

## Emerging careers

# Health informatics

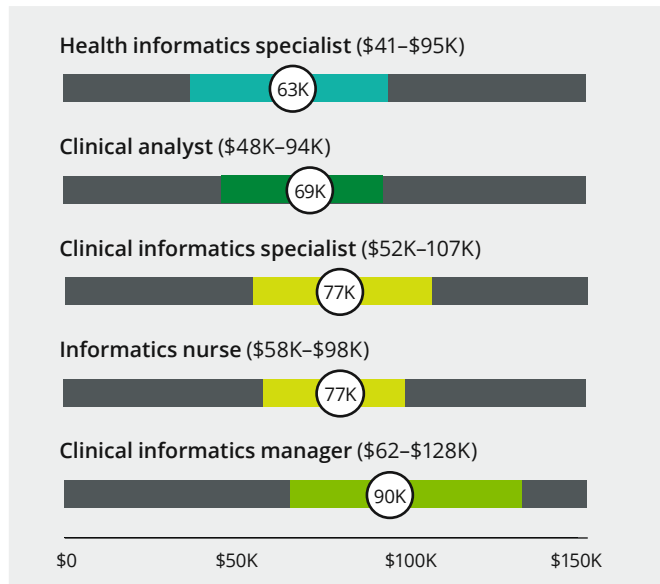
Health informatics involves the digital management and analysis of healthcare information.<sup>(1)</sup> While this subset of the medical field has been around for some time, it's skyrocketed in the past decade with advances in technology, an aging population, and the introduction of the Affordable Care Act, which has a goal of leveraging technology to improve health outcomes. Practitioners in the field — who combine expertise in computer science, information science, and healthcare — support patients with digital systems that give them access to their own health data, allow coordinated care teams to share data, and support the identification of larger public health trends.<sup>(2)</sup>

Those looking to enter the field can take a number of paths. Clinical and IT roles vary depending on the size and nature of the institution, but often they establish or manage the technological systems being used for patient care. Nurse informatics more specifically addresses how technology and data can support and improve nurses' workflow. And for the most analytically minded, public health informatics focuses on connecting and interpreting data for

practitioners to serve larger communities (most recently, this includes efforts such as COVID-19 contact tracing). Additional sub-specialties exist in pharmacology and imaging.<sup>(3,4)</sup>

## Specialties<sup>(5)</sup>

Key roles and salary ranges



## Skills of the field<sup>(6,7)</sup>

### Technical skills

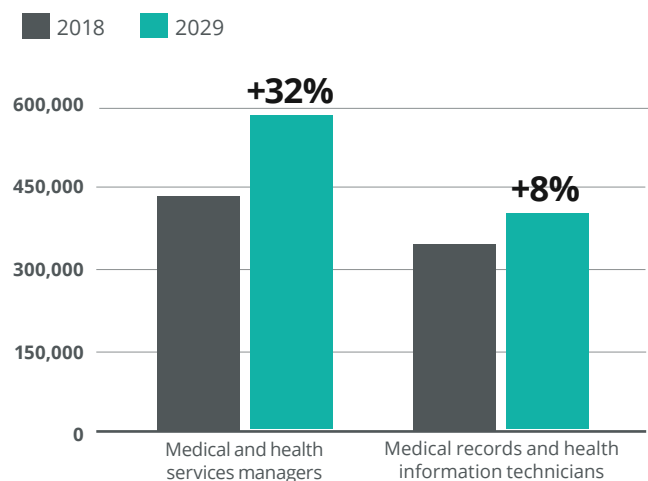
- IT principles
- Programming
- Health data systems
- Ethical & legal issues
- Systems life cycle management

### Soft skills

- Decision-making
- Complex problem-solving
- Social perceptiveness
- Systems evaluation
- Critical thinking

## Job growth

Employment projections, 2019–2029<sup>8</sup>



## Study options available

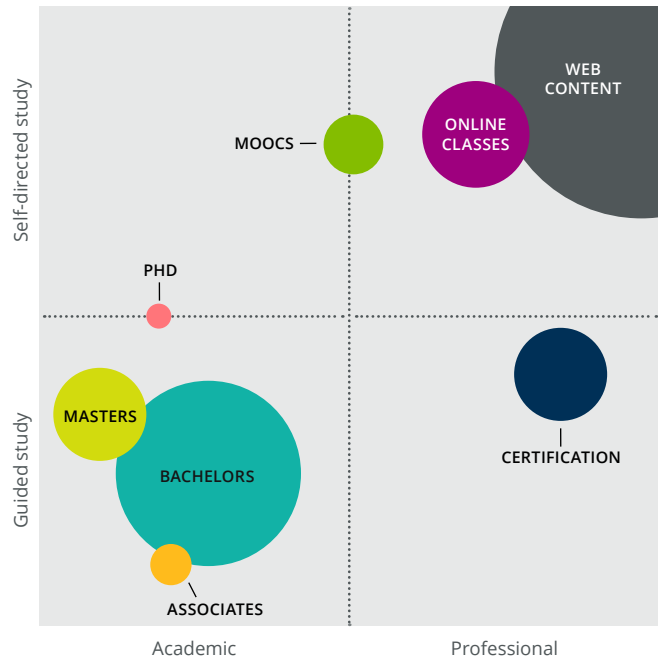
Because demand is high for qualified health informatics practitioners, there's a proliferation of educational opportunities, and they cover almost all degree levels with a range of financial and time commitment (both traditional and online). Options also vary depending on the individual's background — with additional paths available to those who have experience in the medical field.

Working healthcare professionals may only need to pursue an informatics certificate to make a career shift. Those entering the field from the ground floor (or laterally from the technology industry) will find options for associate, bachelors, and masters degrees. An associate degree is suitable for those interested in technician or assistant roles, while a higher degree is recommended for a specialist, administrative, or managerial path. There are even a small number of PhD options for those interested in specialized research, academia, or systemic innovation<sup>(9,10)</sup>

Explore additional fast-growing professions that offer new opportunities for rewarding careers—with the right education and skills.

[See the careers >](#)

## Health informatics education options



## Insider advice

"There are masters degree programs in informatics, of course, but you can begin with learning on the job. Also, it's important to understand that informatics is more than just IT. Informatics also means having an understanding of nurses' workflow, how and why they do what they do, and how electronic documentation can enhance or hinder patient care and nurse efficiency and function."

– Vivian Mae A. Diaz, RN, BSN<sup>11</sup>

### Sources

- <sup>1</sup> "What is Health Informatics?". USF Health, Morsani College of Medicine
- <sup>2</sup> "Why is Health Informatics Important?". Staff Writers, Best College Reviews
- <sup>3</sup> "The difference between health informatics and health information management". USF Health, Morsani College of Medicine
- <sup>4</sup> "Health Informatics Careers and Jobs". Public Health Degrees powered by 2U, Inc.
- <sup>5</sup> "5 health informatics jobs and salaries". Sarah White
- <sup>6</sup> "5 skills needed to succeed in health informatics". University of Illinois Chicago
- <sup>7</sup> "Understanding health informatics core competencies". Johanne Thyne
- <sup>8</sup> Occupational Outlook Handbook. "Medical and Health Services Managers". "Medical Records and Health Information Technicians". U.S. Bureau of Labor Statistics
- <sup>9</sup> "Health Care Informatics Education and Training Program Summaries". study.com
- <sup>10</sup> "Choosing a Health Informatics Career Path". Kent State University
- <sup>11</sup> "Clinical Informatics: Interview with Vivian Mae A. Diaz, RN, BSN". Keith Carlson. RN, BSN, CPC, NC-BC

