The Future of Anesthesiology

for medical students who may be interested in participating

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Discovering Anesthesia Subspecialties
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UC Irvine School of Medicine
Irvine, CA

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No Conflicts of Interest to Disclose
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What is the basis for the anticipated radical changes in American Medicine?

Demographics — aging boomers

Healthcare costs:

- US is #1 % GDP (2009) — 17.3% of and rising
- US is #1 per capita — $7,960
- #2 per capita is Norway — $5,352 (9.6% GDP, #16)
- #2 % GDP is Netherlands — 12% ($4914, #4)
- Europe generally 11-12% GDP
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Federal, state, and local government payments for US healthcare = 45% of total $2.6 trillion (2010)
Federal share = 29% (cf. 23% in 2007)
"Get your facts first, and then you can distort them as much as you please."
Under the Hood of Socio-Politico-Economic Influences

- Supply produces demand with incentives to do more
- Inertia to render non-beneficial care
- Hidden medical liability influences
Bending the cost curve

Institute of Medicine (IOM) Report (2000) results in demand for safety and cost-effectiveness:
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• The promulgation of Pay for Performance (P4P)
• The advent of the new science of performance measurement
• Now Value Based Purchasing (VBP) and Accountable Care Organizations (ACOs)
What is constant in Medicine?
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- Medical politics – local, state, and national
“There is no distinctly native American criminal class except Congress.”
What is constant in Anesthesiology?

Our commitment
- to the critically ill and those with acute/chronic pain
- to improve patient care and safety
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The tension between
- what is comfortable v. what is unknown
- minimizing risk v. pushing forward for reward
- academic v. community perspectives
Who was Emery A. Rovenstine?

1895-1960

1935 — Chair of Anesthesiology, Bellevue Hospital
1937 — 2nd American Professor of Anesthesiology, NYU School of Medicine
1943-1944 — President, American Society of Anesthetists (precursor of ASA)
1948 — a founder of ASA
1957 — ASA Distinguished Service Award
1962 — Inaugural Emery A. Rovenstine Memorial Lecture at ASA Annual Meeting
How to synthesize this into predictions?

- **David Longnecker, 1996 Rovenstine**
  
  *Navigation in Uncharted Waters: Is Anesthesiology on Course for the 21st Century?*

- **Mark Warner, 2005 Rovenstine**
  
  *Who Better than Anesthesiologists?*

- **Ron Miller**
  - **TF Future Paradigms, 2005**
  - **Rovenstine, 2008** *The Pursuit of Excellence*

- **Patricia Kapur**
  - **CSA Bulletin, Summer 2008**
  - **Rovenstine, 2011** *Leading into the Future*
“Difficult to see, always in motion the Future is...”
References


Kapur PA: The Future Practice of Anesthesiology. CSA Bulletin 2008; (Summer):30-35


• Cost containment imperative
• Population-based care prioritized above individual care
• Moving to *ambulatory* and home care instead of inpatient hospital care
• Self-employed physicians searching for stable employment situations
• Non-physician practitioners given more duties wherever possible
Longnecker’s Rovenstine 1996

- Cost containment imperative
- Population-based care prioritized above individual care
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“...form alliances with surgeons and surgical organizations...
...emphasize perioperative medicine skills ... on rotations where partnerships have been formed with surgical colleagues for the overall care of surgical patients... where the CA-3 resident would be “involved in the [entire] continuum of preoperative, intraoperative, and postoperative care of surgical patients...”
Miller’s Predictions

Ron Miller — TF Future Paradigms, 2005

- Demographics, innovations, & economics

Increased critical care, IT with databases and quality/quantity, robotics and voice activation, technical work by care extenders, credentialing based on demonstrated competence rather than training or boards, turf wars, scope of practice, medical procedures instead of surgery, genetic molecular medicine, imaging, drugs based upon pharmacogenomics

How qualified to be intra-op practitioner, supervise how many? technicians, role of anesthesiologist

Emphasis on throughput and outcomes, systems analysis

Opportunities — preop eval, prepare patients, critical care, pain management
When you come to a fork in the road, take it.
Kapur’s Analysis

Patricia Kapur — CSA Bulletin 2008

Technology propels changes:
- non-invasive CV tests, genetic profiling, feedback controlled infusion pumps, remote viewing of OR, telemedicine
- Immediate pre-, intra-, and post-op less technologically demanding and subsumed within broader context of surgical care and long term outcomes

Anesthesia can lead in surgical outcomes:
- Reduce SSI: temp, O2, BS, timely antibiotics, transfusion
- Reduce ischemic events: monitor CV, avoid swings, Hct, shiver
- Reduce pulmonary comp: aspiration, atelectasis, pain, residual block
- Reduce tumor recur: blood, pain immune
Quotes Miller about the rancor re nurse anesthetists:

“The time may well be coming when the profession of anesthesiology needs to face that routine, noncomplex levels of care are not going to be the appropriate setting for solo care by highly trained physician anesthesiologists.”

Advises:

Oversight of straightforward and mid-complex anesthetics, personal care of most complex, subspecialty, critical care, pain, pre-op, manage OR and support services
Point, Click and You’re a Doctor

RADFORD UNIVERSITY
SCHOOL OF NURSING

...imagine your future in nursing

RU Gains SCHEV Approval to Offer Doctor of Nursing Practice Degree

RADFORD — The State Council of Higher Education for Virginia (SCHEV) on Tuesday unanimously approved the university’s proposal for a Doctor of Nursing Practice (DNP) degree, marking the third time in a one-year period RU has received SCHEV approval for a graduate-level program.

The first admitted students to the DNP program, which will be offered in an online distance-learning format, are scheduled to begin classes in the fall of 2010. It is anticipated that the program will enroll 25 students in its first year and employ two faculty members and one administrative professional that specializes in computer distance learning.
They Don’t Share Our Views…

NURSE ANESTHESIA • SAFE ANESTHESIA

Which ones are the anesthesiologists and which are the nurse anesthetists?

CAN’T TELL?

It’s just as hard to tell the difference between their anesthesia education, the way they administer anesthesia, and their safety records.

AANA Newspaper Advertisement
Miller’s Rovenstine #1

Defining the path:
trade union v. profession
Trade versus Profession

“Considerable conceptual evidence suggests that medical professions, including anesthesiology, are in danger of becoming trade unions. If so, what is the difference between a profession and a trade union? A trade union is often defined as a collection of skilled workers who deliver a service or product. A profession is a group of individuals who not only deliver a product, but also develop the product (i.e., research) and make decisions regarding how the product is to be delivered.”

— Ron D. Miller, M.D.
Miller’s Rovenstine #2

• Professional autonomy invaded by government, economics, corporations, politics
• Need long-term vision and pursuit of excellence
• Anesthesiologists as perioperative directors
Miller’s Rovenstine #2
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• Potential what ifs:
  ▸ Dr. McSleepy
  ▸ Sublingual PCA
  ▸ Dedicated procedure center
  ▸ Surgical resident work hours
Miller’s Rovenstine #3

• Research — embrace the problems to be solved:
  ▸ Renal, POCD, SIRS

• Task Forces
  ▸ Anesthesia & Peri-op Medicine
  ▸ Technology & Pharmacology
  ▸ International think task re questions which need answers

• Think Big & Pursue Excellence
Truth is mighty and will prevail.
There is nothing the matter with this, except that it ain't so.
Kapur’s Rozenstine #1

- Changes (worldwide)
  - Society, resource availability, technology, pharmacology, genomics, and molecular biology

- Transformation
  - New system of care, payment models, skill sets

- “Disruptive” or “Discontinuous” changes
  - Care to be population-based, full-risk, bundled payments, ACOs, outcomes-based
Kapur’s Rovenstine #2

- Healthcare delivery re-design is coming to all of medicine — surgeons, radiologists, pediatricians
- Leveraging costly knowledge and skills to greatest extent
- Practicing at “the top of their license”
- Rethink what we’ve always done, a new mental map, open our minds to coming changes
Kapur’s Rovenstine #2

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“…we can stay in the operating rooms and lose new opportunities, or alternatively we can embrace a greater commitment to new forms of practice, education, and research.”
Opportunities for Leadership

- Expanded role of Pain Management for Public Health
- Future of Safety, Quality, and Cost-effective Care
- Using new technology
- — telemedicine (OR & ICU)
- Matching professional resource expenditure to patient co-morbidities, surgical complexity, staff training and experience
- Global/bundled payments — benchmarks, throughput, organization
- Maintain general medical skills
- Perceive and create opportunity in the Future

What’s in a name?
“What's the use you learning to do right, when it's troublesome to do right and ain't no trouble to do wrong, and the wages is just the same?”
1. We must determine quality benchmarks and equal or exceed them.
2. We must oversee and solve perioperative, periprocedural, intensive care, and pain issues throughout the health system, utilizing a cost-effective mix of providers appropriate for the severity of the cases.
3. We must facilitate procedural through-put at all levels, including critical care.
4. Organizationally we must become integral to the management of all areas where acute care and pain services are being delivered.
5. We need to become the acute care go-to people, the acute care solution, for each of our clinical sites.
“...we have excellent anesthesiologists who markedly restrict their full potential to provide a positive impact on public ... safety by delivering one-on-one care to [low-risk] patients who do not warrant such physician-intensive, inefficient, and cost-ineffective care....

How should we best use our physician skills? ...As proven in a number of diverse practice models and in critical care units daily, physician oversight or supervision of well-trained sedation and critical care nurses, nurse anesthetists, and anesthesiologist assistants is a remarkably safe, efficient, and cost-effective model ... while there is still a need for one-on-one or even more intensive care provision to those [specific] patients who need physician skills.

“... will we ... lead the development of practice models [intensive care model and others] that ensure all patients have the benefit of anesthesiologists involved in their care? ... everything...except for our core values of providing, overseeing, and improving the care of critically ill patients and those with acute procedural or chronic pain, can ... and must change as our environment changes. ...”

— Mark A. Warner, M.D., 2005 Rovenstine
The Takeaway

- Remember why you are here
The Takeaway

- Remember why you are here
- Appreciate the possibilities
The Takeaway

• **Remember why you are here**
• **Appreciate the possibilities**
• **Listen**
The Takeaway

• Remember why you are here
• Appreciate the possibilities
• Listen
• Look under the hood
The Takeaway

- Remember why you are here
- Appreciate the possibilities
- Listen
- Look under the hood
- Pursue Excellence
The Takeaway

• Remember why you are here
• Appreciate the possibilities
• Listen
• Look under the hood
• Pursue Excellence
• Be open to new paradigms
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• Remember why you are here
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• Everything is possible
The Takeaway

- Remember why you are here
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- Listen
- Look under the hood
- Pursue Excellence
- Be open to new paradigms
- Everything is possible
- Trust, but verify
Mission of the CSA

The California Society of Anesthesiologists is a physician organization dedicated to

• promoting the highest standards of the profession of anesthesiology
• fostering excellence through continuing medical education
• serving as an advocate for anesthesiologists and their patients
Who are the CSA and the ASA?

- CSA is the largest component society of the ASA
- 2700 active members (3600 total including resident, retired, affiliate), largely anesthesiologists in clinical practice; leadership is a mix of community, academic, and Permanente members; largest state component of ASA
- Founded 1948
- CSA and ASA membership go together
- ASA 28,800 active members (48,400 total), high level leadership more academic but active community members “to keep them honest,” very sensitive to non-academic members. HOD is active and community docs govern.
- Representation of academics in leadership is largely a function of time available away from practice and support for non-clinical work
The CSA can carry out, on behalf of its members, collective activity that members individually are barred from doing by the Sherman Anti-Trust Act.
Money is Money.
Time is Money.
Regulation is Money.
Uncompensated Administrative Activity is Money.

The CSA has evolved from the academic professional medical society it had been years ago to understand these things which have long been appreciated by anesthesiologists in community practice.

The CSA works actively to promote the economics of anesthetic practice in California.

Participation in and support of the CSA is not only a professional responsibility. it is just good business.
"Sometimes I wonder whether the world is being run by smart people who are putting us on or by imbeciles who really mean it."