

**We Need To Educate At Least The
Number Of Anesthesiologists That
We Are Now Educating**



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SAAA 2011



Conflicts of Interest

- None relevant to this discussion

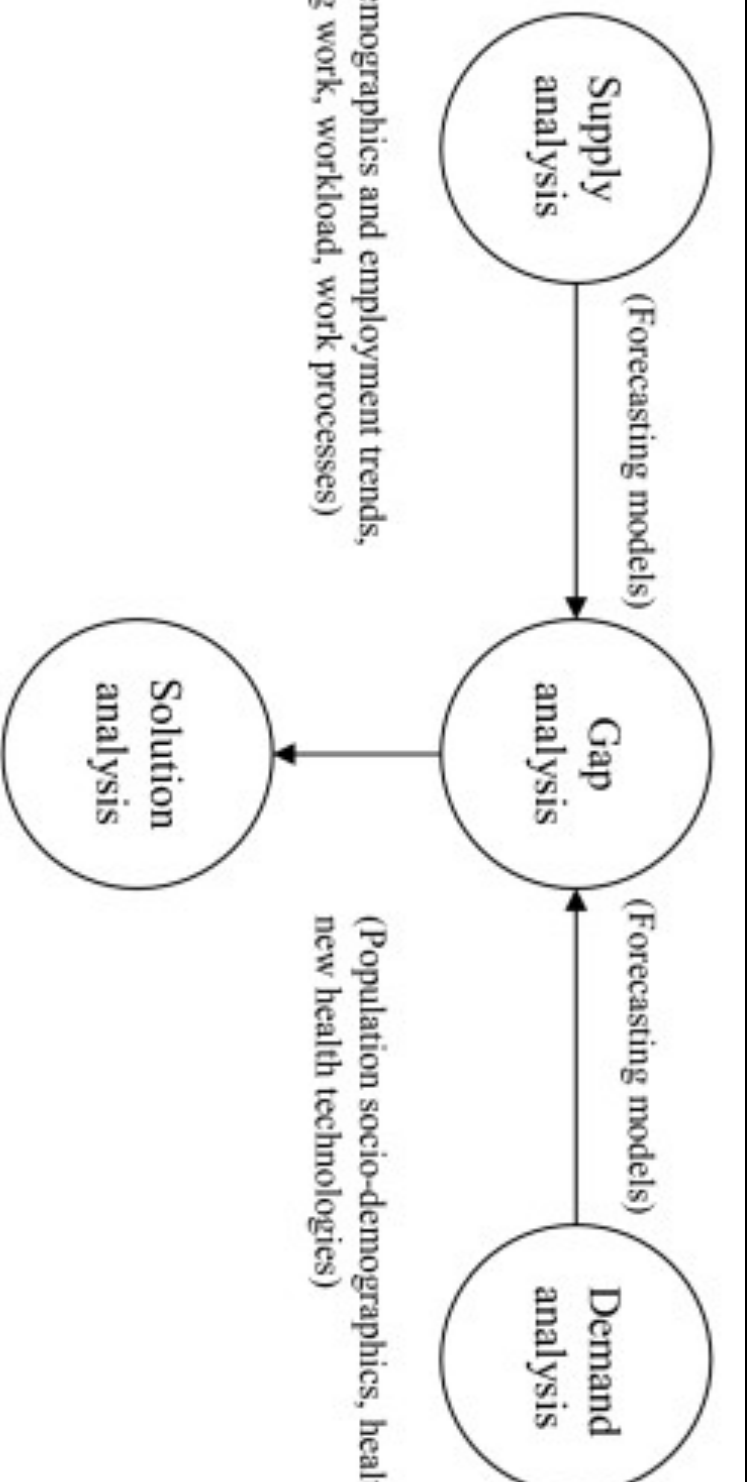
Conflicts of Interest

- None relevant to this discussion, other than I am responsible for the financial health of my department
- Staff anesthesiologists are compensated more than CRNAs
- CRNAs are compensated more than anesthesiology house officers
- Anesthesiology house officers work more hours than CRNAs

Physician Supply Forecast: Better Than Peering in a Crystal Ball?

- 4 forecasting approaches were identified
 - Supply projection: defines necessary inflow to maintain (or achieve in the future) a defined level of service
 - Demand-based: estimates the quantity of health care services to be used by population in the future to project physician requirements
 - Needs-based: defines and predicts health care deficits to be addressed by an adequate workforce
 - Benchmarking: use health systems with similar populations and health profiles to estimate needs

Planning HRs for Health Care



- 2 stage process
 - Estimate size and adequacy of current workforce supply
 - Forecast requirements

Roberfroid et al. *Hum*

Resour Health. 2009; 7: 10

Physician Supply Forecast: Better Than Peering in a Crystal Ball?

- Methodological challenges of such projections are numerous
 - Static models generally are used and uncertainty is not assessed
 - Rapidly evolving environment affects the likelihood of projection scenarios
 - Lack of valid and comprehensive data to feed into the models
- “Thus, internal and external validity of the projections included in our review appeared limited”

Roberfroid et al. *Hum Resour Health*. 2009; 7: 10

**Recent Studies and Reports on
Physician Shortages in the US**

Center for Workforce Studies

Association of American Medical Colleges

August 2011

6 National Reports Predict Shortfall of MDs

- “Physicians and Their Practices Under Health Care Reform” - The Physicians Foundation, Inc. (2009) 15
- “The Complexities of Physician Supply and Demand: Projections Through 2025” – Association of American Medical Colleges (2008) 16
- “Out of Order out of Time” - Association of Academic Health Centers (2008) 16
- “Growth and Aging of the U.S. Population will Cause a Surge in Demand” – The Federal Department of Health and Human Services (DHHS) (2006) 16
- “U.S. Likely to Face a Shortage in 2020” – U.S. Council on Graduate Medical Education (COGME) Report (2005) .. 16
- “America is Running out of Physicians” – Merritt, Hawkins & Associates (2004) 17

33 State Reports Predict MD Shortages

- Alaska (2006) - "Competition for Physicians will Intensify" 3
- Arizona (2005) – "Still Far Below the National Average" 3
- California (2009) – "Likely to Face Physician Shortage in 2015" 3
- California (2008) – "Minorities Underrepresented in California Physician Workforce" 4
- Colorado (2007) – "Serious Implications for Access to Primary Health Care" 4
- Florida (2008) – "Impending Physician Shortage in the State" 4
- Georgia (2008) – "Georgia's Drought of Physicians Will Become a Crisis" 4
- Hawaii (2011) - "Hawaii's Utilization of Physician Services will be Rising Significantly" 5
- Idaho (2007) - "Need for more Physicians in Idaho" 5
- Illinois (2010) - "One-half of Graduating Illinois Residents and Fellows are Leaving" 5
- Indiana (2007) – "Projections Indicate that Shortages Will Continue to Worsen" 6
- Iowa (2007) – "Aging Population will Alter Demand for Physician Services" 6
- Kentucky (2007) – "Demand for Physicians Expected to Increase" 6
- Maryland (2008) - "Critical Statewide Physician Shortages in Maryland" 6
- Massachusetts (2010) – "Physician Labor Market Continues to be Under Extreme Stress" 7
- Michigan (2006) – "Growth in Demand Will Outpace Growth in Supply" 7
- Minnesota (2008) – "Physician Supply in Minnesota is Diminishing" 7
- Mississippi (2003) – "Extant Physician Shortage will Become More Severe" 7
- Missouri (2009) – "Recruitment and Retention of Health Care Providers Very Difficult" 7
- Montana (2009) – "We are not Prepared for the Health Workforce Shortage" 7
- Nebraska (2008) – "Over 1/3 of all Physicians in Nebraska are Older than 50 Years" 8
- Nevada (2009) – "Nevada Currently Ranks 48th in the Number of Physicians per Capita" 8
- New Jersey (2009) – "Facing Significant Future Shortages" 8
- New Mexico (2006) – "Long History of Being a Physician Shortage State" 8
- New York (2007) – "Upstate New York Reported Most Difficulty Recruiting" 9
- North Carolina (2007) – "State Likely to Face a Severe Shortage Over Next 20 Years" 9
- Oregon (2004) – "Looming Shortage of Physicians" 9
- Pennsylvania (2008) – "Pennsylvania's Physician Numbers Have Not Been Growing" 9
- Texas (2008) – "Physician to Population Ratios Increasingly Unfavorable" 9
- Utah (2006) – "Shortages Exist in many Specialties" 10
- Vermont (2010) - "Overall Supply of Primary Care Practitioners is Below Adequate Levels" 10
- Virginia (2007) - "Virginia Must Begin Acting Now to Increase Physician Workforce" 10
- Wisconsin (2008) – "Who Will Care for Our Patients?" 10
- Wyoming (2008) – "Major Primary Care Provider Shortages" 10

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22 Specialty Societies Predict Shortfall

- Allergy and Immunology (2006) – “Shortage within Next Ten Years” 11
- Anesthesia (2003) – “Current Shortfall of Anesthesiologists” 11
- Cardiology (2009) – “Currently a Substantial Shortage of Cardiologists” 11
- Child Psychiatry (2006) – “Evident Shortage Will Continue Well into the Future” 12
- Critical Care Workforce (2006) – “Growing Supply of Intensivists will be Insufficient”.. 12
- Dermatology (2008) – “Stable Undersupply of Dermatologic Services” 12
- Emergency Medicine (2009) – “Emergency Care System Remains in Serious Condition” 12
- Endocrinology (2003) – “Demand Will Exceed Supply from Now until 2020” 12
- Family Physicians (2006)–“Declining Medical Student Selection of Family Medicine” 13
- Gastroenterology (2009) – “A Shortfall of Gastroenterologists Projected by 2020” 13
- General Surgery (2007) – “General Surgeon to Population Ratios Declined Steadily” 13
- Geriatric Medicine (2009) – “The Healthcare Workforce Receives little Geriatric Training” 13
- Medical Genetics (2004) – “Situation is Critical” 13
- Neurosurgery (2005) – “Severe Decline in Number of Active Neurosurgeons” 14
- Neurology (2010) – “Shortage of Neurologists Likely to Continue” 14
- Oncology (2007) – “Oncology Moving to a State of Acute Shortages in 2020” 14
- Pediatric Subspecialties (2007) - “Pediatric Subspecialty Care is in a Crisis” 14

An Analysis of the Labor Markets for Anesthesiology

**Lindsay Daugherty, Raquel Fonseca,
Krishna B. Kumar, Pierre-Carl Michaud**

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2010 RAND Corporation**

http://www.rand.org/pubs/research_briefs.html

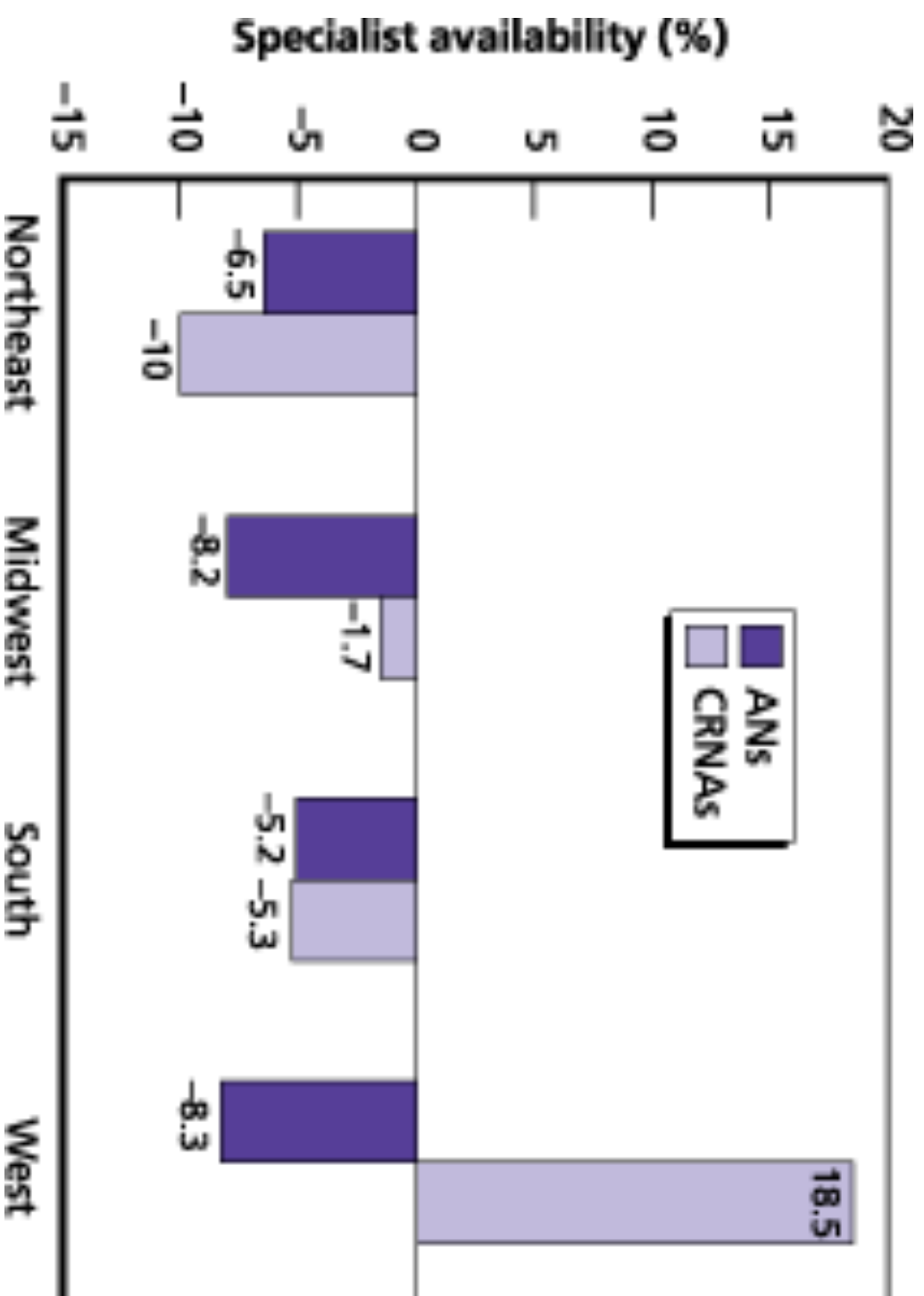
2 Methods to Analyze the Labor Markets for Anesthesiology

- Demand-based analysis (DBA)
 - Most commonly employed method in workforce analysis
 - Sometimes referred to as *noneconomic analysis*
 - Supply = all full-time equivalent (FTE) workers present in a state using national averages of clinical hours worked (49 hours per week for MD ANs and 37 for CRNAs)
 - Demand (FTEs) = actual volume of services provided (measured by hours) divided by hours per FTE per year based on national averages
 - Ignores wages
- Econometric analysis
 - Economic theory suggests that labor supply increases with wages while labor demand decreases with wages
 - Estimates relationship between demand/supply and wages

Demand-Based Analysis of the Labor Markets for Anesthesiology

- ANs work more hours and compensated about twice as much as CRNAs
- ANs spend a greater percentage of their time on GA than CRNAs; CRNAs spend greater percent of time on MAC cases
- 47% of ANs report that their “employer needs more ANs to meet current demand”
- 79% of CRNAs report that their “employer needs more CRNAs to meet current demand”
- Overall, national labor markets in rough equilibrium (i.e. supply = demand overall)
- Shortages in 25 states for ANs and in 19 for CRNAs
- For ANs estimates range from a 36% surplus in Washington, D.C. to a shortage of 82% in AL
- In absolute numbers, FL, AL, and **NC** exhibit the most shortage, and CA, NY, and MA the most surplus

Current Availability of Anesthesiologists and CRNAs by Region



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Econometric Analysis of the Labor Markets for Anesthesiology

- According to the economic approach
 - Current supply of ANs (FTE) would have to increase by 3,800 to meet U.S. demand
 - Current supply of CRNAs (FTE) would have to increase by 1,282 to meet U.S. demand
- 54% of states experiencing shortage of ANs;
>60% of states experiencing shortage of
CRNAs
- DE has a surplus of ANs of more than 26%,
while ID has a shortage of more than 46%

Conclusions Regarding the Labor Markets for Anesthesiology

- DBA and economic analysis agree in classifying states with shortage or surplus in only 44% of the states for ANs, and in 52% of the states for CRNAs
- **Overall conclusion is that shortage of ANs and CRNAs is highly likely at the national level**
- “Using the clinical week averages from our surveys, average entry and exit rates from the recent past for both groups, and a growth rate in the demand for surgeries of around 1.6% between 1985 and 2004, **we find a projected shortage of ANs by 2020**, and an excess supply of CRNAs”

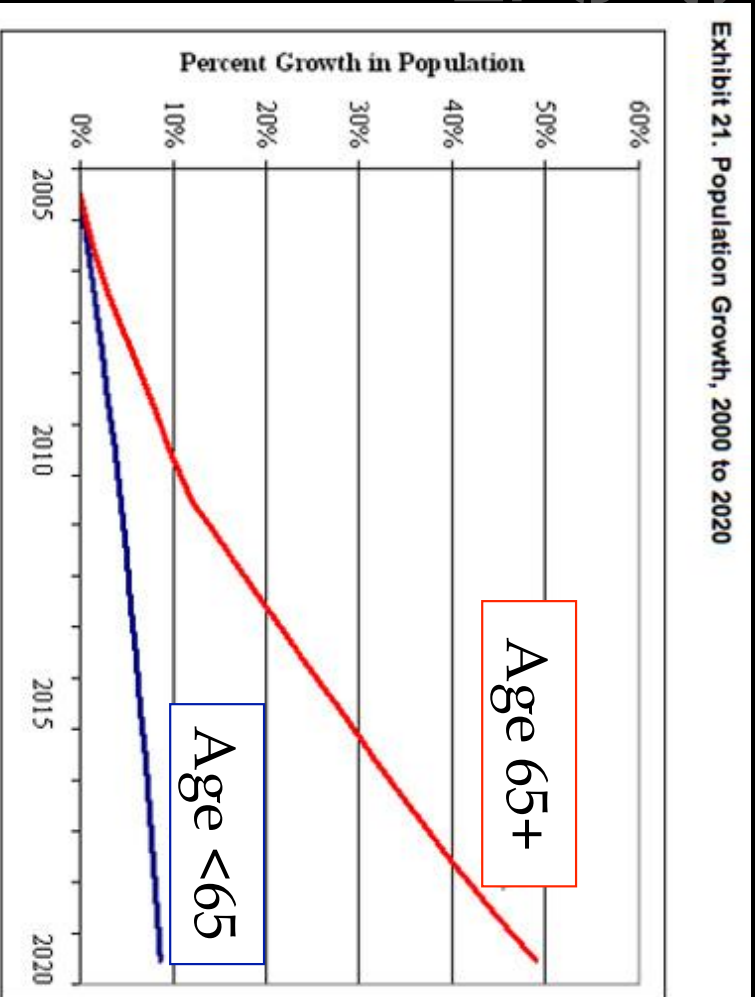
Summary of My Opinions

There will be shortfall of anesthesia

personnel for years to come, caused by an aging population, population growth, destabilizing advancements in surgical and interventional technology, increased demand for “discretionary” surgery, and limitless demand for urgent and intensive care.

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Dr. Andreas Gruentzig

June 25, 1939 – October 27, 1985

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MARCH 2007



DECEMBER 2007

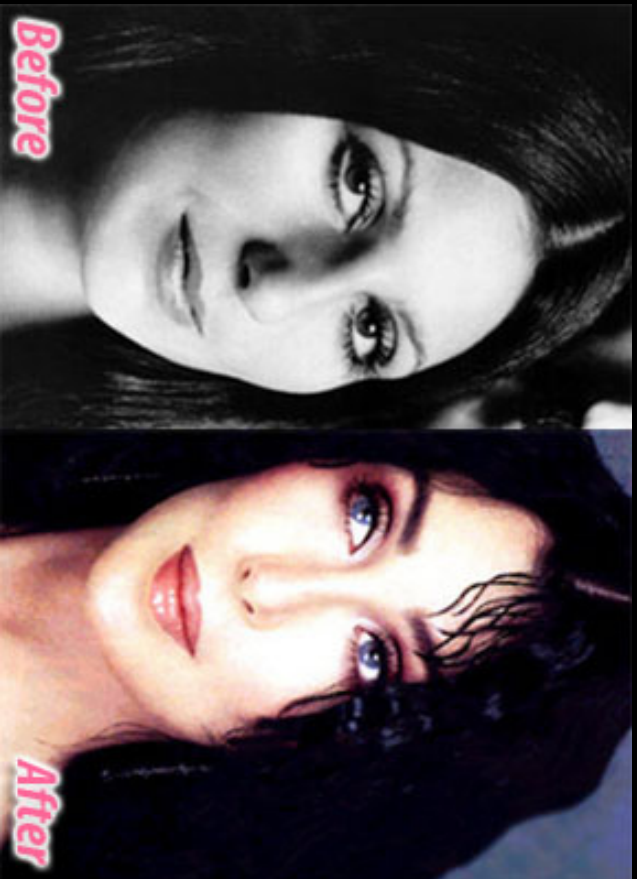
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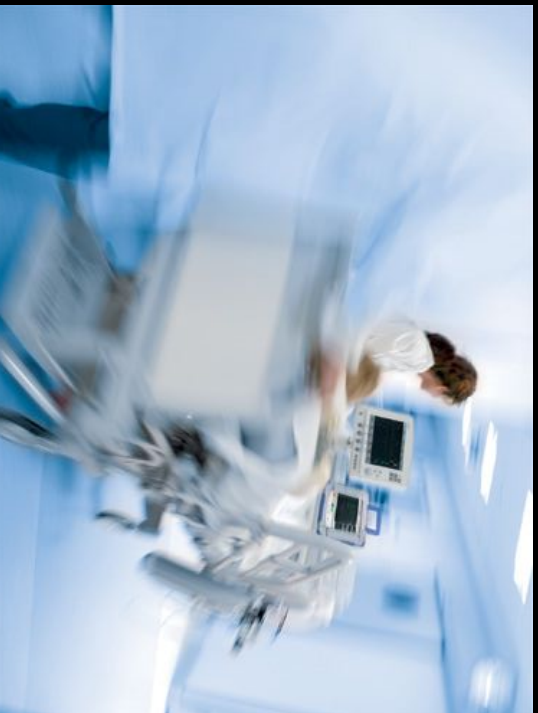


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<http://www.la-star.com/p/pics/michael-jackson/michael-20jackson-201.jpg>

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Further Star Gazing

Reform of health care finances will push the conversion factor (\$/ASA unit) towards MC rates, creating a financial incentive for anesthesiologists to move from the OR to the ICU



www.codingnews.inhealthcare.com



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educate at least as many
new anesthesiologists as
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we now do;

**but not because surgical
anesthesia represents a
golden business
opportunity**



■ Thank you!

VCU Rams Basketball



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