How to Get What you need from 21st Century Medicine
Finding the balance between Science and Art

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June 24 2014
“You Teach Best, that which you most need to learn”

-Richard Bach, “Illusions”
Simple Questions

* Where were you born?

* Where is your home?

* Where are you going?

* What are you doing?
story?

\{PAST\}

Where is Medicine today?

\{PRESENT\}

Where is Medicine

- Professional Association
- Cognitively based
- Institutionalized training
- Licensing
- Colleague Control
- code of Ethics
- Autonomy
Adopted by the 39th World Medical Assembly, Madrid, Spain, October 1987, editorially revised at the 170th Council Session, Divonne-les-Bains, France, May 2005 and rescinded and archived by the WMA General Assembly, New Delhi, India, October 2009

* This document has been replaced by the “Declaration of Seoul on Professional Autonomy and Clinical Independence” (2008) and a completely rewritten “Declaration of Madrid on Professionally-led Regulation” (2009)

The World Medical Association, having explored the importance of professional autonomy and self-regulation of the medical profession around the world, and recognizing the problems and the current challenges to professional autonomy and self-regulation, hereby adopts the following principles:

1. The central element of professional autonomy is the assurance that individual physicians have the freedom to exercise their professional judgement in the care and treatment of their patients.
“Losing Patience”-A growing number of primary-care docs are burning out. What does that mean for the people they treat?

Reprinted article from the Kaiser Health Foundation

Roni Caryn Rabin
WHAT IS INCLUDED IN THIS REPORT?

This report summarizes the results of one of the largest and most comprehensive physician surveys ever undertaken in the United States. The survey was sent by email to over 630,000 physicians (approximately 84 percent of all physicians in active patient care), or to virtually every physician with an email address on file with the nation’s largest physician database.

IT INCLUDES

Responses from 13,575 physicians revealing:

- current morale levels of today’s doctors
- their perspective on healthcare reform and its effects on their practices
- physician practice patterns and metrics
- the career plans of today’s doctors
- what they believe is detracting from effective healthcare delivery
- how delivery can be enhanced

and many other issues impacting patient care and the quality of the medical practice environment.

- Over one million data points derived from responses to 48 questions, many of them featuring multi-response answers.
- Selections from some 8,000 written comments on the current state of the healthcare system by physicians reflecting a wide range opinions and recommendations.
- A detailed analysis underscoring survey implications for policy makers and patients
- Responses aggregated by physician age, gender, practice type (primary care vs. specialists) and practice status (employed physicians vs. practice owners) for cross-referencing between different physician groups.
KEY QUESTIONS ADDRESSED

What do physicians think about the current state of the medical profession?
How satisfied are they in their careers?
What changes will they make in their practices?
Will they continue to see Medicare and Medicaid patients?
What do they think of ACOs and other emerging delivery models?
How many patients do they see?
How many hours do they work?
What do they think about health reform?

A Survey of America’s Physicians provides answers to these and other questions directly impacting quality and access to patient care in the United States.
Primary Care Doctors:

- AMA states that in 2014 the primary care shortage is 9,000 in the US.
- AMA Estimates the short-coming to be 45,000 in year 2020.
- 50% in 2012 reported in a survey of 7,200 doctors experiencing one symptom of “burnout”
- More likely to have a major medical error in 3 months
- Those planning to leave their practice within 5 years
  - aged 35-49: 30%
  - age > 50: 52%
Primary Care Physician Comments

“I always felt I was cutting my patients off”

“I went to bed many nights lying awake, worrying that I missed something.”

“What drives physician satisfaction is also what patients and payers want: delivering good care. And we’re less and less able to do that, you spend less time listening to patients, getting to know them and thinking more deeply about their care.”

“I used to be a doctor, now I’m a clerk”
TIME MANAGEMENT: Primary Care
A.K.A
Competing for your doctors attention

- Will see upwards of 30 patients in a day
- Appointment times as quick as every 11 minutes (in some hospital based primary care practices)
- *18.5 phone calls
- *16.8 emails
- *12 prescription refills (not counting those done during a visit)
- *19.5 lab reports interpreted
- *11 imaging reports
- *13.9 reports from specialists
Many physicians report that digital records are slowing them down— not speeding them up.

Doctor’s face often turned to the computer screen while patient is talking.

Digital records contain numerous repetitive information fields leaving little room for nuanced observation that was captured in an ‘old-fashioned’ doctor’s note.

Restrictions on who is allowed to input data have shifted administrative tasks to physicians.
The article quoted, Dr. John Schumann, a primary-care doctor teaching at University of Oklahoma school of Community Medicine in Tulsa, seeing patients at three hospitals, each with a different system........

“None of them talk to each other, that’s the kind of thing that drives doctors nuts”
The Zodiac

Aquarius  Sagittarius  Ophiucus

Pisces  Capricornus  Scorpius

Aries  Gemini  Libra

Taurus  Cancer  Virgo  Leo

ECLIPTIC
Asclepius

- Son of Apollo and Coronis
- Killed by his grandfather, Zeus, with a thunderbolt, for healing his distant cousin (Hippolytus), bringing him back from the dead and accepting gold as payment.
- Zeus, later, raised him as a God (Or placed his body among the stars as the constellation - Ophiuchus)
The Past, as with much of Human History begins in myth provides hidden lessons in what was expected by patients in ancient times.

This Constellation can be viewed in July at 9 pm by looking at the NW corner of the Milky Way
Aclepius’s Family

- Mother killed by Apollo for infidelity
- Raised/taught healing by the Centaur Cheiron
- Married to Epione (Soothing)
- Seven Children:
  - Hygieia (hygiene)
  - Panacea (universal remedy)
  - Aceso (healing)
  - Laso (recovery)
  - Aglaea (beauty, splendor)
- Illness thought to be a punishment of the Gods,

- Patients slept overnight in the temple - a term referred to as “incubation”

- Dreams were reported to the Priest in AM

- Prescriptions then issued

- Baths, Gymnasium, and medicines Rx’d

- Non-Venomous Snakes slithered freely
HIPPOCRATIS COI MEDICI

FROBEN

BASILEAE

M D XXXVIII
Hippocrates of Cos  (460-370 B.C.)

- He instilled the first dose of science into Medicine, moving Medicine away from myth and charting the first steps in the journey of Medicine to our “modern age” in the 21st century.

- “All diseases have natural causes”

- Science

- “Wherever the art of medicine is loved, there is also a love of humanity”

- Art
“Cure Sometimes, Treat Often, Comfort Always”

-Hippocrates
Hippocratic Oath:
1928 - 24% US Medical Schools
2014 - 100% US Medical Schools

Oath of Hippocrates

I swear by Apollo the Physician, and by Cereus, and by Aesculapius, and by Hygeia, and by Panacea, and by all the gods and all the goddesses, to go about learning and practice amongst you with all good will and excellence, and to abstain from all improper practice; and if I shall fail to do so, let the gods turn me into a woman for evermore.

In whatsoever place I shall live or practice, I will do no harm, but only good to the sick, according to the laws of my art, and to the best of my knowledge and skill, under the direction of the laws of the country.

I will give no deadly medicine, but will use such as are harmless. I will not give to a woman the means of procuring an abortion.

I will employ no words of flattery, nor will I give to any one false accounts of his disease, nor of the manner of treatment.

I will keep this agreement and all things connected with it entire, and will abstain from all discourses concerning it, which is not authorized by my art.

I will only profit by the practice of my profession, and will apply my whole effort to the relief of the sick in all cases with which I am presented, and to carry out this agreement as far as I am able.
“No one before me has given the true method of treating disease. Hippocrates, I confess, has heretofore shown the path, but as he was the first to enter it, he was not able to go as far as he wished…..He has opened the path, but has left it for a successor to enlarge and make plain.”

Wrote a treatise entitled, “That the Best Physician is also a Philosopher”

Regarded medicine as an interdisciplinary field that combined theory, observation, and experimentation
Roman, the son of a prosperous architect, Nikon (died when Galen was 20)

- Studied Medicine at Alexandria
- Put in charge of the Gladiators of Pergamon on completion of his studies at the age of 28
- First went to Rome at the age of 32- gaining fame for treating successfully philosophers, aristocrats, and...
- Emperor Marcus Aurelius said “I have but one physician, and he is a gentleman”
GALEN

- Pioneered the study of Anatomy and Physiology despite being unable to dissect a human body
- wrote over 700 works- still being taught in the Renaissance
- employed systematic experimentation
- Advised his students to travel to Alexandria where there were still two human skeletons for study
- Diet, Exercise, and bathing were common remedies
- Cito, tuto et jucunde
- “quickly, safely, and pleasantly”
Islamic Science and Medicine

- Combined the traditions from Greco-Roman Medicine with ancient Indian (Ayurveda), Iranian, and Arabian practices

- Ishaw ibn ‘Ali l-Ruhawi regarded physicians as “guardians of souls and bodies”

- ‘Al-Ruhawi’- wrote “Ethics of the Physician”- first documented description of a peer review process.

- Physician’s could face a lawsuit from a patient if peer reviews were negative
The Truth in medicine is a goal that one cannot attain, and everything that is written in books is worth much less than the experience of a physician who reflects and reasons.

First to divide all substances into animal, vegetable, and mineral.

Kept meticulous notes- noted that half the illnesses he treated did not follow the time course predicted by Galen.

His Textbook, “liber nonus” - studied until the 17th century in Europe.

Al- Razi- “Rhazes” (865-925 AD)
“During the long obscurity of the Middle Ages, Europe gradually lost touch with science, medicine, and rationalism. Faith dictated from on high replaced reason and observation. Medicine became a hodgepodge of a few potentially useful remedies dispensed along with bizarre compounds, chants, charms, amulets, and prayers. There was no shortage of natural and man-made disasters attributed to witches.”

Robert Adler, “Medical Firsts”
Andreas Vesalius (1514-1564)

- Flemish-born Anatomist - dissected the human body
- Corrected errors from Galen, whose dissections were limited to apes, dogs, and monkeys
- DeHumani Corporis Fabrica
- Contained detailed drawings of the human body posed as if alive
Before publishing his findings proving the circulatory system to the West for the first time, William Harvey checked and rechecked his facts for 12 years stating.....”It is not in my nature to upset the established order”

Spaniard Michael Servetus had described the pulmonary circulation before Harvey:

Not as worried about the established order, he was burned at the stake by Calvinists in 1533
Renaissance to 19th Century Medicine

- **Johann Weyer- 1515-1588 (Netherlands)**
  - 1563-published De Praestigiis Daemonum (On Witchcraft)- He saw mental illnesses where society imagined sorcery and is viewed by many as the founder of modern psychiatry

- **Dr. John Snow- 1813-1858 (England)**
  - 1854- convinced local council to remove the public pump handle on Broad Street ending a Cholera outbreak

- **Carlos Finlay- 1833- 1915 (Cuba)**
  - 1881- first to theorize that the mosquito carried the disease yellow fever

- **William Osler-1849-1919 (USA)**
  - First to: create a residency program for training and to bring students to bedside for clinical training
"I have been made responsible by fate to reveal the truth which this book contains.....my conscience will help me suffer whatever else may be in store for me."

Ignaz Simmelweis
1818-1865
Vienna, Austria
LIFE EXPECTANCY THROUGH THE AGES

Early humans did not generally live long enough to develop heart diseases, cancer or loss of mental functions. A snapshot of how life expectancy has changed, and the big killers of each era:

**AVERAGE LIFE EXPECTANCY**

<table>
<thead>
<tr>
<th>Era</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 years</td>
<td>38</td>
<td>35</td>
</tr>
<tr>
<td>Neolithic</td>
<td>48</td>
<td>38</td>
</tr>
<tr>
<td>Classical</td>
<td>40</td>
<td>38</td>
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<tr>
<td>Medieval</td>
<td>40</td>
<td>38</td>
</tr>
<tr>
<td>1900s</td>
<td>70</td>
<td>75</td>
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</tbody>
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**Key Events**

- **30 years**: Homo habilis (350-900 years ago)
- **Neolithic (4500 BC to 3500 BC)**: Agriculture, irrigation and urbanization brought problems associated with settled populations, such as local contamination of water and diseases such as cholera, smallpox, typhoid, polio and influenza. Malaria and other diseases carried by mosquitoes and lice, which fed on domesticated animals, appeared.
- **Classical Greece and Rome (550 BC to 500 AD)**: Tuberculosis, typhoid, smallpox and scarlet fever spread among the densely populated populations. Malnutrition, gastroenteritis and violence were big killers.
- **Medieval period (1000 AD to 1500 AD)**: Life expectancy grew with urbanization, but diseases caused by crop failures and bubonic plague were the big killers. The Black Death (1347-1351) wiped out 25 million people in Europe and 60 million in Asia, returning several times, culminating in the Great Plague of London (1664-1666). By 1600, life expectancy had dropped back to 36.
- **1900s**: Better health-care, sanitation and living conditions boosted life expectancy to 70 for men and 75 for women by 1950.
- **Today**: Cancer, heart disease and stroke are the biggest killers in the developed world. Newer weapons also come with unprecedented levels of mental function and mobility problems.
20th Century Medicine

- Louis Pasteur proposes “Germ Theory of Disease”
- Cause of tuberculosis discovered
- Diphtheria cured
- Plague vaccine introduced
- Typhoid vaccine introduced
- Tuberculosis vaccine discovered
- Discovery of antibiotics

- 1880: Kraepelin (27 years old) first publishes his theory of psychiatric “diseases.”
- 1890: Appointed Professor of Psychiatry at the U of Munich.
- 1910: Founds German Institute for Psychiatric Research
“Ancient Medicine”
MODERN MEDICINE: “Upside Down Paradigm”?
After FDR's death, Harry S Truman continued support of a national health care program but defeated by lobbying by the American Medical Association and outbreak of the Korean War.

1944 - Franklin Roosevelt endorsed Wagner-Murray-Dingell Bill which provided for a national medical care and hospitalization fund.

1965 - Medicare established by Lyndon B Johnson.

1974 - Nixon introduced the Comprehensive Health Insurance Act, which would have mandated insurance through employers and a federal Medicare-for-all. Apparently Ted Kennedy rejected it but later regretted doing so.

1985 - The Consolidated Omnibus Budget Reconciliation Act (COBRA) enacted under Ronald Reagan amended the Employment Retirement Security Act of '74 to enable some employees to keep health insurance after leaving jobs.

2003 - Medicare Prescription Drug, Improvement and Modernization Act established by George W Bush, which included a prescription drug plan for elderly and disabled Americans.

2009 - Re-authorization of State Children's Health Insurance Program by Barack Obama, extended coverage to millions of children.

American Recovery and Reinvestment Act included funding for computerized medical records and preventive services.

March, 2010 - Health Care Reform Act enacted by Barack Obama, extending affordable insurance to 32 million more Americans by extending Medicaid, insurance through employers etc.

1993 - Clinton Health Care Plan developed by Hilary Clinton not enacted into law.

1996 - Health Insurance Portability and Accountability Act (HIPAA) enacted - made it easier for workers to keep health insurance when they lost or changed jobs. Made use of national data standards for protecting, reporting and tracking personal health information.
Maggie Mahar

Written before the ACA was passed
Drowning in Today’s Background Noise

- Quantity measured over quality with reimbursement dictated by insurance and business mindsets
- Avg doctor: 30+ patients a day, deal directly with nurses and staff
- Avg wait time to see a doctor: 18 days in the USA
- What is now routine: impersonal, quick and dictated by the diagnosis—>code—>physicians being paid to care for problems not people
- Difficult for an average physician to manage the many distractions and spend time with their patients to get to ‘know them’.
- Paperwork requirements for patient and doctor often leave little time for history and examination- let alone, education about diagnosis and treatment
Personal Advocacy: Required in today’s Medical World

- In order to receive the care you deserve, you must advocate for yourself as a consumer of today’s medical services staying as informed as possible.

- You should seek a physician who can serve as a guide through today’s confusing Health care delivery system.

- **Required**: Trust your own voice and instinct: if it seems that you are not being listened to, then you probably aren’t being listened to. Try to find another physician to treat you.
How Doctors Think
Medical Care: Problem Oriented vs. Patient Centered

✦ Problem Oriented

✦ focus on the different medical problems more than the individual
  
  ✦ less personable style of delivery
  
  ✦ focused on quantity
  
  ✦ driven by third party payer

✦ Patient Centered

✦ Focuses care on an individual in a personal manner while aiming to treat a persona’s medical problems comprehensively and how they relate to the whole
  
  ✦ More personable
  
  ✦ Quality not quantity
  
  ✦ e.g. hospice
Build a Relationship With a Physician You Trust

- Trust, support, and open communication are critical to a patient/physician relationship

- **Things to ask and consider when searching for a new doctor:**
  - Do you know a doctor you would recommend?
  - What do you like about this doctor?
  - How long does it usually take to get an appointment?
  - How much time does the doctor spend with you directly?
  - Can you usually see your doctor right away if you need to? Same day?

- **Additional options for health partnership**
  - Social workers, geriatric care, elder lawyers, caretakers
It is More Important to know what sort of person has a disease than to know what sort of disease a person has.

Hippocrates of Cos
Team Approach Often Needed

Social Worker
Retirement
Geriatric
Care Management
Retirement
Home Care
P.O.A
Assisted Living
In-Home Safety
care plan
Experience
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