A Delphi Study to Determine Baseline Informatics Competencies for Nurse Managers


Final Selected Competencies as selected by the expert panel:

Please note that the Comp numbers listed refer to the original number associated with the competency as it was presented to the expert panel for review. Missing Comp numbers indicate that the competency was not selected to be part of the final list.

Level One Beginning Nurse Competencies which were selected:

**Computer Skills - Administration**
Comp 1: Uses administrative applications for practice management (e.g., searches for patient, retrieves demographics, billing data)
Comp 2: Uses applications for structured data entry (e.g., patient acuity or classification applications)

**Computer Skills – Communication (email, internet, telecommunications)**
Comp 4: Use e-mail (e.g., create, send, respond, use attachments)
Comp 5: Uses the Internet to locate, download items of interest (e.g., patient, nursing resources)

**Computer Skills – Data access**
Comp 6: Uses sources of data that relate to practice and care
Comp 7: Accesses, enters, and retrieves data used locally for patient care (e.g., uses HIS, CIS for plans of care, assessments, interventions, notes, discharge planning)
Comp 9: Conducts on-line literature searches

**Computer Skills - Documentation**
Comp 10: Uses an application to document patient care
Comp 11: Uses an application to plan care for patients to include discharge planning
Comp 12: Uses an application to enter patient data (e.g., vital signs)

**Computer Skills – Education**
Comp 13: Uses information management technologies for patient education (e.g., identifies areas for instruction, conducts education, evaluates outcomes, resources)

**Computer Skills-Monitoring**
Comp 14: Uses computerized patient monitoring systems

**Computer Skills – Basic Desktop Software**
Comp 15: Uses multimedia presentations
Comp 16: Uses word processing
Comp 17: Demonstrates keyboarding (typing) skills
Computer Skills - Systems
Comp 19: Operates peripheral devices (e.g., bedside terminals, hand-helds)
Comp 21: Uses existing external peripheral devices (e.g., CD-ROMs, zip drives)
Comp 22: Uses computer technology safely
Comp 24: Identifies the appropriate technology to capture the required patient data (e.g., fetal monitoring device)
Comp 25: Demonstrates basic technology skills (e.g., turn computer off & on, load paper, change toner, remove paper jams, print documents)

Informatics Knowledge – Date
Comp 26: Recognizes the use and/or importance of nursing data for improving practice

Informatics Knowledge – Impact
Comp 27: Recognizes that a computer program has limitations due to its design and capacity of the computer
Comp 28: Recognizes that it takes time, persistent effort, and skill for computers to become an effective tool
Comp 29: Recognizes that health computing will become more common
Comp 30: Recognizes that the computer is only a tool to provide better nursing care and that there are human functions that cannot be performed by computer
Comp 31: Recognizes that one does not have to be a computer programmer to make effective use of the computer in nursing

Informatics Knowledge – Privacy/security
Comp 32: Seeks available resources to help formulate ethical decisions in computing
Comp 33: Describes patients' rights as they pertain to computerized information management

Informatics Knowledge – Systems
Comp 34: Recognizes the value of clinicians' involvement in the design, selection, implementation, and evaluation of applications, systems in health care
Comp 35: Describes the computerized or manual paper system that is present
Comp 36: Explains the use of networks for electronic communication (e.g., Internet)
Comp 37: Identifies the basic components of the current computer system (e.g., features of a PC, workstation)

Level Two Experienced Nurse Competencies which were selected:

Computer Skills - Administration
Comp 39: Uses administrative applications for budget
Comp 40: Uses applications to manage aggregated data
Comp 41: Uses administrative applications for staff scheduling
Comp 42: Uses administrative applications for maintaining employee records

**Computer Skills – Quality improvement**

*Comp 50:* Uses data and statistical analyses to evaluate practice and perform quality improvement

**Informatics Knowledge – Data**

*Comp 53:* Promotes the integrity of nursing information and access necessary for patient care within an integrated computer-based patient record

*Comp 54:* Provides for efficient data collection.

**Informatics Knowledge – Impact**

*Comp 56:* Defines the impact of computerized information management on the role of the nurse.

**Informatics Knowledge – Privacy/security**

*Comp 57:* Discusses the principles of data integrity, professional ethics and legal requirements

*Comp 58:* Describes ways to protect data.

**Informatics Knowledge – System**

*Comp 59:* Describes general applications to support administration (e.g., staffing, budget)

*Comp 60:* Describes general applications, systems to support clinical care

*Comp 61:* Describes general applications to support nursing education

**Informatics Skills – Role**

*Comp 65:* Participates in influencing the attitudes of other nurses toward computer use for nursing practice

*Comp 66:* As a clinician (nurse), participates in the selection process, design, implementation, and evaluation of systems

*Comp 67:* Acts as an advocate of system users including patients or clients

**Informatics Skills – Systems Maintenance**

*Comp 69:* Performs basic trouble-shooting in applications