

The Internet

the future in the present

The Internet

the most important advance in human
communication since the printing press

The World Wide Web

A fundamentally new medium

Exact nature still unknown

**Likely to change every aspect
of how we live**

As electricity did

John Seely Brown



Patient

Physician

**Nurse
Radiology**

**Education
Scheduling
Payment
Follow-Up**

Patient-Physician

**Education
Licensing
Accreditation
Credentialling
Practice**

**Laboratory
Pharmacy
Hospital**

What do Physicians Do?

Listen to patients/family

Observe/Examine Patients

Identify Problems \implies Stratify

Order Tests \implies Dx

Differential Dx \implies Loop

Institute Treatments

Monitor Course

Institute Prevention

Information

Seeking

Observing

Gathering

Assimilating

Interpreting

Dispensing

Feedback

Monitoring

Where is the Internet Applicable?

- 1. Anywhere the telephone/fax machine is used**
- 2. As a library**
- 3. To replace hand-delivered notes**
- 4. To replace letters/brochures/certificates/lab results**
- 5. Orders and results**
- 6. Verbal communications**
- 7. Whenever distance separates individuals or copies are needed for others**

What is the Practice of Medicine?

Many Believe:

Broadly Distributed Information

Not Medical Practice

Tailored Information for an

Individual

Is Medical Practice

E-mail Medicine

**Great for an
established
patient-physician
relationship**

E-mail Medicine

**Verboten for
initial or sole
patient-physician
interaction**

Competence

The ability of a person or system to perform a task to achieve a satisfactory outcome for the person involved

Competence

The ability of a person or system to perform the task at hand, for which he/she/it purports to be competent, in order to achieve an outcome that is satisfactory to the person(s) involved and acceptable to a reasonable group of peers

Determinants of Human Behavior

A Hierarchy

Personal Morality

Societal Ethics

Public Law

Morality

A quality or fact of conforming to or deriving from right ideas of human conduct; goodness and uprightness of behavior

Ethics

Principles of conduct governing an individual or profession; the ideals of character manifested by a people

LAW

A rule or mode of conduct or action that is formally recognized as binding by a supreme controlling authority and is made obligatory by a sanction

The US Chamber of Commerce

15 Principles of Business Conduct - 1924

1. **Foundation...confidence...integrity...fair dealing**
2. **Reward is fair profit...**
3. **Equitable consideration...capital, management, employees and the public**
4. **Knowledge...study...essential**
5. **Permanency and continuity**

The US Chamber of Commerce

15 Principles of Business Conduct - 1924

6. Obligation itself and society...

7. ...letter and spirit...mutual consent

8. Representation...truthfully...scrupulously fulfilled

9. Waste...intolerable

**10. Excesses...artificial conditions...
condemned**

The US Chamber of Commerce

15 Principles of Business Conduct - 1924

11. ...bad faith...fraud...bribery...public wrong

12. Controversies...voluntary agreement or
impartial arbitration

13. ...moral obligations of individuals...

14. Lawful cooperation...is commended

15. Business should render restrictive legislation
unnecessary

Society of Professional Journalists

Code of Ethics -1996

Seek Truth and Report It

Minimize Harm

Act Independently

Be Accountable

Principles of Medical Ethics

AMA-CEJA

- I. A physician shall be dedicated to providing competent medical service with compassion and respect for human dignity.

II. A physician shall deal honestly with patients and colleagues, and strive to expose those physicians deficient in character or competence, or who engage in fraud or deception.

AMA-CEJA

III. A physician shall respect the law and also recognize a responsibility to seek changes in those requirements which are contrary to the best interests of the patient.

AMA-CEJA

IV. A physician shall respect the rights of patients, of colleagues, and of other health professionals, and shall safeguard patient confidences within the constraints of the law.

AMA-CEJA

V. A physician shall continue to study, apply and advance scientific knowledge, make relevant information available to patients, colleagues, and the public, obtain consultation, and use the talents of other health professionals when indicated.

AMIA-CEJA

VI. A physician shall, in the provision of appropriate patient care, except in emergencies, be free to choose whom to serve, with whom to associate, and the environment in which to provide medical services.

AMIA-CEJA

VII. A physician shall recognize a responsibility to participate in activities contributing to an improved community.

AMA-CEJA

Medical Ethics

Doing the right thing
for individual patients
and populations of
patients

The International Committee of Medical Journal Editors (The Vancouver Group)

**Ann Intern Med, BMJ, CMAJ, Dutch
Med J, Index Medicus, JAMA, J Danish
Med Assoc, Lancet, MJA, NEJM,
NZMJ, J Norw Med Assoc, West J Med
> 600 journals have agreed to
participate**

1999

Features of a Learned Professional (1)

Self-governance

Service to the poor

Delivers quality

Does not rip off others

High level learning

Features of a Learned Professional (2)

Autonomy of activity

Altruism

Self-sacrifice

Heroism - as needed

**Ethical behavior with public
accountability**

Purposes of a Medical Journal

to shed light

to take heat

to give heat

The Internet Provides the World's

- **Greatest library**
- **Easiest to use library**
- **Least expensive to use
library**

**Assessing, Controlling
and Assuring the
Quality of Medical
Information on the
Internet**

Basic Standards

Authorship

Institution

Attribution

Disclosure

Timing

The Internet

caveant Lector et Viewor

**The Internet is the
Medium**

It is not the Message

The Age of Patient

Autonomy

Take Charge of Your Life

**Medical
Internet
Company**

Content

Media

eCommerce

Lab-Radiology-

Pharmacy

Hospital

Billing/Claims

Patient Health Info

Clerical

or

Clinical

Clinical Care

or

Book Keeping

Electronic Medical Record

Changes to

**On Line Health
Management**

**In Theory in US
Internet Will Enable
265 Million
Individual Health
Plans**

eSummit Categories

Quality of Content

Personal Data Protection

Commercial Behaviour

Disclosure

Use of the Internet in

Medical Practice

Medical Practice on the Internet

A Watershed Time/Issue

- 1. Follow basic principles of medical ethics
like Hippocrates first do no harm
CEJA**
- 2. Preserve Privacy**
- 3. Disclose/Disclose/Disclose**
- 4. Informed Consent Applies**
- 5. Promote Research on Internet Medicine;
Publish the good research; then let Ethics
follow Science**
- 6. Much of this is a Risk/Benefit Ratio still to be
determined for most interactions/interventions**

VISION

A New World
Made Better by
Information

Delusion

Shared by many Culture

Shared by some Cult

Shared by two Love

Held by one Psychosis

The World's Population- %

College Education - 1

Malnourished - 50

Near Birth - 1; Near Death - 1

Own a Computer - 1

6 People (all US) = 60 % Wealth

The Patient

The Patient

The Patient

Enemies of Physicians

- Premature death
- Disease
- Disability
- Pain
- Human Suffering

The Real Business
is the
Augmentation
of Relationships

TRUST