

11/29 Medical Technology and the Modern Hospital

Prevalence of Technology

Who has taken medications? X-rays? Surgery?
Diagnostic vs. therapeutic technology

Medical Technology into the 19th Century

Herbal and mineral remedies, lancets, surgical tools
Uroscopy
Simple, affordable, little barrier to access, no special institutions
Germ theory: immunizations and antitoxins, but little else initially

Therapeutic Technology in the 20th century

Insulin
Penicillin, antibiotics, and magic bullets
Post-WWII: medicines for heart disease, mental illness, etc.
3,400,000,000 prescriptions written in 2003, \$180,000,000,000
Some diseases cured, others transformed

Diagnostic Technology in the 20th century

Diagnosis in the 1800s: physical exam optional
Stethoscopes, ophthalmoscopes, and sphygmomanometers
Ambivalence: did technology and quantification add value?
Medical chemistry
X-rays: Wilhelm Roentgen, 1895
Slow implementation of x-rays

Impact of Technology

Reliance of technology and erosion of clinical skill?
Increased distance between patients and doctors
Changed disease categories: e.g. hypertension
Placebo effects
Cost

Transformation of Hospitals

Anesthesia, surgery, imaging, laboratories, computerization of medicine
Plumbing, electricity, laundries, oxygen, sprinklers, etc.
Increasing costs of hospitals
Recruiting patients: hospitals as hotels
Hospital ideology in 2005: shopping malls and the consumer ethic