

***Were the Projections of a Physician  
Surplus Wrong? If so, Why?  
and  
Can we Learn From our Mistakes?***

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# *Overview*

- A. Forecasts in the past have been wrong primarily because they were based on unrealistic assumptions of health system changes and reform. This is also a shortcoming of some current forecasts.
- B. The evidence of a likely future shortage is very strong.
- C. Assuring access to quality care in the future requires increasing medical education and training, as well as health systems delivery and financing reforms.
- D. IMGs provide a cushion for planners.
- E. Effective physician workforce planning requires on-going data collection and monitoring of key trends and indicators of supply and demand.

# *Effective Physician Workforce Forecasting: Some General Observations*

- Goal: inform decision makers of potential futures and the factors likely to influence the adequacy of the future supply to meet needs
- Components of effective planning:
  1. Data and analytical work
  2. Identification and modeling of possible futures
  3. Translating data and findings into policy
- In our economy and political system, the market adjusts, making it unlikely that predictions of major surpluses or major shortages will be correct but that doesn't mean forecasts are unimportant

# *Modern Day Errors in Workforce Research*

- GMENAC estimated need and predicted a surplus of as many as 200,000 by 2000
- COGME predicted *manage care dominated system* w surplus of 115,000 specialists
- Pew Commission suggested the American system would use fewer resources more effectively, and have a surplus of 150,000 w *shrinking specialty demand*
- IOM predicted *reduced demand* for physician services due to managed care

## *Errors Occurred When:*

1. “Needs” based projections were used, assuming utilization rates which were not reflective of reality or which changed over time
2. Projections incorporated assumptions about how the US system would drastically change to control costs and utilization
3. Projections were based on someone’s vision of what the health care system should look like or best case scenario for the future
4. The goal was to use the physician workforce to force health systems changes
5. The inappropriate application of health services research findings to workforce planning

# *What the Data Tells Us Today*

# *An Inconvenient Truth: The Nation is Already Beginning to Face Shortages and it Will Get far Worse Before it Gets Better*

Most models assume supply equals demand in base year but:

- 30 million people live in HPSAs today
- Growing reports of shortages in wide range of specialties
- Shortages in a wide range of geographic areas

# Recent Reports of Physician Shortages

Allergy and Immunology (2000)

Anesthesia (2003)

Cardiology (2004)

Child Psychiatry (2006)

Critical Care Workforce (2006)

Dermatology (2004)

Endocrinology (2003)

Family Medicine (2006)

Geriatric Medicine (2007)

Medical Genetics (2004)

Neurosurgery (2005)

Oncology (2007)

Pediatric Subspecialty (2005)

Psychiatry (2003)

Rheumatology (2007)

Arizona (2005)

California (2004)

Florida (2005)

Georgia (2006)

Kentucky (2005)

Massachusetts (2006)

Michigan (2006)

Mississippi (2003)

Nevada (2006)

New York (2007)

North Carolina (2005)

Oregon (2004)

Texas (2002)

Wisconsin (2004)



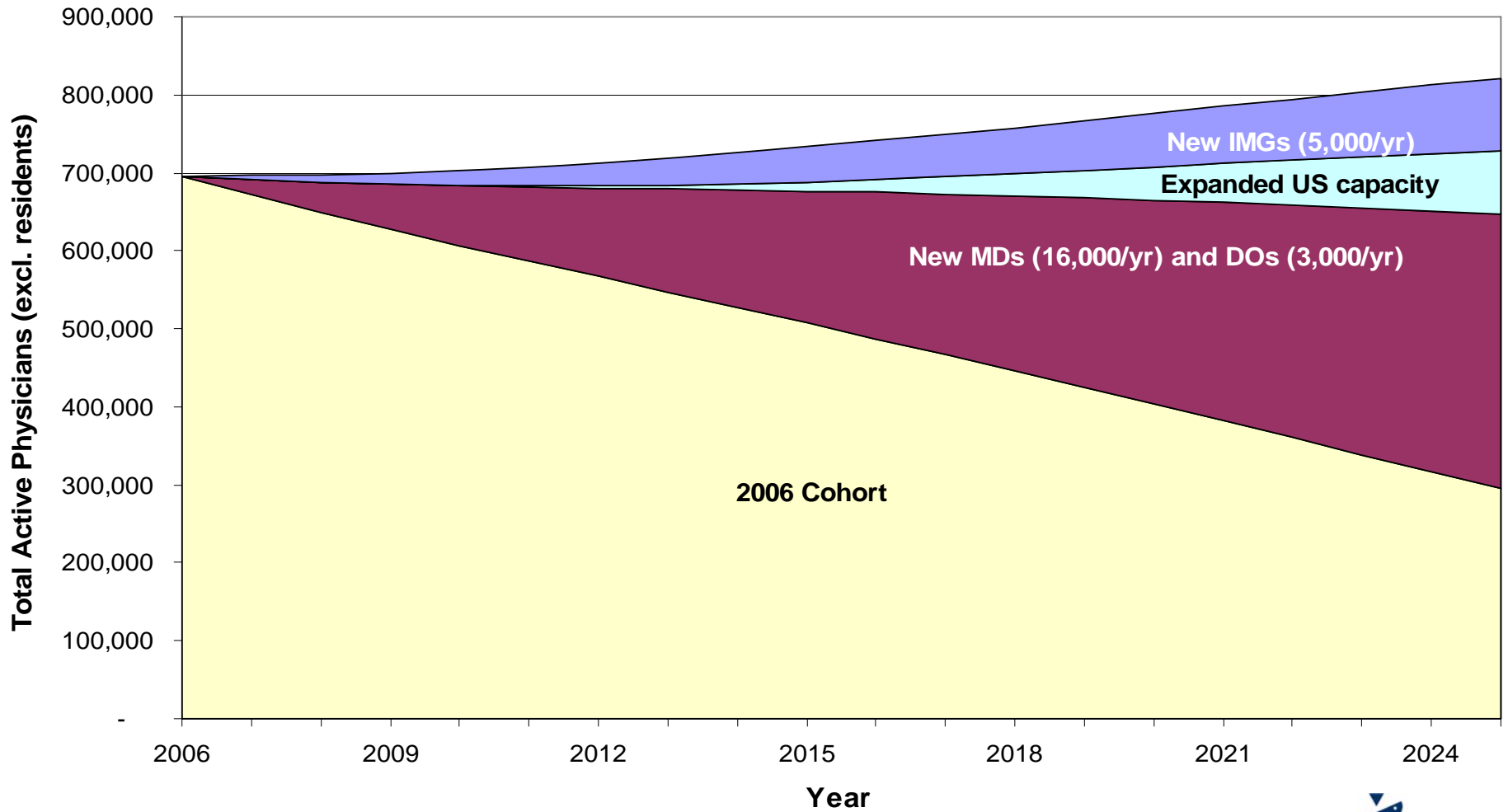
# *Drivers of Future Demand for Physicians*

- **Population growth**
  - US Pop Growing by 25 million/decade
- **Aging of the population**
  - Over 65 will double 2000-2030
  - Over 65 make twice as many physician visits as under 65
  - Major illness/chronic illness far more prevalent among the elderly
- **Public expectations**
  - Baby boom generation: high resources and expectations
- **Life Style factors**
  - Rates of obesity, diabetes, etc. rising rapidly
- **Economic growth of the nation**
- **Medical advances**

# *Drivers of Future Supply*

- **Doubling of medical school enrollment from 1960 to 1980 then flat for 25 years**
- **Aging of physician workforce & retirement**
  - 250,000 active physicians over 55
  - Number retiring each year is rising rapidly
- **Gender and generational differences**
  - Female physicians are more likely to have family responsibilities and to work fewer life time hours in medicine
  - Younger physicians highly value personal life
- **International migration and IMG policies**
  - Concern with brain-drain/competing opportunities
  - Increase in US citizens attending schools outside US
- **Residency training positions key factor in future supply**

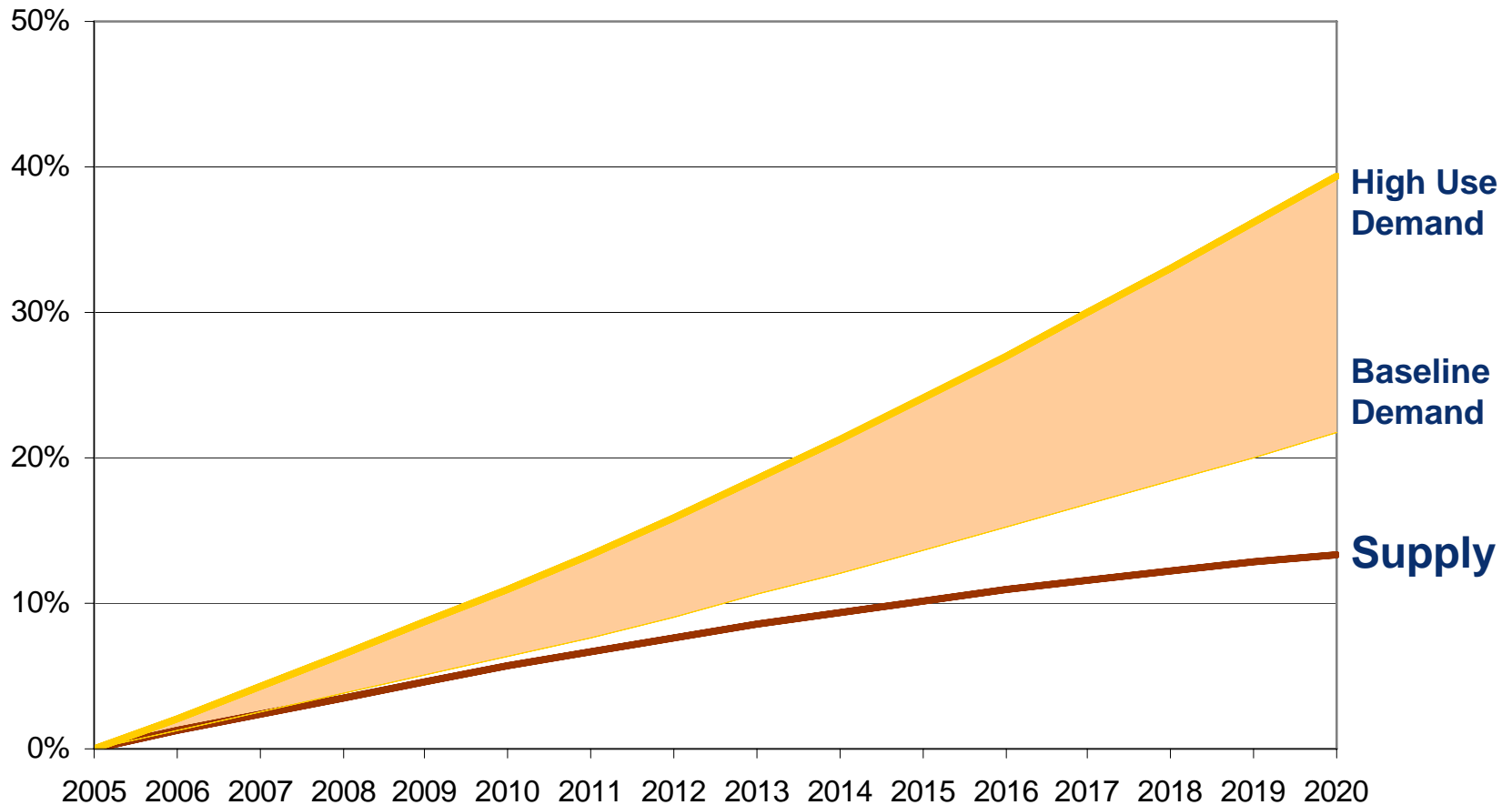
*Without an Increase in Medical School Capacity, Continuation of IMGs, and an Expansion of GME the Nation's Total Physician Supply Will Decrease*



*...while per capita utilization will increase*



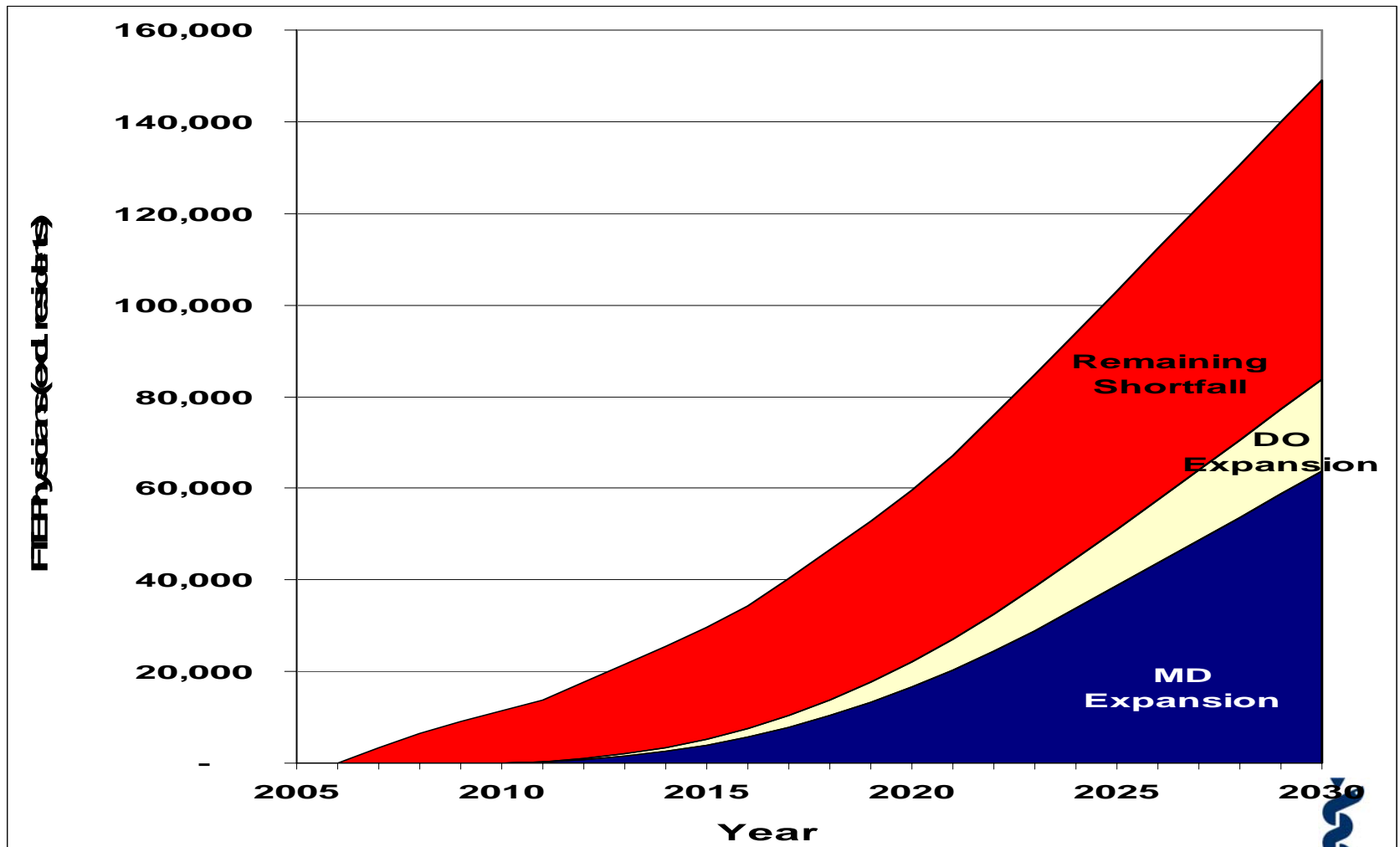
# *HRSA Forecasts a Shortage of at Least 55,000 Physician FTEs by 2020*



Source: Health Resources and Services Administration, DHHS 2006. "Physician Supply and Demand: Projections to 2020"



# *Expansion of UME and GME Will Not Meet All of Future Demand: Still Need System Improvements and Changes*

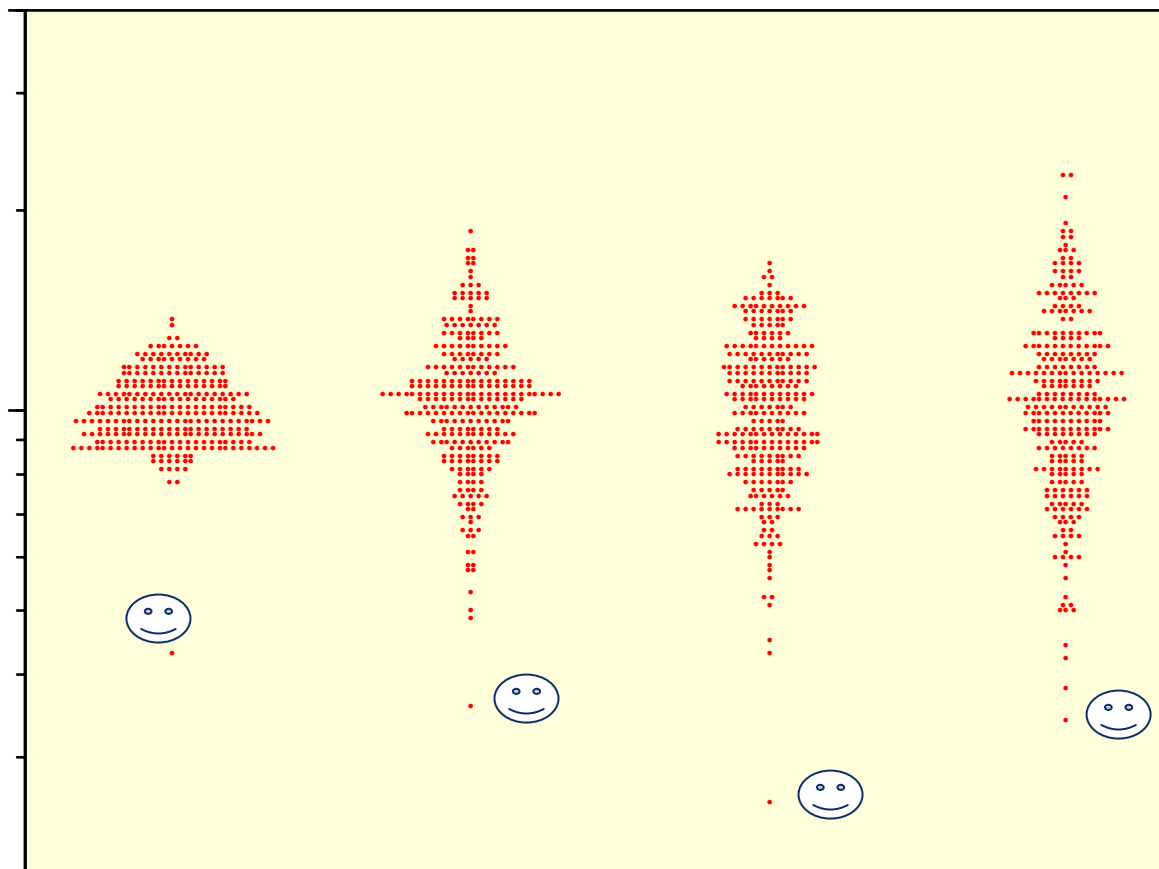


## *Common Challenges to our Findings: Right Directions... Wrong Conclusions*

1. If we eliminate unnecessary and marginally beneficial services and/or improve efficiency we would not face a shortage
2. The total supply is adequate, the problem is maldistribution by specialty and area; if we re-distribute physicians then we will not have a shortage
3. Life style and genetics contribute more to health and, therefore, physicians do not contribute significantly to improved health
4. If we focus more on prevention then we will not need more doctors
5. While not said, often implied: A major shortage will force improved efficiencies and will be good for the nation

# Variation as Workforce Methodology?

Assumes that more is always worse...



**Hip Fracture (13.8)**

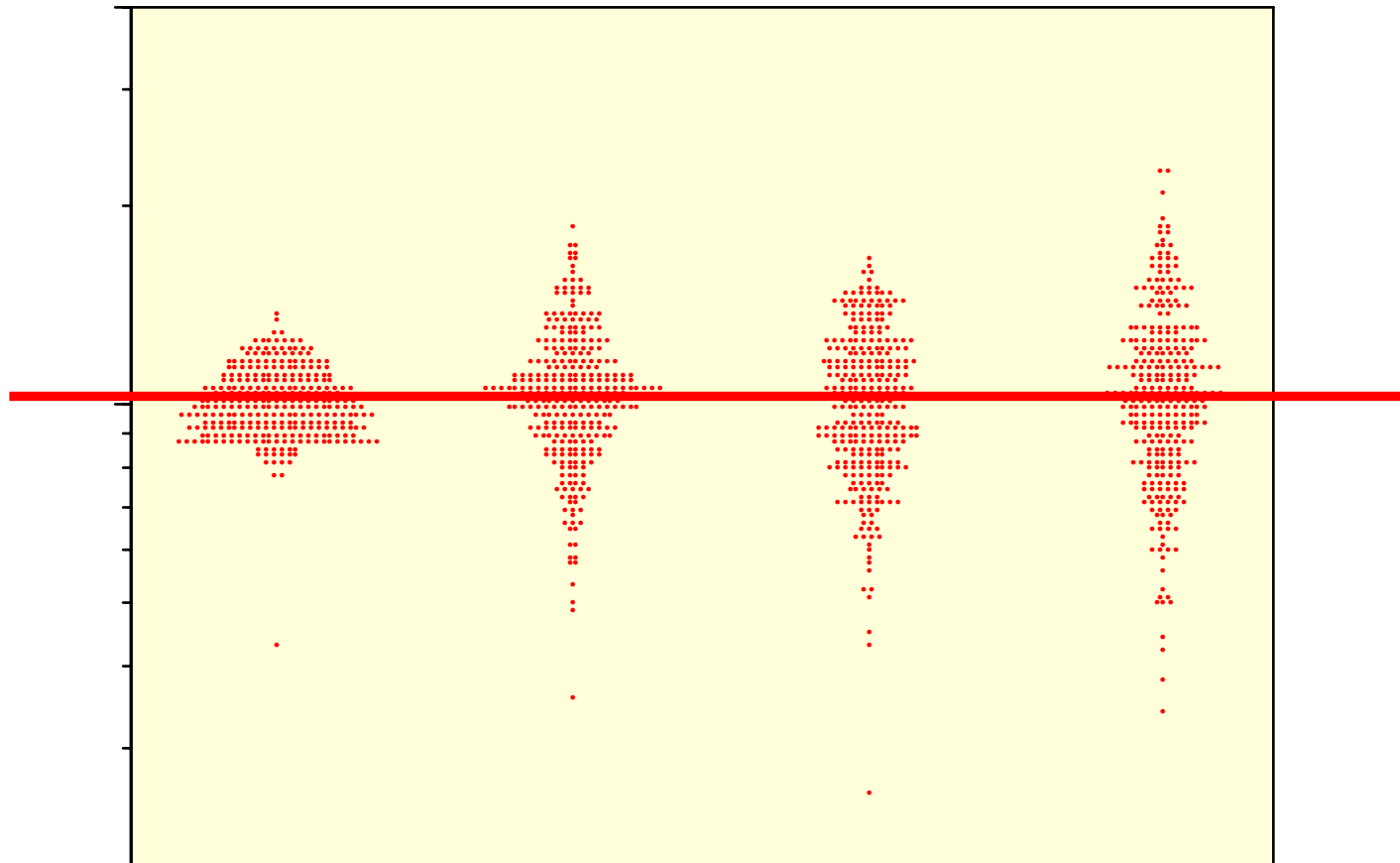
**Knee Replacement (55.0)**

**Hip Replacement (67.2)**

**Back Surgery (93.6)**

...and that less is always better

# Utilization Based Projections Plan for Service Averages



**Hip  
Fracture  
(13.8)**

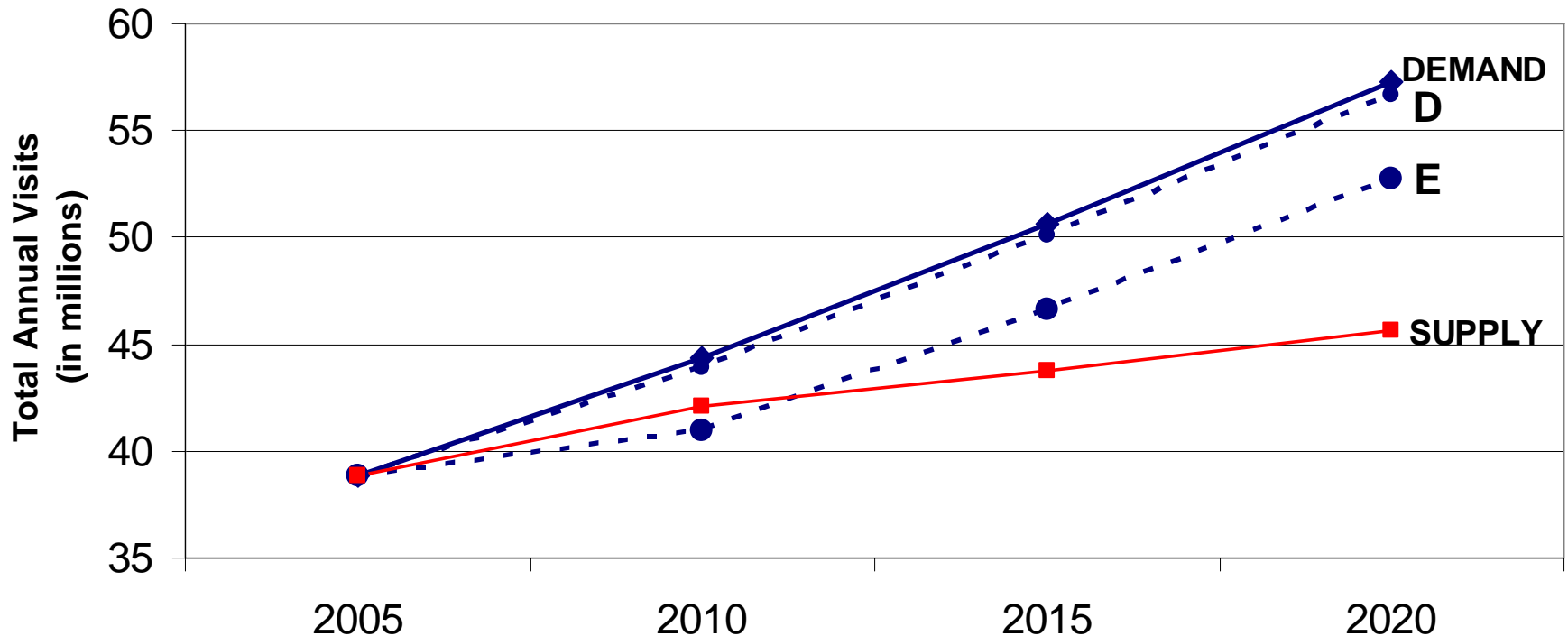
**Knee  
Replacement  
(55.0)**

**Hip  
Replacement  
(67.2)**

**Back  
Surgery  
(93.6)**



# *An example of an appropriate workforce study: The Oncology Study - Baseline S/D based on existing patterns; scenarios explore alternate futures*



**Baseline Estimates** - assume current incidence/prevalence and utilization rates

**Supply** - visit capacity of projected supply of physicians

**Demand** - demand for visits based on projected number of cancer incidence and prevalent cases

**Scenarios** - Explore alternate care models

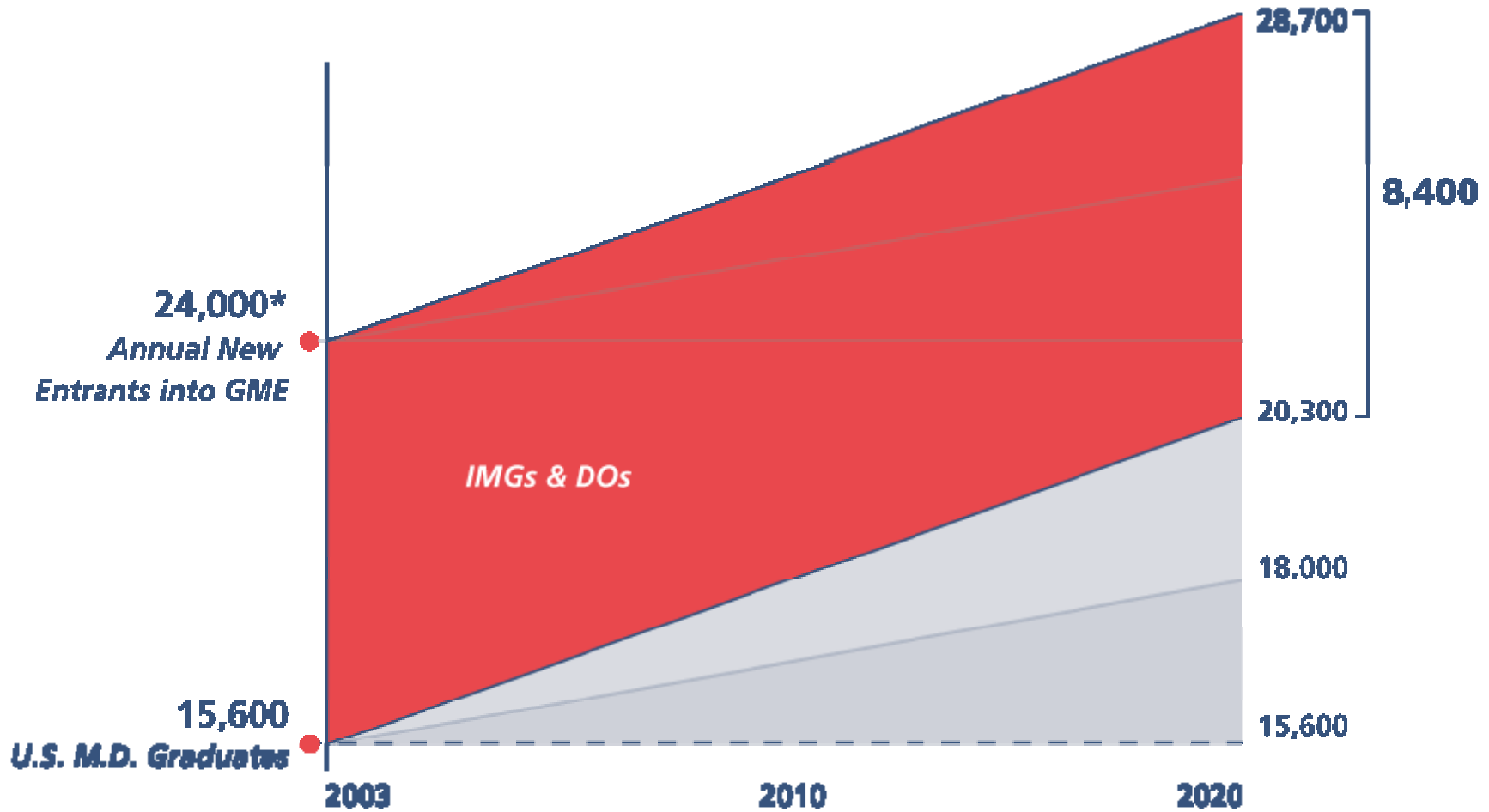
D - Increase in use of Hospice for cancer patients that die of cancer Max (20% reduction)

E - Increase in use of PCPs to see prevalent cases Min (10% reduction in prevalent cases that see oncologists)

## *Translating the AAMC Analysis into Policy*

- Increase medical school enrollment
- Increase GME positions
- Press for health system improvements, such as improved IT, increased use of NPs and PAs

# Meeting Future Needs Will Require GME Growth and Continued Participation of DOs and IMGs

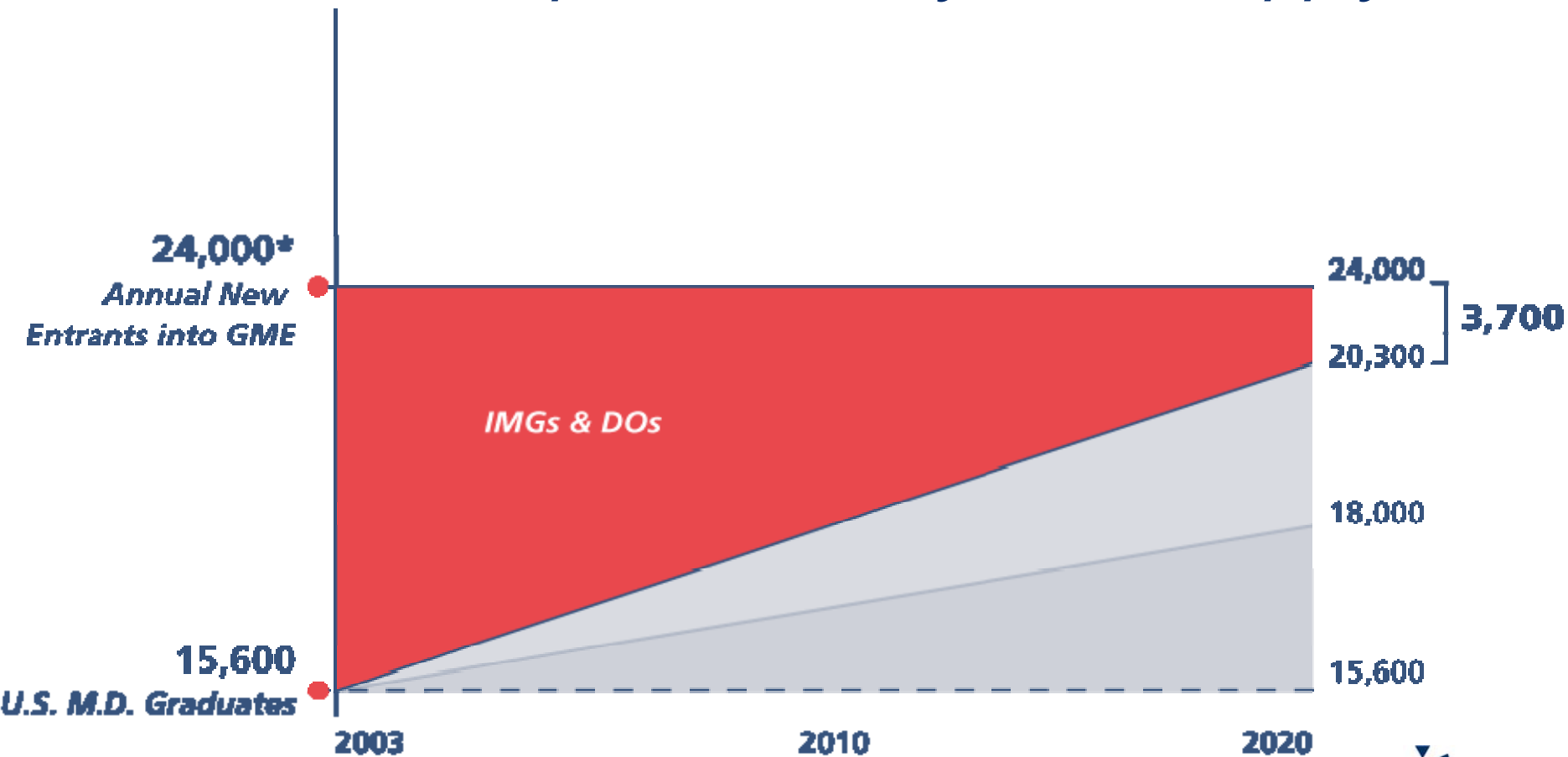


\* ACGME & Osteopathic GME

# *What if we are wrong?*

- The IMG cushion
  - 6,500 new IMGs enter GME and the health care system every year
  - If demand does not rise as expected, reduce IMGs and/or require non-US IMGs to return to country of origin
  - Failure to increase US MDs and DOs will likely lead to a greater dependency on IMGs

# *Growth in UME Alone Without an Expansion of GME is Likely to Displace IMGs in Training but Will Not Expand the Physician Supply*



\* ACGME & Osteopathic GME

# *Physician Workforce Planning in an Imperfect Health Care System*

- Monitoring of key trends and indicators with on-going data collection
- Periodic comprehensive assessments of supply and demand using the most current data
- Studies to better understand dynamics of supply, demand and distribution
- Studies assessing the relationship of workforce inputs and health outcomes
- Build models on the world that exists and scenarios on what is desired and possible
- Inform decision makers of alternative futures and factors that may influence



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