The health information system collects data from the health sector and other relevant sectors, analyses the data and ensures their overall quality, relevance and timeliness, and converts data into information for health-related decision-making.
HIT professionals are usually from information technology backgrounds, and provide support for EHRs and other systems HIM professionals use to secure health information.

As technology advances, HIT professionals are necessary to ensure the electronic data HIM professionals manage is maintained and exchanged accurately and efficiently.
Health informatics is part of a larger subject referred to as Biomedical Informatics which currently includes bio-informatics and health informatics as its major sub-disciplines.

Bioinformatics is a rapidly developing and highly interdisciplinary field, using techniques and concepts from computer science, statistics, mathematics, chemistry, biochemistry, and physics.
Patient paper data base
Electronic health records: pros

- Compact
- Easily copied/archived
- Portable (handheld and wireless devices)
- Secure
- Decision support
- Workflow management
- Performance audits
- Research
Electronic health records: cons

- High capital investment
- Hardware, software, operational costs
- Transition from paper to computer
- Training requirements
- Power outs – the whole system goes down
• Information retrieval services for accessing patient data selectively, and in a timely way at any or all times by authorized individuals.

• Tools support clinical problem solving such as decision analysis tools, clinical reminders, prognostic risk assessment and other clinical aids.
Principles of health information systems

PRINCIPLE 1:

A health information system needs to have a logical and transparent structure.

- There exists an abundant literature on HISs.
- A large part of it is devoted to the description of particular experiences.
• Supply chain management (SCM)
  - Helps determine what supplies are required for the value chain and what quantities are needed to meet customer demand