HEALTH-WORKFORCE FORECASTING:
Physician shortages and surpluses

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THE 21st PRINCETON CONFERENCE
THE CHANGING HEALTH CARE LANDSCAPE
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Physicians active in patient care per 100,000 population, 2010

<table>
<thead>
<tr>
<th>State</th>
<th>Physicians</th>
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<tbody>
<tr>
<td>Massachusetts</td>
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<tr>
<td>Maryland</td>
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<td>New York</td>
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<td>Utah</td>
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Note: "Half dead" and "dead" are likely placeholders for visual emphasis.
Last year, I presented to Rick Foster, former CMS Chief Actuary, the following image and asked him what it meant.
The Ups and Downs of Jennifer Aniston’s Love Life

This chart also works for health-workforce projections

Appropriate physician-population ratio
In the 1960s 1970s and – when Stu Altman was young and a Republican -- policy wonks projected a massive physician shortage.

Alarmed, the U.S. Congress – which then was actually functioning -- quickly doubled medical-school capacity.

Figure 3. Medical School Graduates, U.S., 1961-62 to 2005-06
By the 1980s the story had changed drastically:

For example, the Graduate Medical Education National Advisory Committee (GMENAC) reported (based upon the number of physicians needed to provide “necessary and appropriate” services) that a surplus of 70,000 physicians would be likely by the year 2000.

In its 1994 report to both Congress and the Secretary of Health and Human Services, COGME noted,

“in a managed care dominated health system, the Bureau of Health Professions projects a year 2000 shortage of 35,000 generalist physicians and a surplus of 115,000 specialist physicians” and recommended that the nation “produce 25% fewer physicians annually.”
In 1995, the Pew Commission recommended that medical schools by 2005 reduce the size of the entering medical school class in the U.S. by 20-25%, arguing further that this reduction should come from the closure of existing medical schools.

In 1996, an IOM committee recommended that,

“no new schools of allopathic or osteopathic medicine be opened, that class sizes in existing schools not be increased, and that public funds not be made available to open new schools or expand class size.”
Then came managed care and Jonathan Weiner's scary JAMA paper in 1994:

Assuming that 40% to 65% of Americans would be in well integrated managed care, Weiner projected that in the year 2000

1. there will be an overall surplus of about 165000 patient-care physicians;

2. the requirement and supply of primary care physicians will be in relative balance; and

3. the supply of specialists will outstrip the requirement by more than 60%.
Then came the **buzz kill** for surplus mongers:

Richard Cooper *et al.*

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**Economic And Demographic Trends Signal An Impending Physician Shortage**

A new model of workforce projections, based on physician supply and utilization, predicts an impending physician shortage, which the nation cannot afford to ignore.

*by Richard A. Cooper, Thomas E. Getzen, Heather J. McKee, and Prakash Laud*

*Health Affairs, 21, no.1 (2002):140-154*
This is the current religion in physician forecasting.

Indeed, when the Affordable Care Act (ACA) was passed -- out came the sackcloth and the ashes in health-workforce forecasting.

For example, in April 2011, Sarah Mann of the AAMC, in her “Addressing the Physician Shortage Under Reform,” wrote

“A physician shortage was already expected before ACA was signed into law in March 2010, and now that gap could worsen. According to projections released last fall by the AAMC Center for Workforce Studies, there will be a shortage of about 63,000 doctors by 2015, with greater shortages on the horizon—91,500 and 130,600 for 2020 and 2025, respectively.”
II. WHY IS HEALTH-WORKFORCE FORECASTING SO DIFFICULT?
This is the inverse of the physician population ratio
Physicians

Fixed physician-population ratio

Smaller population

Non-physicians health personnel

Smaller population

Groups or partnerships

Solo practice

● Observed sample average for solo and group GPs in the U.S.

▲ Sample average for Canadian solo GPs

● Sample average for Canadian GPs in groups or partnerships

Visits/Week

200

175

150

125

100

OFFICE HOURS PER WEEK

0

10

20

30

40

50

60

70

NO. OF AIDES PER PHYSICIAN
III. CONCLUSION
Years ago (1989), the late Eli Ginzberg, a true sage on matters of health workforce forecasting, had concluded thus:

> “In a pluralistic society such as the United States, which does not have a national system of health care, it may be futile to pose the question whether the nation will have too many, too few, or just the right number of physicians a decade or two in the future. All we can hope to do is to address selected facets of the supply problem as they force themselves onto the nation’s agenda. To do more is likely to lead to frustration; to do less is to stockpile problems for the future.”

I would add:

1. Health-workforce forecasting is relatively cheap and are basically harmless, as long a policy makers do not pay too much attention to it.

2. I would advise policy makers to have a bit more faith in the health system’s ability to adjust to and compensate for shortages of particular types of health workers.
END