



## Health Information Technology – 101

### 1. Evolution of Technology

- a. 1940s-60s: Analog vs. Digital  
Circuit-switched vs. Packet-switched  
ARPAnet (Advanced Research Projects Agency Network)  
(.mil) (Nov. 21, 1969)
- b. 1970s-80s: 1979: CSNet, TERN, etc.  
1983: MILnet  
1985-87: NSFnet (.edu, .net, .org, .gov)
- c. 1990s-2000s: Global Information Infrastructure (GII)  
National Information Infrastructure (NII)  
High Performance Computing and Communication Act of  
1991 (Dec. 9, 1991)  
Global “information superhighway”  
Thousands of networks – “Internet” (.com, etc.)

### 2. Application to HIT

- a. Access (24/7, anywhere, anytime, Worldwide)
- b. Improved Service:  
Specialists/Monitoring, etc.  
Electronic Health Records (EHRs)  
Personal Health Records (PHRs)  
Health Information Exchange (HIE)
- c. Lower Cost
- d. Broadband
- e. Interoperability
- f. Survivability, Privacy, Cost, Implementation, etc.