifications for impairments, and, and asking for nursing's input, because now nursing had established itself. So those are... those are very proud moments.

I think in the United States, one of the days that I was most proud of was when the National Library for Medicine decided... National Library of Medicine decided to include some of the nursing nomenclatures in the Unified Medical Language System, which they said before... early when we started this, they said that we'd probably not be able to be done without raising considerable money to be able to do that, and there was a significant day in which we had a meeting, and the first people came from the staff. And because the American Nurses Association had put together a way in which one could recognize with criteria certain classifications that they met criteria, then they said they could take these and they could include them. And that made me so proud because... and so pleased and so excited that we really can have... and that's another one of the quotes that's frequently associated with me, is you know nurses can have whatever they want as long as they get together and know what it is, and ask for it. And this was one of those times when I was really very pleased. And so I think we need to keep, keep that consensus-building, so... But if, if each one of the nomenclatures had gone on its own, which it had in the past, the, the... they were not able to sort that out. But once ... ANA became that clearinghouse and established the criteria, then they were able to do that. So that's another very, very... I'm very, very pleased with, with that activity.

And so I think those are some of things.

Of course, in my career, I'm very pleased with having been able to be in two schools of nursing—first the University of Wisconsin as the dean, in which we were able to establish nurse-managed centers that were able to use and then... classified language in those practice... or standardized language. And to this day, the University of Wisconsin, Milwaukee, has 15... more than 15 years of data on their practices that are... that are really influencing policy.

And then I went to the University of Pennsylvania, and we also established nurse-managed practices. They also used standardized language and computer-ah, ah, ah... - assisted or collected data. And one of my most exciting times in this last year was that

one of the doctoral students actually had done an analysis of the data in one of the practices, and her paper was published in *JAGS*, which is the *Journal of Aging... Journal for Gerontology*, and it... what it did, it was able to demonstrate that with using nursing terminology and nursing data, you could demonstrate that people who had cognitive impairment would benefit from rehab. Now, the whole field out there in gerontology has been looking for this kind of evidence, but you couldn't do it... you couldn't get that evidence without having a standardized nursing language to, to be able to show what was going on with patients. And that was just published recently, and they... it was so significant that it also warranted the journal editor to write the editorial in relationship to that. And that was now using partially the... or an augmented Omaha system to be able to demonstrate that classification system. So that was so, so pleasing to me. So that was another, really, achievement.

And then in June of this year, I have another doctoral student who actually for the first time, used one of our data repositories, data warehouses in one of the areas I'm working in, and was able to do her research on a N of 10,000 patients for her doctoral dissertation, and was able to be able to look at assessment factors, and the diagnosis, and the interventions that nurses did around the particular phenomena. Now, I'll tell you, as somebody who has been working her whole life in facilitating research, you say, 'When could that have happened?' We're usually trying to dig out things for an N of 20 or 100, or else we have to go into existing databases like Medicare or Medicaid. So if this works, and if we do this right, it will change the fact of not only our practices, but it will change the face of how we do research. And I am absolutely convinced of that now that I have these, these examples that are 'yes!' So there are many days I'm going 'yes!' And I think those feel good as a... as, as achievements that are all depending on these aspects of, of in... of informatics, computerized information systems, decision support systems, standardized languages, these are all important factors.

So I think those are some. I have many, many others. I could probably go on to say it's just been a very... the nursing profession and my career has been a really, really, really

tremendously satisfying one. But those are some of the... some of the, the key ones from early on to just recently.

Interviewer: What would you say to a new nursing coming into this field?

Norma Lang: What would I... what would I offer, or what would I suggest to people considering a field of, of nursing? I think it's, it's... nursing has so many incredible opportunities that it's just got... all over the world, and I might add that as well. There isn't... there aren't too many professions that you can go into on almost the day you graduate that it's... the phenomenal opportunities are there that you can almost hardly make a decision. And so I, I would offer as we look at what's... healthcare needs are around the world, whether it's going to be the chronically ill, that many of us are getting into the age group where that's going to happen more and more. There's going to be more chronic illness. Actually, the more we keep people alive with our dramatic discoveries, the more we actually keep... contribute to the more chronically ill, there's such an incredible role for nursing to be in there for health promotion, health management of chronic illness, not to mention, of course, the most standardized ones that most people recognize, and those are the acute care, the emergency rooms and all... and all of that.

But there also is, if you look around the world, where were the nurses in every kind of catastrophe that goes on, even as recently as our, our hurricanes, or into the... into the wars that we're having? I mean, you look at many nurse colleagues that I have met, and one of the... that was... it's another really tremendous opportunity for me is to meet nurses all over the world in the... in the... this... activities I've been doing. I think nurses have such an incredible ability to influence health, from the bush communities in Africa, to... all the way to, to wherever you would find, in the workplace, wherever people are, in schools. And so I think it's tremendous. If you want to be a scientist, just go for it, just keep right on going, and go get baccalaureate, masters, doctorates.

And then the research areas are just almost incredibly... the opportunities there are tremendous, from looking at what happens with people who have pain, to make that better, to teach people better, how to get them to change their health behaviors, all the way to doing health services kind of research, where see what payment factors have to do around healthcare, to basic physiology and basic gene, ah, ah, gene... genetics and genetic counseling.

So it's like, my gosh, what would you like to do? We have something for you in, in nursing. So I see it as just a tremendous opportunity.

And I'll tell you when you're a patient, and I've had that opportunity several times, even within this last year, and you're opening your eyes after an anesthesia, and there's this nurse, who is really a very capable nurse, and, and there... there's just nothing like it, to see a very competent nurse standing there, who you know has kept you alive for the last... while you were not awake, and then is going to take you through your next steps. So I think the practice opportunities to actually work with people, and get those rewards right, right there are also tremendous, and to have those skills and knowledge that are needed right now in this... in this world. And I keep saying 'world,' because it's a global... it's a global community these days.

So I, I think it's, it's really very good. So whatever you'd like, it's there.

Interviewer: Where do you think we're going with quality informatics?

Norma Lang: What do I think about, about the issues of quality and the concerns about quality? I think that it's a... it's a complicated area. It's not an easy answer to discuss quality. And quality is usually always there in, in relationship to cost, and where are the resources going. And I have the opportunity right now to be on the board of directors for the National Quality Forum, which is in the business of trying to develop performance measures that are consensually devised by people who are consumers, to payers, to

researches, to providers. And that's been a really interesting experience to see what are those measures that are agreed upon by all those different viewpoints. So I see quality as something that we're still going to be striving for some time.

And, actually, way back when I did my dissertation, I started with the concept of quality as defined by Plato and Aristotle, and that's a long time ago, and they said they were going to be looking for those dimensions of quality. And we probably haven't... we're still... they're still there; we're still looking for those. I think nurses are able to articulate more on behalf of patients what it is they think is needed in quality, and I think that's good, and should be encouraged. And I think they're getting the data now through the clinical information systems to be able to describe that, and to use that as leverage to be able to make improvements either in their own practice or in the policies that are needed. So I think there's some movement there. And I still think working in quality from whether you're a staff nurse and you're wanting to be participating in shared governance and making that known, to people who have spent their whole life in trying to develop the measurements from a research perspective, or the people who work in policy who are trying to take those and implement new policies.

So I think quality is, is still a good term. As a matter of fact, I'm probably one of the holdouts that think quality assurance is a good term. And a lot of people say, 'Well, you can't assurance for a reason, or you have to use assessment, or quality improvement, or continuous improvement' for all the reasons, and I'm still kind of a diehard that says if you're a professional, the reason society gave you the, the term... or they said you were a professional is because you've given them some assurance that you're going to do the best that you can and probably... and at least not do harm. And if we can't say that, if we can't assure, say we are into the business of quality assurance... and I don't know if we can still have that connotation or denotation, and we can still be called professions.

So I'm, I'm, I'm... I know I'm in the minority, but I'm still going to hold out for, for that, as a... as wanting for nursing to be a profession, that it's really got standards, they're

going to hold to those, they have body of knowledge that they work from, and they have a consensus of a body of ethics that's going on. I think all of those are an important part of quality that says we're going to assure a level of quality to you.

Interviewer:

Norma Lang: You had asked me for some of the things I really felt great about, and one of the other things that I really feel great is there is... the most wonderful thing is when you can work with the new generation coming up. And as I meet many of the students that I've had in the past, who are now full-fledged professionals, there is just an incredible satisfaction. So I love that role of bringing the next generation along, and I'm hoping in the remaining years that I have that I can bring several more along, people who will be leaders in this. And I, I take great pleasure in looking at... to see all of those, those persons who I feel I have a little bit of influence, maybe a few fingerprints on their careers.

End of Interview