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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Judy Murphy

Interviewer 1:   Judy, please give us your name, your education, and your title.

Judy Murphy: My name is Judy Murphy, and I was educated at Alverno College with a bachelor's degree in Nursing, and my current position is Vice-President of Information Services at Aurora Health Care in Milwaukee, Wisconsin.

Interviewer 1:   Let's get right to the basics. How would you describe nursing informatics?

Judy Murphy: I think I'd describe nursing informatics in kind of the classic way—the intersection of the science of nursing, the science of computers, and the science of information. But over the years, I think I'd also add in there the people, process, and technology intersection, because I think as we think about how nurses use computers, that's probably more relevant than thinking of the traditional definition.

Interviewer 1:   Would you briefly describe your career in nursing that led up to your involvement in nursing informatics?

Judy Murphy: In thinking about my career, and what led up to my movement into nursing informatics, it's kind of an interesting one. I did the traditional staff nursing. And while I was a staff nurse, I got really interested in education, moved into the in-service education department, and in that department, in the, actually, late 70's, early 80's, got involved in the roll-out of mainframe computer applications to the nursing units. So, in that educational role, I was responsible for training nurses in the applications that we were rolling out, which, of course, at the time, were very traditional, again, mainframe applications. So it was order entry, order communication, if you will, to ancillary departments, along with the results reporting back to the nursing units. And as I was doing that, I thought, "Wow, you know, there's kind of an opportunity here in the computer department." We had a very small IS department at the time. We were a fairly large hospital—about 800-bed hospital—but we had about 15 to 20 people that worked in the IT department. So I went and talked to the IT director. The position of CIO, technically, didn't even exist then. Wasn't real interested in that kind of a role, so then I

thought, "Oh, I'll talk to the Director of Nursing." Again, the CNO role wasn't something that really existed at that time. [I] talked to her. She wasn't really interested. But over the next year to two years, they both became really interested, and I was hired into the computer department, or the IS department, in 1983.

Interviewer 1:   Did you have an "aha" moment when you realized the value of informatics?

Judy Murphy: When I think about having an "aha" moment, probably the thing that comes to me the most was associated with meetings, and discussing informatics concepts, and some of the things that we were all doing as nurses at that time. So, I would say that was probably the late 80's, and it was a SCAMC meeting. One of our…. You know, I don't remember what the name of the group even was then, if we were the Nursing Informatics Working Group or not. I think probably not. But, in looking ahead, and thinking about what we were all doing, kind of that sharing, and realizing that this was hard work, that there weren't a lot of people doing it—that was probably the "aha" moment that, "We're onto something here; we need to, you know, garner our resources, band together, and go forward," because this work was going to be tough.

Interviewer 1:   When did you first consider yourself an informatics nurse?

Judy Murphy: I first thought of myself as an informatics nurse probably right around that same time. And I can specifically remember 1988—aging myself here—and the international meeting in Dublin. Again, it was sort of that banding together and sharing experiences, concepts, thoughts, what we were going to be able to do going forward. And I would say that would be when I would identify myself as an informatics nurse.

Interviewer 1:   Let's talk about your personal aspirations and accomplishments. Did you have an overall vision that guided your work?

Judy Murphy: In thinking about my overall aspirations in my career, I've always been on the side of the provider or on service, and that's been somewhat unique in the nursing informatics community, if you will, since the majority of folks have been on the research side or on the academic side or in the education side, and not as many on the service or provider

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side. So I've always felt that my unique role was kind of that crossover person that took the concepts that were being looked at in research and made sure that they would work well in the actual service setting. So, that again I think was my unique aspect of my career.

Interviewer 1:   Who were some of the people that you collaborated with to accomplish your vision and your goals? And do you have any memorable experiences with them that you can share?

Judy Murphy: The people that I collaborated most with in my career, not surprisingly, first would be Patti Brennan. We have had an ongoing debate over the years, although we seem very similar. We're also very different in that she believes she needs to be 7 to 20 years out [ahead] of what's actually happening in practice, and I believe her work needs to be relevant to practice, and that you should be able to, you know, cross that gap in a shorter period than seven, eight, nine, ten years, that research-to-practice should be more like two or three years. So that's been kind of an ongoing debate. I don't have a specific instance where the two of us, you know, talked about that. It's been sort of this ongoing debate.

Interviewer 1:   Are there any other people you'd like to talk about that have influenced your career?

Judy Murphy: Other people would certainly be Norma Lang, and I think she was one of your interviewees as well.   And Norma, because she came from the Midwest, and from the city where I'm from, Milwaukee, Wisconsin—she was at Marquette for a long period of time—we had a lot of conversations over the years about informatics and how it was going to impact on nursing. And I was thrilled when she moved back three years ago, and is really working in a much more informatics oriented role than a nursing role, and taking all of her experience, so I think I've been impacted by her as well.

Interviewer 1:   Including your own achievements, what do you see as significant events that have shaped the field of nursing informatics?

Judy Murphy: Significant events that have impacted the profession of nursing informatics are probably, most recently, the ones that I feel have impacted us greatly, are the huge supports that we've been seeing from the federal government most recently. I think that's the thing

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that's taken us to the next generation. For many years, I think we were plodding along. And when President Bush kind of started the whole thing, in terms of the formation of the office, the National Office of Health IT, and the appointment of David Brailer and now Rob Kolodner, and the kind of moneys that have been transferring into the area in terms of research—I really feel like that's defining us and moving us ahead to the next level, if you will, of where we need to be going, and getting us, of course, the public scrutiny, but as well as the public awareness of what we're doing.

Interviewer 1:   Switching to a question about research, what were the most important questions addressed by research related to nursing informatics?

Judy Murphy: The most important questions addressed…. Say that question again.

Interviewer 1:   Well, or an iteration of it. What were the most important questions addressed by research related to nursing informatics? Or make a comment about research in nursing informatics, maybe in light of what you're doing now with Norma Lang.

Judy Murphy: Yeah, well, I think one of the most important things, as I think about the research questions that have been answered, is the linkage that we've seen at, or discovered, if you will, to the work flow; that it's not just about what the kinds of systems are that we use, it's not about the features and functions, it's not even just about the equipment that we use—although all those play into this idea of how we use the applications to do the nursing thing that we do. So, as we're delivering patient care, the thought that those systems are used within the context of work flow and thought flow, and how those support the work flow and support the thought flow that we're actually being able to execute—that, to me, is the key issue.

Interviewer 1:   Looking back to your first involvement in nursing informatics, what were some of the earliest events that you recall?

Judy Murphy: The earliest informatics events that I recall are in fact 1984—the first SCAMC meeting that I went to—and, you know, being kind of in awe of people that I had read on the topic. And it is an interesting one in that there weren't a lot of people that were

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publishing at that time, unless you were looking at the industry-specific content. So, if you were looking at the proceedings from previous SCAMC meetings, you would find that kind of information, but it definitely wasn't in any of the main mainstream journals in nursing, mainstream journals in medicine, etc. And then I also remember the first HIMSS—of course that wasn't called "HIMSS" then either—meeting that I attended in 1987. And I remember that one fairly dramatically too, because it was the intersection not so much of nursing and medicine in conjunction with IT, but those people like those engineering, industrial engineering people. And that, again, was the first times that I really started thinking about the work flow, and how the systems that we use integrated with the work that we were doing.

Interviewer 1:   Was there anything happening in the social and political environment that either helped or constrained the development of nursing informatics?

Judy Murphy: As I think about the things that may have influenced the development of nursing informatics, probably the biggest socio-political thing that was going on was what was going on with women, because certainly there's a heck of a lot of nurses and nursing informaticians who are, in fact, women. So, as we think about women's careers over the last 20 to 25 years, I certainly think that the evolution of women as professionals and women in careers beyond the traditional careers have allowed us to flourish in our development as well.

Interviewer 1:   Do you think it was difficult to establish the discipline of nursing informatics?

Judy Murphy: I don't actually think it was difficult to develop the discipline. I think that, early on, we coalesced as a group of individuals, I mentioned earlier, doing this hard work, and the recognition that it really was hard work. And there was only one way to get it done, and that was by banding together and learning from each other. And so, to me, because we did that early on, because we formed a community—and I remember Judy Ozbolt saying, you know, "What a wonderful time we were able to have because our work and our friends are so integrated."—and I think that because we formed that community, both

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from a professional standpoint and from a friendship standpoint, that we've been able to do more than any of us would have been able to do alone.

Interviewer 1:   How has the field evolved? And are you surprised at how the field has developed?

Judy Murphy: In terms of the field evolving, I've found it extremely interesting. I think the proliferation of nursing informatics programs around the country has really added to the richness of what we're doing and the diversity of what we're doing. A lot of the younger folks coming into the industry are looking at this from many different aspects than we would have looked at them before—things like human factors and form factors and usability. You know, we didn't talk about that kind of stuff 20 years ago. So it's certainly added to the breadth and depth of the kinds of things that we're doing.

Interviewer 1:   Are there any lessons learned that you would like to pass on?

Judy Murphy: In terms of lessons learned to pass on, I strongly feel, sitting here in the year 2007, that our time is now. I think with the increased attention that we're getting from the public sector, the increased attention that we're getting from the government, just the proliferation of the kinds of devices that we can use, and the connectivity, and the networking, and the different kinds of media, and the way we can have mobility just about anywhere we go and get IP and get, you know, Wi-Fi, and get all of those different kinds of things, I'm really feeling like the time is now and within the next couple of years that we're actually going to see the tipping point in the use of this technology in making a real difference in patient care.

Interviewer 1:   Where do you think the field is going? And what opportunities or road blocks lie ahead?

Judy Murphy: In terms of the future, and where I see, you know, us going, and the road blocks—kind of relates to my previous answer in that I think the ability to connect, and our connectedness, if you will, with each other is going to allow us to do things going forward that is so significantly different from what we could be doing in the past, mostly because the world is flat, or small, as we've been saying, and our ability to get at research, and to get at people, and to have, you know, virtual conferences, or to have, you

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know, telephone conferences, or video conferences, and to be able to talk to each other and understand what's going on around the world so much easier and quicker than we ever could before. I think that's going to make a difference to us going forward in our ability to, again, learn from each other and really be able to dovetail onto the things that are going on around the world.

Interviewer 1:   Do you have anything to say about the limitations of the field for nursing practice?

Judy Murphy: I actually don't think there's a lot of limitations, when I think about the field of nursing practice. And are you…? General nursing practice, or informatics practice?

Interviewer 1:   Whatever you want.

Judy Murphy: In terms of nursing practice. I actually have a daughter who is a senior in nursing school, and it is just fun to be watching her education over the last four years and how it's changed from when, you know, I was educated, and their ability to realize that it's not about what you're learning—it's about learning how to learn and how to find the answers. And there's this huge recognition, probably in many different kinds of professions, but certainly in nursing, that as you graduate, you only know one small amount of what you're going to need to know in your lifetime if you're going to be a nurse. And we didn't learn that way. We kind of thought that we knew everything that we were going to need going forward. And I think today there's that realization that you're learning how to learn and learning how to find answers rather than learning content. And that's what I see in her mostly. And it's the process stuff again—really focusing on how do you approach patients, how do you approach communities of patients, and think about that broader picture about what they're going to need tomorrow, not just what they're going to need today. It's an exciting time.

Interviewer 1:   Could you just mention again about your daughter and how her learning in nursing school is different from previous…?

Judy Murphy: OK, in thinking about what's different today, and how nursing practice is changing from when I graduated, I think the biggest thing I relate to is in my daughter. She's a nursing

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student. In fact, she's a senior nursing student graduating this year. And one of the things that I'm seeing that's so different from when I went to college and graduated from nursing school is that they're graduating—the current students—realizing that they are not learning everything that they're going to need to know going forward in their profession, but instead the focus is really on learning how to learn, or learning how to answer questions, or how to seek out the right answers to questions. I think when we graduated, or I graduated, anyway, that there was this belief that you kind of had this body of knowledge that you learned, and that you were going to go forward and, you know, conquer the world with that. And the realization today is that, because information and decision-making and knowledge is changing so greatly, that they need to teach process. They need to help students understand that, when they graduate, they just are learning one small amount of what they're going to need to know going forward. So the emphasis is really on learning how to learn rather than learning all the answers on the content.

Interviewer 1:   Why do you call it "nursing informatics"? What do nurses bring to the party?

Judy Murphy: When we call it "nursing informatics," I think the things that nursing brings is all the traditional things that nursing actually connotes, and that's the caring, the feeling, the touch, all those things that, again, when you think about just that word "nursing," what that really means. But I think it also has that added feature of the fact that we're combining that up with the high technology, if you will. So I know it's overused—the "high touch, high tech"—but I think that's what the "nursing informatics" word really means; and the time is really now to make a difference with that.

Interviewer 1:   That's all I have to say. Is there anything you would like to…?

Judy Murphy: I don't have anything else. Well, maybe I'll think of something, but right now I don't.

Interviewer 2:   Two questions, specifically. When we talked about you being interviewed as a pioneer, one of the distinctions is that many of your colleagues come out of academia, and you come out of practice. So I'm wondering if you could talk a little bit about what lessons have you learned both as an executive, and what lessons have you seen in terms of

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practicing nurses. How has that led to change? How have you been able to shape the industry based on your experiences?

Interviewer 2:   [Inaudible]. I think that when you talked in terms of lessons learned that you'd like to pass on, you kind of jumped over into the future, so if you do this with the executive and the practicing nurse, that's going to be able to….

Interviewer 1:   From the past, what's happened that's…?

Judy Murphy: So, as I continue to think about my unique aspect of being on the practice side of things, one of the exciting opportunities that I've had to be able to experience is to actually see these systems being utilized by nurses and how that's changed over the years. So, first of all, we installed our first nursing systems, again, in the late 80's and the early 90's. And to think those were not Windows-based systems. You know, those were mainframe-based systems. And nurses kind of saw that as something they were using to execute pieces of their jobs, but not that it actually helped them do the nursing job that they were doing. And that's what I see that's been kind of transformative and changed over the years. As nursing has evolved, and things like the Magnet status, and shared governance, and practicing nurses actually governing their own practice—as that's been happening, there's sort of been this parallel track about realizing that there's lots of tools that are being developed over the years that are helping them do their job. And I think as we sit here today, as I observe practicing nurses, particularly in the high-tech areas like in ICU, like a PACU recovery room, those kinds of things, I definitely see that nurses don't just see these as something added onto their job, but this is how they are executing their job, and these are the things that really are able to augment their practice. And they'd be unable to make the kinds of decisions that they make without these tools. So I think it's sort of that realization, again, that nursing is a lot about the quality of the decisions that you make, and the quality of the decisions that you make are really based on the quality of the data that you have. And so information systems are a way of coalescing that data, highlighting, maybe, the abnormalities or the important pieces, and making sure that that kind of is in your face, as the practicing nurse, and then coupling that with the ability to integrate that into your work flow through the devices that you use, whether that be

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wireless or bedside; that it actually integrates and augments your efficiency, because it's not this extra thing that you have to go do in addition to everything else, but it's part of your work.

Interviewer 2:   Following up with that, one of the questions that I have is, as a nurse executive—it's a different perspective than practicing nurses or academia—what are some lessons learned for nurse executives that you could share?

Judy Murphy: Some of the lessons learned that I'd have for nurse executives is really ensuring the fact—and we work on this, where I am at, all the time, by the way—it's one of those evolving kinds of things—and that is the real ownership of the system. Again, when I entered the profession and was working in the IT department, there was no question that I had the knowledge of what systems were out there, what the systems could do, how they would help the staff nurses, etc. But as time has gone on, and we're talking about systems that are more closely integrated with this thought flow and work flow of the nurse, it's of paramount importance that this is seen as a system that the nursing structure—whether that's the staff nurses through shared governance, or whether those are the executives that are paying for these systems in the first place, and most specifically, the nurse executives—they need to have the ownership of those systems, so that everybody can understand that these systems, again, are helping the staff nurse do her job better, and it is not something being done to them, but it is something being done with them and for them. And that's why this ownership thing is so important. And, you know, we talk about it a lot in the industry today related to CPOE and how, you know, physicians have to own that. Definitely, that's helpful. But as I think about nurses, it's even more important that, again, they see this as the tools that will enable to do the practice that they've always wanted to do rather than something, again, like I said earlier, that's being added, added on. So, just to cycle back again, to emphasize the point, it's so that the nurse executive is seen as the champion, the owner, the sponsor of the implementation of any kind of a nursing system, with or without decision support, with or without a lot of care planning and those kinds of things, but that it is definitely seen as being owned by the nursing department and driven by the nursing department, so that when we get to the more complex things, like integrating evidence-based practice, that,

again, the nurses are seeing this is content and decision support for them, and not something that's coming external to them by some outside force.

Interviewer 2:   One more question. [Inaudible].

Judy Murphy: No, that's fine. You kidding?

Interviewer 2:   No. I recently was interviewed by a union that represents nurses. One of the questions they asked me is: "How can practicing nurses really get involved and make a difference in the development and use of information technology?"

Judy Murphy: So when we think about how practicing or staff nurses can get involved in the development of systems, there's a myriad of opportunities to do that, almost all within the practice setting, but certainly a lot of them in the organizational settings as well. So, within the setting where they're working, there's committees where we're doing screen design, where we're doing decision support design, talking about the alerts and reminders—that's one whole area that very directly relates to the development of systems. Now, that's actually sight-based customization, but then a lot of the vendors are running focus groups as they think about evolving to second- and third-generation systems.   And, particularly in nursing, with this integration with how they make decisions, that thought flow piece, again, and the work flow piece, they're really looking for input from staff nurses. So there are oftentimes opportunities to participate in focus groups to be able to help the vendors evolve their thinking in terms of where systems need to go next. Along that same line, then, the organizational work, outside of the informatics organizations, but where we're starting to get into the actual staff nurse organizations, be it AORN, or be it AACN, or some of the groups that they are participating in—a lot of them are looking for input in terms of taking their standards of practice and how those can be integrated with information systems. So it's certainly another way the staff nurses could get involved. And, I guess, last but not least would certainly be to influence their leaders who are purchasing the systems within the organization that they're working.

Interviewer 2:   One more question.
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Interviewer 2:   AMIA—one of our goals, especially in nursing, is to grow the next generation of nurses. One of the concerns in a multidisciplinary organization is the comfort level of the new staff. What have you done in the past as you've come in through AMIA and other interdisciplinary organizations that have helped you feel more comfortable and to be able to grow that might provide guidance for the next generation?

Judy Murphy: And you're thinking of within the informatics community now?

Judy Murphy: Yeah. So, when we think about evolving the next generation of nursing informaticians, nursing informatics researchers, folks working in our specialty area, if you will, one of the things that I think we can do as the older generation is to really, really spend some time mentoring them and making them comfortable within our organizations and within some of the areas that we've excelled in. So when I think about the Nursing Informatics Working Group at AMIA, or I think about presenting papers at AMIA, doing a presentation at HIMSS, probably the best way for them to get involved is to become part of this nursing informatics community, because I think we start out by getting comfortable with each other, and then we can involve, evolve, excuse me, into getting more comfortable in the community of our peers with the physician group, with the pharmacist group, with the respiratory therapy group, etc. So, at this meeting alone, I personally have reached out to a couple of new folks, more than a couple, actually, and said, "Hey, this is a great poster, but next year you have to do a paper. And, oh, by the way, here are some people that are in your area that could review your paper." And I think folks, if they're tapped on the shoulder, tend to do things differently than if they just kind of wait to decide to do it on their own. So that sort of tapping on the shoulder, whether it's suggesting a presentation, suggesting they become part of our community by coming to the meetings, by volunteering to be on one of our subcommittees, by volunteering to be on a organizing committee for the Nursing Informatics Symposium— all of those are easy ways to start dabbling a little bit so that we can start growing that next generation. But we do have an accountability to do that, and I'm hoping that everybody takes that seriously—anybody over 45, anyway. OK, 50.

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Interviewer 2:   So, one last question. Since this is about history, tell me a story about who in your early career did something for you that made a difference to help you grow.

Judy Murphy: I've got to think about that. So, as I think about my past, and a person who really made a difference to me, and did that sort of tapping on the shoulder, it was Madeline Wake. And she's kind of on the periphery, if you will, of the informatics community. She's currently Provost at Marquette University in Milwaukee, but she was actually the Director of Continuing Education when she made the difference to me. And it was one of those moments where I was hemming and hawing about whether I was going to go to an international—well, actually, whether I was going to submit a paper to an international conference—and feeling that "Oh, what I was doing was not all that significant." So she did the old, you know, "ask three important questions." "Now, wait, what are you doing? And, how could other people learn from that? And, what do you think you would do differently if you were able to do it again?" And just by asking those simple questions, made me realize that, "Oh yeah, you know, other people would like to hear about this." And it goes back to that comment that the work is too hard for us to all recreate the wheel and we need to be sharing. And, so, in that simple way, she tapped me on the shoulder, and was driving me toward this idea that you have to keep involved with this informatics community, because they need you just like you need them.

Interviewer 2:   Thank you.

[End of interview].