

Integrating Informatics Competencies and Digital Health into Nursing Education

ARCASN Workshop

Moncton, N.B.

Thursday, June 8, 2017

Facilitators:

Lynn Nagle, PhD, RN, FAAN

Karen Furlong, PhD, RN



TIME	AGENDA
1200 - 1230	LUNCH
1230 - 1245	Welcome and introductions Self Assessment
1245 - 1315	Project overview <ul style="list-style-type: none">• Entry-to-practice informatics competencies• Nursing informatics teaching toolkit• Consumer Health Solutions Resource
1315 - 1445	Case study activity <ul style="list-style-type: none">• Whiteboard animation video with group discussion to explore the intersection of digital health and nursing care
1445 – 1500	BREAK
1500 - 1600	Case study activity (continued)
1600 – 1650	Discussion & networking

Workshop Objectives

Participants will...

- have a clear understanding of CASN's digital health support tools for undergraduate nursing education;
- leave with a deeper understanding of where and how digital health intersects with nursing care; and,
- learn strategies for integrating this content into nursing programs.

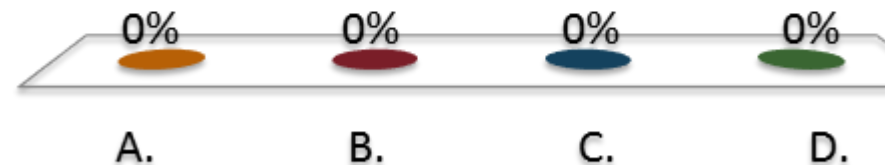
Nursing Informatics is most commonly defined as the intersection of:

- A. Computer, Nursing & Cognitive Science
- B. Computer, Information & Nursing Science
- C. Information, Nursing & Human Science
- D. Nursing, Cognitive & Information Science



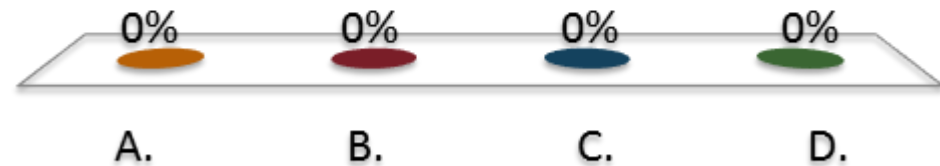
Nursing Informatics is primarily concerned with the:

- A. Management and transformation of nursing data, information and knowledge to support decision-making in practice settings
- B. Use of technology in to improve the quality of clinical care delivery
- C. Design of technology solutions for safer care
- D. Development and management of best practice guidelines to support clinical decision-making



Informatics in Nursing...

- A. Has been evolving for more than 50 years.
- B. Is a new area of nursing specialization.
- C. Requires a background in computer science.
- D. Is relevant to the practice of only a few nurses.





Canada
Health
Infoway

Inforoute
Santé
du Canada

CASN
ACESI



Nursing Informatics is...

...the "science and practice (that) integrates nursing, its information and knowledge, with management of information and communication technologies to promote the health of people, families, and communities worldwide."

(IMIA Special Interest Group on Nursing Informatics, 2009)



Canada
Health
Infoway

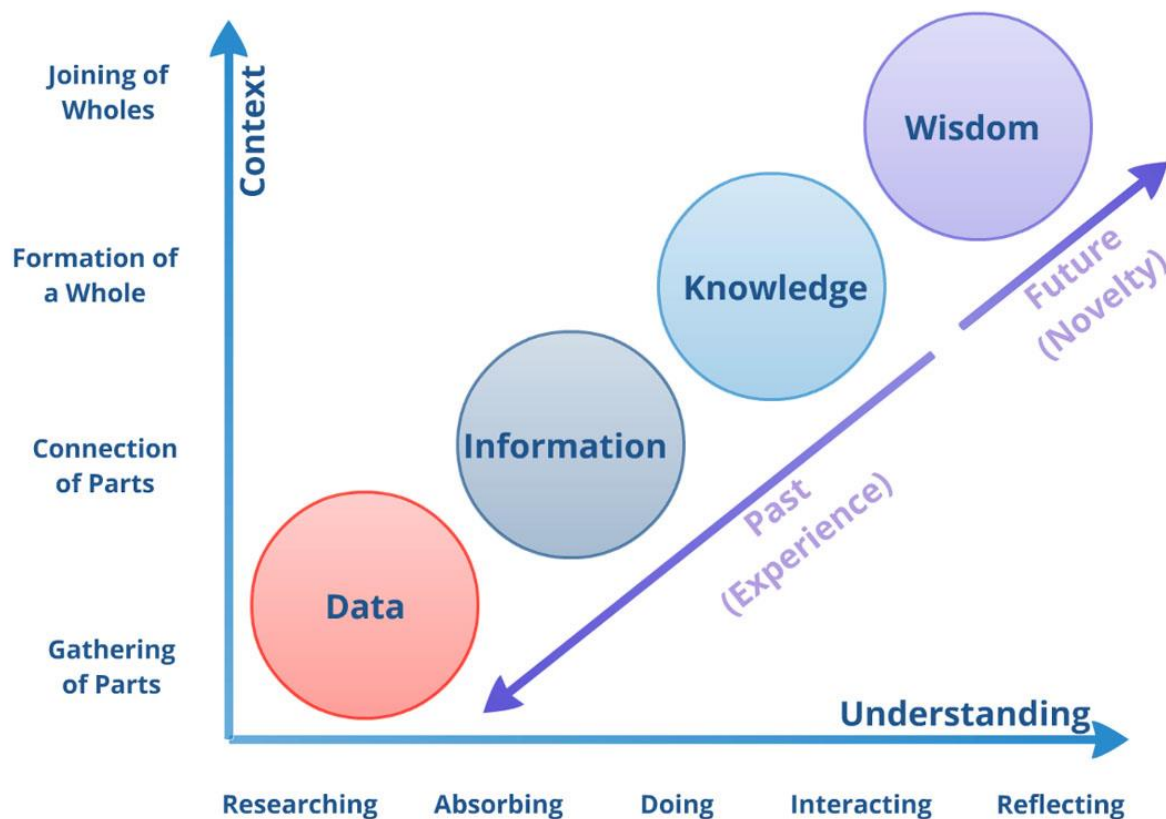
Inforoute
Santé
du Canada

CASN
ACESI



“Nursing informatics (NI) incorporates the science of nursing with information, technological, communication and analytical sciences to support the integration of data, information, knowledge, and wisdom into the provision of evidence-based nursing care”

(ANA, 2014)



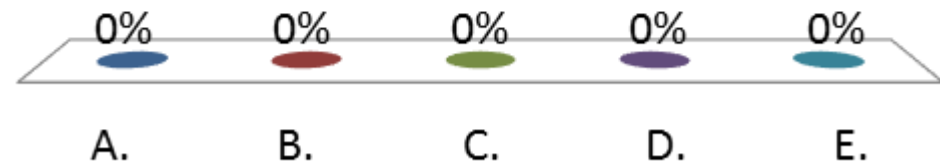
Bernstein, Jay H. (2009). The Data-Information-Knowledge-Wisdom Hierarchy and its Antithesis.

Proceedings North American Symposium on Knowledge Organization

Vol2. Available at: <http://dlist.sir.arizona.edu/2633>

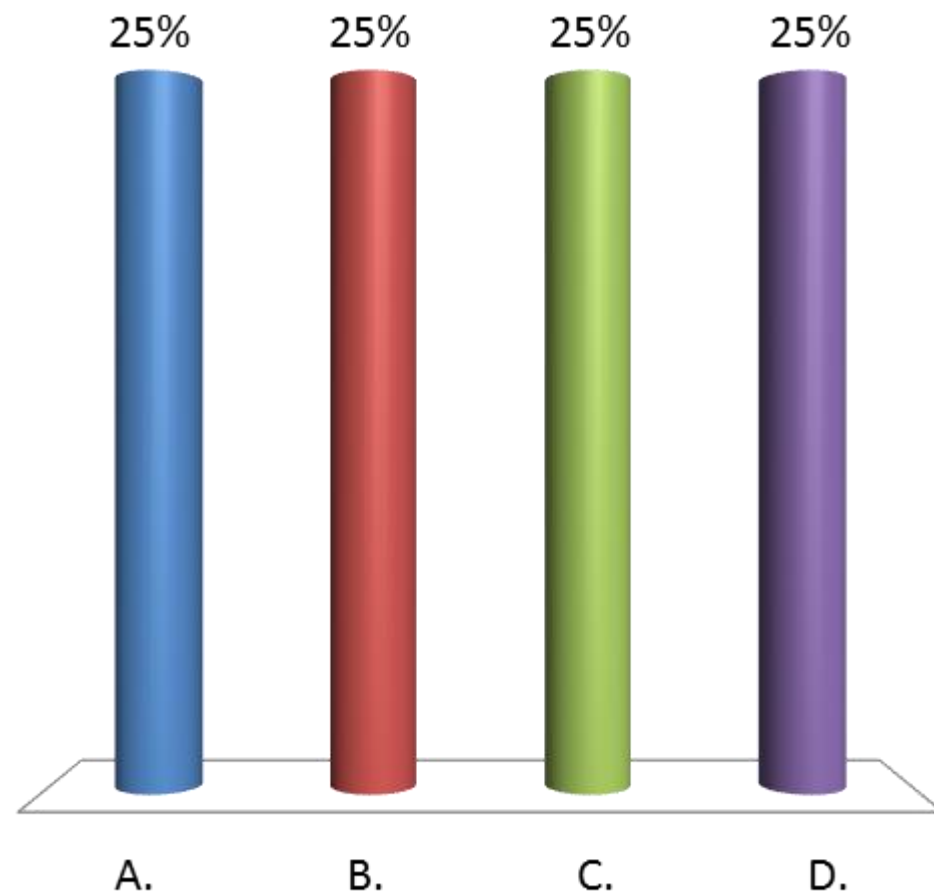
Digital Health includes:

- A. Robotic surgery
- B. Mobile health apps
- C. Remote healthcare delivery
- D. Electronic health records
- E. All of the above



Digital Health content in nursing curricula:

- A. Is generally well developed
- B. Needs further development
- C. Should be delivered by practice settings
- D. Is best developed as a practice specialty



A shift to consumers and digital health...

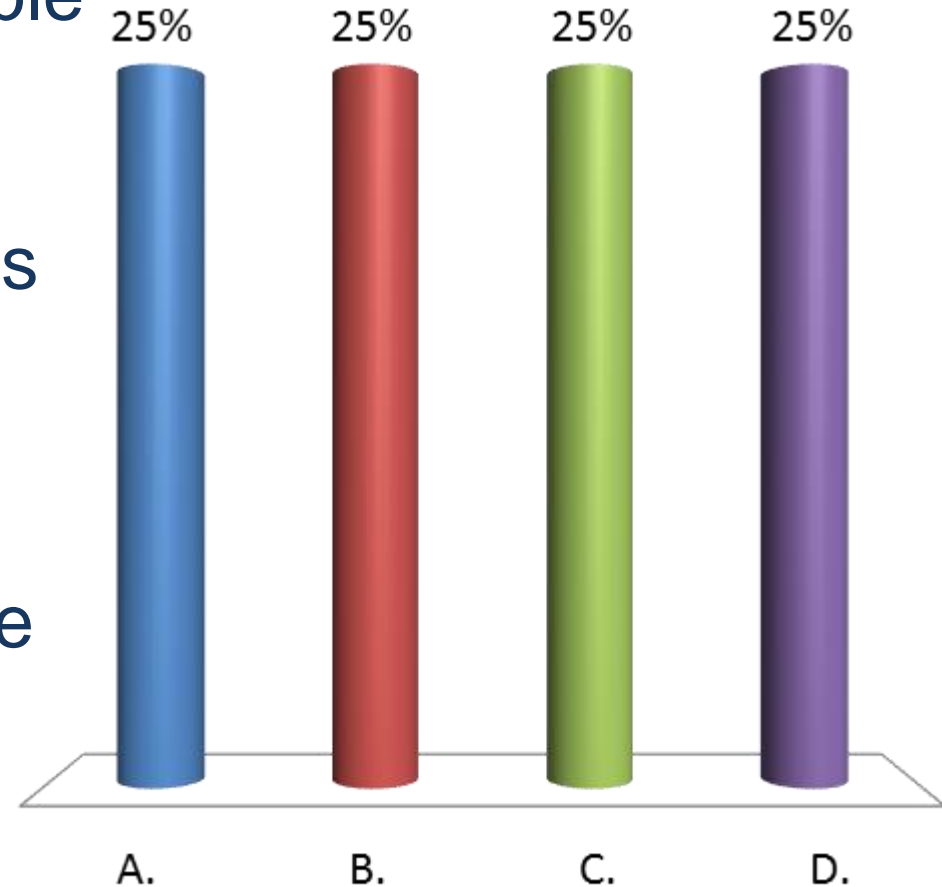
- Convergence of the digital and genomic revolutions with health and wellness, healthcare, living, and society (Hannah, 2016).
- *Digital health* is the empowerment of people to better track, manage, and improve their own and their family's health, live better, more productive lives, and improve society.
https://en.wikipedia.org/wiki/Digital_health Accessed February 16, 2016 based on *Topol, Eric. The creative destruction of medicine : how the digital revolution will create better health care. New York: Basic Books. ISBN 978-0465025503.*

Digital Health encompasses...

- Pervasive information & communication technologies (ICT) (e.g., EHRs, EMRs)
- Virtualization of care (telehomecare, mHealth, remote monitoring)
- Wearables, apps, sensors...
- Robotics
- Big Data
- Genomics

In 2017, Electronic Health Records in Canada are typically:

- A. Integrated and accessible within and across care settings
- B. Only used by physicians
- C. Limited in functional maturity
- D. Capturing all health information once for use by many



Longitudinal and
comprehensive

Electronic Health Record (EHR)

Controls the access
and use of information

Health Information Access Layer (HIAL)

Access to clinical
decisions supports

**Point of Services Applications:
Clinical Information Systems**

EMR

EPR

Other

**Clinical
Documentation**

Order Entry

**Medication
Administration**




Integrated access to detailed data

Results and images

Patient information

Medical alerts

<ul style="list-style-type: none">• Help• Logout	Patient Details  GME0000 Smith, Caroline Sex: Female DOB: 1940/01/01 Next of kin: John Smith Phone: 365-565-9090 Address: 19 Provincial Rd. Edmonton AB T6M 1R7	GP: N. Evans Phone: 333-465-5545 Address: 11 Terrence Ave. Edmonton, AB T4Y 8U9 Other Healthcare Providers <table><thead><tr><th>Name</th><th>Disp.</th><th>Last Encounter</th><th>Next encounter</th><th>Right of Access</th></tr></thead><tbody><tr><td>Diaz, Ellen</td><td>Cardiology</td><td>01/2006</td><td>07/2006</td><td>Y</td></tr><tr><td>Fournier, Janice</td><td>RN</td><td>08/2005</td><td></td><td>N</td></tr><tr><td>Cohen, Richard</td><td>Dermatology</td><td>08/2005</td><td>N</td><td></td></tr></tbody></table> Medications <table><thead><tr><th>Date</th><th>Medication</th><th>Prescriptions</th><th>Last Filled</th></tr></thead><tbody><tr><td>11/1989</td><td>Hydrochlorothiazide 25 mg</td><td>One tab at breakfast</td><td>12/2005</td></tr><tr><td>03/1999</td><td>Hydrochlorothiazide 5 mg</td><td>One tab twice daily</td><td>12/2005</td></tr><tr><td>01/2001</td><td>Metformin 500 mg</td><td>Two tabs twice daily</td><td>12/2005</td></tr><tr><td>03/2001</td><td>Atorvastatin 20 mg</td><td>One tab at supper</td><td>12/2005</td></tr><tr><td>02/2002</td><td>Atenolol 50 mg</td><td>One tab at breakfast</td><td>12/2005</td></tr><tr><td>02/2002</td><td>ECASA 325 mg</td><td>One tab at breakfast</td><td>12/2005</td></tr><tr><td>02/2006</td><td>Ramipril 10mg</td><td>One tab at supper</td><td>02/2006</td></tr><tr><td>06/2005</td><td>Cloxacillin 500 mg</td><td>Discontinued</td><td></td></tr><tr><td>05/2004</td><td>Beclomethasone Cream</td><td>Discontinued</td><td></td></tr></tbody></table> Encounter History <table><thead><tr><th>Date</th><th>Facility</th><th>Speciality</th><th>Clinician</th><th>Reason</th><th>Type</th></tr></thead><tbody><tr><td>02/2006</td><td>GP</td><td></td><td></td><td>Hypertension</td><td>-</td></tr><tr><td>01/2006</td><td>Cardio Assoc</td><td>Cardiology</td><td>Diaz, E.</td><td>CAD</td><td>Outpatient</td></tr><tr><td>12/2005</td><td>GP</td><td></td><td></td><td>Diabetes</td><td>-</td></tr><tr><td>10/2005</td><td>General Hosp</td><td>Dietician</td><td>Johnson, H.</td><td>Diabetes teaching</td><td>Outpatient</td></tr><tr><td>08/2005</td><td>GP</td><td></td><td></td><td>Diabetes</td><td>-</td></tr><tr><td>08/2005</td><td>GP</td><td></td><td></td><td>Cellulitis</td><td>-</td></tr><tr><td>08/2005</td><td>Home Visit</td><td>RN</td><td>Fournier, J.</td><td>Cellulitis</td><td>-</td></tr><tr><td>08/2005</td><td>GP</td><td></td><td></td><td>Cellulitis</td><td>-</td></tr><tr><td>07/2005</td><td>Polyclinic</td><td>Dermatology</td><td>Cohen, R.</td><td>Stasis dermatitis</td><td>Outpatient</td></tr></tbody></table> Immunizations <table><thead><tr><th>Type</th><th>Most Recent</th><th>Number Received</th></tr></thead><tbody><tr><td>Influenza</td><td>11/2005</td><td>7</td></tr><tr><td>Pneumovax</td><td>03/2005</td><td>1</td></tr><tr><td>Twinrix</td><td>08/2002</td><td>3</td></tr><tr><td>Td</td><td>04/1996</td><td>1</td></tr></tbody></table> Diabetic Indices <table><thead><tr><th>Type</th><th>Value</th><th>Most Recent</th></tr></thead><tbody><tr><td>A1C</td><td>0.071</td><td>12/2005</td></tr><tr><td>LDL</td><td>2.41</td><td>12/2005</td></tr><tr><td>BP</td><td>135/75</td><td>02/2006</td></tr><tr><td>Urine</td><td></td><td></td></tr><tr><td>Microalb</td><td>0.02</td><td>08/2005</td></tr><tr><td>Eye Exam</td><td></td><td>05/2005</td></tr><tr><td>Home Gluc (average)</td><td>7.4</td><td>01/2006</td></tr></tbody></table>	Name	Disp.	Last Encounter	Next encounter	Right of Access	Diaz, Ellen	Cardiology	01/2006	07/2006	Y	Fournier, Janice	RN	08/2005		N	Cohen, Richard	Dermatology	08/2005	N		Date	Medication	Prescriptions	Last Filled	11/1989	Hydrochlorothiazide 25 mg	One tab at breakfast	12/2005	03/1999	Hydrochlorothiazide 5 mg	One tab twice daily	12/2005	01/2001	Metformin 500 mg	Two tabs twice daily	12/2005	03/2001	Atorvastatin 20 mg	One tab at supper	12/2005	02/2002	Atenolol 50 mg	One tab at breakfast	12/2005	02/2002	ECASA 325 mg	One tab at breakfast	12/2005	02/2006	Ramipril 10mg	One tab at supper	02/2006	06/2005	Cloxacillin 500 mg	Discontinued		05/2004	Beclomethasone Cream	Discontinued		Date	Facility	Speciality	Clinician	Reason	Type	02/2006	GP			Hypertension	-	01/2006	Cardio Assoc	Cardiology	Diaz, E.	CAD	Outpatient	12/2005	GP			Diabetes	-	10/2005	General Hosp	Dietician	Johnson, H.	Diabetes teaching	Outpatient	08/2005	GP			Diabetes	-	08/2005	GP			Cellulitis	-	08/2005	Home Visit	RN	Fournier, J.	Cellulitis	-	08/2005	GP			Cellulitis	-	07/2005	Polyclinic	Dermatology	Cohen, R.	Stasis dermatitis	Outpatient	Type	Most Recent	Number Received	Influenza	11/2005	7	Pneumovax	03/2005	1	Twinrix	08/2002	3	Td	04/1996	1	Type	Value	Most Recent	A1C	0.071	12/2005	LDL	2.41	12/2005	BP	135/75	02/2006	Urine			Microalb	0.02	08/2005	Eye Exam		05/2005	Home Gluc (average)	7.4	01/2006
Name	Disp.	Last Encounter	Next encounter	Right of Access																																																																																																																																																													
Diaz, Ellen	Cardiology	01/2006	07/2006	Y																																																																																																																																																													
Fournier, Janice	RN	08/2005		N																																																																																																																																																													
Cohen, Richard	Dermatology	08/2005	N																																																																																																																																																														
Date	Medication	Prescriptions	Last Filled																																																																																																																																																														
11/1989	Hydrochlorothiazide 25 mg	One tab at breakfast	12/2005																																																																																																																																																														
03/1999	Hydrochlorothiazide 5 mg	One tab twice daily	12/2005																																																																																																																																																														
01/2001	Metformin 500 mg	Two tabs twice daily	12/2005																																																																																																																																																														
03/2001	Atorvastatin 20 mg	One tab at supper	12/2005																																																																																																																																																														
02/2002	Atenolol 50 mg	One tab at breakfast	12/2005																																																																																																																																																														
02/2002	ECASA 325 mg	One tab at breakfast	12/2005																																																																																																																																																														
02/2006	Ramipril 10mg	One tab at supper	02/2006																																																																																																																																																														
06/2005	Cloxacillin 500 mg	Discontinued																																																																																																																																																															
05/2004	Beclomethasone Cream	Discontinued																																																																																																																																																															
Date	Facility	Speciality	Clinician	Reason	Type																																																																																																																																																												
02/2006	GP			Hypertension	-																																																																																																																																																												
01/2006	Cardio Assoc	Cardiology	Diaz, E.	CAD	Outpatient																																																																																																																																																												
12/2005	GP			Diabetes	-																																																																																																																																																												
10/2005	General Hosp	Dietician	Johnson, H.	Diabetes teaching	Outpatient																																																																																																																																																												
08/2005	GP			Diabetes	-																																																																																																																																																												
08/2005	GP			Cellulitis	-																																																																																																																																																												
08/2005	Home Visit	RN	Fournier, J.	Cellulitis	-																																																																																																																																																												
08/2005	GP			Cellulitis	-																																																																																																																																																												
07/2005	Polyclinic	Dermatology	Cohen, R.	Stasis dermatitis	Outpatient																																																																																																																																																												
Type	Most Recent	Number Received																																																																																																																																																															
Influenza	11/2005	7																																																																																																																																																															
Pneumovax	03/2005	1																																																																																																																																																															
Twinrix	08/2002	3																																																																																																																																																															
Td	04/1996	1																																																																																																																																																															
Type	Value	Most Recent																																																																																																																																																															
A1C	0.071	12/2005																																																																																																																																																															
LDL	2.41	12/2005																																																																																																																																																															
BP	135/75	02/2006																																																																																																																																																															
Urine																																																																																																																																																																	
Microalb	0.02	08/2005																																																																																																																																																															
Eye Exam		05/2005																																																																																																																																																															
Home Gluc (average)	7.4	01/2006																																																																																																																																																															
Patient Record <ul style="list-style-type: none">• Summary• Lab Results• Diagnostic Images• Details• Notes or Comments	Alerts <ul style="list-style-type: none">• Allergies – Sulfa Drugs• Pap smear due• Td due• A1C above target Diagnosis <table><thead><tr><th>Diagnosis</th><th>State</th><th>Status</th></tr></thead><tbody><tr><td>Hypertension</td><td>11/1989</td><td>Ongoing</td></tr><tr><td>Diabetes</td><td>05/1996</td><td>Ongoing</td></tr><tr><td>Coronary Artery Disease</td><td>02/2002</td><td>Ongoing</td></tr><tr><td>Fasting lipids</td><td>12/2005</td><td></td></tr><tr><td>Exercise stress test</td><td>1/2005</td><td></td></tr><tr><td>Coronary angiogram / Cellulitis</td><td>02/2005</td><td>Resolved</td></tr><tr><td>Cholecystectomy</td><td>05/1981</td><td>Resolved</td></tr><tr><td>Cesarian section</td><td>01/1967</td><td>Resolved</td></tr></tbody></table>	Diagnosis	State	Status	Hypertension	11/1989	Ongoing	Diabetes	05/1996	Ongoing	Coronary Artery Disease	02/2002	Ongoing	Fasting lipids	12/2005		Exercise stress test	1/2005		Coronary angiogram / Cellulitis	02/2005	Resolved	Cholecystectomy	05/1981	Resolved	Cesarian section	01/1967	Resolved																																																																																																																																					
Diagnosis	State	Status																																																																																																																																																															
Hypertension	11/1989	Ongoing																																																																																																																																																															
Diabetes	05/1996	Ongoing																																																																																																																																																															
Coronary Artery Disease	02/2002	Ongoing																																																																																																																																																															
Fasting lipids	12/2005																																																																																																																																																																
Exercise stress test	1/2005																																																																																																																																																																
Coronary angiogram / Cellulitis	02/2005	Resolved																																																																																																																																																															
Cholecystectomy	05/1981	Resolved																																																																																																																																																															
Cesarian section	01/1967	Resolved																																																																																																																																																															

Medication history

Interactions

Problem list

Immunization

Canadian Association of Schools of Nursing

The national voice for nursing education, research, and scholarship and represents baccalaureate and graduate nursing programs in Canada.



Canada
Health
Infoway

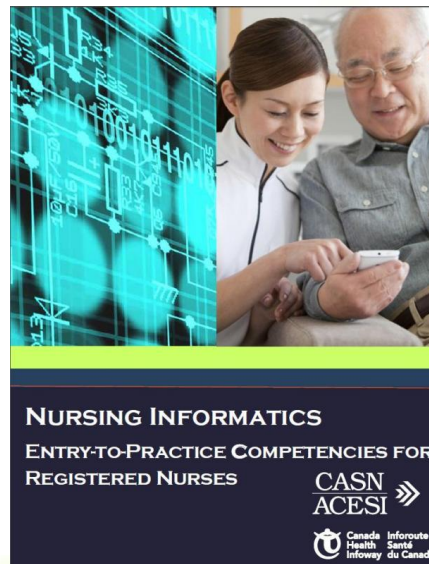
Inforoute
Santé
du Canada

CASN
ACESI



DIGITAL HEALTH NURSING INFORMATICS TRAINING PROJECT

<http://www.casn.ca/education/digital-healthnursing-informatics-casn-infoway-nurses-training-project/>



Canada Health Infoway (Infoway)

A not-for-profit corporation funded to...

With their partners, *Infoway* helps accelerate the development, adoption and effective use of digital health solutions across Canada





Project Background

- Since 2011, CASN and Canada Health Infoway have partnered on a series of projects to enable the integration of digital health into nursing curricula
- Developed a series of guideline documents and tools to support faculty through a Digital Health Nursing Faculty Peer Leader Network



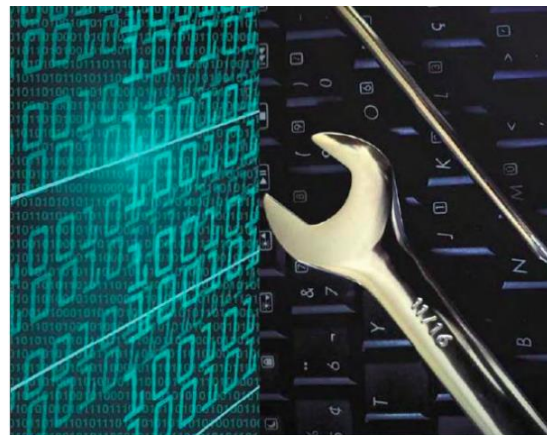
NURSING INFORMATICS

ENTRY-TO-PRACTICE COMPETENCIES FOR
REGISTERED NURSES

CASN
ACESI



Canada
Health
Infoway



NURSING INFORMATICS TEACHING TOOLKIT:
SUPPORTING THE INTEGRATION OF THE CASN
NURSING INFORMATICS COMPETENCIES INTO
NURSING CURRICULA

CASN
ACESI



Canada
Health
Infoway



CONSUMER HEALTH SOLUTIONS:
A TEACHING AND LEARNING
RESOURCE FOR NURSING
EDUCATION

CASN
ACESI



Canada
Health
Infoway

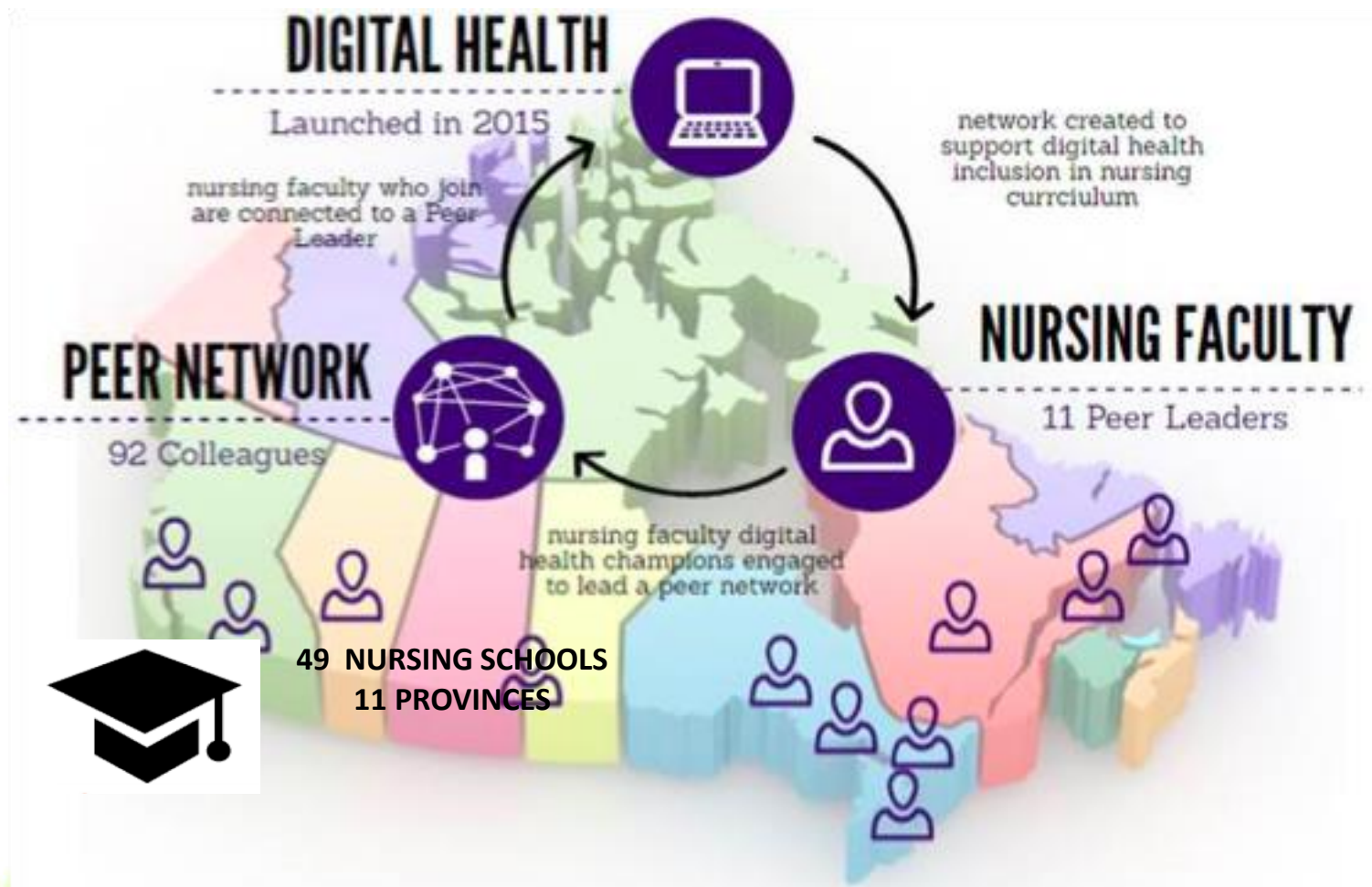


<http://www.casn.ca/2014/12/casn-entry-practice-nursing-informatics-competencies/>

<http://casn.ca/wp-content/uploads/2014/12/in-fowaytoolkit.jpg>

<http://www.casn.ca/wp-content/uploads/2015/03/file0002120440786.jpg>

The Digital Health Nursing Faculty Peer Network



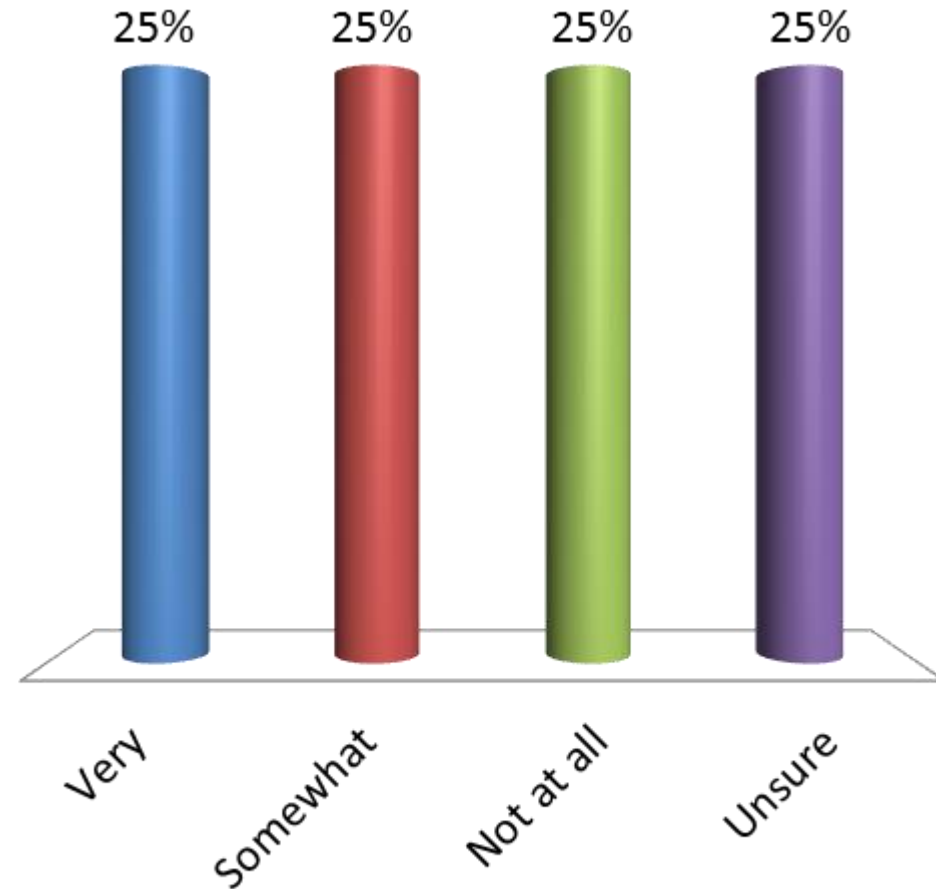
I am _____ familiar with the CASN
Entry-to-Practice Informatics Competencies.

A. Very

B. Somewhat

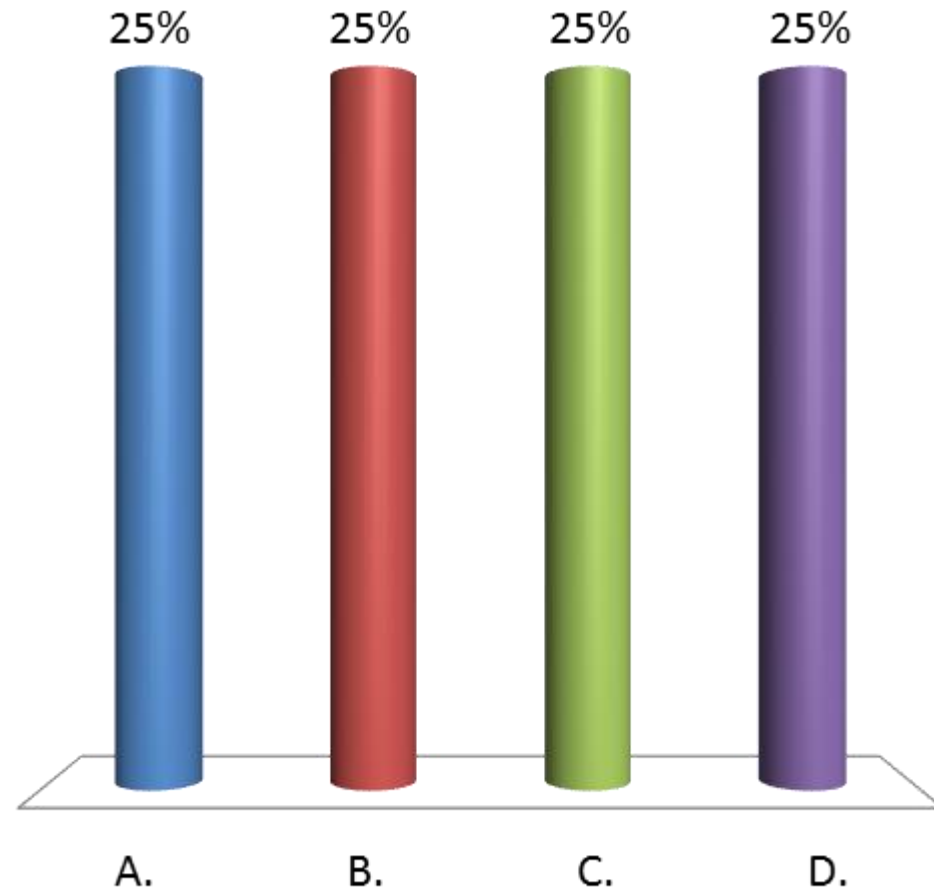
C. Not at all

D. Unsure



The CASN Entry-to-Practice Informatics Competencies include which of the following:

- A. Use of information and communication technologies
- B. Information and knowledge management
- C. Professional and regulatory accountabilities
- D. All of the above



CASN Over-Arching Nursing Informatics Competency

Students use information and communication technologies to support information synthesis in accordance with professional and regulatory standards in the delivery of patient/client care.

http://www.casn.ca/en/Whats_new_at_CASN_108/items/123.html

CASN Entry-to-Practice Informatics Competencies

Foundational

- Uses hardware (PCs, tablets, mobiles, modems, blue-tooth, flashdrives)
- Uses applications (email, texting, podcasts, blogs, social networking, word processing, spreadsheets)

Competency 1: Information and Knowledge Management

- Uses relevant information and knowledge to support the delivery of evidence-informed patient care.

Competency 2: Professional and Regulatory Accountability

- Uses ICTs in accordance with professional and regulatory standards and workplace policies.

Competency 3: Information and Communication Technologies

- Uses information and communication technologies in the delivery of patient/client care.

SELF ASSESSMENT

Consider each of the abilities within the three entry to practice nursing informatics competencies as defined by CASN.



Information and Knowledge Management

- Lit reviews, scholarly articles, evidence-informed decision making
- Uses patient data to support decision making
- Assist patients and families to use ICTs to manage their health
- Understands EHRs
- Understands importance of using standardized nursing data to advance knowledge and articulate nursing
- Evaluates data from multiple sources to inform practice

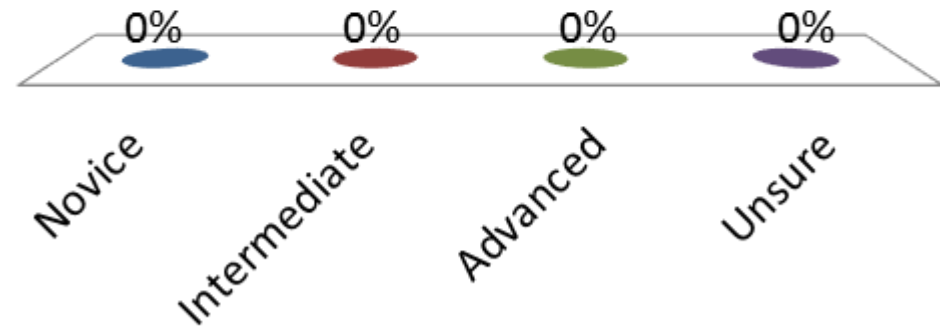
Information and Knowledge Management

A. Novice

B. Intermediate

C. Advanced

D. Unsure



Professional and Regulatory Accountability

- Privacy and confidentiality
- Advocates for ICTs to deliver safe quality patient care
- IDs and reports system failures/problems
- Functions appropriately if system unavailable
- Uses professional judgment with ICTs
- Recognizes need for nurse input into systems

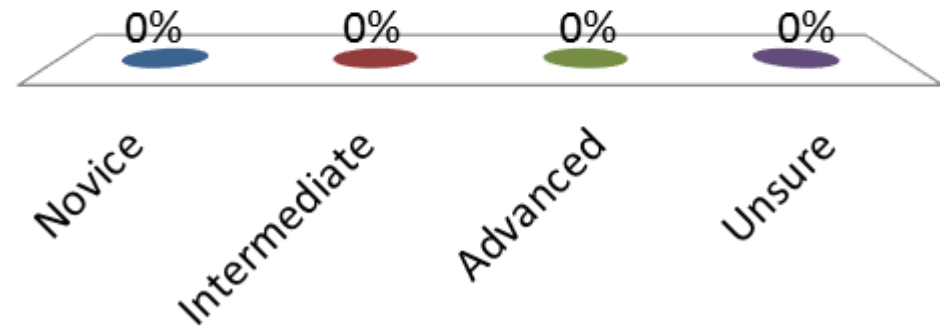
Professional and Regulatory Accountability

A. Novice

B. Intermediate

C. Advanced

D. Unsure





Information and Communication Technologies (ICT)

- Identifies and uses variety of ICTs (hemodynamic monitoring, EHRs, point of care devices)
- Uses decision support tools to assist judgment and deliver safe quality care
- Uses ICTs to support not interfere with nurse-patient relationships

Information and Communication Technologies (cont.)

- Describes variety of information systems (CPOE, clinical documentation, MARs)
- Knows difference between EHR, PHR, EMR
- Describes benefit of informatics to improve health systems and quality of interprofessional patient care

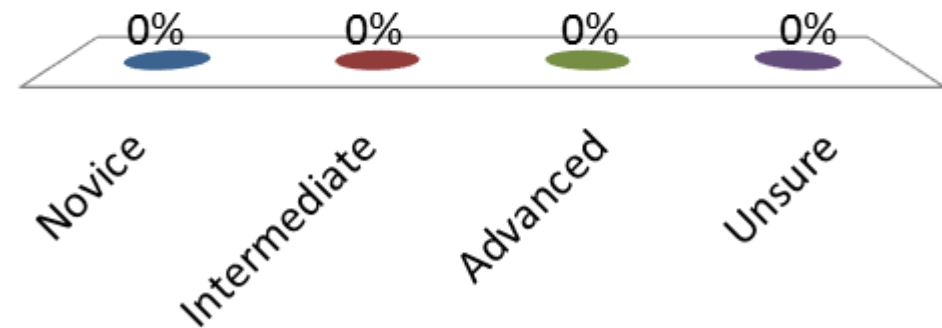
Information and Communication Technologies (ICTs)

A. Novice

B. Intermediate

C. Advanced

D. Unsure



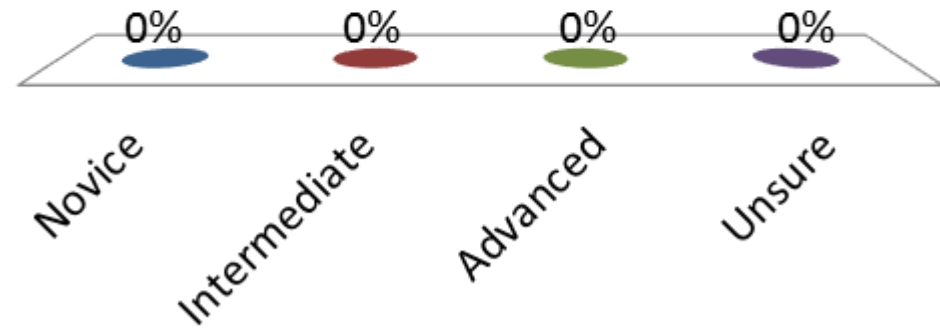
Overall, as a nurse educator I rate my ability to integrate basic informatics content into the nursing curriculum as:

A. Novice

B. Intermediate

C. Advanced

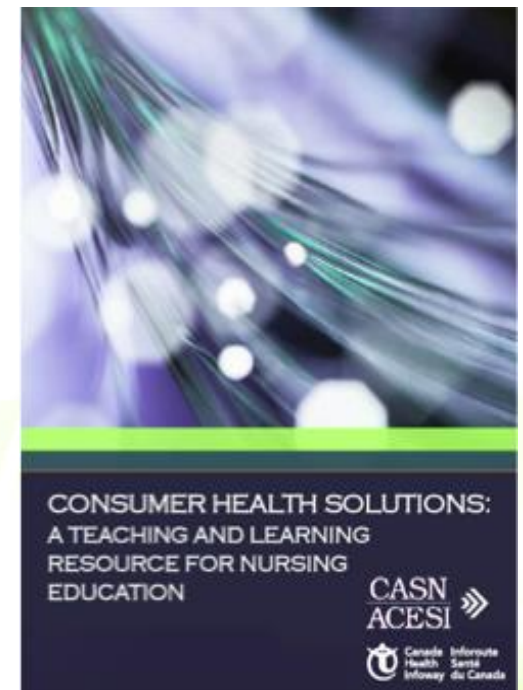
D. Unsure



Consumer Health Solutions

Integration of digital and consumer health solutions (CHS) content in nursing education

- Increased faculty knowledge about CHS
- Readiness to integrate digital health/CHS into courses/curriculum
- Presence of learning opportunities

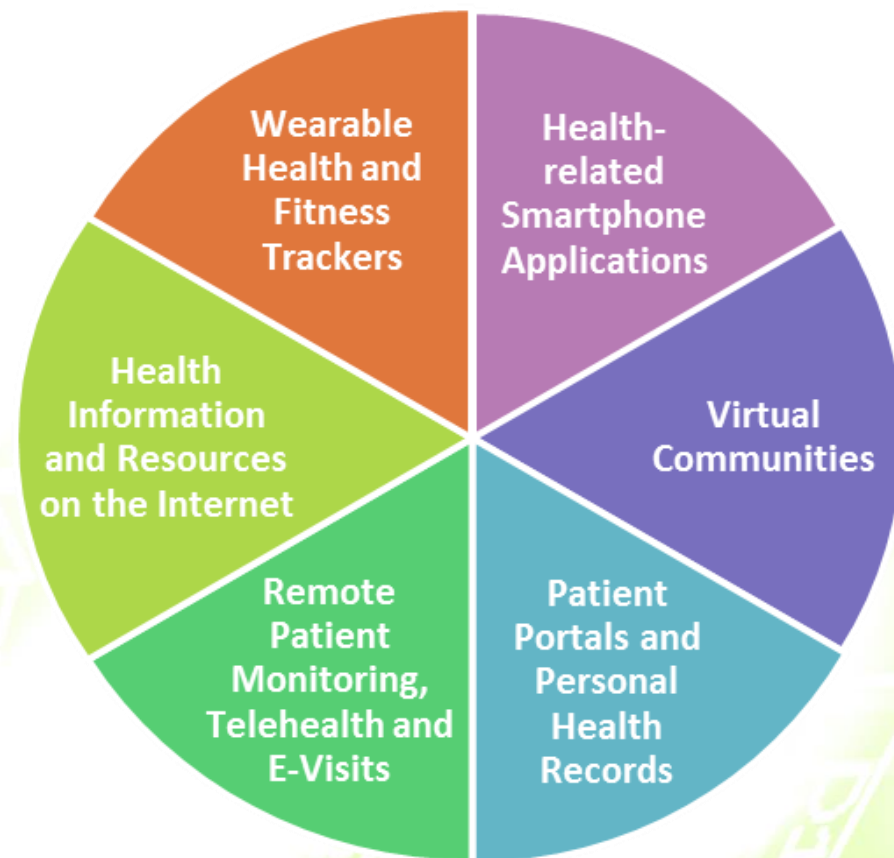


<http://www.casn.ca/wp-content/uploads/2015/03/file0002120440786.jpg>



Consumer Health Solutions Resource

Detailed exploration of 6 burgeoning areas of consumer health solutions and accompanying learning activities for curricular integration.



Sample Learning Activity

Section 2: Health-related Smartphone Applications

Health-related Smartphone Applications		
Activity Overview	Learning Activity Description	Learning Outcomes
Learning Environment(s)	How is the public using health-related smartphone applications?	Defines health-related smartphone applications.
Classroom	<p>Provide students with the article <i>Health-e-Apps: A project to encourage effective use of mobile health applications</i> (Ho, 2013). Ask students to survey how many of their peers, nursing faculty, or even neighbours in their community use these tools. What motivates them to use these applications? Do they share the information they track with their health care professional, why or why not? Students engage in class discussion about the benefits and challenges associated with the use of mobile health applications.</p>	<p>Describes how to engage clients in discussions about the benefits and risks of health-related smartphone applications.</p>
Target Students		
Years 1 and 2		
Key Concepts		
Health-related smartphone applications; Health promotion		
	Evaluation Suggestions	Describes ways to leverage health-related smartphone applications to promote health.
	Observation of group discussion	
	Resources	
Indicators	<p>Ho, K. (2013). Health-e-Apps: A project to encourage effective use of mobile health applications. <i>BC Medical Journal</i>, 55(10) 458-460. Retrieved from http://www.bcmj.org/newsnotes/health-e-apps-project-encourage-effective-use-mobile-health-applications</p>	
1.3, 1.7 2.1, 2.2, 2.5, 2.6 3.1, 3.3, 3.6		



In Clinical Practice... **the Promise...**

- Increased patient empowerment & engagement
- Information continuity
- Continuity of care
- Improved quality & safety
- Personalized care
- Practice based evidence

The Peril...

- Technology becoming the focus - depersonalization
- Over-reliance on technology
- Negative impact on critical thinking and inquiry
- Oversimplification of clinical context in the face of clinical decision support tools
- Privacy breaches

In Nursing Education... **the Promise...**

- Engaged learners
- Active learning
- Supportive of student to graduate transition
- Alignment with digitally enabled practice environments



Canada
Health
Infoway

Inforoute
Santé
du Canada

CASN
ACESI



The Peril...

- Loss of alignment with practice
- Lack of student engagement
- Curriculum irrelevance
- Faculty obsolescence



DISCUSSION TIME





Canada
Health
Infoway

Inforoute
Santé
du Canada

CASN
ACESI



COFFEE BREAK





Canada
Health
Infoway

Inforoute
Santé
du Canada

CASN
ACESI



WHITEBOARD ANIMATION

CASN
ACESI



Canada
Health
Infoway

Inforoute
Santé
du Canada

Digital Health Nursing
Faculty Peer Leaders

**NURSING CARE
IN A DIGITAL WORLD**



ADDITIONAL RESOURCES





Canada
Health
Infoway

Inforoute
Santé
du Canada

CASN
ACESI



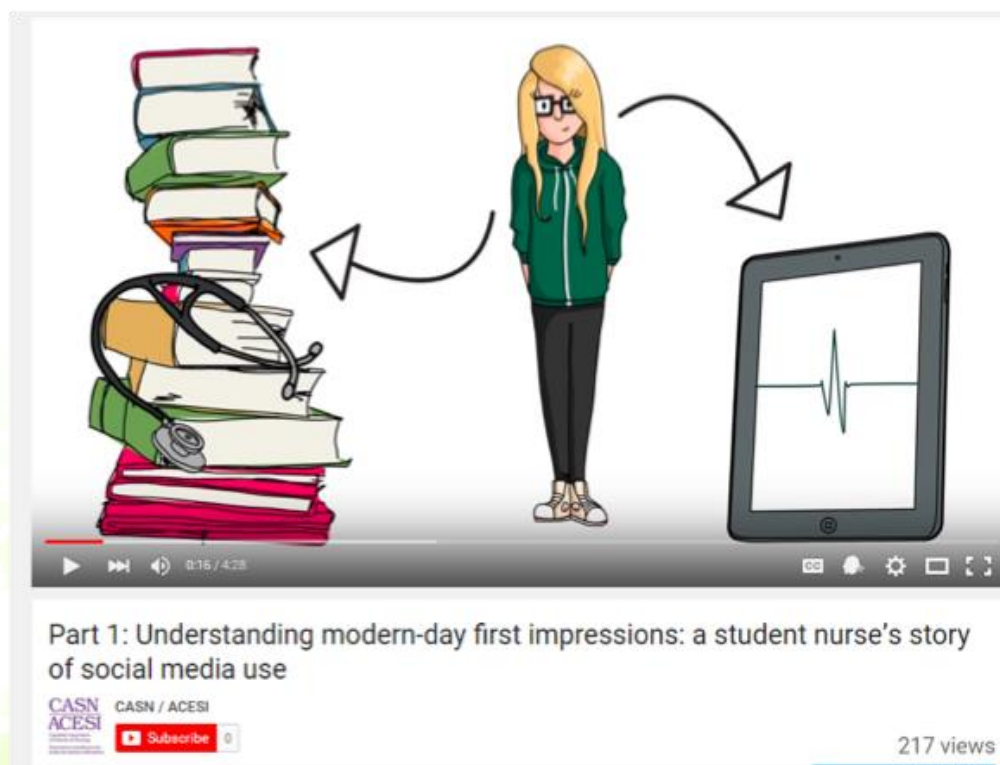
Nursing Informatics in Canada

Nursing Informatics in CANADA



<https://cnia.ca/>

Whiteboard Animation: Classroom Learning Activity



48

<http://www.casn.ca/2016/03/whiteboard-animation-student-nurses-story-social-media-use/>



WHITEBOARD ANIMATION



THE VALUE OF CLINICAL DATA STANDARDS FOR NURSING



Digital Health Nursing
Faculty Peer Leaders

https://youtu.be/u_ZI2_JDxW0



CNIA-CNA Joint Position Statement on Nursing Informatics

Nursing informatics competencies are essential for nurses in all roles to function in complex, contemporary health-care environments.

Moreover, there is a need to have nurses with a specialization in informatics to support decision-making relevant to the profession's use of information and technology in digitally connected health environments.



Canada
Health
Infoway

Inforoute
Santé
du Canada

CASN
ACESI



Canadian Nursing Informatics Association

www.cnia.ca



CNA-CNIA Joint Position Statement on Nursing Informatics

<https://www.cna-aiic.ca/~media/cna/page-content/pdf-fr/nursing-informatics-joint-position-statement.pdf?la=en>



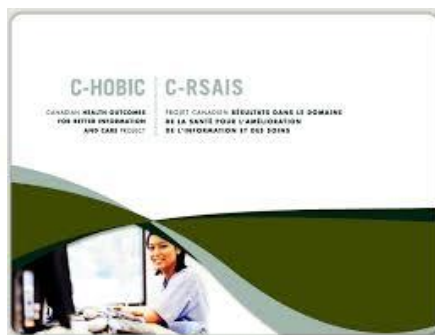
Technology Informatics Guiding Educational Reform

<http://www.thetigerinitiative.org>



International Classification of Nursing Practice (ICNP)

<http://www.icn.ch/what-we-do/international-classification-for-nursing-practice-icnpr/>



Canadian Health Outcomes for Better Information and Care (C-HOBIC)

http://www.c-hobic.cna-aiic.ca/about/default_e.aspx



Canada Health Infoway

www.infoway-inforoute.ca



Canadian Institute for Health Information

www.cihi.ca

ASSOCIATION CANADIENNE
D'INFORMATIQUE DE LA SANTÉ



COACH – Canada's Health Informatics Organization

www.coachorg.ca



Position Statements & Guidelines on Social Media

Nurses Association of New Brunswick. (2012). Practice Guidelines: Ethical and responsible use of social media technologies. Fredericton, NB: Author.	http://www.nanb.nb.ca/media/resource/NANB-PracticeGuideline-SocialMedia-E.pdf
Canadian Nurses Association. (2012). When Private Becomes Public: The ethical challenges and opportunities of social media. Ottawa, ON: Author.	https://www.cna-aic.ca/~media/cna/page-content/pdf-en/ethics_in_practice_feb_2012_e.pdf?la=en
Canadian Nurses Protective Society. (July 2012). Social Media. infoLAW, 19(3), 1-2.	http://www.cnps.ca/upload-files/pdf_english/social_media.pdf
College of Registered Nurses of British Columbia. (2012). Social Media: Professionalism, nurses and social media.	https://www.crnbc.ca/Standards/Confidentiality/Pages/SocialMedia.aspx
College of Registered Nurses of Nova Scotia. (2012). Position Statement: Social Media. Halifax, NS: Author.	https://crnns.ca/wp-content/uploads/2015/02/PositionStatement_SocialMedia.pdf
College & Association of Registered Nurses of Alberta. (2011). CARNA Social Media Guidelines . Calgary.	http://www.nurses.ab.ca/Carna-Admin/Uploads/Social_Media_Guidelines.pdf
Association of Registered Nurses of Newfoundland and Labrador. (2012). Position Statement: Social Media . St John's.	http://www.arannl.ca/documents/publications/Position_Statement_on_Social_Media_2013.pdf

Social Media

NurseONE : “Teaching Health Information Science for Health Care Instructors Handbook activity topic 1 to 4”, by Pasquale Fiore (2013)

http://www.nurseone.ca/~media/nurseone/files/en/health_sciences_information_course%20announcement_en.pdf





Canada
Health
Infoway

Inforoute
Santé
du Canada

CASN
ACESI



Thank You!

Karen Furlong

kfurlong@unb.ca

Lynn Nagle

Lynn.nagle@utoronto.ca