I briefly want to address several questions:

1. How much sleep should we lose over an aggregate shortage of physicians?

2. Does academic medicine produce the “right” specialty mix?

3. Is there an economic (as distinct from “political”) case for publicly subsidizing Graduate Medical Education (GME)?

4. Should this nation build more medical schools?

5. Should this nation build more nursing schools?
1. How much sleep should we lose over an aggregate shortage of physicians?
AND THE ANSWER IS . . .

No.

Focus instead on $D_t/Q_t$
The physician surplus \((X_t > 0)\) or shortage \((X_t < 0)\) at a future time \(t\) can be expressed at a very macro level by Albert Einstein’s equation:

\[
X_t = a_t \cdot c_t \cdot S_t - \left(\frac{D_t}{Q_t}\right) N_t
\]

- \(X_t\): physician surplus or shortage
- \(a_t\): % professionally active
- \(c_t\): % prof. active in patient care
- \(S_t\): no. of physicians alive at \(t\)
- \(D_t\): per-capita demand per year for physician services
- \(Q_t\): output of per physician services per doc. per year
- \(N_t\): No. of persons to be served per year

\(AL\)
Number of Professionally Active Physicians per 100,000 Population, 2004
(Excludes Doctors of Osteopathy)

ACTIVE PHYSICIANS PER 100,000 POPULATION

Number of Professionally Active Physicians per 100,000 Population, 2004
(Excludes Doctors of Osteopathy)
QUESTIONS FOR STU ALTMAN: An expert at “Stuff Like That”

1. What is the “right” physician population ratio for America (i.e., ratio D/Q in Einstein’s equation?)

2. Can Idaho’s low population density be explained by the fact that Iowan’s die like flies for want of an adequate physician-population ratio?

3. Why in h... do folks in D.C. need so many physicians per capita? (Are they all a bunch of sickies?)

4. Ditto all three questions for nurses.
Number of Professionally Active Nurses per 100,000 Population, 2004

- District of Columbia: 2,093
- North Dakota: 1,793
- Maine: 1,483
- Nebraska: 1,059
- New Hampshire: 1,047
- Alaska: 1,034
- Pennsylvania: 1,025
- Missouri: 997
- Wisconsin: 939
- Tennessee: 921
- Kentucky: 908
- North Carolina: 899
- West Virginia: 883
- Oregon: 860
- Maryland: 847
- New Jersey: 841
- United States: 824
- Wyoming: 810
- Louisiana: 785
- Florida: 764
- Colorado: 754
- Hawaii: 737
- Arkansas: 731
- Oklahoma: 692
- Utah: 653
- Idaho: 631
- California: 590

ACTIVE NURSES PER 100,000 POPULATION
Instead of worrying about the physician supply, I’d would about the general shortage of labor faced by the United States (and all developed countries):

- I’d be sure to educate well ALL kids in this country.
- I’d put priority on building more nursing schools
PROJECTED NUMBER OF WORKERS PER MEDICARE BENEFICIARY

SOURCE: Trustees’ Report 2000
NATIONAL SUPPLY AND DEMAND PROJECTIONS FOR FTE REGISTERED NURSES 2000 TO 2020

Source: Bureau of Health Professions, RN Supply and Demand Projections

2. Does academic medicine produce the “right” specialty mix?
AND THE ANSWER IS . . .

Yes.

In their infinite wisdom, both private and public payers signal with the fees they pay that America does not value much the professional work of primary-care physicians – pediatricians, general practitioners, internists, geriatricians, and so on.

In their legendary wisdom, the American people do value very highly the work of physicians twiddling dials at fancy machines. We pay a lot for their work.

Young physicians understand this signal.
3. Is there an economic (as distinct from “political”) case for publicly subsidizing Graduate Medical Education (GME)?
AND THE ANSWER IS . . .

No.

First, a medical education is not a “public good,” as is so often alleged. It is privately owned human capital.

Second, residents, highly skilled labor, arguably supply teaching hospitals with their cheapest form of labor (see James Knickman et al.). If anything, a GME program is a profit center, rather than a cost center.
SURVIVAL OF THE FITTEST:

What is the Mission of the Teaching Hospitals?

Uwe E. Reinhardt, Ph. D.
Princeton University

John F. Kennedy School of Government/Commonwealth Fund

BIPARTISAN CONGRESSIONAL HEALTH POLICY CONFERENCE
Aventura, Florida
January 11-13, 2001
THE STORY TOLD BY TEACHING HOSPITALS

GME subsidy needed to break even

Net revenue added by a resident to the teaching hospital prior to resident’s salary and added GME costs

Incremental patient-care costs due to GME program

RESIDENT’S SALARY
Net revenue added by a resident to the teaching hospital prior to resident’s salary and added GME costs

Cost of uncompensated care

Incremental patient-care costs due to GME program

RESIDENT’S SALARY
WHAT PROBABLY REALLY HAPPENS;

Net revenue added by a resident to the teaching hospital prior to resident’s salary and added GME costs

Profits from GME program

Incremental patient-care costs due to GME program

RESIDENT’S SALARY

The cost of uncompensated care & Medicaid Fraud by States
1. Please agree that, in principle, economists are right with regard to the financing of AHCs.

We economists rarely make mistakes.

2. On the other hand, paying proper respect to the economists’ brilliant dicta does not need that these dicta need to be made into public law right away.

As long as we saddle our teaching hospitals with the task of running and financing a catastrophic health insurance system for the uninsured, cutting the flow of GME money that actually is used to finance that catastrophic health insurance system is very risky.
4. Should this nation build more medical schools?
AND THE ANSWER IS . . .

Why not?

It is truly odd that this nation literally has frozen our medical school places for close to four decades.

Given how heavily we rely on human capital financed abroad (IMGs), it would make sense to build 5 to 10 more U.S. medical schools (and/or to expand significantly the classes of existing schools) thus to give our own brightest kids a chance at become physicians.
5. Should this nation build more nursing schools?
AND THE ANSWER IS . . .

Absolutely!

Every A.H.C. should have a nursing school to educate and to train (not the same thing!) nurse educators and nurses.

I would make GME money conditional on it.
Finally, what about Stu Altman?
The Progression of Testing New Pharmacological Compounds

1. Insects
2. Lawyers
3. Rats
4. Economists

SOURCE: Aurumpronobis Pharmaceuticals Inc., Annual Report 2002: Figure 3.
VIAGRA™ + PROZAC™

VIAZAC™

VIAZA™ will make Stu go out and look for a lover.
But if he doesn’t find one, he won’t give a damn.