

HEALTH INFORMATICS: THE FOREFRONT OF TECHNOLOGICAL INNOVATION IN HEALTH CARE.

Debra Duncan



Agenda

- 1. Informatics Definition/Introduction
- 2. Legislation
- 3. Forecast
- 4. Innovation/Outcomes
- 5. Titles
- 6. Roles & Competencies
- 7. Day in the Life
- 8. Continuing Education
- 9. Walden Overview
- 10. Walden Informatic Programs
- 11. Scholarships & Grants
- 12. Q & A





Introduction/Definition

You would be hard-pressed to find an aspect of medicine that has yet to be touched by the mass collection and analysis of data that has been ushered in by the Information Age.



50% of all dollars spent on healthcare is wasted on inefficient processes. (University of Illinois)



Introduction/Definition

Nurses on the frontline of patient care feel the impact of changes in best practices more than anyone.





UNDERSTANDING THE HITECHACT

Legislation









Bureau of Labor - 2010 – 2020 - 21% growth - 500,000 new jobs

Forecast

- HIMSS 2014 average salary over \$100K; nurse informatics
 specialist \$66K; director of nurse informatics \$140K
- UK Healthcare new EHR will generate 225 new informatics jobs!





Innovation/Outcomes Seven Ways Informatics Impacts Healthcare

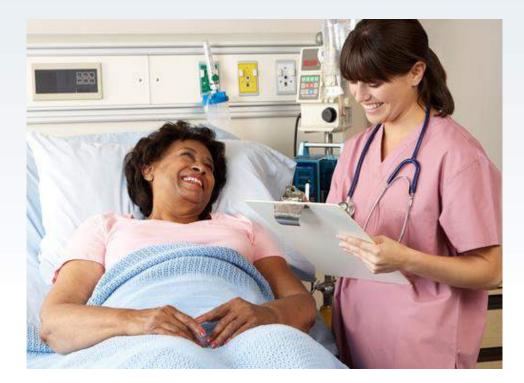
1.Improves coordination 2.Saves money **3.**Manages population health 4. Involves patient 5. Improves efficiency 6.Increases medical knowledge 7.Expands margin of care



Innovation/Outcomes Case Study

UnityPoint Health

- 83% reduction number of clicks and keyboard interactions
- 150 hours saved annually
- 58% improvement number of patients receiving pulmonary functioning testing







Titles & Fields

WALDEN UNIVERSITY <u>A higher degree.</u> A higher purpose.

Roles & Competencies

 Interpersonal skills
Ability to problem solve
Programming knowledge
Communication skills
Ability to work with health data systems

Five Top Skills Needed





7:40 AM – Arrive to work

8 AM -Check calendar

8: 15 AM Check and answer emails that need immediate attention

9 AM – Check deadlines to prioritize work

9:15 AM – Check to-do list

9:30 AM – Design and program system according to client needs based on upcoming deadline

9:45 AM – Check and answer emails

10 AM – Meeting

12 Noon – Eat lunch at desk while answering emails

12:30 PM – Continue with programming the system

12:45 PM – Answering questions from colleagues or answering emails

12:55 PM – Continue with programming the system

2 PM – Finished programming and now documenting what I just build on spreadsheet

4 PM – Meeting either formal or informal with individual

team members

5 PM – Eat dinner

5:30 PM – Look over next day's schedule

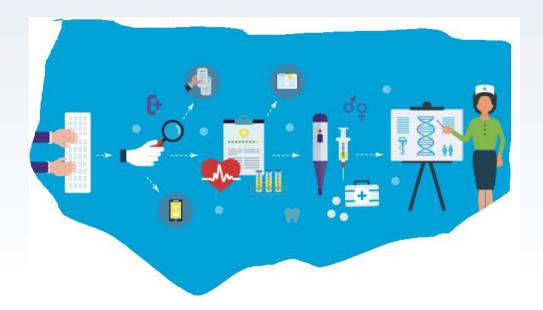
5:45 PM – Design and build system for next deadline

7:45 PM – Entering in my time worked on the project for the day

http://mastersinhealthinformatics.com/2011/a-day-in-the-life-of-a-

wrse-informaticist/

Day in the Life





Continuing Education

The ANCC offers **board certification** for nursing informatics. Eligibility for certification include:

- Hold a bachelor's degree or higher
- Have practiced as a registered nurse full time for two years (or part time equivalent)
- Have completed 30 hours of continuing education in nursing informatics within three years before certification
- Have met one of the following practice hour requirements:
 - Have practiced a minimum of 2,000 hours in informatics nursing within the prior three years
 - Have practiced a minimum of 1,000 hours in informatics nursing in the last three years and have completed a minimum of 12 semester hours of credit in informatics courses that are part of a graduate-level nursing informatics program
 - Have completed a graduate program in nursing informatics that includes a minimum of 200 hours of supervised practicum
- Certification is by exam, and the credential is valid for five years.



A **PIONEER** in Online Education

Relevant LEARNING

PROGRAMS

Walden offers **over 85** doctoral, master's, and bachelor's programs—including more than 435 specializations and concentrations. We also offer more than 55 certificates.

ACCREDITED Institution

WALDEN UNIVERSITY

In 1990 Walden was **accredited** by The Higher Learning Commission, just 20 years after its founding. Specialized accreditation demonstrates programs meet rigorous accreditation standards and prepare students for success.

Global REACH

COUNTRIES

Walden is the flagship online university in the *Laureate International Universities* network and has more than 165,000 students and alumni from all 50 U.S. states and more than 180 countries.

TEMPO Learning By Walden

Walden offers its **competencybased education** (CBE) learning experience through Tempo Learning.

Focus on graduate education in KEY PROGRAM AREAS: Nursing, Health Sciences, Counseling, Social Work and Human Services, Psychology, Education, Public Policy and Administration, Management, and Information Technology

Curriculum: BS in Healthcare Management

Master the business side of healthcare and move your career forward in a thriving, growing field.

Key Information

Next Start Date August 26, 2019

Transfer Credits Up to 135 credits

Admission Requirements 🗸

Current Savings

Receive a \$6,000 grant if you have an Associate degree or higher, reside in the U.S., and start this program on August 26, 2019. Additional grants available based on your amount of Transfer of Credit. Contact one of our enrollment advisors to learn more.



IIVERSITY higher purpose.

Course-Based BS in Healthcare Management

Curriculum Component	Requirements	Cost	Total*
Tuition	181 total quarter credit hours	\$325 per quarter hour	\$58,825
Technology Fee	Per quarter	\$150	\$2,400
		Total	\$61,225
		·0)0).	

Tuition for the competency-based BS in Healthcare Management is \$2,350 per three-month subscription period, inclusive of technology fees.

MS in Information Technology Degree Specializations

Walden's MS in Information Technology program offers a variety of specializations to help you meet your personal and professional goals.

Big Data Analytics	Health Informatics	Information Assurance and Cyber Security	
Informati	on Systems Softwa	are Engineering	
the later of the second		and the second s	

Curriculum Component	Requirements	Cost	Total*
Tuition	30 total semester credit hours	\$865 per semester hour	\$25,950
Technology Fee	Per semester	\$200	\$1,000
		Total	\$26,950
		Transfer up to 15 credits	\$12,975
		Total with Transfer Credits [†]	\$13,575

*The tuition reflects the minimum time to completion. Time to completion varies by student, depending on individual progress and credits transferred, if applicable. For a personalized estimate of your time to completion, call an enrollment advisor at <u>844-675-0896</u>.

*Tuition and fees are subject to change. Books and materials are not included and may cost between \$1,000 and \$1,400.

[†]Maximum transfer credit total includes reduction in technology fee as related to reduced number of courses over time.

Completion Requirements

- 30 total semester credits
- · Core courses (12 sem. cr.)
- Specialization courses (18 sem. cr.)

This sequence represents the minimum time to completion. Time to completion will vary by student, depending on individual progress and credits transferred, if applicable. For a personalized estimate of your time to completion, call an enrollment advisor at <u>844-767-9524</u>.

Core Courses

Course Code		
ITEC 6111	Information Technology in the Organization	(3 sem. cr.)
ITEC 6115	Computer Networking and Operating Systems	(3 sem. cr.)
TTEC 6145	Enterprise Database Design	(3 sem. cr.)
ITEC 6030	Principles of Programming	(3 sem. cr.)

Specialization Courses

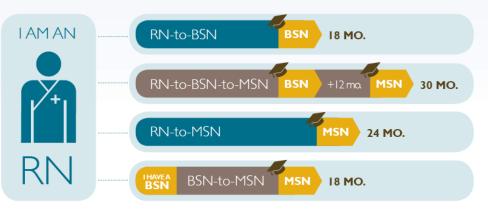
Course Code	Course	Credits
ITEC 6712	Business Architecture and Process	(3 cr.)
ITEC 6721	Organizational and Social Dimensions of Information Systems	(3 sem. cr.)
ITEC 6713	Business Strategy for Competitive Advantage	(3 sem. cr.)
ITEC 6600	Foundations of Health Informatics	(3 sem. cr.)
ITEC 6631	Information Systems Management	(3 sem. cr.)
ITEC 6645	Representation of Health Information	(3 sem. cr.)

WALDEN UNIVERSITY - NURSING PROGRAMS

Full suite of degree level offerings:

Bachelor's, Master's, Post Master's Certificates, Doctoral PhD in Nursing and CCNE-accredited DNP, MSN, and BSN with over 14,000 students.

Walden offers multiple pathways to a nursing degree, depending on your goals and where you are in your nursing education journey.



Time to completion may vary by student depending on individual progress and credits transferred, if applicable.

WALDENU.EDU

BSN Pathways

- RN-BSN completion program
- NEW Competency Based RN to BSN
- Accelerated into Masters (RN-BSN-MSN)

MSN Specializations Available:

- Nursing Executive
- Nursing Education
- Nursing Informatics
- Nursing Public Health
- Adult-Ğerontology Nursing Practitioner
- Adult-Gerontology Acute Care Nursing Practitioner
- Family Nurse Practitioner
- Psychiatric-Mental Health Nurse Practitioner





WALDEN UNIVERSITY A higher degree. A higher purpose.

Master of Science in Nursing (MSN) - Nursing Informatics

Learn how to integrate nursing science, computer science, and information science to effectively manage and communicate data in your field with our online MSN Nursing Informatics specialization.

Key Information

Next Start Date August 26, 2019

Accreditation CCNE Accredited

Transfer Credits var

Admission

Current Savings

Receive up to a \$7,500 Scholarship if you reside in the U.S. and start this program on August 26, 2019. Contact one of our enrollment advisors to learn more.

BSN Track

Curriculum Component	Requirements	Cost	Total*
Tuition	53 total quarter credit hours	\$450 per quarter hour	\$23,850
Technology Fee	Per quarter	\$150	\$900
		Total	\$24,750
		Trausfer up to 25 credits	\$11,700
		Total with Maximum Transfer Credits $^{\rm T}$	\$13,050

RN Track

			Total*
Tuition	26 total RN Foundational quarter credit hours	\$395 per quarter hour	\$10,270
	53 total MSN quarter credit hours	\$450 per quarter hour	\$23,850
Technology Fee	Per quarter	\$150	\$1,200
		Total	\$35,320
		Transfer up to 35 credits*	\$15,800



Scholarships and Grants





More Information

- 1. Name
- 2. Phone
- 3. Email
- 4. City/State
- 5. Program of Interest
- Debra.duncan@waldenu.edu

919-200-3489







"Data that is loved tends to survive." – Kurt Bollacker

https://www.cisc-llc.com/7-ways-health-informaticstransforms-health-care/

https://medium.com/sjsuischool/informatics-careers-what-ittakes-and-how-to-get-there-6f98a1795bc

References

https://healthinformatics.uic.edu/blog/healthinformatics-and-the-path-to-improved-rural-care/

https://www.registerednursing.org/nursinginformatics/

https://explorehealthcareers.org/field/informatics/

https://www.allnursingschools.com/nursing-informatics/

https://computing.louisiana.edu/informatics/what-can-i-dodegree-informatics http://www.colu

http://www.columbia.edu/itc/hs/nursing/m8120/misc/ppt/Wh at%20is%20Informatics.ppt

https://www.healthcatalyst.com/knowledge-center/success-stories/

https://www.mba-healthcare-management.com/faq/what-arethe-newest-trends-in-the-health-informatics-field/

https://www.owlguru.com/day-in-life-of-informaticsnurse-specialists/





WALDEN UNIVERSITY – On Demand CE





OPIOID PRESCRIBING: SAFE PRACTICE, CHANGING LIVES

& EARN I CONTACT HOUR

Learn about guidelines for patient selection and assessment of risks associated with opioid use for long-term management of crone pain, instation and modification of EN/LA opticid therapy, orgoing monitoring, and patient and caregiver education. This program also induces decussion of pain, immediate-release optoids, cannable, addiction, and CDC guidelines.

STRESS MANAGEMENT

· FARM / CONTACT HOUR Being a nurse is extremely rewarding, but it can also be extremely stressful. Stress management It one of the most important self-care techniques that numes can practice. In this engaging session, Dr. Debris Rose Wilson offers effective stress management strategies for both personal and professional settings.

INTRODUCTION TO MENTORING IN THE CAREER TRAJECTORY OF A NURSE

S SARN I CONTACT HOUR This webinar session describes the benefits of mentoring for individual nurses and the organizations in which they work. Dr Loues Januarie will explore the definition, evidence basis, purpose, and bring of mentoring in the owner trajectory of a nume. Mentoring provides the building blocks for numes to enrich, enlighten, and advance their career, while greating work environments that support employee engigement, retartion, and succession planning

THE ART AND SCIENCE OF APOLOGY

Apologizing is both an art and a science. The science is the list of elements that, when merged, will form the "perfect" spology. The art, on the other hand, deals with the sumounding components that make an apology more relevant, effective, and successful.

THE BALANCING ACT: TIME MANAGEMENT TIPS

If you've made the decision to earn your degree online, you may be wondering how you'll keep up with your education while balancing work and family commitments. Time management is an important place to start. In this webmar, hear from Walden graduate, Dr. Sharaca Shavel, at she discusses tips and tools you will need to complete your assignments, and discover new ways to stay organized and work more efficiently.

COACHING, COUNSELING, AND DISCIPLINE

Today's diverse workforce has great potential for high performance. To make the most of that potential, a performance management system grounded in respective communication and collaboration for all employees a ontical. Through practical examples, this webinar will examine a performance management system that addresses the need for structure within a auture of creativity and innovation.

VIEW WEBINARS AND LEARN MORE WaldenU.edu/HCA

WALDENU.EDU/HCA



Appendix



Introduction/Definition

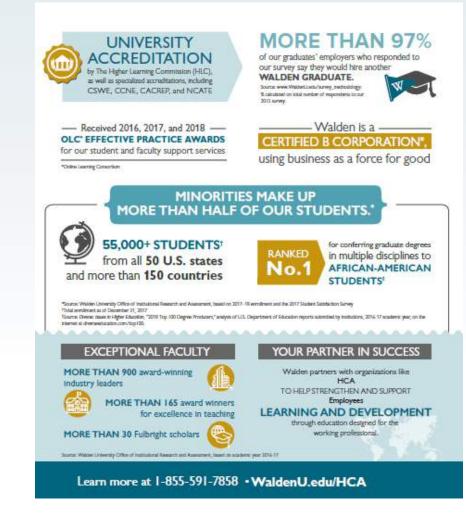
Nursing	Nursing Informatics
Nurses, patients, health, environment	Nursing data, information, and knowledge
Content of information	Design, structure and presentation of information as it impacts nurses' decision-making
Using information applications and technology	Optimizing information structures, applications and technology for use in managing and communicating data, information and knowledge



Source: ANA. (2001, proposed). The Scope of Practice of Nursing Informatics and the Standards of Practice and Professional Performance for the Informatics Nurse Specialist



WALDEN UNIVERSITY – At a Glance



FACULTY LEADERSHIP



MORE THAN 900 award-winning industry leaders



MORE THAN 85 advisors and board members for professional and charitable organizations



MORE THAN 165 award winners for excellence in teaching



MORE THAN 30 Fulbright scholars



MORE THAN 250 fellows and competitive grant winners

Source: Walden University Office of Institutional Research and Assessment, based on academic year 2016-17

WALDENU.EDU/HCA

