



University of San Diego

# Career Options in Health Care Informatics

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*Associate Clinical Professor*

*Program Coordinator, Graduate Health Care Informatics Program*

*University of San Diego*

# Welcome!

- This session is being recorded. We will send you a link to the recording after the session.
- There will be time for Q&A at the end. You can enter your questions in the chat pane at any time
- If you have questions, please type them into the chat pane in your AnyMeeting app



# About University of San Diego

- Catholic institution founded more than 60 years ago
- Ranked in the top 100 Online Graduate Education programs by *U.S. News & World Report*.
- Selected as a designated Ashoka *Changemaker Campus*
- Hahn School of Nursing and Health Science top ranked in Research & Clinical Practice
- Now offering a number of professional graduate degrees in an online format, including an M.S. in Health Care Informatics



# About Today's Presenter



**Jonathan Mack, Ph.D.**

Clinical Associate Professor

Program Coordinator, Graduate Program  
in Health Care Informatics (M.S.)

And Nursing Informatics (MSN)

# Webinar Objectives

In the next hour, you will learn:

- The differences between clinical, nursing, and health care informatics
- The types of positions that are currently available in the health informatics field
- Specific job skills you will need to land a job
- How to compete for leadership positions

# Quick Domain Definitions

- Health Informatics
- Nursing Informatics
- Medical Informatics
- Public Health Informatics
- Clinical Informatics
- Health Care Informatics vs. Health Information Management

# Health Information Management (HIM) vs. Health Care Informatics (HCI)

## HIM

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- Job focus: organizing and managing patient data contained in the medical record.
- Medical record management
- Responsible for coding health information for billing and reimbursement
- Entry level positions have AA degree or certificate
- Medical record technician
- Biller/coder job titles

## HCI

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- HCI utilizes computer technology in the management of patient care.
- Responsible for the design and utilization of patient/ enterprise-wide data systems.
- Focus on database design, software management, programming, information systems design, standards and analysis .
- Entry level positions usually require RN, Bachelor's Degree or Master's degree
- Analyst, Clinical Informatics

# Biomedical Informatics

*Biomedical informatics* (BMI) is the interdisciplinary field that studies and pursues the effective uses of biomedical data, information, and knowledge for scientific inquiry, problem solving, and decision making, motivated by efforts to improve human health.

- Employed in academic, research centers, and public health settings
- Work with biological and health data

--AMIA 2016



# Nursing Informatics

Nursing Informatics is defined as:

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”

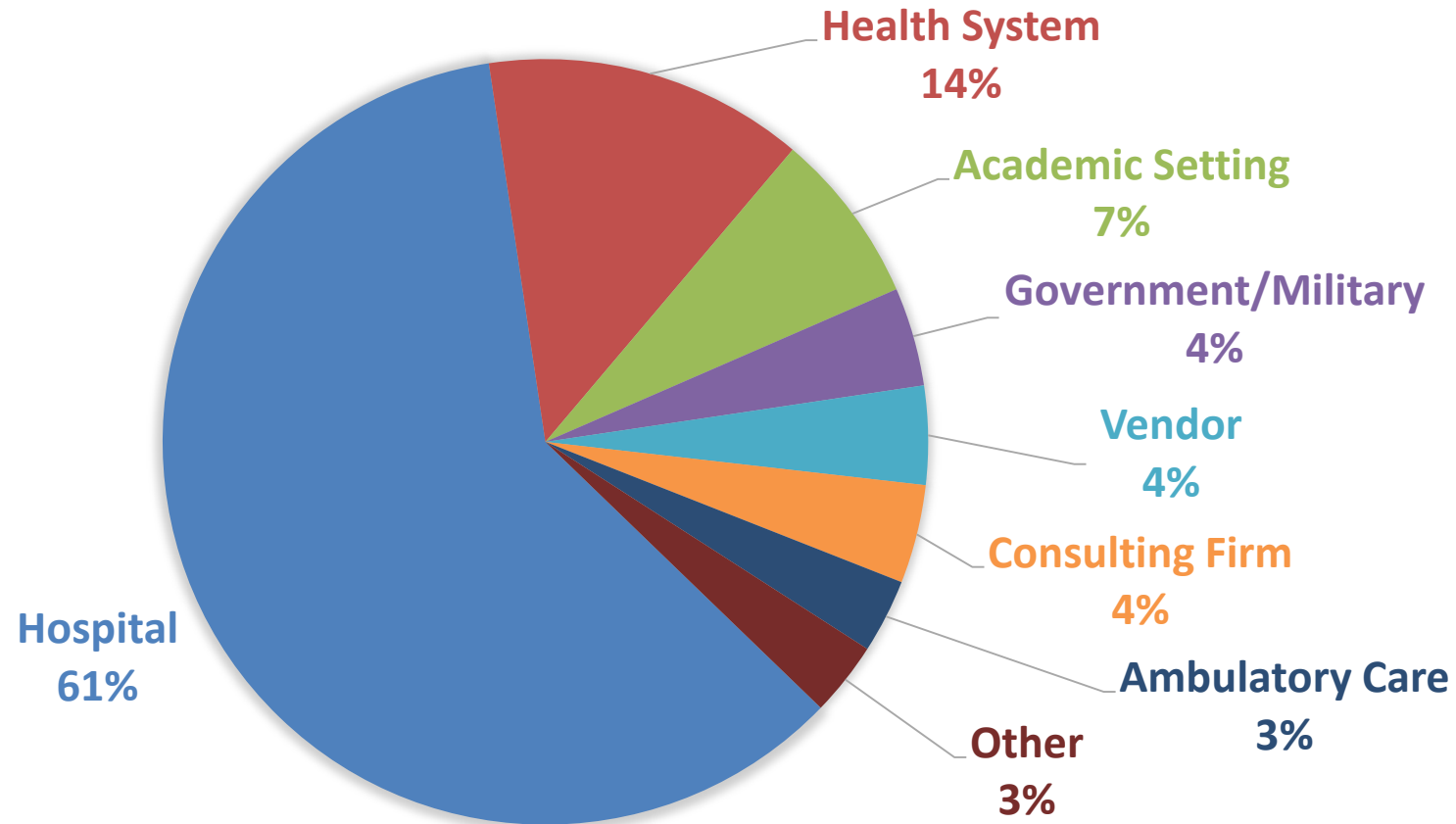
-- IMIA Special Interest Group on Nursing Informatics



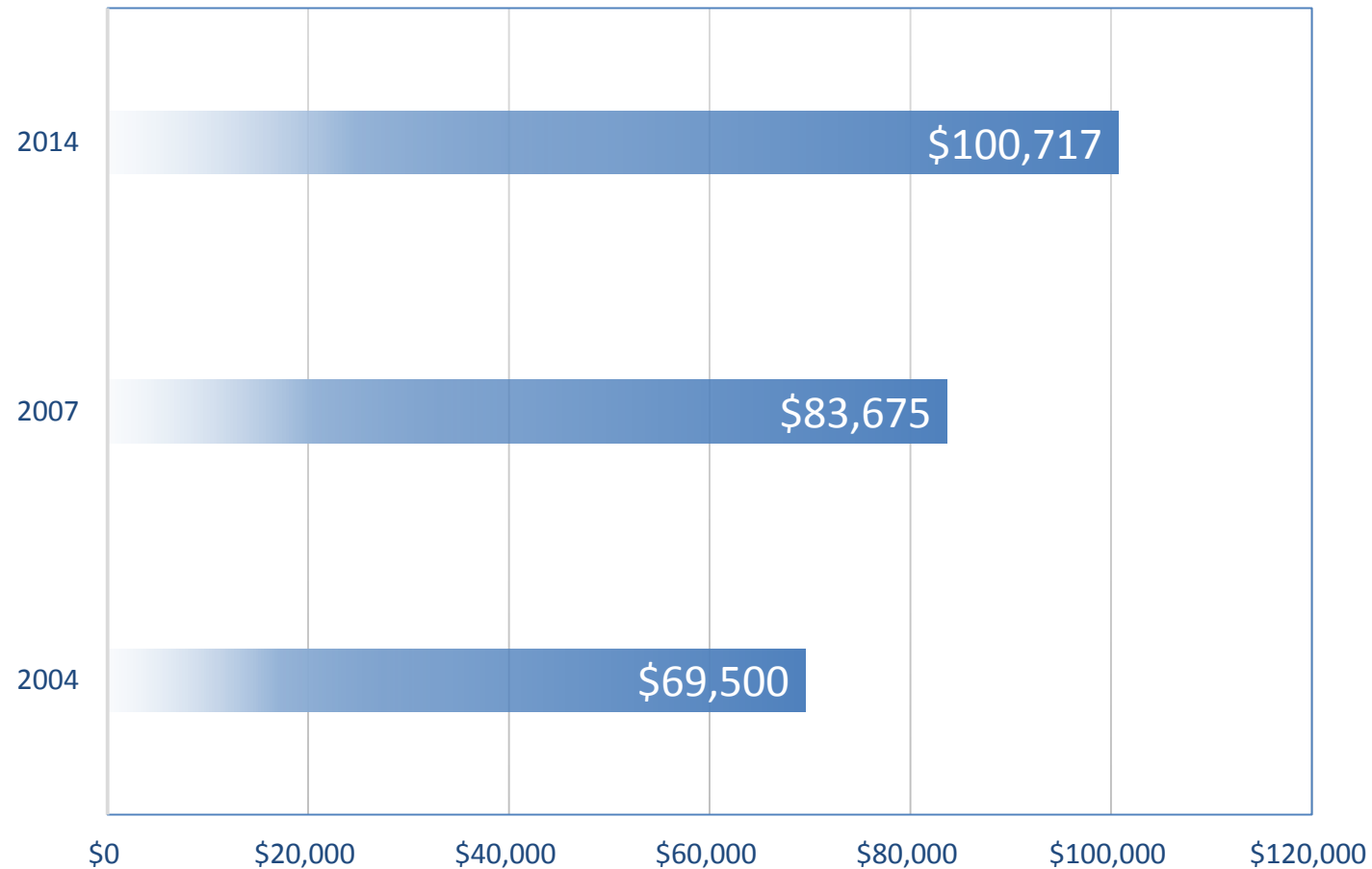
# Job Outlook and Salary

Position	Median Salary
Clinical analyst	\$64,000
Clinical applications specialist	\$64,000
Informatics nurse	\$67,000
Information technology consultant	\$71,000
Health information management director	\$72,000
Clinical informatics manager	\$91,000
Chief medical information officer	\$144,000

# Where Do Nurse Informaticists Work?



# Average Salary of Informatics Nurse Professionals



# What's Driving Demand for Health Informatics Specialists?

- EHRs/EMRs required by CMS
- Telehealth and telemedicine expansion
- Use of mobile devices by patients and clinicians
- Move toward national infrastructure linking all medical records

# Common Job Titles

- Analyst
- Trainer
- Project Manager
- Informaticist
- Clinical Analyst
- Clinical Specialist
- Nurse analyst

# Job Posting: Cedars Sinai (Los Angeles, CA)

## **Manager Clarity Specialist (Epic) -- *posting as of July 6, 2016***

The Manager will be responsible a group of analysts and report developers, leading them in the analysis, requirements, design, development, testing, enhancement, documentation, and ongoing support of reporting requests. These requests support the day to day/ongoing business and patient care processes within the health system.

Minimum of eight to ten years experience with information systems in a complex multi-platform healthcare environment. Experience demonstrates progressive broad-based information systems experience, with three to five years of demonstrated management/supervisory experience i of a healthcare IT team of 7+ employees with an annual budget exceeding \$2 million. Two to three years of this experience required specifically in Epic Clarity report development.



# Job Posting: Cedars Sinai (Los Angeles, CA)

## EMR Trainer (Epic) -- *posting as of July 8, 2016*

### Job Description

- The Trainer will contribute to the development, implementation and success of the software applications/systems. Will train end-user and all other assigned classes to help ensure the proficient use of applications. Will also develop and maintain application training materials, including eLearning modules, as directed by the Lead Trainer.
- Will participate in workflow design and system build sessions in order to gain and maintain the expertise necessary to assist in the continuous improvement of the training curricula development and delivery process. Assists with mentoring Associate Trainers.

### Qualifications

- Bachelor's Degree in Instructional Design, Medical Informatics, Instructional Technology, Communication, Education or related field. Degree in Instructional Design or Medical Informatics is preferred. Equivalent combination of education and work experience is acceptable.
- Typically requires 1-3 years of systems training and curricula development experience; 3-5 years preferred.





# Job Posting: Sharp HealthCare (San Diego, CA)

## Clinical Informaticist -- *posting as of July 8, 2016*

### Job Description

The Clinical Informaticist manages the implementation, training, evaluation, and support of the Cerner and other applications within the hospital(s) in conjunction with the system-wide Information Systems departments. Manages the communication needs regarding the clinical applications between Information Systems staff, the Sharp entity management team and the clinical users of the Clinical Systems. Monitors application use and physician/staff education needs. Develops, supports and activates downtime strategies in times of need. Participates in application development decisions. Secures and reports user input in design development. Acts as a Change Agent by managing the interdisciplinary process of capturing, defining and prioritizing pre and post implementation issues. Proactively identifies and coordinates clinical change management and workflow transformation processes.

### Preferred Skills and Qualifications

- Bachelor's Degree in Nursing or other Health Care degree
- Registered Nurse (RN) strongly
- Knowledgeable about Six Sigma/LEAN, Work-Out, and CAP (Change Acceleration Process) and their integration into current Sharp's clinical and operation quality initiatives. Thorough knowledge of the impact of process analysis and re-design methodologies on the legal, regulatory, ethical, managerial and organizational, principles and standards for the acute general hospitals and health systems.
- Current Driver's License
- Experience in a nursing leadership level position at a health care institution of similar size and complexity
- Must be knowledgeable of new trends in clinical management and information systems, and be able to apply data processing technology for the clinical and physician services areas. Must have a thorough knowledge of Nursing practices and principles
- Knowledge related to federal and state medical record statues and regulations



# Job Posting: Epic Inc. (Madison, WI)

## Clinical Project Manager -- *posting as of July 11, 2016*

### Job Description

Use your clinical expertise to help guide the evolution of our clinical software, and help clinicians focus on high-quality, personalized patient care.

As an expert advisor to, and member of, Epic's Implementation team, you will help provide organizations around the country use our software to improve their care processes. We'll look to you to analyze client needs, create clinical workflows, develop strategies tailored to each organization, and provide guidance throughout the scope of implementation projects. Additionally, you might interact with prospective customers during the sales process and assist with system content and software demonstrations.

### Requirements

- BS in Nursing (or similar clinical major)
- A history of academic and professional success
- Strong presentation skills
- Willingness to travel more than 50%
- Software experience is not required; we'll train you to be an expert
- Eligible to work in the U.S. without visa sponsorship
- Relocation to Madison, WI area (reimbursed)



# Job Posting: Cerner Inc. (Naples, FL)

## Application Consultant -- *posting as of July 8, 2016*

### Job Description

The Application Consultant manages the impact of technology implementation to optimize clinical and business work processes. The Application Consultant analyzes business and client processes to integrate and align applications to Cerner standards and client's needs. They resolve customer concerns raised during installation, operation, maintenance, or product application, along with compatibility matters. The Application Consultant must have expertise in diagnosing problems and coordinating the appropriate additional resources to determine and deliver resolution. Manages process improvements effectively, leveraging existing implemented applications to achieve better performance and outcomes..

### Basic Qualifications

- Associate's degree or higher required or equivalent experience
- Background in healthcare or sciences with emphasis in information systems
- Support and maintenance knowledge of Cerner Millennium systems including but not limited to PowerChart framework
- Live in or willing to relocate to Naples, Florida

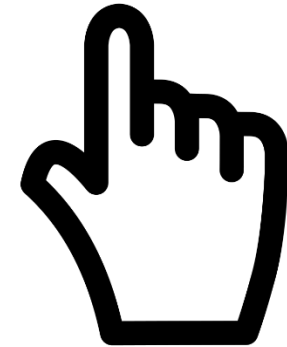
### Preferred Qualifications

- Experience with Cerner Radnet solution, Radiology Modalities, PACS workflow and support
- Familiarity with Cerner various Scheduling solutions – Inpatients and Ambulatory
- Familiarity with Cardiology workflow, Cath Lab, EKG, including 3rd party applications, integration points with Cerner Millennium and PACS support
- 2+ years experience working with clinical users
- General Knowledge of Cerner Millennium backend tools, build and troubleshooting experience



# Use LinkedIn for Open Job Leads

- <https://www.linkedin.com/jobs/health-informatics-jobs>



# Your Resume: Preparing Yourself Academically

Academic preparation depends on background of applicant and job/career trajectory

- Entry level with no experience:
  - Minimum of Bachelors degree in health care discipline with technology, data management or information systems
  - Get experience with EHRs

# Your Resume: Preparing Yourself Academically, con't.

- Masters degree necessary for upward mobility
- Practical on the job experience always the best
- Certification
- Networking
- Professional organization affiliation
- LinkedIn Profile

# Professional Organizations

- HIMSS (Health Information Management Systems Society)  
<http://www.himss.org/>
- AMIA (American Medical Informatics Association)  
<https://www.amia.org/>
- AHIMA (American Health Information Management Association) <http://www.ahima.org/>
- ATA (American Telemedicine Association)  
<http://www.americantelemed.org/>



# Leadership Roles in Health Care Informatics

- CIO (Chief Information Officer)
- CNIO (Chief Nurse Informatics Officer)
- VP of Informatics
- CMIO (Chief Medical Information Officer)
- Director or Manager Role



# Experienced HCI Transitioning to Leadership Roles

- Graduate degree
- Well developed written and oral communication skills
- Track record of successful project management
- Demonstrated lower level leadership experience or..... potential for leadership roles
- Consider certification
- Professional organizations affiliation and activity

# Emerging Roles in Health Care Informatics

- Data Scientist
  - Expert in data management
  - Role exists in Business organizations
- Cyber Security
  - Technical and operations
  - Critical need for large and small organizations
- Telehealth
  - Program managers
  - Technical expertise
  - Televideo/Teleconference, Telephonic, remote home monitoring

# USD's M.S. in Health Care Informatics

- 100% online program
- 10 three-unit courses + capstone course
- Two courses per semester (back to back)
- Complete the program in 20 months (5 semesters)
- 31 academic credits with curriculum designed to prepare graduates for leadership roles in health care informatics



## Integrates health care technology, leadership & management

### Technical Courses:

- Intro to Health Information Mgmt.
- Intro to Health Care Delivery Systems
- Systems Analysis & Design for Health Care Informatics
- Database Design & Knowledge Management
- Advanced Health Care Information Management

### Business Management Courses:

- Health Care Leadership, Values & Social Justice
- Financial Management in Health Systems
- Management of Health Systems Care Delivery & Outcomes
- Strategic Planning & Management of Health Systems
- Statistics

# Online Learning

- Courses are *100% Online – available 24/7*
- Provide a flexible and convenient, yet rigorous, learning structure
- Access course content and resources anywhere with an internet connection
- Courses utilize multi-media, facilitated discussion forums, and student collaboration to create a learning community



# Application & Tuition

- Application Fee:**      *\$45 – Waived for Webinar attendees!*  
*(Discount Code will be sent in a follow up email)*
- Tuition per unit:**      \$925 → this is 35% less than the on campus  
program!
- Next class starts:**      August 30 (*deadline to apply is Aug. 2<sup>nd</sup>*)

**Learn more at**  
**[HCInformatics.SanDiego.edu](https://HCInformatics.SanDiego.edu)**



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# Questions?



Jonathan Mack, Ph.D.

Please use the question pane to type any questions you have for Dr. Mack

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