

## 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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**Roy Simpson**

Roy Simpson: Okay. My name is Roy Langden Simpson, S-i-m-p-s-o-n. Langden is L-a-n-g-d-e-n.

Interviewer: Your title?

Roy Simpson: Vice President, Nursing Informatics and Senior Executive for Cerner Corporation.

Interviewer: History, and how did you get into nursing informatics?

Roy Simpson: That's a... that's an interesting question to look at the trajectory of one's history, and how they got into informatics. I was, in the 70's, a Chief Nursing Officer in a large, multi-hospital system, and before that had been at university systems in a community hospital for the chief nursing officer. And I became a Chief Nurse and a Vice President of Nursing Affairs for a major multi-hospital system called Hospital Corporation of America. And at that time in the late 70's, one of the responsibilities was to keep up with some of the financial information, and staffing requirements, and nursing cost-per-patient day and nursing hours-per-patient day over those [beep], but yet I had no line authority over any of those hospitals.

So it's the beginning of a matrix, and the only way that I could keep up with those hospitals was to develop reporting structures through the information systems technology. And so that, coupled with patient classification, financial data, we were at cost-based reimbursement at that time, all of those data elements I had to make some determination as to how I was going to keep up with them, and that's how I kind of slid back in to nursing informatics.

Interviewer: Was there ever a moment when you thought it would be good for patient care?

Roy Simpson: No, actually, it... it's how my whole history in informatics got started. And that, that history evolved when I had to be responsible for all the data analysis that was related to financial aspects of nursing care. I was desperate to find information about patient care. And I could not find a lot of patient data in UB82 at the time, or UB... it wasn't even 82 at that time... to find uniform billing, to find any of the other aspects. And that's when I coupled with two great researchers names Harriet Werley and Norma Lang, and I called them to tell them that I didn't know what I was doing in my job, and what could they do to help me out. And that was how we started the process for development of the Nursing Minimum Data Set.

Interviewer: Talk about that collaboration.

Roy Simpson: Well, I had... in my corporate structure at that time, there was... being a for-profit organization; it had a foundation on the side attached to it. And that foundation gave grant money. And so Harriet and Norma and I collaborated on determining what would be the best way to determine patient care data. And so Harriet said, 'Well, what would you like for me to write up?' And I said, 'Well, Harriet, let me be... assure you that we do not need a million pages. I need one page to take before the board at HCA and the foundation.' And she literally wrote up one page about why we needed the Nursing Minimum Data Set, and how much funding they should give us. And it went sailing through with no questions asked. And the check was written and we started the process.

Interviewer: What year was that?

Roy Simpson: The grant application was in 1981. The distribution of the grant funding was in '82, and then the book came out... the conference was in '83, and then the book came out in '84.

Interviewer: What was it like to work with them on that project?

Roy Simpson: ...What was it like working with Dr. Norma Lang and Dr. Harriet Werley. It was awesome. There... there's no doubt about it. I was not a researcher. I was not a scholar. I was clearly a service person. I had been through numerous battles in the world of corporate America, so my forte and my acumen were a lot differently oriented, but I knew that we all had the same goal in mind. And that was what was probably the bonding effect upon us.

And I think the other thing was that Norma was the dean at the time, and I was impressed with how in her hierarchical role of academe, being the dean, that she had so many scholars underneath her that she provided an atmosphere for people to grow. And so everyone already knew Harriet. She already had endowed chairs after her name before this time, but it was very interesting how the platform was set. It was like the timing of everything.

But I think one of the major things that I learned from that aspect was the importance of relationships in funding and moving organizational structures forward, and how those relationships evolve over time and strengthen the process of nursing as a profession.

Interviewer:

Roy Simpson: Wow. Now, that's an interesting question, did I ever think of myself as an informatics nurse? You know, I happened to have been on the ANA Scope of Practice, original Scope of Practice, and the certification and everything to define it as a clinical specialty, so I never saw myself other than a clinician. And, and I still, today, don't... when people ask me, you know, do I take care of patients? I immediately respond and say yes. I, I never back off and act like that I don't have as much impact as a nurse on one. I just have an impact on a lot of nurses and a lot of patients that are engaged. And I find that to be more of what I thought about. I never thought about moving from one discipline to the other, because I always saw informatics as a clinical discipline. And I remember when the Division of Nursing was transitioning the funding of nursing... of informatics

from administration to clinical, the people that were on the Scope of Practice were already in the clinical realm long before we were in the administrates. So it's kind of interesting. So, no, I didn't. I didn't perceive that I... that there was this definitive line.

I do think that there as a definitive line in the choices that I made once it was established that it was a clinical specialty, but I always felt like it was part of my clinical practice.

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

Roy Simpson: What do I see as my contribution to the field of nursing informatics? I think probably, if I were to focus on a single thing, it would probably be my work with the Nursing Minimum Data Set—securing funding, working with Harriet, having direction from Norma on people's values and how they approach our profession of nursing. That for me was probably something that I consider a mutual learning experience.

I think the second thing, if I had to say I contributed something, would probably be, as opposed to research articles, would probably be tactical articles and columns that I write about the work of informaticians, about the taxonomies and nomenclatures, about the way that we implement systems, about the business of technology, about the development of software, the, the whole lifecycle of the actual work of the tactical operations of software. I think with over 600 articles, you know, you kind of... it's very daunting to try to say you've contributed something, but I think it has been about the operations of IT, you know.

Interviewer: Over your career is there any one core principle or core value?

Roy Simpson: ...Oh, yeah. There's a... there's a clear core value, and I, I think it's anybody that's a nurse, that, that identifies themselves as a nurse, and you can kind of tell when they're... start talking about the profession, whether they really are or not, and that's patients. If they remove themselves from patients, they're no longer in our profession. I mean, it's

about patient care. I mean, that's what we're all doing the data analysis for the betterment, for the evidence, for the research, for the movement of the profession. I mean, it all evolves around the patients that we take care of, and, I mean, that's, that's core. It's a given.

Interviewer: Over your career are there any high points?

Roy Simpson: Yeah, I do, I do see some points. I remember when the NLN Forum on Computers in Nursing was established in the early 80's. I met my lifelong friend, Diane Skiba. That was a... that was a very important day in my career. Karen Reader. I remember Bill Holzemer was known, and Sue Grobe. I remember that it was a... it was a day that none of us kind of knew each other, and we were joined at the hips because of computers. And when I... while I didn't know at that time, when I retrospectively look, I see that everybody has gone and done different things in informatics, and they've gone in different leadership roles, and they... but they always have that core of, of informaticians in their background. And it's very interesting because I try to look at informatics just like critical thinking, in that it's just a part of every clinician's life—data to information to knowledge—just like critical thinking is in every staff nurse's life and everyone's... you can see that exemplified in those people, even though they may not be at the core of AMIA, and NIWG, and, you know, ANA, and NNL, and AAC, and in everybody established. You just know that they're informaticians when they're out there, and it's kind of a, a, a heartfelt excitement when you see them.

Interviewer: Do you remember what year that meeting was, about?

Roy Simpson: Yes. It was in 1982. It was in New York City. And Frank Schafer was the Deputy Director and Pam Moraldo was the CEO at the time, and they decided that they needed this computer forum. And it was great, because it allowed non-registered nurses, consumers, to be a part of the whole aspect of it, which was precluded in other disciplines' professional organizations, so a great platform.

Interviewer: Did you have a sense that this was an important thing?

Roy Simpson: Yeah, I... do we have a sense of that this was an important thing? I'm, I'm sure that we had a sense that there was value. I don't think we realized the pioneering efforts that were taking place. Judy Ronnel and Diane Skiba had just written the curriculum pamphlet on 'Informatics and the Curriculum,' which was the first pioneering effort. You know, I had just begun the Nursing Minimum Data Set with Werley and Lang. You know, others had just moved forward on things. Karen Reader's research had just come out. Linda Edmunds had just talked about this thing called text messaging, which was so overwhelming that she had presented at SCAMC, and... so, I mean, I don't think we knew... we didn't know what we didn't know. And so I think that was it. But we recognized there was a sense of camaraderie and liability among the group, and that was... that was good.

I think the one thing that, that did hit me was I worked at one time for a corporation called H. Bealing Company, and I was their corporate nurse prior to coming to Cerner. And in the 90's, what I realized out of that group was that we had to move education forward, and so we started the Scholar's Program. And I still believe today that it was one of the better programs that an entity of a for-profit and academe were able to move change in the profession. And I think that those people who came to Scholar's tended to find themselves maybe not in it, but after they got through with it they were in. And that kind of came out of that group, because I... I had Diane and Judy help me put together those programs. So...

Interviewer: In the early days, was there support for what you were doing?

Roy Simpson: What was the reaction of my general colleagues? Well, I think, first of all, was I was a male, and I was a nurse. So that automatically created an anomaly in the corporate structure to begin with. And then on top of that, I had high visibility professionally,

because I had always been geared in my professional associations. And they just kind of were like, 'Oh, well, there's go Roy, you know, doing whatever.' And they didn't tend to keep me corralled, and yet I had a boss at that time, Joe Hage, who was the Chief Information Officer for the corporation, who just somehow seemed to get it. I mean, he always knew when I went in to talk to him that there was some tremendous value for the strategic imperatives of the organization, and he was very aware that everything I did was not for a quarterly return, that it had a yearly return. And I think that was probably what helped me in positioning informatics in the corporation more than anything, because we had TV series and all of those things that went along during that time.

Interviewer: What would you say to someone interesting in informatics?

Roy Simpson: Well, what would I say to someone coming into informatics, and how did all of this evolve? I'm going to back up a second for just a, a minute. I'm going to be a on board of trustees for a college, and it is very interesting, being the first male in the state of Georgia to get licensed in the... in the... in the early 70's/late 60's was quite an anomaly. And I'm on the Board of Trustees for Excelsior, and 28% of our constituents, the study body in nursing are male. It's the highest of any school of nursing in the entire world that has males. And I think that informatics moves us out of ritualism and mechanistic aspects of care, and moves us more into the science and art through the discipline of data, to information, to knowledge.

So when I say to someone why should you be an informatician, if first try to look at their understanding of clinical practice and patient care, and what are their drivers that, that get them there. The second thing that I try to move them into informatics is that I, I think that it is a clearer focus on graduate education. It defines a discipline that is unique. I mean, clearly, I don't have a masters in nursing informatics because in 1970, they were just allowing men to come into nursing school, much less be a clinical practitioner in psychiatry, which is what I was. But they... but today, there's a clear distinction and



knowledge base as you move into higher education with an informatics role. And so I think that's one of the things that I find.

I also find that it is a much more interdisciplinary practice domain than other disciplines, because it's almost like everybody brings their unique discipline to the issues of health. And whether they're medicine, nursing, pharmacy, dentistry, vet... they all bring a more camaraderie of understanding about the care of patients.

Interviewer: What opportunities are there for nurse informatics in the vendor realm?

Roy Simpson: What opportunities are there for nurses in the vendor world? If I were trying to recruit someone to the vendor world, I would first tell them to not use historically government and academic titles in the world of corporate America, because people in corporate America don't use the same titling. For instance, marketing has more of a connotation in the vendor world of research, because you do market analysis, you do product analysis, you do focus groups, you do things that researchers do, but it's called marketing. Or in publications and... that's preparing the marketplace for sales, introduction of new products and services. So I think the first thing I would tell them is be sure that you read about the job, not the title. You can be quite dissuade from the title about what someone does or does not do in corporate.

I think the other thing is that it has a spirit of entrepreneurship. It may be intra-preneurism, but it has more responsibility of self-actualization towards ones careers goals, as opposed to step and grade the government may have, or that you do the following checklist in order to get to the next position. Corporate America has a different model, which for me has played well in my career, but for others it may not. But I think, also, in the vendor world is that if you don't understand how to take research and move it to product application, and then you end up with research that sits on a shelf. And the beauty of those people, who have research and can move it to product, is they can get their knowledge out to the consumer, and to the patients, and to the clinicians who

practice with their toolsets. And I think that's one thing that sometimes it's very exciting about being in the vendor world, or the supplier world, as we say, because you do keep up with research, and you evaluate research as to whether it has application for the marketplace. And that's very valuable to patient care.

Interviewer:

Roy Simpson: Oh, no, no, no. If you work for a vendor organization, depending upon the size of the vendor organization, you may impact more patients than anyone ever could in an individual role or responsibility, because your products usually sell-out... for instance, with Cerner now, we have 3,200 hospital clients. I mean, that's a lot of hospitals that our work affects the transformation of care at their bedside... [siren]

Interviewer: Where do you think the field is going?

Roy Simpson: Where do I think the field of nursing informatics is going? If I put on my futurists hat, I probably would say that it's moving more towards genomics than any of the other disciplines. I think that... [noise]

Interviewer: The future.

Roy Simpson: I probably would put it in three domains: I'd put it in genomics, bioterrorism, and probably the third would be in the domain of consumer health. And those are the three areas that I would probably focus in on for the future.

Interviewer: What do you mean by consumer health?

Roy Simpson: I think that if you're a Republican, you would take the stance that people are responsible for their own health. And even if you were a Democrat, you would probably still say people have responsibilities for their own health, and that access is the key issue. And I

think with the accessibility to the Web, to portals, to information, that one of our major roles for consumer health will be the validity and reliability of the information that patients read on their own disease states. And what more impetus for someone to understand a disease than to have it? And I think that's going to challenge the caregiver to a new level of not only informatics, but clinical practice, because if you don't know more than your patients know, you're going to be in bad shape. And we're already hitting that. I can remember practicing as a nurse practitioner in adolescent psychiatry, patients would come in with reams of paper about their own behaviors, and their diagnoses, and their DSM IV's, and, you know, what other patterns they had. And so you begin to be challenged of your own by just your patients knowing, you know, what their disease processes are, and how to manage their own chronicity, etc., and so forth. So I think that consumer part is going to be a major part that drives who we are.

And I noticed today, or last evening, at AMIA here, there were probably, at least, 20- to 25 percent of the posters were all related to consumer health—you know, language, 'how do you understand what your doctor said?' I even remember seeing one on how do you educate the illiterate about a NICU child? So I, I think consumer health from the context and the, the knowledge base of a health practitioner, and what they, they are able to communicate to their patients will be a lot of it.

[change tape]

Interviewer: Are there any lessons that you've learned that you think might be valuable?

Roy Simpson: Wow, that's an interesting question. It's probably also a very timely question for me as well. And that is, what are some characteristics, or what are some lessons learned in, in trying to focus one's self as being a leader in this field? Joyce Clifford, who is a living legend in nursing, and that's a designation by the American Academy of Nursing, did a dissertation on the importance of professional organizations, and why nurses, in particular, should be members of professional organizations. And I think to be a leader, to

be only about the organization that you are either compensated for, or that you have an economic gain from does not expand you into leadership. I think you have to branch out and be involved and evolve professionally. I think that's a requirement, because, otherwise, you can't get grounded in what you believe. And let me assure you that people will tell you what you believe in is not right if they have an opportunity. And so you have to be pretty assured of what you believe in to drive it forward, and, and many times, it's at odds with the status quo. And when you do go at odds against the status quo, it can't be something that is off the cuff. It has to be contemplated. It has to be very thoughtful, reflective, intuitive, it has to have a lot of characteristics that to others may seem very flip, but to you, you need to be assured that that was the right step you took when you went counter to the stream. And I... and I think that is part of leadership.

I think... in Six Sigma, they talk about change, and the number one criteria for change is to have a vision. I think it's very impossible to be a leader without a vision for where you're going to take either the organization, the product, the profession, or any of those things without a clear vision of where you want to go.

Interviewer:

Roy Simpson: Yeah, I think there are. You know, it's, it's hard to reflect on one's own self when... but I just did a lead article for *Nurse Leader*, which is a journal that comes out monthly from AHA, and A... the American Organization of Nurse Executives, and in that, I think going to nursing school was clearly a major step in time when I went to nursing school. It's hard for people to believe there were no bathrooms for men, there were no uniforms identified for men, they didn't know how to teach you about certain things. It was... it was quite... it was quite counter. I mean, that was not the cultural norm to, to go... to go forward. I think that's, that's one.

I think the other thing is you have to be assured of yourself of who you are, because when you do go counter you're going to get a lot of noise factor. You know, people will attack

your personality, they'll attack your life, and they'll attack everything they can. And I think it's important to, to, to know who you are, so... when you... when you do that.

Yes, I've run for offices when no one else would dare run for offices. I've been asked off of ballots because I didn't fit the norm, after the ballot has been gone, which was quite interesting. I have... I've experienced awards and scholarship when I am clear to tell people I am not a scholar, by any means. You know, I'm not sure I know of a specific thing, other than entering the profession, and that's probably the strong thing. I think the other things are, are counter to, to it.

I think probably the most valuable book that I ever read that helped me in leadership was Joanne Ashley's work, and that has to do with paternalism in the role of the nurse. I think it helped me understand the educational complexity, the role of women, the understanding of women. And there are many times I tell many of my male counterparts, you know, you should be in nursing for just a day to see what the other side sometimes is like, because I think sometimes the role of men in nursing, nurses don't recognize the obstructions they put in for men to go to nursing. I mean, you have to ask how can medicine be 50% female, how can pharmacy be 70%, law be 60%, and nursing still only have 4% men, and we haven't... we haven't exponentially increased our numbers for gender diversity any more... you know, any more than originally, but other professions have. But then you have to look back at our power base, and I think that's why Joanne Ashley's book was so valuable to me in my reading.

Interviewer: What is the biggest challenge facing the profession?

Roy Simpson: I think that the, the major challenge that is facing the profession is the blending of commerce with academe, because I don't believe that schools of nursing or schools of medicine will be able to afford the technology and software that's innovative and transitionary into the future without private enterprise, government, and academe joining new and collaborative relationships that we've not had in the past.

Interviewer: The nurses that are being trained are not going to be prepared.

Roy Simpson: Exactly, because the, the, the concept may be of great value to have an understanding how data structures are filed, but if every supplier and vendor has a different model to it and you don't have application utility with it, then the concept may not be able to be brought into practice without having the technology tools there. And the tools change so fast that, you know, you really have to keep up. I mean, because part of being an informatician is computer science and information science [laughing], and they're not stagnant. And so we... it, it costs a lot of money to role forward with technological innovation. And I think in order for us to get the research at the level we need in nursing informatics, we've got to form partnerships with vendors, suppliers, government, schools. We can't be isolated anymore in the way in which we go about this type of activity. And the schools have to get together. I mean, it will no longer be just one school. It will be four or five schools with, you know, a commerce person and a government person. And I don't think you'll see this siloed type of grant going forward.

Interviewer: What do you enjoy most?

Roy Simpson: Wow. What do I enjoy most about my career? Wow. There's nothing beyond the relationship with friends. It's the ultimate. It's just really great people in nursing informatics. They are... I mean, I've experienced personal things, and they're always there.

Interviewer: Anything I haven't asked?

Roy Simpson: I probably would say probably two or three things, and the first one that just pops off my head is I remember in 1981, Linda Edmunds was on a panel with me, and Virginia Saba was chairing. And Linda talked about text messaging on a 3990 mainframe from IBM at Stonybrook Hospital, and half of the audience, I'll never forget it, were like, 'That will

never happen. No one would ever want to be sending text messages. Who ever heard of these things called e-mail's, etc.?' And, you know, and, literally, it was just like before us, it was like everybody... I mean, now we have 52 million devices that give us e-mail, Internet... and, I mean, to be in that meeting, and to see, and people talk about, and to see that happen and change. You know, I remember Gary Hales, from Computers in Nursing at the next year, talking about the importance of cell phones. And, you know, and nobody... nobody had a cell phone then. He talked about cellular towers. And, I mean, everybody was like, 'Oh, Gary, you're off your head. Where are you coming from, you know?'

And, I mean, and just to look back, I mean, it is unbelievable how it has just 'whoosh!' it's just gone. I mean, that's why I think it's so exciting, because you can see how this technology can enable patient care. And I just... I can't say enough things about how it can. I mean, it's almost like the development of penicillin. You know, it really does change the way that we interact with patients, patient's interaction with us, the way patients respond to therapy or don't respond to therapy. We just... we just have so many things that are available to us.

And I think the other thing that, that... the second thing that I would say is that I can remember in the curriculum revolutions in the 70's, when we were moving more towards baccalaureate education from the '65 standard, no one ever thought about informaticians or informatics being part of everybody's entry-level pre-licensure requirement. And there's no way. I mean, you can't even take your NIC CLC's nowadays if you don't understand how the computer works, how technology actualizes thing.

And then the other thing is that I don't think that our discipline, as a whole, has embraced the enabling utility of technology to advance our profession. And let, let me give you a very simple explanation of that. Everything's done by committee...

Interviewer:

Roy L. Simpson

Nursing Informatics Pioneer Interview

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Roy Simpson: A... an example of that that would be very cataclysmic to the profession and could change the entire dynamics of the profession is to use technology to help drive consensus of our discipline. And the example I think of in my head, which I'm sure everyone would say, 'He is crazy as they come.' But if ANA, in their reorganizational structure, which they have reorganized into workforce advocacy, labor management, etc., and so forth, if the House of Delegates of ANA said, 'Okay, we're going to nominate the person, that's all we're going to do from ANA is nominate the person who is going to be the President of ANA.' And with technology we allowed 2.8 million nurses to vote on these people that had a platform for where they were going to take the profession, and whether you're a member or not you got to vote on this president, that would give us such political power in public policy. When someone stands up and says, '2.8 million nurses voted for me, and this was how it came out,' that is a lot... resounding sound to congressmen, that when each of our individual disciplines get up... and we collect data about all these people who voted, so that we would know whether you're licensed in nine states and you're being counted nine times, or whether you have an AD, a diploma, a baccalaureate, masters, how many people, what our true workforce volume would be. I mean, we could make it through technology so enabling for the profession, and yet we get caught in these historic regulations and laws that just preclude us from growing. I mean, I think that's Caring has grown so immensely is they don't have all this encumbrance. They just kind of do it through enabling technologies. And I think that that we have to look to that to the future to drive your profession, to get consensus.

End of Interview