

Is Nursing Primed for a Transformation Using Nursing Informatics Concepts and Tools? The Editor's Vantage Point

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Nursing Informatics (NI) as a specialization in nursing can influence and potentiate change. Nurses have long been considered to be change agents. The knowledge and expertise that nurses gained from learning NI solidified the fact that we can be innovative, resourceful, creative, and visionaries. Are nurses poised for major transformations in the way we do nursing, using our understanding of NI concepts and strategies?

We look around us and note that much of what we see in nursing, and the world, seem to be percolating towards a particular trajectory. Even before COVID-19 hit us in Spring 2020, there had been prior signs that the world was evolving and ready for change. Racial tension became more pronounced, marked political divisions, constant tests of our democracy, workplace redesigns relative to changing system models, and rapid developments in technology affecting all facets of our lives. The need to change became more pronounced as we continue to be pounced by COVID-19 and its uncertainties.

We have seen many changes in nursing practice, such as the increased use of telehealth, personal health record sharing within and among healthcare providers whom we entrust our health to, and the use of FaceTime to check on hospitalized relatives and friends. There are also more care navigators communicating to patients by phone to avoid unnecessary hospital visits, the frequent use of Zoom and other teleconferencing applications to assist in managing our care, and the pervasive use of all types of social media in healthcare. Even the manner that nursing administration handles regular and emergency staff scheduling is shifting away from the way we used to plan work shifts. More and more healthcare organizations use the bidding process using a scheduling program, and supplemented by shared computer applications from organizations that specialize in per diem, temporary or travel nurses. Hospital and patient data inform nurse administrators on how day to day operations will be prioritized using their knowledge of big data and data analytics. Organizational programs and strategic initiatives are decided upon from processing and managing these same data.

Nursing education is also undergoing changes. In April 2021, the American Association of Colleges of Nursing (AACN) approved a new model of nursing education with gradual implementation over at least the next three years. The Essentials of nursing education were reviewed and revised, resulting in "10 domains and the expected competencies for each domain that represent professional nursing practice and reflect the diversity of practice settings" (AACN, 2021, p. 1). The new Essentials will transform how nurses are prepared in entry level to nursing (baccalaureate) and advanced practice (master's and Doctor of Nursing Practice) programs.

Informatics and Healthcare Technologies (Domain 8) are tools "used to provide safe, high quality care, gather data, form information to drive decision making, and support professionals as they expand knowledge and wisdom for practice" (AACN, 2021, p. 2). However, if one examines the other nine domains, each one needs some form of Informatics and Healthcare Technologies.

When one speaks about System-Based Practice (Domain 7), nurses need to understand systems theory such as those that apply to either manual processes (e.g., patient care education) or those that are computerized (e.g., electronic medical records, barcode medication administration). Another example to illustrate the interrelationship of Informatics and Healthcare Technologies to other domains is Quality and Safety (Domain 5). Everything that nurses use and do to provide safe and quality care for their patients include significant knowledge of informatics concepts and tools. The same is true for the rest of the domains. In reality, the educational preparation of nurses is a mosaic of the interwoven domains which make them well-grounded in their knowledge, skills and attitude (KSA) relative to their nursing competence.

Being educationally-prepared in Informatics and Healthcare Technologies and other interrelated domains, strengthens the nurses' KSA and strategically positions them to be better change agents. Nurses possess vision, creativity, innovativeness, resourcefulness, flexibility, and adaptability. They can use these traits to: (1) analyze and identify new models, processes, technologies and programs that can enhance patient-centric care; (2) deliver safe, quality and evidence-based nursing practice; (3) educate patients and families on health promotion and healthy living strategies; (4) establish new nursing roles and avenues that optimize their education; and, (5) design equitable and targeted population health programs using data analysis outcomes.

Nurses are better positioned to identify what roles are best for them. By sheer numbers alone, nurses comprise a majority of professionals in most healthcare organizations. Coalitions within the nursing profession are important. There is synergy in the fusion of many ideas and perspectives. Nurses should be able to lead the transformation in our own profession. NI supports nurses, consumers, patients, and members of interprofessional teams; and, decision-making should be grounded on desired outcomes, according to the most recent changes in the definition of NI (Bickford, 2015, p. 130).

Nursing continues to go through many modifications and it will endure as it always has. But nursing professionals should drive these changes and remain in the forefront, rather than non-nurses determining what they think nursing should be. The understanding of the power of NI to lead and drive nurses to its desired trajectory is an important reality that nurses should all consider and embrace.

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