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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Virginia K. Saba

Interviewer: Please introduce yourself and your current position.

Virginia Saba: Virginia K. Saba, Distinguished Scholar at Georgetown University, Washington, D.C. I'm an adjunct professor there

Interviewer: What's your current definition of nursing informatics?

Virginia Saba: Well, it's changed over time. The definition of informatics has changed over time. The one that I like best is the one that says informatics is the integration of computer science, which is hardware, and information science, which is software, and nursing science, which is the nursing practice

Interviewer: Describe your career in nursing, and then how did you get into informatics?

Virginia Saba: Oh, my career in nursing is pretty sporadic. So, basically, I was a home health/public health community health nurse when I first went into practice. But in late 1960's, I worked at the National Institute of Perinatal Research, where they were conducting a study of 50,000 pregnant women. And I had the job of coding delivery, labor and delivery. Well, my biggest argument occurred with a statistician who said, 'The statistics show that the women during labor went from 1 to 99 centimeters.' And I said, 'Sir, that's impossible, 10 is the highest dilation a woman can go.' He said, 'I'm sorry, the statistics show 1 to 99. You don't understand anything about computer processing.' Well, anyone who tells me I don't understand anything about computer processing got my ire up, and I started taking courses at IBM. They were the only courses at the time that were being offered. And then courses were being offered by the Department of Defense and in Department of Agriculture.

So after taking several of courses, we all agreed that I might as well get a degree and put my courses to use, so I applied the American University and took a computer science

certificate and degree, which finally led to a doctor of education and information science from the American University.

Interviewer: When did you get that certificate?

Virginia Saba: Well, I can't remember. But I got my doctorate in '86, so the certificate was in '84, probably, and the master was in probably '82.

Interviewer: When you started taking these computer courses, what did you have in mind?

Virginia Saba: Nothing, just to be able to conduct… use the computer for research, I guess. Then I joined the Division of Nursing of the Public Health Service, and I was put in the Manpower Analysis Branch because I liked statistics and they needed someone in that area. And the Division of Nursing is really one of the leaders that started to fund contracts where… in the field of… well, they didn't call it tech… they called technology of management information system at the time. And that's how it all began. It was computer processing using a mainframe, and keep, you know, cards not online—processing of IBM cards to analyze statistical data.

So as part of my role, since I was a public health nurse, they asked me to help conduct the surveys of public health nursing in home health care agencies. So that became my task, as the nurse consultant in the Public Health Service, with a team of statisticians. Well, the two of us would get our data from the states. They submitted their data. We designed the form. We sent it out, and the state and territorial directors of nursing collected the data in each of their states and sent it to us. We had a nice committee, but we couldn't agree on definitions and terms. So how could we code statistical data, when we couldn't agree on the age categories, the program categories, even on Perinatal categories we couldn't even agree on terms.

So a lot of our early beginning was coding for the Public Health Nursing Surveys. And that's how I got into, and I… it just led from one thing to another.

That led into contracts with two states, New Jersey and Florida, where we developed statewide systems for public health/home health nursing, because at that time, they were implementing Medicare and Medicaid, and they needed facts about the agencies, the staff, and the programs they were providing.

And so that's how I got into it. I had nothing to do with informatics. It was really from using the computer to process statistical data for public health nursing.

Interviewer: What were some of those early projects that you were involved in? When you talk about the surveys, what sort of things were they looking at?

Virginia Saba: They were looking at programs that nurses were involved in. We were counting nursing personnel by category, as well as we were counting programs that they were involved in. And, and we got involved in the community, in what they did for the patients in the community. So it was an exciting time. We put out publications. You got your name in the publications. And the Division of Nursing was getting quite a bit of credibility for this.

But on, on the other side, while this was happening, other things were going on. Dr. Harriet Worley came to visit me one day in the 70's, and said, 'Let's put on a conference to talk about what other people are doing besides, besides you and the Division of Nursing.' So we sat together, put a list of names together, and she came up with a Nursing Information Systems Conference…

Virginia Saba: Well, I think I'd like to re-track and put this before what I said. In the… in the early 70's, because of this Medicare and Medicaid, and everybody deciding they wanted to buy a mainframe to process data, we, we had a collaborative with the National Link for Nursing to do teaching home health and public health agencies how to collect statistical data and cost-out nursing care. And so we put on these national workshops, the first workshops ever put on, and we had one computer there by the Northern Virginia Visiting

Nurses Association. And they were showing us how they were processing data using this monstrosity, and which is what I call, processing IBM code.

And that led to a series of workshops around the country, several documents, and another document that described all the systems following it, by 1997, where they '77, where they… a final work conference culminating this five-year project. And, and that's where we got visibility, because when going around the country putting on these workshops, you got to meet everybody who was doing anything. They'd come up and say, 'Oh, I'm doing something in developing a CAI program, a computer-assisted program. Are you interested in that?' And, of course, you'd say, 'Yes.' And so I started to learn who was doing what, where around the country as a side product of these workshops. And that's… so that when Dr. Harriet Werley came and said, 'Let's put on a, a conference,' I knew all the people that she should be calling, because I had been involved or heard from… when you're a federal employee, people come… think you're going to give them money, which we didn't, but they, they did come and talk about what they were doing. And so I heard a lot from a lot of pioneers, and that got me excited and interested in the field.

Interviewer: Anything else you can say about your work with Harriet Werley?

Virginia Saba: Well, from that, we had this one conference, and that led to the Nursing Minimum Dataset Conference, which she spearheaded with… the first one was with Margaret Greer at the University of Illinois, and the second one was with Norma Lang at the University of Milwaukee. But we were involved… I was involved in helping select these people, because I knew all the names and I had all the addresses, which a lot of people didn't have at the time.

And so she was the who… I was a little shy… but, she had more clout and she knew a lot more than I did, so she said, 'Let's give it to the American Nurses Association and put in a resolution to make this a new specialty.' And we got our little team together, and in 1984, we got the resolution passed by the American Nurses Association, and the Council

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on Computer Applications from formed. And from that we would meet to form different resolutions that got passed, like saying technology should be part of the nursing practice. We put out four monographs. We put out a directory of who's doing what where. We put… gave awards to the Nurse of the Year. And we had a good group going, and it was quite exciting.

But, also, while I was in the Division of Nursing, on the other side, I was working with McMart… what's her name? Farley…

Interviewer: So you were working…?

Virginia Saba: When I was in the Division of Nursing, I was approached by Coralee Farley from the National Center for Health Nurse… Health… National Center for Health Services Research, who was on the board of the SCAMC, the Symposium on Computer Applications in Nursing in health care… Computer Applications in Medical Care. And she said, 'Well, you know so much about what's going on. Why don't you put a nursing session on at SCAMC this fall?' And I said, 'Sure.' I never turned anything down.

And so we put together a sessions. That was in 1981. We put together several… one or two sessions, and we got all the nurses we knew who were willing to speak at this SCAMC. And that was the first SCAMC where nurses were presented, or allowed to be presented. And since then, we've been at every SCAMC or AMIA since.

But, also, during that session, that meeting, we said, 'let's get together after the meeting, and see how, how many nurses are here.' And I think we counted 25 or 30 nurses. And we started a little special interest group, where we exchanged names and addresses of all the people who were there, so they could work with other people in these same area. And we started out little network forming, which today ends with what I call CARING, as the networking, networking activity, which has continued since then. And SCAMC was where we all met every year, and where we hobnobbed with each other, and sort of stimulated each other. And that, that was a big, big, big step forward.

Also, in 1981, or it was before 1981… it was in 1980, Dorothy Polklington from Tri Service Research… from Tri Service, who was putting in the Tri Service Information System in the military said, 'We want to give the nurses in the army a workshop. So will you help me put it on?' So she and I put together a workshop, and that led to then the first NIH workshop... conference, which was held in 1981, as well.

So in 1981, is when I would say that nursing really got involved in computer technology in nursing. And we were really excited, and it was a small group who was hobnobbing with each other.

And then Sue even got in at that time, when she had a workshop in… at St. Mary's Hospital in Baltimore. That was about 1983, if I'm not mistaken, and 1984. And worships started emerging all about the country, and it was great.

Interviewer: Was there an a-ha moment?

Virginia Saba: Well, I guess it happened all along. In sometime in the late 70's, and I don't know, remember, National Center for Health Services Research funded $10 million, $1 million to each of 10 projects to develop a health information system, or patient care information system. That's when HELP out of Latter Day Saints was formed; Technicon was formed in San Mateo, California, and several… Reigenstrief… whatever that's called in Indiana was formed, and some of these early systems. And they had one, a Burrough system at Duke, and I said, 'Why aren't…when nurses got involved, and they wanted to document patient care. And that's how it all got started.

The scientists from the NASA program that… the space program that went bust in California wanted a job, so they went to San Mateo Hospital and studied the nursing station, which they thought was the hub of patient care. And that's when the first nursing care protocols were developed, care plans were designed, and the Technicon system took off. Based on that, the NIH took the Technicon system, the National Institutes of Health,

and adapted it in 1978, and they developed another strategy for documenting nursing care, based on NASA's hierarchy of needs. Burroughs developed another strategy.

And so we started putting all of these strategies together in a book, and we started teaching about them at the NIH, where they had a … what'd they call it?—a course for Nursing and Heath Professionals at the National Institutes of Health. And so Kathleen McCormick and I started this course on nursing information systems, which we thought was a hot idea at the time.

And from our course and all the materials that I had to collect, to teach the course, we said, 'Let's put it in a book.' And that's how the first book was prepared in 1986. And we did it together, and then from then we did a second edition in 1996, and then we got smart and we hired…we didn't hire, we invited guest experts to submit chapters for the third and fourth edition. And that's how the text… that's how our textbooks got formed.

Interviewer: The name of your first textbook?

Virginia Saba: *Essentials of Computers for Nurses*.

And the term 'informatics' came about in 1997… 1977, when the French coined informatics to mean information in the computer milieu. The Russians gave it a title as well, and so some of the nurses in Europe took it on. And then Dr. Marion Ball put it on the title of her first book. And so, all of a sudden, 'informatics emerged as the term instead of 'computer technology.' And it's still not widely used. People still don't understand when we say 'nursing informatics.' They prefer 'information technology.' That makes more sense. But we use 'management information system,' 'computer technology,' and 'essentials of computers for nursing.'

And we found there was applications in practice, administration, education, and research, and we would write about the whole four areas. And doing at that you would get at the practitioners in hospitals, and what they were doing in hospitals; the administration, and what they were doing for managing patient care, like acuity and staffing and scheduling;

and what they were doing in education, which was primarily computer-assisted instruction, interactive video. Software programs were emerging everywhere, and there were a whole group of pioneers that Christine Balwall used to collect all the software programs and put them in a directory of software programs that was published by the National League for Nursing for several years, until it ended in about 19… I don't know… 1995 or… 1995.

Interviewer: What do you see as your primary contributions to the field?

Virginia Saba: What are my contributions to the field? Just I'm involved. I keep pushing. I also was on the International… the International Medical Informatics Association. I became a nurse from USA that was on the board. And so that… I was on the board for nine years, so that meant promoting international conferences and international use of technology around the world. And that's still going on. So, you know, I keep… I guess I create new ideas, and people carry them out.

Interviewer: You're involved with the National Committee on Vital and Health Statistics, right?

Virginia Saba: I was involved for about five years with the National Committee on Health and Vital Statistics. I was there representing the ANA… at one point, the ANA was funding some of us to go to these meetings that were talking about technology. And so I would go to that meeting to talk to represent nursing. And we always sat in the back. They never let us at the table. And for years, we tried to get a nurse at the table. Not until last year did we actually get a nurse at the table. It took 20 years of politicking to get a nurse to be at the table to fight for nursing, because they were passing and reviewing and endorsing technological aspects for health and human services, which then became law. And, for example, the HIPAA legislation, when they were developing the safety regulation, they had to select the terminologies that were used to transmit electronic billing. Nursing was not involved. And they said, 'Well, you'll get into HIPAA Part 2.' So in HIPAA Part 2, which was the Patient Medical Record Initiative, we hope to have gotten in there. And the only thing we've gotten in was we got SNO Med approved and nursing terminologies

are in SNOMED. And they said, 'Well, you should be satisfied with that.' And that's the best we've done so far to convince the federal government that nursing does make a difference.

And my goal is to make nursing visible, viable, and I'm… I don't know if I want to get paid for what we do, but I want to credit for what we do. So, therefore, I want to get a room rate, and I want to get coded and considered a professional, like all the other professions are in the eyes of the federal government.

Interviewer: When you first started out in the field were people supportive of what you were doing?

Virginia Saba: I guess they said, 'What is a nurse doing here?' I've gone to many meetings where I was the only nurse. I still go to many meeting where I'm the only nurse. 'What are you doing here and why are you here?' But now they know who I am. I'm really quite known, so all I have to do is walk in the room and they hear, 'Oh-oh, here comes nursing.' And, and, so I, just by my presence, remind them that nursing is part of the health care system.

Interviewer: When you first started promoting the use of technology, what the attitude then?

Virginia Saba: There was then and there still is now push-back on the technology. Many people are afraid that it's going to take away their job. And so there's still resistance in health care about the introduction of, of technology. But we've gotten more sophisticated equipment. So people talk about technology, but they don't talk that the hardware went from the mainframe, to the mini computer, to the super computer. And nothing much happened because you had to have all these programmers that you had to interface with. But all of a sudden, in 1982, '81, the PC, the personal computer came into being, and all of a sudden, we could do our own thing. We could program our own… software. We could take generic programs, and become independent of the programming and the analyst who sat out there controlling us in the early beginning. And because of that,

nursing then could say, 'I can do my own software.' 'I can design my own courseware.' 'I can teach my own students.' 'I can write my own care plan.'

And that gave them power. And because of power, and having this one-to-one with a PC, it's your machine, a lot of smart researchers, a lot of smart nursing leaders got into the field, and wrote programs, marketed them, and put them in… into use.

Interviewer: Significant events in the development of the nursing informatics field. Was that one of them?

Virginia Saba: Well, the change in technology, and, also, the change in operating systems, which went from sequential storage to random access. Because of the random access storage, you could then, then do some interactive databases, and makes the relationships… we couldn't do relationships early. We just did one-to-one. And now that we can do relationships and everybody wants everything out of the computer now. They want everything, to the point that they've gone to the other extreme—they want the computer to do whatever they think comes into their heads. We still don't understand what coding is all about, and what the computer can actually process, and they still don't understand that. That's the hardest thing to get across, understanding the use of data, data processing and databases. And that's still the big problem.

I can… I did that today in my lecture. I said, 'How many data amounts are in my name? One, two, three, four or five?' They didn't say one, but usually I say one. But today they did say four. And to teach them the atomic level data is very hard, and they don't think that way. They don't know how to compartmentalize their brain to talk about patient problems, patient care, or intervention and patient outcome. And they got to… they do it automatically, but they don't think about it as three steps. They think about it as, 'Well, the patient has a fever. I'm going to give him aspirin.' I mean, and the fever went away. They don't think that that was three things—the problem of fever, the aspirin to treat it, and the result was the fever went away.

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Interviewer: So part of the problem is to get nursing to understand what they do… and to translate that…

Virginia Saba: ..Into technology. And they just think they use the computer to do word processing. That's not… that's not computer processing. That's just a glorified typewriter, an electronic typewriter. And to convert that into code: Why do they want a code? So they can retrieve data to do better care. They can't seem to understand this, when if they want to improve their care, they've got to code their care.

And, and this takes time, you know, and this takes a… which gets me back to why I left the Public Health Service. I had my 20 years, and I left the Public Service and went into teaching, and started teaching at Georgetown University School of Nursing, where I taught the undergraduate and the graduate computer course three times a year. And, and then it dwindled down, but in the beginning, everybody was clamoring for computer courses.

The other thing that happened was in 1995, when the Internet explosion occurred. All of a sudden, everybody wanted to know how to use the Internet. So then we had to revitalize our courses and put on workshops all over again, to show them how to use the Internet when Internet sites were nurse-friendly… oh, we had… we took our computer lab at Georgetown, and every conference that came into town came over to our lab to sit down and look at there were a computer… not computer, but look at the Internet and access the Internet. They were still not used to using a keyboard. And so the Internet was brought in… e-mail, and it's brought website, and really revolutionized the fact that everybody now has a computer. Their children have computers. The adults then are shamed, shamed into using the computer or using the Internet.

And so now everybody has it. But they've gone to the other extreme. They say, 'Now that I can use the PC and I can type a letter, I don't need to know anything more about information technology,' where the problem is still there. They've got to code atomic-level data. They've got to process a problem into an intervention, into an outcome.

Interviewer: The ANA database project, what was that about?

Virginia Saba: The ANA database project? The ANA started with the Council on Computer

Applications in Nursing, which we got approved in 1984. And that led to in 1890…

1990, when the Database Steering Committee… the ANA Steering Committee on

Databases was formed. It was just a new name for the old committee, but we had a new

mandate, and that was to look at, at terminologies and develop criteria and standards for

terminologies. And so that was the goal of that new database committee. It was chaired

by Norma Lang. And I was on the committee. Kathleen McCormick was on the

committee. We had about eight people on the committee. We also had a member from

the National League for Nursing there, and a member from the National… Nursing

Association of Nursing Diagnosis there. So it became a very large, powerful group.

And we started to, first thing, is to develop the criteria, and then to approve of the

terminologies that were being developed out in the civilian sector. So the first four that

were developed was NANDA, which got approved. And the first the Nursing Minimum

Data Set. That was approved not only by committee… by the American Nurses

Association as the framework for terminologies. As a result, then, the first four that

were... terminologies that were approved was NANDA, North American Nursing

Diagnosis Association. They had a 100… no, about 98 terms in a laundry list. And

ma… put it into a taxonomy, Taxonomy 1, which we hoped could get international

approval. And which led to the selection by the ICN to take it on to develop the

International Classification of Clinical Nursing Practice. That was the forerunner of how

that happened, because we needed to get international approval from all the countries

from around the world. So that's how that one got started.

The second one was the Omaha System, because that was developed in the 1974 on. And

that was developed by the Division of Nursing, and I was a project director in that one, in

effect. And that was a first beginning of problems. But when I got the contract to do the

clinic… the Home Health Care Classification, and I called it clinical care classification,

that was a contract, or a cooperative agreement with HCFA, the Health Care Financing

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Administration, to develop a method for costing-out outpatient care in the community. So as a byproduct of this coding, we had to… we had 80,000, inter… actions, and 40,000 diagnostic problems that we had to code. So we developed a coding strategy based on keyword source using a colleague of mine, Dr. Alan Zuckerman, and as a result we developed a classification of home health care classification, and of nursing diagnosis, nursing interventions, and now we say nursing outcomes and action.

And so now the new name for that is the Clinical Care Classification, because it's being used now by vendors, and it's not being used in the communities as much as in, hospitals for coding patient care and documenting patient care.

Interviewer: How about your military background?

Virginia Saba: Well, that was when I was in the public health service, and so that was when I was in the Division of Nursing, and we did all these studies and research grants that I mentioned before.

Interviewer: And then earlier, you talked about some of your international efforts, but talk about, how are you involved in the nursing informatics internationally…?

Virginia Saba: Well, the, the American… the old SCAMC, which is now the American Medical Informatics Association was formed just to be a part… or to be the U.S. representative for the International Medical Informatics Association, which was formed in about 1975 in Europe. And all the countries had an informatics organization, as well as a ministry of informatics in health… in technology in each of the countries. We didn't. And so AMIA was formed, the American Medica to be the representative in the USA. And so because of that the ANA supported it, we had our working group already in the… in the SCAMC, so we became the special working group of AMEA. And that was renamed and reformed, and we became an integral part of AMIA.

So as a result, then, we could represent the U.S. in the International Medical Informatics special interest group called Nursing Informatics. And so the first representative from the

USA… I was going to say was Sue Grobe. I can't remember… oh, no, it was Judy Ronald. I think the first one was Judy Ronald. And I guess, then… about five nurses used to go to these meetings, and in 1994, I became the secretary and the chair elect. And so I was an officer for nine years. As a result, I got involved in all the international activities. And we wanted to work with ICN, on the International Classification of Clinical Nursing Practice, we wanted to work with ISO, the International Standards Organization, and so we started the International Linkages. And that's… so we spread internationally.

And now, we're having a conference in Korea in 2006. We picked the conference for Finland in 2012. And hopefully it will come back to the United States in 2015. And so this goes on every three years. And the network is there. It's all done. And every country now has got an informatics, nursing informatics association in their medical informatics association. We felt that was the better way to go to get the physicians to support the nurses in other countries, because the nurses are not quite that independent as we are. Even though we have a lot of other nursing special interest groups, like CARING, and all of our other groups here, we still are now forming an alliance so we can all be in agreement with what's going on.

Interviewer: Looking back at your career, is there any vision that has kind of flooded through your career?

Virginia Saba: Making nursing visible and the electronic health care record, getting nursing out of the room rate, and putting them at a professional footing with all the other health professions. And we're still not there yet.

Interviewer: What are the big challenges that lie ahead?

Virginia Saba: The challenges are to get out of the room rate, and get accountable for what we do. Get recognized, I think, like the Center for Health and Medicare and Medicaid services, and be on a footing like the physical therapist, the speech therapist, the occupational therapist,

the social workers, and everybody else that's professional. We are not in their eyes professionals. We think we are, but we're not being paid for what we do. We're not in the electronic health record. We're still not visible there. We're not… when… vendors are trying, but since they're not a reimbursable commodity, they put us at the bottom of the list, and so all the other systems are getting implemented before nursing care of patients. Even now, it's order entry, results reporting, bar coding of medications, but it's not the documentation of patient care. … and that's coded.

And the other thing they're doing now, putting care plans in, but they're not coded. And if they're not coded, they're not going to give us data that we need to make evidence-based practicum… a reality, or decision support systems a reality.

Interviewer: Looking back over your career… are there any moments you can remember, any favorite memories?

Virginia Saba: Well, I can say people, like Harriet Werley, Kathleen McCormick, all those early… at the early 80's, we were a small group, and we've remained friends every since, really. Sue Newbold, Jean Arnold, Diane Skiba, Roy Simpson, Karen Reider, who has since passed away—these are pioneers, who've all contributed, and are still contributing in their own way. And I'm sure there are others, but right now I can't…

Interviewer: What was it like to work together on projects?

Virginia Saba: It was fun, it was frustrating, and sometimes it was competitive but, we always tried to… and what we did at SCAMC, which was really the most fun, we got up, and we also had a meeting and a cocktail party at every meeting, every year. And we got up and gave a little report about what each of us were doing, and we went around the room, and let everybody tell us what they were doing in their state or in their agency. And it really put us all together. It was very collegial, and very, very friendly. And we had this little network going. So when anything happened, we'd get on the phone—now we get on e-

mail—and say help us out with that, that, or the other thing, or, 'will you speak here,' or 'will you speak there.'

Interviewer: Lessons learned?

Virginia Saba: What have I learned? …that technology is critical to the nursing profession. It's critical to health care. It will save patients' lives. And we've got to be in that. We've got to be in there, proving that what we do makes a difference. And we say this over and over and over again.

Interviewer: Why do think people aren't getting it?

Virginia Saba: 'Cause we're not being paid for what we do. We're not in the reimbursement stream. And it goes right back, it's a big vicious circle. I'd like to get some demonstration money from the federal government to prove this point, but we haven't been successful so far. And the ones that are being done are being done because they want to measure quality, they want to get at outcomes, but that's not at the cure of the patient. That's still the nursing… the nursing… if the biggest nursing database in the whole country is that piece of data, that once the patient admits… is admitted to the patient as being discharged. Nobody knows the care that's provided. That's not being documented electronically. All the other stuff is being, but they can't prove that when they have a poor outcome that it was because care was not good, because we're not documenting care. So they've put the blame on other things—high infection rate, mortality of the patient, falls. Why was there a fall? Why was there an error in medication if we didn't document that the care was provided?

Interviewer: Any advice to somebody who is thinking about getting into this field today?

Virginia Saba: Oh, gee. Get into it. It's lucrative, and it's, it's rewarding, it's satisfying. There's a lot of challenges still left . It's getting visibility for our professional. We've got people and all the vendors… that was our… let me just tell you, that was our biggest challenge. We would go around at the SCAMC meetings and say, 'Do you…' we'd say, 'What are you

demonstrating?' And they'd say a patient care system, hospital information… 'Oh, is there a nurse on your… on your… in your company?' 'No.' 'You mean there's not nurse in your company and you're talking about health care?' After we did this a number of times, finally, there were nurses now demonstrating systems. They started hiring nursing, one. Now, the vendors have got 10, 20… Cerner's got 200. And this is a… you know, this didn't happen 20 years ago. And it took us prodding the vendors at these meetings to say, 'Where is your nurse? Where is your nurse?' And we would humiliate them into getting nurses to be at least at the… at the meetings.

Interviewer: What are you most proud of as far as your career goes?

Virginia Saba: I'm most proud of, I guess, the clinical care classification. I'd like to see that become a standard. I'd like to see part of it be at least implemented and accepted by the federal government. It's free. It was developed by them. And it's easy to use. I think if I could get that approved, I'd really be happy.

Interviewer: What's on the horizontal as far as international nursing informatics?

Virginia Saba: Well, we have several things going on in the international arena in nursing informatics. First, we have the IMINI, International Medical Informatics Nursing Informatics special interest group, which is a very powerful organization. We have representatives from 28 countries. We meet every year somewhere, and every three years, we hold a national… an international conference. The last one we held was in Rio de Janeiro in Brazil in 2003. The next one will be held in Seoul, Korea in 2006. And, and the principal investigator is Hanoi Park of Korea., who is also a member of this organization. And the following one is in Finland in 2009. We set up an arrangement whereby we went from continent to continent, so we wouldn't have countries competing against each other. So one was the Far East, one is Europe, and then the other is the Americas. So we assume in 2012 it will be in the U.S. or Canada, because Brazil had it in 2003.

The other thing that we're doing internationally is we now have members in the International Standards Organization. We did pass the reference terminology model a year-and-a-half ago, which was the first nursing standard to ever be passed by an international organization. And it is being implemented all over the world, accept the… well, it's being recognized by the U.S., but each country that's a member has to now implement nursing terminology into their… in… into their national system. So countries like Norway, and Sweden, and Finland are implementing the CCC into their system. So we're very pleased with that.

Another…there's another initiative on the horizon being submitted Ann Casey out of the United Kingdom that we're working on. And Lou Ann… I'm working on another one where we're trying to establish a task for… a methodology for having a nurse look at every standard that gets proposed and is being ready to be passed to make sure nursing is part of it, and the nursing input is, is correct.

Interviewer: When people say you're the mother of nursing informatics, what's your reaction…?

Virginia Saba: I just say I'm the oldest. Because I'm the oldest I've become the mother.

Interviewer: Do you see yourself as having a primary role in moving things forward?

Virginia Saba: Well, I think I did, because I was in the federal government, and when you're in the federal government you can promote change. And I didn't look at it that way at the time. We were just involved at other things. We were getting national survey data that was used by the federal government. We were setting up national standards that was developed by states. So, you know, we, we… but I thought was probably I had more input when I was a member of the ANA Council of Computers and in the ANA Steering Committee, because there we were impacting on the professional as opposed to impacting on, on the federal establishment. And then teaching, I was impacting on students. So I've been in pretty nice roles, where I had a chance to impact.

Interviewer: In the ANA effort, what impact did you have on the profession?

Virginia Saba: Well, the impact on the profession, at the ANA we would go to every… well, we did several things when we were in the ANA. We, you know, we first established our council. And because of that Harriet Werley, Kathleen McCormick, Rita Zielstorff, and myself in that first committee with, I believe, Pat Schwirian, and decided we would have monographs developed. So we developed four monographs—one on education by, by…one of practice by Zielstorff, one on research by… I can't think right now… and one of administration by Joyce Johnson, Roy Simpson, and myself, as, as getting the word out. This was before books were established. We did this before the first textbooks came out. So that was a way of disseminating information.

The second thing we did, at every ANA conference, we… anybody who had a software package, we had a demonstration theory. And we put a little booklet together, and we held demonstrations every half-hour on any software that people wanted to demonstrate. And you… it was surprising, the number of responses we got for that. Then we put out a directory of who's doing what, where, why and when. Then we offered an award every year. And so we got people professionally involved.

We also went to the National League for Nursing meetings to help them with their organization. And they started to put out monographs. They started to, to lobby for integration of technology into nursing education. And so we, we influence the academic arena as well.

Interviewer: You've been out there saying 'pay attention…'

Virginia Saba: I've been out there saying, 'Pay attention,' yes. And now we're doing it with the American Academy of Nursing right now. We just formed a special expert panel on nursing informatics. So now we're going after bigger things. We're trying to get the magnet hospitals to add floor technology requirements for passage. We're trying to get a nurse in every… on every committee that deals with legislation or information on technology, like HL7, ASTM, and ANSI, and we're working on that. And that's … Sue Newbold is in HL7. So we're getting all of those… we're still infiltrating. We got a

nurse on the committee of the National Center for Health and Biostatistics, finally, and Judy Warren. So, you know, we're infiltrating everywhere we can. We've got nurses in Dr. Brailer's office who's now setting the pace for legislation. Suzy Beebe is on the staff there who is a nurse, and she's not… indirectly is… she's in the Office of the Secretary. And he has said he is going to appoint a nurse to his desk, but I don't know if he has officially yet at this point in time.

Interviewer: Let's talk about honorary doctorates for you.

Virginia Saba: Well, I, I have three nice awards. I was the U.S. representative to a project called the Nightingale Project that came out of the European Union the first year for the Union. They funded a project chaired by John Mantis of Greece, and Harry Hassman of the Netherlands, and Ellie Plenton … a nurse in the Netherlands, and that was to disseminate nursing informatics education around the European Union, of all the European Union countries. So I was the consultant from the U.S. and Evelyn Holvenga was a consultant… was the other… we had two consultants. And we went to every meeting, every workshop, every conference, and put in every publication. And it was a huge series, it was a three- to five-year project. As a result of that, I got an Honorary Doctor of Philosophy from the University of Athens about four years ago.

Then I got a… the Living Legend Award from the American Academy of Nursing.

And then this past weekend, I got a Doctor of Science Award from Excelsior College, where we put together for the past five years with the staff a distance learning program on nursing informatics, where they now give a certificate, a bachelors, and a master's degree in nursing informatics. And, as a result, I'm the first one to get the Doctor of Science. Honorary degree.   It was a very festive event.

End of Interview