CNIA

Informatics Self-Assessment Tool for Nurses

Canadian Nurses
Informatics Association

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Background

In 2012, the Canadian Association of Schools of Nursing (CASN) in collaboration with Canada Health Infoway developed the *Nursing Informatics: Entry-to-Practice Competencies for Registered Nurses* to establish nursing informatics competencies required by all registered nurses in order to provide safe and competent patient care. The competencies are divided into 3 domains with an over-arching competency.

- Foundational Information and Communications Technologies (ICT) Skills
- Information and knowledge management
- Professional and regulatory accountability
- ICTs for the delivery of patient care

Each competency category has a set of indicators which can be used to gauge integration by nurses.

Informatics Self-Assessment Tool

To assist nurses in applying these competencies to practice, a self-assessment tool based on the Nursing Informatics: Entry to Practice Competencies has been developed by the Canadian Nurses Informatics Association.

Purpose of tool

To help nurses:
- assess informatics competence
- identify areas that need to be developed/improved
- identify relevant learning opportunities to address gaps in knowledge

Using the tool

A rating scale is used for each indicator (1-5) to indicate the degree of knowledge possessed by the nurse as well as the frequency and confidence in demonstrating informatics skills. A score is provided for each competency category with a total score provided. This assessment tool can be used to identify opportunities for development as well as assess progress in knowledge attainment and skill development.

Informatics Self-Assessment Tool for Nurses

(Adapted from [Canadian Association of Schools of Nursing (CASN) Entry to Practice Competencies for Nurses](#))

Date of assessment:

> **Use this rating scale to assess your knowledge and skills within the competency categories:**
> 1. Have little or no knowledge.
> 2. Have some knowledge and have begun to demonstrate this capability some of the time.
> 3. Am knowledgeable and demonstrate this capability most of the time.
> 4. Am very knowledgeable and frequently demonstrate this capability with skill and confidence regardless of the complexity of the situation.
> 5. Have an excellent level of knowledge and demonstrate this capability with a superior degree of skill and ease. I act as an exemplary role model in this area and could teach this skill to others.

Competency	Indicator	Rating 1-5
Foundational Information and Communication Technologies (ICT) Skills	Demonstrates foundational knowledge in device use (computer use, handheld devices, keyboard, USB flash drives, etc.) and application use (electronic communication, multimedia presentation, word processing, social media tools, etc.)	
Information and Knowledge Management: Uses relevant information and knowledge to support the delivery of evidence informed patient care.	Performs search and critical appraisal of on-line literature and resources (e.g., scholarly articles, websites, and other appropriate resources) to support clinical judgement, and evidence-informed decision making	
	Analyses, interprets, and documents pertinent nursing data and patient data using standardized nursing and other clinical terminologies (e.g., ICNP, C-HOBIC, and SNOMEDCT, etc.) to support clinical decision making and nursing practice improvements.	
	Assists patients and their families to access, review and evaluate information they retrieve using ICTs (i.e., current, credible, and relevant) and with leveraging ICTs to manage their health (e.g., social media sites, smart phone applications, online support groups, etc.).	
	Describes the processes of data gathering, recording and retrieval, in hybrid or homogenous health records (electronic or paper), and identifies informational risks, gaps, and inconsistencies across the healthcare system.	
	Articulates the significance of information standards (i.e., messaging standards and standardized clinical terminologies) necessary for interoperable electronic health records across the healthcare system.	
	Articulates the importance of standardized nursing data to reflect nursing practice, to advance nursing knowledge, and to contribute to the value and understanding of nursing.	
	Critically evaluates data and information from a variety of sources (including experts, clinical applications, databases, practice guidelines, relevant websites, etc.) to inform the delivery of nursing care.	
Professional and Regulatory Accountability: Uses ICTs in accordance with professional and	Complies with legal and regulatory requirements, ethical standards, and organizational policies and procedures (e.g., protection of health information, privacy, and security).	
	Advocates for the use of current and innovative information and communication technologies that support the delivery of safe, quality care.	
	Identifies and reports system process and functional issues (e.g., error messages, misdirections, device malfunctions, etc.) according to organizational policies and procedures.	

regulatory standards and workplace policies.	Maintains effective nursing practice and patient safety during any period of system unavailability by following organizational downtime and recovery policies and procedures.	
	Demonstrates that professional judgement must prevail in the presence of technologies designed to support clinical assessments, interventions, and evaluation (e.g., monitoring devices, decision support tools, etc.).	
	Recognizes the importance of nurses' involvement in the design, selection, implementation, and evaluation of applications and systems in health care.	
Information and Communication Technologies: Uses information and communication technologies in the delivery of patient/client care.	Identifies and demonstrates appropriate use of a variety of information and communication technologies (e.g., point of care systems, EHR, EMR, capillary blood glucose, hemodynamic monitoring, tele-homecare, fetal heart monitoring devices, etc.) to deliver safe nursing care to diverse populations in a variety of settings.	
	Uses decision support tools (e.g., clinical alerts and reminders, critical pathways, web-based clinical practice guidelines, etc.) to assist clinical judgment and safe patient care.	
	Uses ICTs in a manner that supports (i.e., does not interfere with) the nurse-patient relationship	
	Describes the various components of health information systems (e.g., results reporting, computerized provider order entry, clinical documentation, electronic Medication Administration Records, etc.).	
	Describes the various types of electronic records used across the continuum of care (e.g., EHR, EMR, PHR, etc.) and their clinical and administrative uses.	
	Describes the benefits of informatics to improve health systems, and the quality of Inter-professional patient care.	

Scoring

Foundational ICTs Skills score:	**/ 5**
Information and Knowledge Management score:	**/ 35**
Professional and Regulatory Accountability:	**/ 30**
Information and Communication Technologies:	**/ 30**
Total:	**/100**

20 – 40	Significant knowledge development is indicated. Develop a learning plan to address needs.
41 – 70	Some knowledge and skill development is indicated. Focus on specific relevant areas.
71 – 100	Good knowledge base exists. Maintain and advance knowledge. When possible, share expertise with others**.**

Next Steps

Review the assessment tool for areas of strength and opportunities for development. Identify **3 areas** in which you could develop your informatics knowledge or skills in the upcoming year.

When considering learning strategies and opportunities to address these areas, complete the annual **CNIA Education Survey (attached to this email)** to help inform the selection of webinar topics by the Canadian Nursing Informatics Association.