

WHAT IS HEALTH INFORMATICS?

THIS RAPIDLY GROWING FIELD MEANS NEW JOBS FOR PEOPLE LIKE YOU!

BY STEPHANIE PETIT



Hmmm ... what's a four-letter word for "the main stalk of a plant"?

The health care industry is always looking for ways to improve the quality of health care while also reducing the high costs. Health informatics can be defined as the application of computers and information technology to solve problems in the field of health care. This includes how health data is collected, stored and communicated, as well as how technology can be used to help make health decisions. It combines computer technologies, information science, clinical practice and business management to create better health care.


Initiatives like Electronic Health Records help ensure a patient's

health history is recorded, saved and accessible, and professionals are needed to create and maintain these systems. CareerBuilder.com ranks health informatics as the No. 1 job opportunity in an emerging industry. If you're interested in technology and health care, it might be the job for you!

According to the American Medical Informatics Association, there are now more than 70 advanced degree programs in the field of health informatics. Most programs combine technical instruction, medical classes and hands-on experience so students are fully emerged in the field. Students

learn to identify what information and data are needed by doctors, patients and other health care professionals, and how they are used in order to make effective health care decisions.

Graduates from a degree program in health informatics can work in a variety of environments such as hospitals, medical research laboratories, health insurance companies or consulting organizations. Salaries for graduates are typically between \$40,000 and \$45,000, with some positions offering up to \$75,000.

See? You don't have to be an emergency room doctor to save lives! 

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- Contact Dr. Tommie Turner at (314) 340-5955 or turnert@hssu.edu for more information.

10 REASONS TO GET INTO HEALTH INFORMATICS

HEALTH INFORMATICS COMBINES THE SCIENCE OF INFORMATION WITH DIFFERENT LEVELS OF HEALTHCARE.

BY ABBY DUDLEY

Professionals in this field work to improve healthcare provider communication, increase the quality of patient experience and make healthcare and its costs more efficient. If you're not already hooked, here are 10 reasons why you should consider this career path:

1. YOU GET TO EXPLORE DIFFERENT FIELDS

Health informatics includes a lot of different disciplines that all incorporate many types of sciences. Information science, social science, computer science and management science are all in the scope of health informatics, falling under such categories as healthcare informatics and human bioinformatics. All center around the main purpose of studying information, making it also perfect for those who may be reluctant to leave the studying atmosphere of a classroom.

2. THERE IS A LOT OF ROOM FOR SALARY GROWTH

Different levels of management positions in the health informatics fields have salaries that range from \$80,000 to \$200,000, providing a lot of opportunity for rewarded upward mobility. ▶

I'll be making HOW MUCH money?!

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3. HEALTHCARE IS LARGELY PUBLIC SPENDING

Health informatics streamlines and makes more efficient the entire healthcare process, so work in this important field has a great effect on many people outside of what you may even consider.

4. HEALTH INFORMATICS (AND ITS DIFFERENT SPECIALTIES) HAS MANY ACCESSIBLE DEGREE OPTIONS

The best way to start your career toward health informatics? Major in it. A simple Google search reveals pages of different online schooling options to pursue both bachelor's and master's degrees. Beyond such programs, some of the nation's top schools have added highly specialized departments for the field—the University of Michigan and the University of Illinois-Chicago are among schools that have recently added these departments.

5. YOU CAN USE CLINICAL KNOWLEDGE

Many interested in healthcare fields start with a desire to actually treat patients. Well, clinical informaticists combine the science of information with a knowledge or understanding of clinicians to better patient care and healthcare communication. AKA, you are able to be involved in patient care without attending medical or nursing school.

6. IT'S A QUICKLY EMERGING FIELD

Not only does the growth of this field mean more opportunities for specialized education programs, but also—and more importantly—it means more jobs. The Bureau of Labor Statis-

tics predicts 18-percent growth of jobs in this field by 2016, and 22-percent growth by 2022, a rate far faster than average.

7. YOUR WORK STAYS CURRENT

Healthcare is always on the table for discussion—it's hardly a topic that is about to lose steam. And health informatics doesn't just work within current policy outlines, it actually shapes them. The research that these informaticists do is essential to the development of policies, laws and plans.

8. HEALTH INFORMATICS HAS EXPANDED TO GLOBAL PROMINENCE

All over the world, health informatics is a blossoming field. Europe, Asia and Oceania all work within the field to develop their government healthcare programs, providing opportunities for potential candidates to work internationally.

9. YOU'LL WORK WITH CUTTING-EDGE TECHNOLOGY

Work in the field capitalizes on technology such as wearable medical devices that include watches, eye glasses and necklaces to monitor ECG, pulse and heart rate. These technological breakthroughs revolutionize the information available to these information-studies, allowing for more holistic knowledge of patients, medical conditions and the healthcare process in general.

10. YOU CAN HELP PEOPLE

Isn't this the fundamental reason to get into all health-related fields? ☑



HEALTH INFORMATICS STEM JOBS BY SALARY

WANT TO KNOW YOUR STEM TYPE?
LOG ON TO STEMTYPE.STEMJOBS.COM
TO FIND OUT!

| | BIOINFORMATICS TECHNICIAN | MEDICAL CODER | QUALITY IMPROVEMENT SPECIALIST | PHARMACY INFORMATICS SPECIALIST | NURSE INFORMATICIST | INFECTION PREVENTION SPECIALIST | INFORMATICS SPECIALIST | EPIDEMIOLOGIST | CLINICAL OUTCOMES SPECIALIST | CHIEF MEDICAL INFORMATICS OFFICER |
|---------------------------|---|---|--|--|---|---|--|---|---|---|
| WHAT WILL I DO? | You are needed in all branches of health, pharmacy and medicine to help scientists and clinicians visualize, analyze and interpret molecular and biological data from tests and research. They do the science, you do the data. | When someone receives medical care, their care is categorized by a complex series of codes for billing and research. You are the master behind the code, and you are in high demand. | You are responsible for data coordination and data entry related to quality care initiatives across the health system. You may provide follow-up calls after patients return home, along with collecting and analyzing outcome data during their treatment. | You provide clinical and technical support to pharmacists and other users of medication use and automation technologies and systems. You are the specialty link between various clinical departments, centered around medication delivery. | You begin in nursing, typically with license as a Registered Nurse (RN), and transition to the point where clinical practice and technology come together. You will be highly engaged in designing medical record systems, and assisting in the ongoing technological transformation of healthcare. | You develop and coordinate activities and infection control measures which prevent and control the spread of infectious diseases throughout the health system. You educate staff and provide ongoing orientation programs relating to infection control and disease prevention. | Informatcs specialists work in nearly all industries and fields. As a health informatics specialist, you combine your knowledge of data analysis with a speciality field such as clinical care or surgery to focus on solving problems related to treatment or healthcare delivery and optimization. | Epidemiologists engage in surveillance activities to prevent the spread of infectious diseases. They also conduct studies to investigate the causes of disease to reduce the risk of future disease development. Epidemiologists report their findings to public policy officials or publish the results of their research. | You develop, coordinate, assess and ensure the quality of patient care management tools and systems. You take a look at the whole system of care for patients and analyze the data to drive ongoing improvements and increased effectiveness. | The roles and responsibilities of chief medical information officers will vary from organization to organization. Overall, they are responsible for the effective and efficient flow of information and construction of IT systems to support a high quality of patient care across multiple information systems. |
| MEDIAN SALARY | \$45,000 | \$46,000 | \$55,000 | \$63,000 | \$67,000 | \$74,000 | \$75,000 | \$85,000 | \$120,000 | \$180,000 |
| STEM TYPE | Investigator | Producer | Investigator | Designer | Designer | Explorer | Solver | Advisor | Integrator | Advisor |
| WILL I LIKE IT? | You think in pictures, sometimes really detailed pictures | You don't just name things, you name parts of things. | When things go well, you know why. When they don't, you know who to blame. | Forensics and pharmacy, what's not to love? | Healthcare is awesome, but the blood part, not so much. | You don't just track the flu, you stop it in its tracks. | In the Matrix, you would have been able to see everything through the code interface. | You've been tracking the flu in your neighborhood for years. | They should have asked you first before launching healthcare.gov. | Someone needs to get this "tricorder" up and operational. |
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