The Nursing Information Systems (NIS) office is a new and constantly evolving branch of the patient care services. This nursing discipline-specific specialty integrates the science of nursing and computer science. NIS emphasizes patient safety via the installation of systems that focuses on reducing errors in healthcare, as well as the communication and management of this information.

Focus

- Management and communication of information
- Content of information
- Design, structure, and delivery of information

Nursing informatics at St. Joseph's Healthcare System started in the late 1980's as a process of data entry and reporting, which were objective and concrete, with minimal interpretation of clinical value.

Emergency Data Management Systems (EDMS-Medhost) was fully installed in the Emergency Department for all disciplines in 2005. Significant improvements in both process and patient outcomes were evident immediately.

In 2006, the roles and responsibilities of the Manager of Clinical Informatics in nursing were redefined and expanded, including an assessment of the structure and delivery of information from existing systems, along with the creation and/or design documentation methodologies used from technology available at the bedside.

St. Joseph's has been on the forefront of electronic documentation at the bedside, recognizing its importance at an early time. A gradual, yet systematic, implementation of specific systems, which are now active in the different nursing specialty areas, include:

- **Obstetric/L&D and Perinatal services**
- Centricity Perinatal Systems (CPN-GE)

- **Emergency Department**
- EDMS – MEDHOST

- **Surgical and Perioperative Services**
- Horizon Surgical Manager (McKesson)

- **Inpatient Adult Medical-Surgical Divisions, Pediatric Services, Pediatric Intensive Care Unit**
- Electronic Patient Care Documentation (e-PCD - Siemens)

The design, content, and structure, notably of EDMS and ePCD, originated from NIS in close collaboration with the IT department and other specialties and disciplines. Orientation and training are also conducted and supervised by the NIS office, with support from the office of IT - Clinical Systems. Unit-based SUPERUSERS are the point-of-need resources for all end-users of the different systems.

Implementation of Electronic Medication Administration Record (eMAR)

The implementation of eMAR paves the way for standardized handling, management, and documentation of medication administration. When implemented institution-wide, eMAR allows every clinician easy, efficient, consistent and legible online access to each patient's medication profile.

This new system required a change to our current process. The task of transcribing medication orders is now the responsibility of licensed pharmacists. A second layer of safety is the nurses' responsibility to validate each medication order.

The ultimate goal of the office of Nursing Information Systems is to make every nurse and support personnel skilled in the management and communication of patient health information across the continuum of care.

Goals

- Incorporate practice standards, safety measures, and regulatory practices in computerized nursing documentation solutions
- Provide a vehicle for the comprehensive documentation of care
- All nurses and support staff must be skilled in managing and communicating information
- Automation of nursing documentation in all inpatient care settings by year 2009