



ANI Innovator Profiles

Nursing Clinical LOINC Subcommittee

Interview with Susan Matney, MSN, RN-C, PhD, FAAN
Clinical LOINC Nursing Subcommittee Chair

[LOINC](#)

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The Alliance for Nursing Informatics (ANI) is a collaboration of organizations that represents more than 6,000 nurse informaticists and brings together 33 distinct nursing informatics groups globally.

Mission: To advance NI leadership, practice, education, policy and research through a unified voice of nursing informatics organizations.

Vision: Transform health and health care through nursing informatics and innovation.

ANI Innovator Profiles Program

The purpose of this program is to capture an ANI Innovator Profile for each ANI member organization to increase awareness and visibility of ANI members and describe how they contribute to a unified voice for nursing informatics.

ANI Innovator Profile – Nursing Clinical LOINC Subcommittee

LOINC is a common language (set of identifiers, names, and codes) for clinical and laboratory observations. The LOINC Committee serves a number of key roles in LOINC development. As a group, the Committee defines the overall naming conventions and policies for the development process. In collaboration with Regenstrief Institute and other stakeholders, the Committee helps set priorities for new content development. Individual members may also take the lead on the development of naming rules and LOINC® names for new subject matter and serve as content experts to answer questions that suggest new submissions. The LOINC Committee has two primary divisions: the Laboratory LOINC Committee which deals with observations made on specimens, and the Clinical LOINC Committee which deals with observations made on patients. The mission of the Clinical LOINC Nursing Subcommittee is to provide LOINC codes for observations at key stages of the nursing process, including assessments, goals, and outcomes, and to meet the needs for administrative and regulatory data related to nursing care.

Interview with Susan Matney

- 1. Can you please tell us about yourself and the career path that led you to become a leader at the Nursing Clinical LOINC Subcommittee?**



For as long as I can remember I have always wanted to become a nurse. My first nursing experience was when I was fifteen years old, I started working as nurse's aide at a local nursing home. Upon graduating high school I received my LPN and after eight years of experience I received an associate's degree in nursing. Shortly after receiving my degree, I took the position as the director of nursing for a small hospital where I was responsible for nursing care, quality, policy and procedures. At the time, the hospital did not have an in-house pharmacist and the front desk wanted to know how to bill the pharmacy. Thus, my first computer experience consisted of keying in all of the prescription drugs in the pharmacy by hand and developing a formula to determine the average retail prices from the average whole sale price. This was the first opportunity where I saw how technology can improve healthcare.

I moved to Salt Lake City, Utah after I received my bachelor's degree in nursing and became the director of women's services for a small hospital. This led me to begin tracking information within the labor and delivery department of the hospital. I started studying computers and developed a database for my delivery log where I trained nurses on entering data into the database.

I realized that an informatics career may be the right fit for me when I noticed that the University of Utah had started a Nursing Informatics program which I found to be quite intriguing. I applied and was accepted. About one year into the program, I discovered a nurse informaticist job position open at Intermountain Healthcare. Given Intermountain's great reputation, I accepted the position where I had the opportunity to work under Stan Huff, one of the top terminology experts in the world, who gave me exposure to every kind of standard terminology. In addition, this role allowed me to work with the data dictionary team and develop a database that contained SNOMED CT and LOINC and stored all terminology as well as information models within the system.

LOINC was first used for laboratory observation. To create the initial LOINC database data from multiple institutions were analyzed to determine the axes for laboratory measurements. However, we quickly realized that these axes could be utilized for clinical observations as well and began incorporating clinical observations into the LOINC database in 1997.

In 1999, I was invited to attend the Nursing Terminology Summit at Vanderbilt University. There I was exposed to the American Nurses Association (ANA) terminology recognition process. The ANA recognizes certain terminologies for nursing. I consulted Stan Huff and discussed if LOINC could be taken to the ANA to become a recognized terminology for nursing. Moving forward to 2002, I took LOINC to the ANA and it was approved and recognized by ANA at that time.

I left Intermountain Healthcare after nine years to pursue an opportunity to work for Siemens Healthcare under Rosemary Kennedy. Our task was develop a nursing plan of care application. In this position I learned n-depth how nursing terminologies can be used to document the nursing process. I eventually left Siemens due to a job opportunity at the University of Utah. I worked on a Clinical and Translational Science Award (CTSA) grant and our team developed a research



infrastructure using standardized terminologies. The goal was to query multiple systems to obtain research cohorts. I mapped terminologies from selected institutions to a SNOMED CT and LOINC in a centralized location. The mapping facilitated cohort selecting using i2b2 (Informatics for Integrating Biology and the Bedside).

My current job position is at 3M Health Information Systems where I work as a Medical Informaticist. There, I focus on standards development and am involved in the development and maintenance of the data dictionary. In this role I also have the opportunity to work with nurses that work on the data dictionary, which brings me great joy.

2. What is the primary mission of the Nursing Clinical LOINC Subcommittee?

The mission of the Nursing Clinical LOINC Subcommittee is to provide LOINC codes for observations at key stages of the nursing process. This includes assessments, goals and outcomes. In addition, we have also loaded the nursing management data set (NMMDS), which is content required to meet the need for administrative and regulatory data related to nursing care.

In regards to our scope of responsibility, we triage all of the content related to nursing. We interface with nurses to assist with their understanding of the use of LOINC. Another part of our scope is to look for gaps. We are currently working on the submission of a minimum data set for physiologic nursing assessments. The work is part of the national initiative stemming out of the University of Minnesota School Of Nursing's *Nursing Knowledge: Big Data & Science for Transforming Healthcare Conference*.

I also help nurses format and submit content for clinical LOINC in a fit condition, which requires an in-depth comprehension of all of the axes. In addition, I have found it important to disseminate new content and inform nurses of recent developments in LOINC. For example, I am currently raising awareness about an article published in JAMIA discussing the development of the skin and wound model, which includes LOINC for all of the assessments of that model. Lastly, I continuously solicit input from nurses to gauge what we are missing to continuously improve the database.

3. What projects is your organization working on to advance informatics and innovation in healthcare?

One project we worked on with HL7 is a pressure ulcer risk assessment standard where we are configured a domain analysis model for pressure ulcers. Another project involves the nursing management minimum data set. As we reviewed the nursing management minimum data set we developed LOINC codes so it could be integrated. We view this as a big win for nursing to have the nursing management minimum data set coded and in alignment with other industry standards, such as the National Database of Nursing Quality Indicators (NDNQI).



Lastly, I am currently overseeing a workgroup of the University of Minnesota School of Nursing's Big Data Initiative where we are coding physiologic nursing assessments into LOINC and SNOMED CT. Thus far we have gathered assessment data from six institutions. And we have started the process with psychological measures, creating panels to have observations for basic assessment values for a coded observation.

4. What value do you see in the Nursing Clinical LOINC Subcommittee being an ANI member?

Being an ANI member allows me to interface with other organizations. For example, I helped assist the Association of periOperative Nurses (AORN) with aligning their content to LOINC and SNOMED CT.

It also helps me to stay current with the latest emerging trends with standards and to offer assistance anyway that I can. We can continue to support ANI by providing assistance and offering feedback for other member organizations when requested.

5. In what way(s) is your organization supporting ANI Initiatives e.g. the [ANI consumer pledge](#), ANI Comments & Testimony, the Emerging Leader program, etc.?

The Nursing Clinical LOINC Subcommittee has mostly been involved with opportunities to participate in in comments and testimony. I have not been involved in the Emerging Leader Program but if there are participants who are interested in terminology and standards I would love to provide support anyway I can.


6. What is the Nursing Clinical LOINC Subcommittee's vision for the future of nursing informatics?

My short term goal is to create a landing page on the web site for nurses and I am happy to report that the University of Minnesota Big Data Initiative is developing a framework for nursing care.

My long term goal is in regards to interoperability and being able to share nursing data across systems and use this data for research to influence the evidence. This will allow us to make a difference by obtaining evidence regarding what works and what doesn't for institutions across the country and globally. It is a lofty goal, however, this is an exciting time for nursing informatics and I am excited to see where we are headed.

7. Do you have any additional comments to share?

I would encourage others to become involved in standards work. Even if you do not attend standards meetings, it is important to understand them. If you visit the [LOINC website](#) you can view a basic tutorial and understand what LOINC is about.



I would also like to mention that the use of standardized terminology and messaging using HL7 is not going away. Therefore, I would recommend learning about standards and terminologies and how they relate to nursing. I would also encourage you to get involved by joining the Clinical LOINC meetings. These meetings are open and virtual. Lastly, I would encourage everyone to be involved and enjoy the ride.

Biography for Susan A. Matney, MSN, RN-C, FAAN

Susan A. Matney, MSN, RN-C, FAAN is a Medical Informaticist with the 3M Health Information Systems, Healthcare Data Dictionary (HDD) Team. She has more than 15 years of experience in Informatics and 30 years of experience in nursing. In 2002 Matney took the terminology ‘Logical Observation Identifiers Names and Codes (LOINC)’ to the American Nurses Association to be recognized as a terminology for use by nursing. Matney is a Fellow of the American Academy of Nursing and represents nursing at national/international conferences and organizations, including Systematized Nomenclature of Medicine – Clinical Terminology (SNOMED-CT), Health Level 7 (HL7), LOINC, and the Federal Health Information Model Terminology (FHIM) team. Matney received her BSN degree from the University of Phoenix, Salt lake City, Utah, and her MSN degree from the University of Utah in Salt Lake City. Susan is currently an adjunct faculty member and a doctoral candidate at the University Of Utah College Of Nursing in Salt Lake City, Utah. Her dissertation is focusing on the development of a Theory of Wisdom-in-Action for Clinical Nursing.

Recorded: January 6, 2015

For the full interview recording you can [click here](#) or visit <http://www.allianceni.org/members.asp>.