Leadership in Anesthesiology – Planning the Future of Our Specialty

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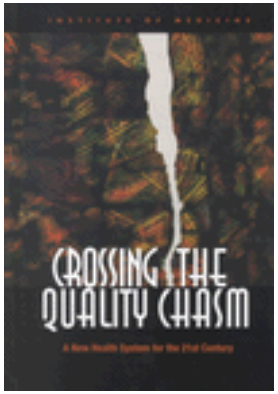
I. Current Issues Facing Healthcare in America

Access to Health Insurance ≠ Access to Medical Care

Status of U.S. Health Care System



IOM 2001

IOM Report: last 35 years have been an 'era of Brownian motion in health care' system reform.

Health care delivery is an underlying disease of current system:

It's a largely disorganized and fragmented delivery system characterized by lack of coordination, poor communication, uneven quality, and rising costs.
(Goodman and Fisher NEJM 2008)

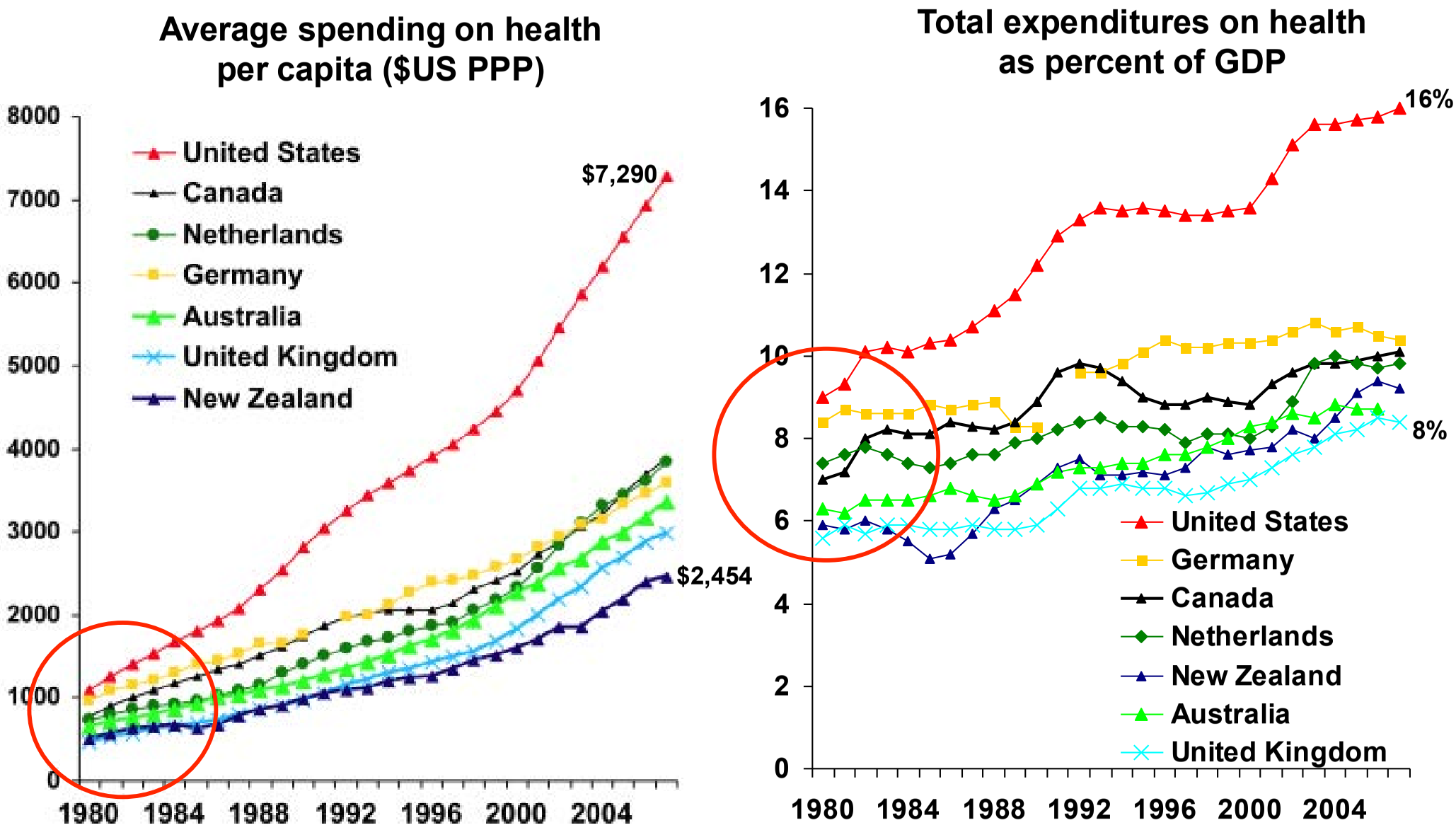
Healthcare delivery in the U.S. is a series of regionally influenced sectors, based on a Medicare business model that favors payment for procedures and not patient contact time. It compels physicians to emphasize expensive procedures over office visits in order for the physician to remain in practice. (Lema 2008)

Issues Driving Healthcare Reform

- U.S. healthcare spending is twice that of the rest of industrialized world – 17.6% of GDP in 2009.
  - Average employer health insurance premium (2009)
    - $13,375 yearly per family (27% of U.S. median income)
  - Americans receive only 55% of recommended care for common conditions when compared with other countries.
  - Every 30 seconds, someone in the U.S. files for bankruptcy as a result of a serious health problem (1: 5 bankruptcies).
- Americans think that death is optional - $130 billion spent on care in the last two years of life.

www.nchc.org/facts/cost.shtml

International Comparison of Spending on Health, 1980–2007



Note: $US PPP = purchasing power parity.

Source: Organization for Economic Cooperation and Development, *OECD Health Data, 2009* (Paris: OECD, Nov. 2009).

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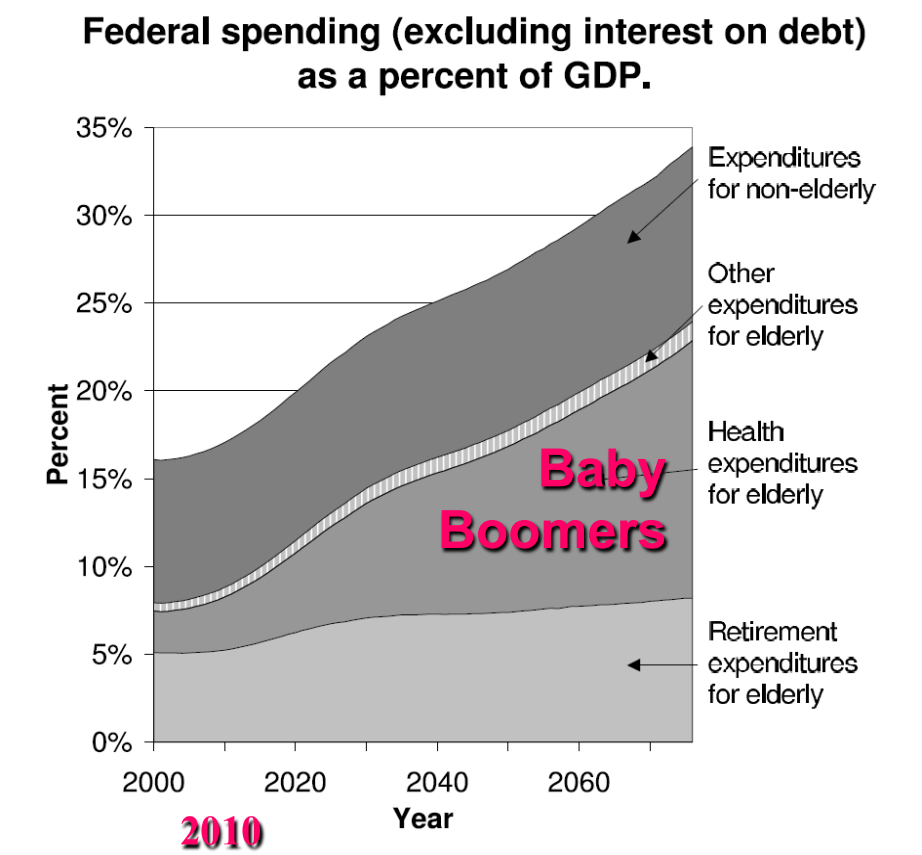
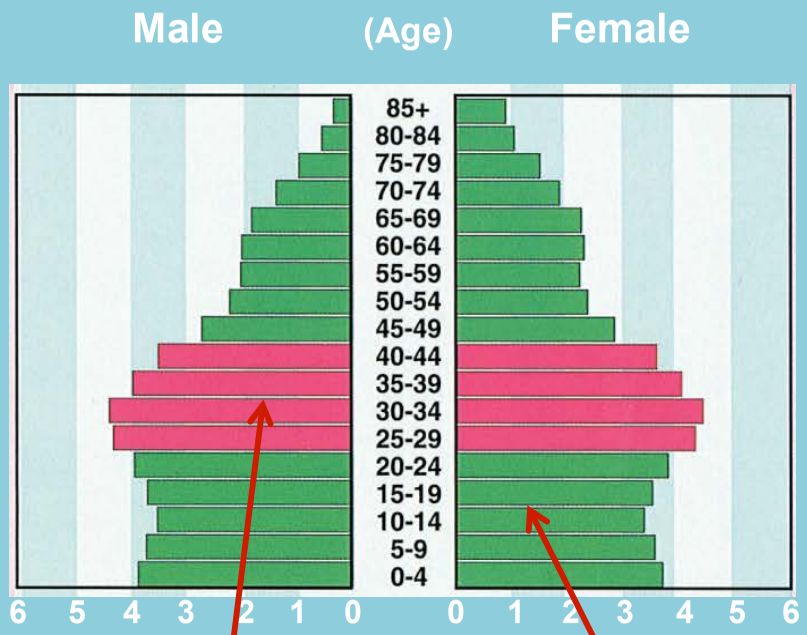
It's All About Caring For The Elderly





1990

40 million Gen Xers

ME and 70 million Boomers

Factors Contributing to MD Shortage

- By 2030, 70 million will be over age 65.
- Doctors are aging with their patients and are nearing retirement:
  - 1975 – 51,000 MDs over age 65
  - 2006 – 177,000 MDs over age 65
- Life-style issues for the new generation of MDs will reduce their productivity by 15% - 25%.
- 1990 – 2006: 54% decrease in primary care practitioners.

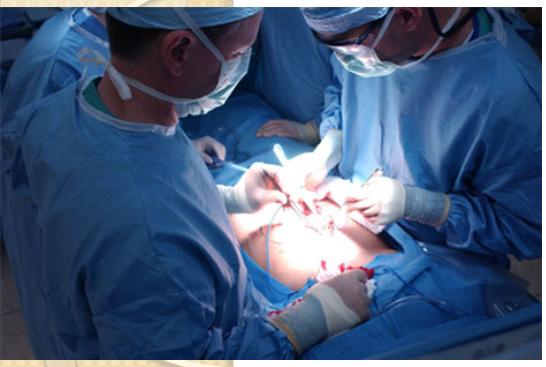
Davis R. USA Today 2/26/08 p.1-2; Rubin R. USA Today 12/3/08 p.9D;
Nuckols T et al., NEJM 360:2202, 5/21/2009

II. Future of Anesthesiology – The Peripatetic Practice

Connected to the operating room means you may go down with the ship…

or

What you learned during training will not apply in the future



SURGICAL TRENDS SINCE MID-90's CHANGING THE LANDSCAPE

- **Minimally invasive surgery blurred lines between invasive radiology and surgery**
- **Robotic and Telesurgery (Radical Prostatectomy)**
- **Transgastric Surgery (Appendectomy)**
- **Radiologic procedures (Gamma Knife)**
- **'Medicalization' of surgery (Urology – Brachytherapy, hormone therapy)**
- **Office-based procedures removing traditional surgery away from hospitals**

'Minimally Invasive' Anesthesia
Changing Practice Landscape – Safer and Easier

Old Techniques	New Techniques
Arterial Blood Gas Analysis Color of Blood	Continuous End Tidal Co_2 Monitors Pulse Oximetry
Pallor, Complete Blood count	Continuous Hemoglobin/Pulse Oximetry
Electroencephalogram	Cerebral Oximetry (Tissue Oxygen Saturation in Brain)
Pulmonary Artery Hemodynamic Monitors	Non-Invasive Cardiac Output Monitors (From ET tube)
Nerve Stimulation, Antimuscarinic/ Anticholinesterases	Selective Neuromuscular Relaxant Binding Agent (Sugammadex®)
Arterial Line Blood Pressure Monitoring	Continuous Non-Invasive Blood Pressure Monitoring
Anatomic Landmarks, Blind Needle Insertion	Ultrasound Guided Needle Placement With Nerve Stimulation
Fiberoptic Intubation, Awake, Sedated Intubation	Glidescope®, Laryngeal Mask Airway®

Future Practice Predictions

- Megatrends in anesthesia practice
  - Intense Competition
    - Outsourcing Abroad – loss of surgical cases and revenue
    - Hospital Closures – less sites, less job options
    - CRNA Independence – threat as cost, not safety, is driving force
    - Complimentary Medicine – removes patients from surgical options
  - Decreasing Payments
    - Vanishing Stipends – Hospital CEOs retaliate to preserve margins
    - Expanding Entitlement Programs – Medicare/caid, SCHIP pay less
    - Payments Not Keeping Pace with Operating Costs – less margin
  - Complex Group Interactions
    - Power Struggle with CEO – MD shortage vs. controllable CRNAs
    - Lifestyle - 'work less, pay more' concept – less days/hours

Weiss, M.F.,JD Summit HMR The Resource, #61,7-8/06, #68,11-12/07, #70,3-4/08

Other Megatrends in Anesthetic Practice

- **Disruptive Technologies**

  Unexpected advances in anesthetic drugs or delivery systems – making anesthesia accessible to many specialties
  – threatens volume of routine cases.

- **Expansion of Minimal Surgery**

  Further reduces need for anesthesia specialists.
  – competition from non-anesthesia providers.

- **Physician Proceduralists**

  Expand oversight of conscious sedation nurses or employ CRNAs/CSNs to give office anesthetics
  – loss of case volume and personnel.

Changes In Hospital Practice Are Inevitable and Imminent

- **Practice** – lesser trained personnel will dominate routine health care delivery to reduce costs – **higher supervisory ratios**.
- **Hospitals – inpatient ICU facilities where surgical and medical care are fused. ER, ICU, Hospitalist and Surgicalist physicians already collaborate for continuity of hospital care – need to become a player again.**
- **Payment** – reduced payment for expensive surgical and hospital-based services will challenge MDs' ability to provide solo care without accepting hospital employment or CEO subsidy – **higher supervisory ratios or perioperative care**.

III. Leadership – Planning the Future of Anesthesiology

Lead, follow or get out of the way

vs.

Fools rush in where wise men fear to tread

Radically Rethinking What We Do

Anesthesiologists vs. Nurse Anesthetists

"…Midwives manage uncomplicated deliveries under protocols providing for physician compensation…Why does our specialty's view of the care of low risk anesthetics differ so dramatically from the obstetrician's views of the care of low risk deliveries?"

- Ron D. Miller M.D.
ASA Newsletter 2005

A Waste of Our Skills?

"…we have excellent anesthesiologists who markedly restrict their full potential to provide a positive impact on [patient] safety by delivering one-on-one care to [low risk patients and procedures that] do not warrant such physician-intensive, inefficient, and cost-ineffective care."

- Mark Warner M.D.

44th Rovenstine Lecture 2006

ASA President –Elect

Is it time to follow the ICU physician care model of supervision by protocol of 8-10 operating suites?

The Gauntlet Has Been Dropped

- Patient Access v. Patient Safety v. Physician Payment v. Government Cost Containment
- "How many people can we get through the system as safely and efficiently and as cheaply as possible?"
- Healthcare reform is NOT about patient safety or access, but about cost containment.

No Good Deed Goes Unpunished

Over the past 35 years, we have convinced the public that anesthesiology very safe. It is now in jeopardy of being relegated by legislators and payers to a technical perioperative endeavor managed by technicians without close physician supervision.

It's so easy, even a caveman can do it.

Four Areas to Change

- Diversifying of our practices beyond the operating room (critical care, pain medicine)
- Expanding of our administrative leadership capabilities (ambulatory surgery directors)
- Restructuring resident training programs so future physicians are prepared for the changes
- Conducting relevant research to show safe short-term and long-term patient outcomes

Our strategies **must** focus on expansion of perioperative care, critical care and pain management services that make us valuable and essential to those who are in need of our medical services.

adapted from Kapur, P SAAA Lecture 2009

Accepting the Responsibility

- Reduce overall morbidity and mortality by:
  - Reducing the incidence of postoperative infection
  - Reducing postoperative ischemic events
    - Cardiovascular
    - Peripheral
    - Hepatorenal
  - Reducing postoperative cognitive dysfunction
  - Eliminating intra-operative awareness and its resultant psychotrauma
  - Reducing the development of chronic pain
  - Reducing postoperative pulmonary complications
  - Reducing tumor recrudescence

Leadership – American Style

Six Rules for Successful Leadership from Jack Welch (ex-CEO of GE)

- **Control your destiny**, or someone else will.
- **Face reality** as it is, not as it was or as you wish it to be.
- Be **candid** with everyone.
- **Don't manage, lead**.
- **Change** before you have to.
- If you don't have a **competitive advantage**, don't compete.

IV. Health Reform

Medical Armageddon

or

A Tempest in a Teapot

Healthcare Reform - Government Concerns

- National Debt: 13.6 Trillion dollars or $44,000 per American
- 42% of adults (19-64) are un/underinsured
- Recent Census Bureau Statistics - 47 million uninsured Americans (10% make over $75,000/ year)
- CBO Director estimates wasteful healthcare spending to be $700 Billion
- Medicare Insurance Fund exhausted by 2017
- Medicare pay cut for physicians is 21% in 2010
- CMS is using Rand Corporation to study cost-effective outcome data for highest paying CPT codes (Pain)

Lema's 6 Essential Questions For U.S. Healthcare Reform

1. How do you get every American into a healthcare network without rationing care (access or quality)?
2. How do you pay for it without bankrupting businesses or over-taxing the middle class?
3. Where are you going to find the necessary health providers to deliver timely care without stratifying the quality into MD vs. non-MD delivered care?
4. Who's going to pay the educational costs of the doctors already practicing in the current system once practice restrictions and payment caps are legislated?
5. How are you going to convince the 'best and brightest' to enter medicine during this transition to nationalized style of healthcare?
6. How can you expect cost containment when tort reform is not even being considered?

Some Washington Politicians' Solution to Healthcare Costs

V. Final Thoughts on Anesthesiology's Future

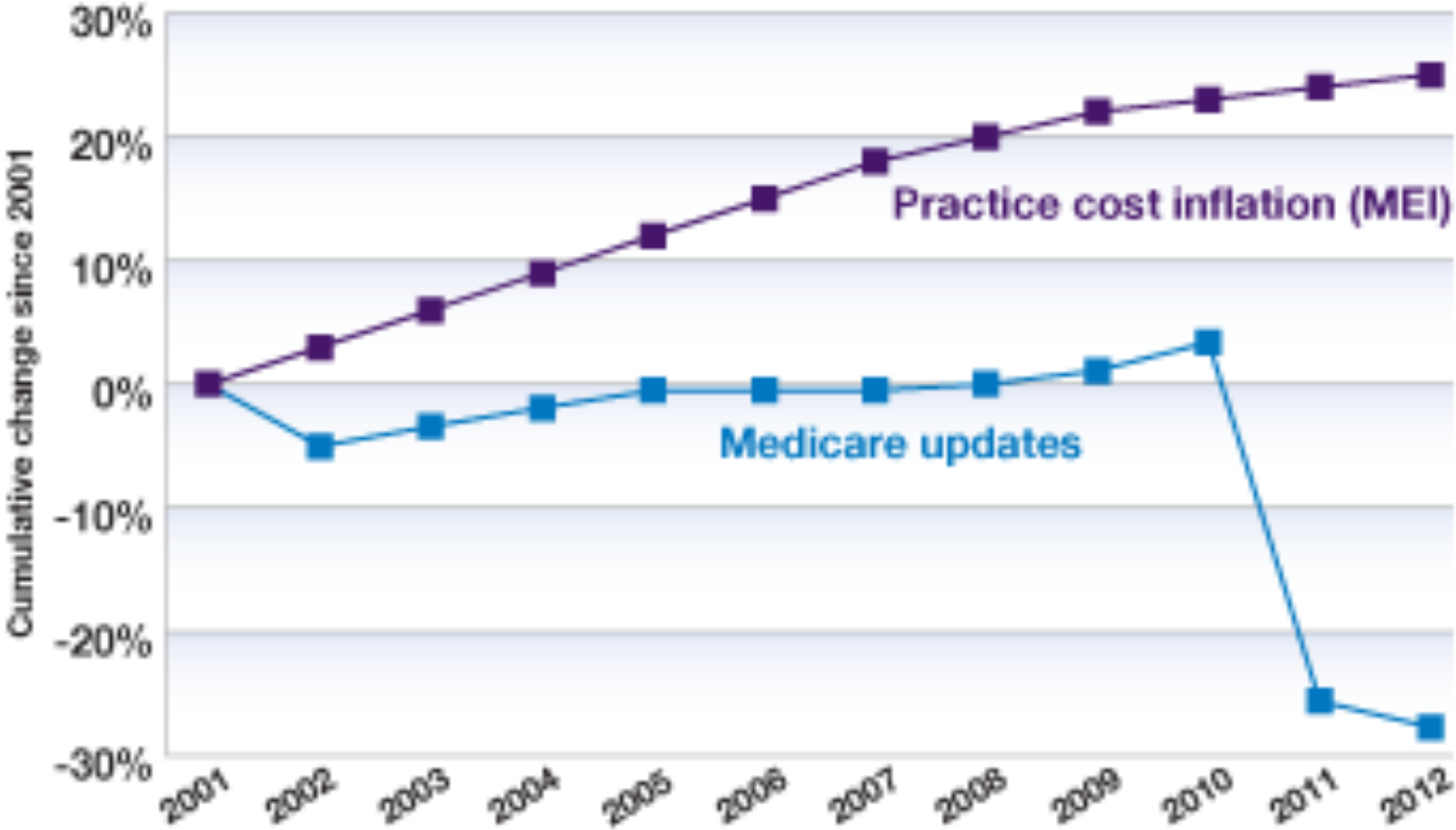
It's not about ObamaCare or Healthcare Reform.

It's all about the evolution of medical practice

What Would I Worry About

- Endoscopy/Ophthalmology payments will be capped or eliminated.
- Impact of anesthesiologists becoming hospital employees.
- Medicare/caid cuts - CMS demands RBRVS payment structure.
- Impact of mega-group takeovers on anesthesia training programs.
- How do you transform an OR-based residency program to a non-OR based training?
- Will CRNA mega-groups displace MD based groups and how might that impact training applications?
- LMA/propofol replaced by Sedasys systems and conscious sedation nurses.

Medicare updates versus medical practice inflation



Only Three Ways to Get Paid

Payment System	Key Element	Impact Incentive	Risks	Correction
Salary	Paid a certain amount per week	More time to see patients, limits number of patients seen, less concerned about volume	Too much care given to one patient and not enough to the community	Clinic controls appointments and hours and schedules them to increase productivity.
Capitation	Paid based on number of patients in panel	Add many pts to panel for high paymt/ member; reduce hours	Under utilization of MD services leads to poor care	System limits number of patients/panel
Fee for Service	Paid for every service provided	Encourages providing expensive procedures or extends contact	Overuse of services and costs is hallmark	Monitoring of services or reducing paymt. P4P, transparency

Brook RH. JAMA(2010), 304(7):795-796

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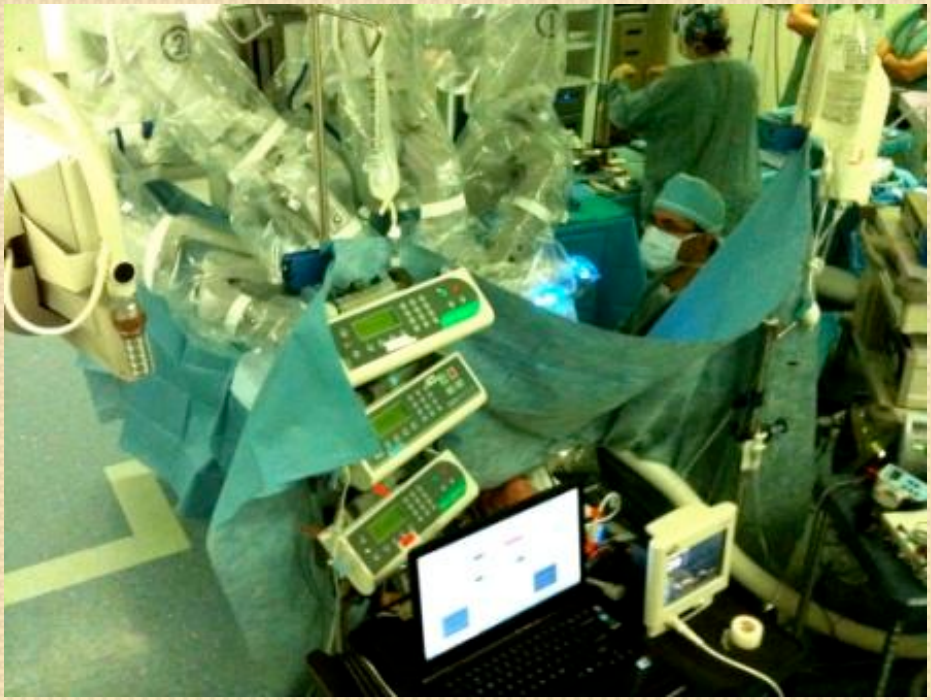
McSleepy meets DaVinci

- In a world first, a completely robotic surgery and anesthesia has been performed at the McGill University Health Centre.
- Robots will not replace doctors but help them to perform to the highest standards [with less personnel].

Julie Robert 10/18/2010 (http://muhc.ca)



U.S. Healthcare Reform – Probable 2011 Directions

U.S. government will use clinical outcome studies to redistribute payments by restricting or eliminating fees on services that demonstrate little benefit in improving a patient's well-being or hastens convalescence (vertebroplasty for those over age 65).

Reform will likely increase the cost of goods, increase federal and state taxes, reduce payments to hospitals and physicians, and mandate performance measures.

Government will dumb down care by expanding the role of non-MD providers. Make everyone a doctor and the perception of care is unchanged.

Real Solutions to Improve Healthcare in America

- Change the current payment system from "payment dictates practice" to "**practice guides payment**".
- Better access to healthcare means having an **adequate supply** of doctors and other providers.
- Pay adequately for **complex** cognitive medical care and doctors will return to primary care.
- Develop healthcare algorithms guided by **evidence – based practice** with favorable outcomes.
- Make the patient responsible for **paying some healthcare costs** through health savings plans or other reimbursable accounts.
- Engage **all stakeholders** in the reform process and let them know that their second choices are more likely to be considered (truly a compromise).
- Health reform will not happen without **tort reform**.

Why Anesthesiologists Are Well-Prepared for Changing Times

- Efficiently manage OR activities
- Provide subspecialty care to improve marketability
- Deliver care when it matters most and when unexpected crises occur
- Supervise or personally deliver the full spectrum of cost effective anesthesia care
- Perioperative and critical care medicine have always been fundamental part of our training.

Real Solution for Anesthesiologists to Thrive (Survive)

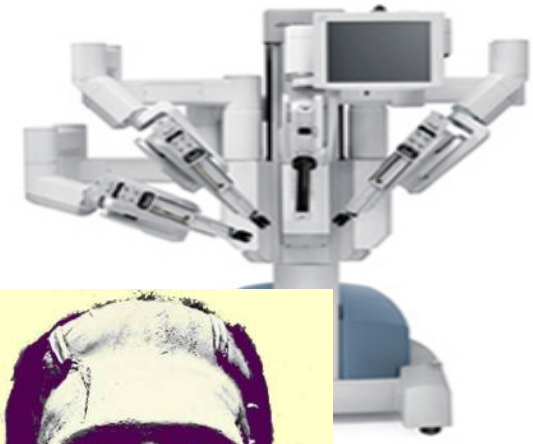
- Get out of the OR and back to the ICUs.
- Run perioperative care services for the surgeons.
- Take on a greater administrative role in the OR (business degree).
- Become indispensible to those who would use your services (preoperative work-ups).
- Prepare for medical direction (up to10:1) and supervision of sedation nurses.
- Start figuring out how we can save 1.5% yearly on healthcare without hurting our bottom line.
- Demonstrate that we are safer, cheaper and more versatile than CRNAs.

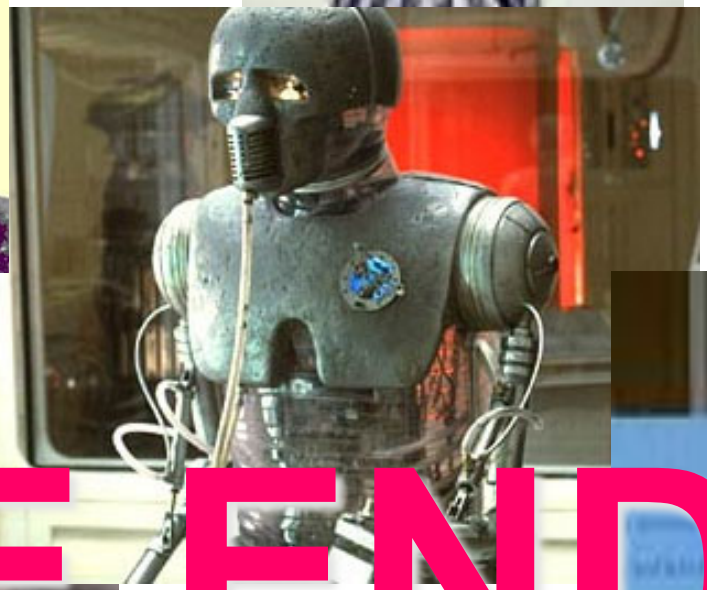
Future Anesthesia Practice/Payment Opportunities

- **High-Acuity Intraoperative Anesthesia Care**
- **Supervision of Multiple Anesthetic Locations**
- **Medical Care of Surgical Patients**
  - **Preoperative Evaluation**
  - **Surgical Antibiotic Prophylaxis**
  - **Perioperative Glucose Control**
  - **Perioperative Beta Blockade**
  - **Acute Pain Management**
  - **Surgicalist or Perioperativologist**
  - **(Postoperative Cognitive Dysfunction?)**
- **Medical-Surgical-Pediatric Intensive Care**
- **Chronic Pain Care**
- **End-of-Life & Hospice Care**
- **Operating Room Management**
- **Oversight of Procedural Sedation**
- **Oversight of Perioperative Services**

From A. Hannenberg **RVG – E/M Codes – Hospital Payment**

Welcome to the Future





THE END

- I. Current Issues Facing Healthcare in America
- II. Future of Anesthesiology – The Peripatetic Practice
- III. Leadership – Planning the Future of Anesthesiology
- IV. Health Reform
- V. Final Thoughts on Anesthesiology's Future

U.S. Healthcare vs. The World

Overall Ranking

Country Rankings	
	1.00–2.33
	2.34–4.66
	4.67–7.00

	AUS	CAN	GER	NETH	NZ	UK	US
OVERALL RANKING (2010)	3	6	4	1	5	2	7
Quality Care	4	7	5	2	1	3	6
Effective Care	2	7	6	3	5	1	4
Safe Care	6	5	3	1	4	2	7
Coordinated Care	4	5	7	2	1	3	6
Patient-Centered Care	2	5	3	6	1	7	4
Access	6.5	5	3	1	4	2	6.5
Cost-Related Problem	6	3.5	3.5	2	5	1	7
Timeliness of Care	6	7	2	1	3	4	5
Efficiency	2	6	5	3	4	1	7
Equity	4	5	3	1	6	2	7
Long, Healthy, Productive Lives	1	2	3	4	5	6	7
Health Expenditures/Capita, 2007	$3,357	$3,895	$3,588	$3,837*	$2,454	$2,992	$7,290

Note: * Estimate. Expenditures shown in $US PPP (purchasing power parity).
Source: Calculated by The Commonwealth Fund based on 2007 International Health Policy Survey; 2008 International Health Policy Survey of Sicker Adults; 2009 International Health Policy Survey of Primary Care Physicians; Commonwealth Fund Commission on a High Performance Health System National Scorecard; and Organization for Economic Cooperation and Development, *OECD Health Data, 2009* (Paris: OECD, Nov. 2009).

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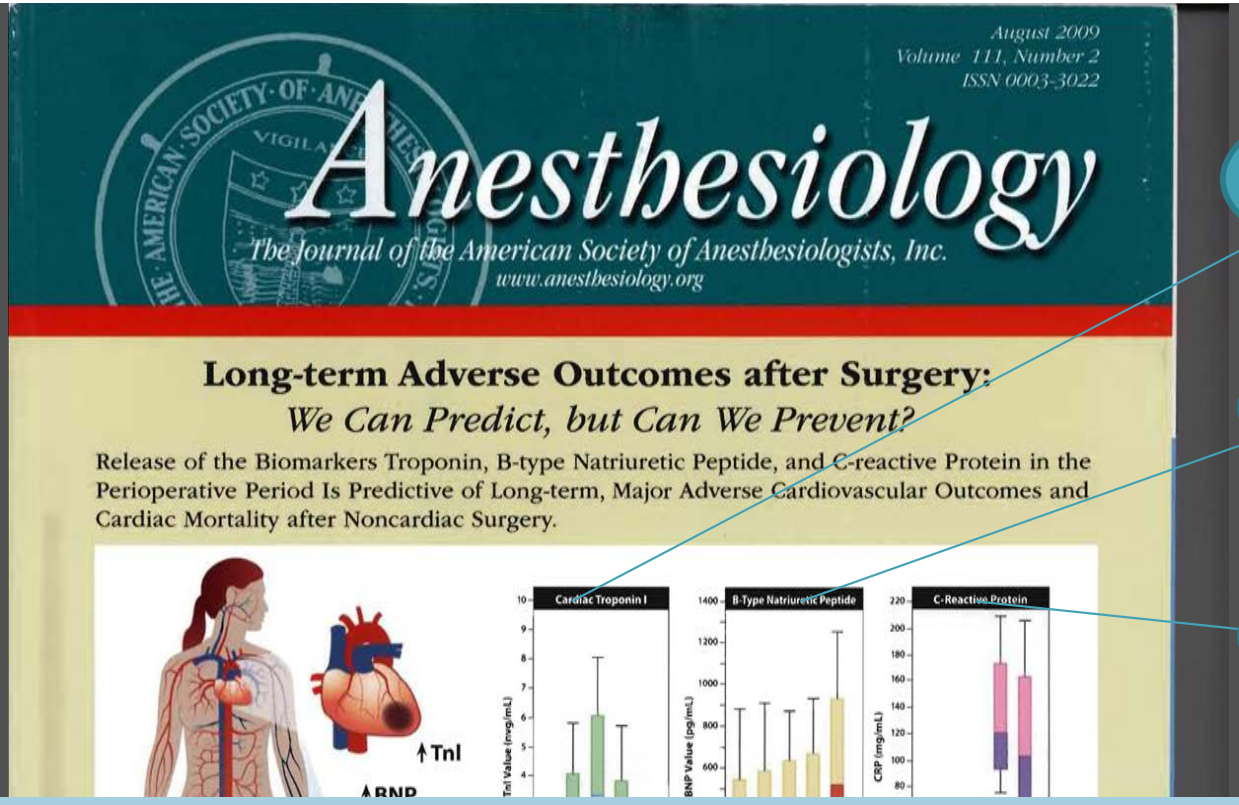
Anesthesiology Shortages May Hasten Transition to Mid-Level Providers

- Expansion of anesthesia services into offsite/unusual anesthetizing locations creates greater solo MD demand with reduced work force efficiency.
- Pain medicine subspecialty prevents most physicians from providing OR coverage depleting supply.
- Rise of preoperative testing sites will remove another MD from OR coverage each day.
- Earlier retirement by MDs- reduces workforce
- Quality of life pursuits and gender issues will likely reduce clinical productivity of next generation.

August 2009



Troponin

β - NP

CRP

Troponin, β-type natriuretic peptide and C-reactive protein remain elevated 5 days after surgery and indicate potential adverse effects on myocardial performance.

How Might Anesthetic Practice Evolve Over the Next Decade?

- Inpatient hospital care only for the sickest patients (one large ICU).
- Safer drugs with keen target specificity and with minimal or no side effects.
- Computer-driven dosing with physiologic feedback compensation.
- Minimally-invasive but tiresomely-long surgeries and anesthetic management.
- Telemedicine, Robotics, Pharmacogenetics

Adapted from Kapur, P. SAAA lecture 2009