

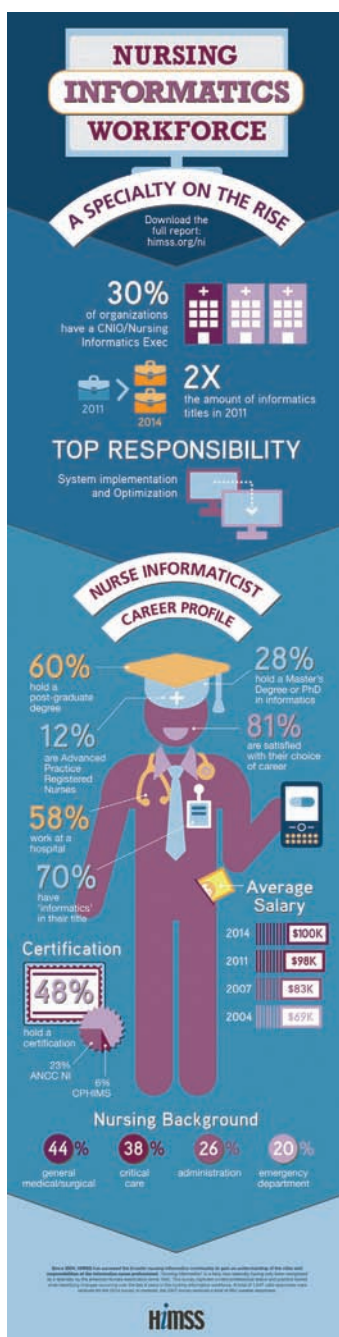


Nursing informatics: A specialty on the rise

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At the crossroads of technology and patient care stand the nurses who've chosen nursing informatics as their specialty. Nursing informatics is a well-established specialty within nursing, which has evolved to be an integral part of healthcare delivery and a differentiating factor in the selection, implementation, and evaluation of health information technology that supports safe, high-quality, patient-centric care. The American Nurses Association (ANA) has published three expanding editions of *Nursing Informatics: Practice Scope and Standards of Practice* (1994, 2001, 2008), with the most recent edition defining nursing informatics as "a specialty that integrates nursing science, computer science, and information science to manage and communicate data, information, knowledge, and wisdom in nursing practice." At the time of article publication, the ANA is working on a revised scope and standards, which is expected to be released in the summer of 2014.

Since 2004, the Healthcare Information and Management Systems Society (HIMSS) has surveyed the broader nursing informatics community to gain an understanding of the roles and responsibilities of the informatics nurse professional. The HIMSS 2014 Nursing Informatics Workforce Survey captures current professional status and practice trends while identifying changes that have occurred over the past



9 years in the nursing informatics workforce. A total of 1,047 valid responses were received and are included in the following analysis. Full report findings are available at <http://www.himss.org/ni-workforce-survey>.

Survey results

The 2014 survey builds on previous HIMSS research from 2004, 2007, and 2011. (See Figure 1.) An e-mail invitation, with a link to the web-based survey, was sent to nurse informaticists in December 2013 and January 2014. Invitations to participate in the survey were also distributed by organizations that sponsored and supported the research, including the Alliance for Nursing Informatics.

Respondents

Close to three-quarters (71%) of all survey respondents work either at a hospital (58%) or at the corporate office of a healthcare system (13%). Of these respondents, over two-fifths (41%) work at a Magnet® hospital.

Nursing background

Nearly two-thirds (60%) of the respondents have a postgraduate degree, which includes a master's degree or PhD in nursing or any other field/specialty. More specifically, 43% of this year's respondents have a master's degree in nursing or a PhD in nursing, representing an increase from the 36% in 2011. In terms of

the respondents' clinical experience at the bedside before becoming nurse informaticists, slightly fewer respondents indicated more than 16 years of experience in 2014 (41%) compared with 2011 (46%). On the other hand, there was an increase in the number of respondents reporting 1 to 5 years of clinical bedside experience from 2011 (12%) to 2014 (20%). This may suggest that the nursing informatics field continues to grow as a specialty and there's increasing demand for the role, drawing nurses from the bedside.

Informatics background

Training and education in informatics continue to advance. Slightly more than one-third (37%) of the respondents have only on-the-job informatics training. However, the percent of respondents who've obtained a postgraduate degree in nursing informatics or other informatics fields increased by 24% between the 2011 and 2014 surveys. In addition, 43% of the respondents reported that they're currently enrolled in some type of informatics education or training, either a formal degree program or a nondegree program/course.

Salary

Respondents were asked to report their base salary (not including benefits or bonuses) as of December 1, 2013. Salaries among the nurse informaticist respondents continue to increase when compared with previous surveys. The average salary in 2014 is \$100,717, up from \$98,703 in 2011 and \$83,675 in 2007.


Certification

The number of respondents with any certification increased from 45% in 2011 to 48% in 2014. More than half of the nurse informaticist respondents also indicated that they'd be pursuing some type of

certification within the next year. Survey respondents indicated that the perceived value of certification is personal satisfaction and enhancing their credibility and marketability.

Informatics career

Nearly half (46%) of the respondents have more than 7 years of informatics experience. The percent with 7 to 10 years of experience increased from 10% in 2011 to 21% in 2014, whereas the percent with more than



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10 years of experience decreased from 39% in 2011 to 25% in 2014. This could be the result of experienced nurse informaticists pursuing other career paths or retiring, or an increasing number of informatics nurses entering the specialty.

Career satisfaction

New to the 2014 survey were questions surrounding the respondents' job satisfaction with both their current positions and their career choices in informatics. Satisfaction was rated using a 1 to 7 scale, where 1 was not at all satisfied and 7 was highly satisfied. Over half (57%) of the respondents indicated that they're satisfied or highly satisfied with their current positions (score of 6 or above). The majority of respondents (81%) are also satisfied or highly satisfied with their career choices in informatics. Respondents seemed to be quite satisfied with their choice of career in informatics, but not necessarily with the current position they hold.

Job responsibilities

Two-thirds (67%) of the respondents indicated that they don't have a supervisory role and there are no individuals who report to them. This number increased from 58% in 2007 and 61% in 2011. The job responsibilities of the respondents continue to include systems implementation and development and, as reported in the 2014 survey, system utilization and optimization, which was a new selection category.

Barriers to success

There was a significant shift in the selected barriers to success as a nurse informaticist. In the 2004 and 2007 surveys, respondents identified the lack of financial resources as the top barrier, whereas in 2011 it was the lack of integration and interoperability. For this year's survey, a lack of administrative support and a lack of staffing resources are the primary barriers faced.

Why choose informatics?

Technology is revolutionizing the way that healthcare is delivered with a steady infusion of new solutions into clinical environments. At the same time, outside of healthcare, both clinicians and consumers are learning to incorporate technologic solutions into their daily lives with tools such as high-speed data networks, smart phones, handheld devices, and various forms of patient engagement and social media exchanges. Bringing these types of technologies into the healthcare marketplace will transform the time and place for how care is provided.

Having individuals who understand the unique complexities of healthcare practices, along with how to best develop and implement technologic tools that positively affect safe patient care, is essential. Nurses who can integrate informatics solutions into clinical encounters are critical for the transition to an automated healthcare environment that promotes the continuum of care across time and place, in addition to wellness and health maintenance activities.

Healthcare has become a global environment, offering care solutions that are delivered remotely. The technology of today allows the healthcare team to connect with patients despite barriers of time or physical proximity. Virtual office visits, online appointment scheduling, mobile labs, electronic

medication prescribing, retail clinics, and patient portals connected with electronic medical records are changing the way in which care is provided. Nurses also play a critical role by helping patients set up their own personal health records, or by explaining to patients how to access and use a patient portal. The learning curve can be formidable, especially for patients with health literacy barriers. Telehealth exchanges are increasing in number, especially in underserved rural populations. New technologies offer opportunities to provide quality care to patients in remote settings, improving the access to specialized resources. The challenge for delivering this type of care is ensuring that the automated solutions fully interact with one

another, as well as with the clinicians using them.

The skills for success

The need for system integration and interoperability is now the most important factor for the success of technology in healthcare. Having skilled individuals in place with the right experience and education to help drive the direction of these electronic interchanges is as important as the technology itself. **NM**

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