

How Does the Federal Government Project the Need for Physicians in the US?

September 19, 2011

Christopher Hogan, Ph.D.

Direct Research, LLC

chogan@directresearch.com

Outline of Presentation

- What do we mean by “the number of physicians we need”?
- The US Health Resources and Services Administration (HRSA) physician requirements model.
- Compare Maryland primary care physician supply to the HRSA standard.
 - Current (2009/2010) level.
 - Projection to 2020, for population growth and health care reform.
- Geographic distribution of physicians is a separate issue.
- Summary

How Many Physicians Do We “Need” (1)

(Paraphrasing HRSA (2008), The Physician Workforce)

- **Medical model** (pre 1960)
 - Prevalence of disease x time to treat = required physician time.
 - Assumes all who need care are treated.
- **Medical model with adjustments** (circa 1980)
 - Adjust downward because not all disease will be treated.
- **Market model** (HRSA’s current method, 2008)
 - Assume physician supply/demand equilibrium in base year (2000).
 - US Physicians/capita in base year = benchmark for need.
 - Trend forward for pop. growth, aging, insurance, other factors.
 - Accepts the status quo, as it existed in 2000.

How Many Physicians Do We “Need” (2)

(Paraphrasing HRSA (2008), The Physician Workforce)

- Shortcomings
 - May reflect inefficiency, excess.
 - HMOs use fewer physicians (J. Weiner, Hopkins).
 - Over/under use of specific specialties.
 - Medical practice changes over time.
 - Ignores trends in GDP (ability to pay for care).
- Advantages
 - Neutral baseline.
 - No judgements, no expert opinion, no a prior calculations.
 - Impose your policies in addition to this.

HRSA's Current Method

- Count US year 2000 average physicians/capita.
 - Data source: AMA Masterfile.
 - Who counts: Active non-federal patient care (incl. residents) phys.
- Trend demand (need) forward, adjusting for:
 - Population growth and aging.
 - Changes in insurance coverage.
- Trend supply forward:
 - New and retiring physicians.
 - Speculate about:
 - Average physician work week.
 - Physician productivity changes.
 - Alternative providers (non-physician practitioners).

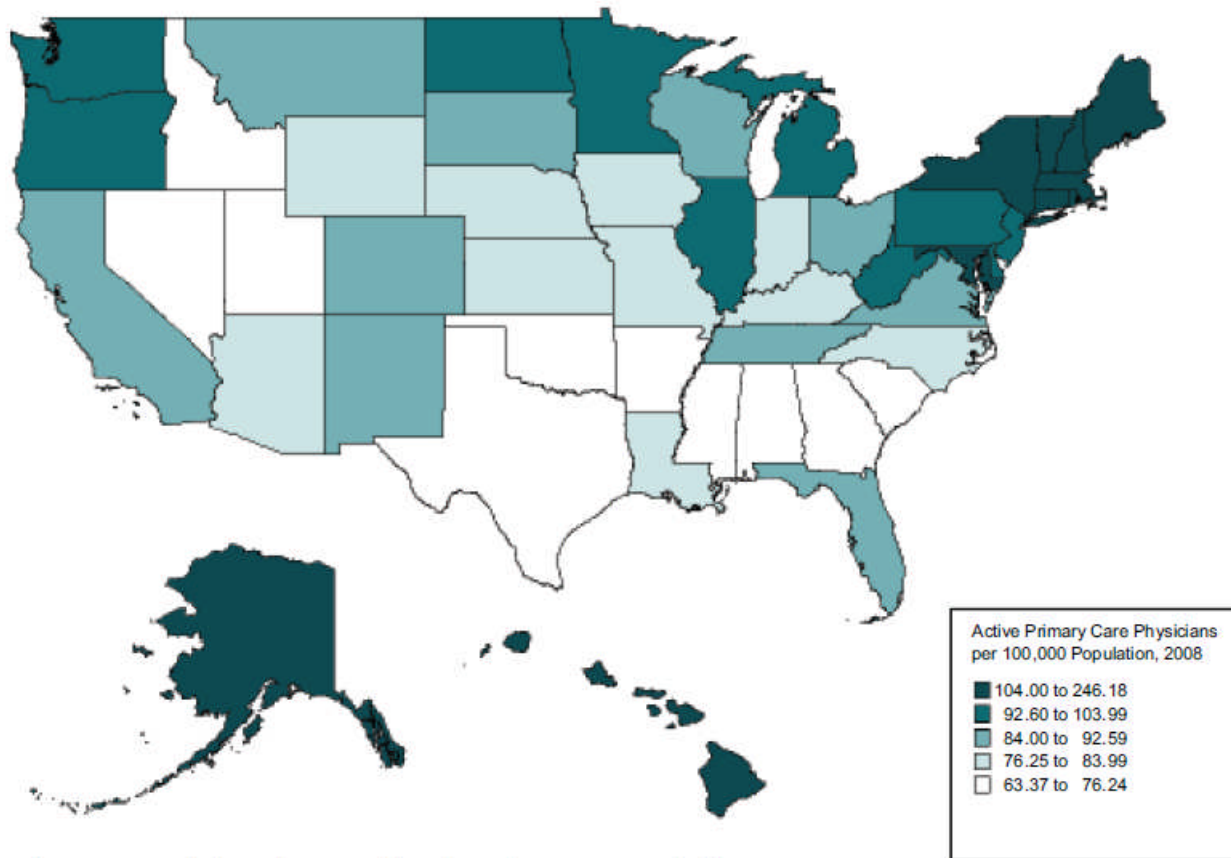
Compare Maryland Physicians/Capita to HRSA US Benchmark (1)

- HRSA (2008) 25% higher
- AAMC (2009) 29% higher
- MHA/MedChi (2008) 15% lower
- MHCC/HSCRC (2011) 27% higher
- Difference in methods:
 - HRSA, AAMC use AMA Masterfile only.
 - MHA/MedCHI compared Maryland licensure data to Masterfile.
 - MHCC/HSCRC compared Maryland licensure data to Masterfile, with adjustments to make them comparable.

Compare Maryland Physicians/Capita to HRSA US Benchmark (2)

- MHCC/HSCRC 2011
 - All physicians 27% above
 - **Primary care physicians 11% above**
- Aside: Maryland otherwise similar to US average.
 - Age mix of population.
 - Net patient inflow/outflow across state border.
 - Average work hours of physicians.
 - Conclusion: A percentage point here or there.
- Typical of US Northeast (next slide)

Active Primary Care Physicians per 100,000 (AAMC 2009)



How Many More Primary Care Physicians Will Be Needed by 2020?

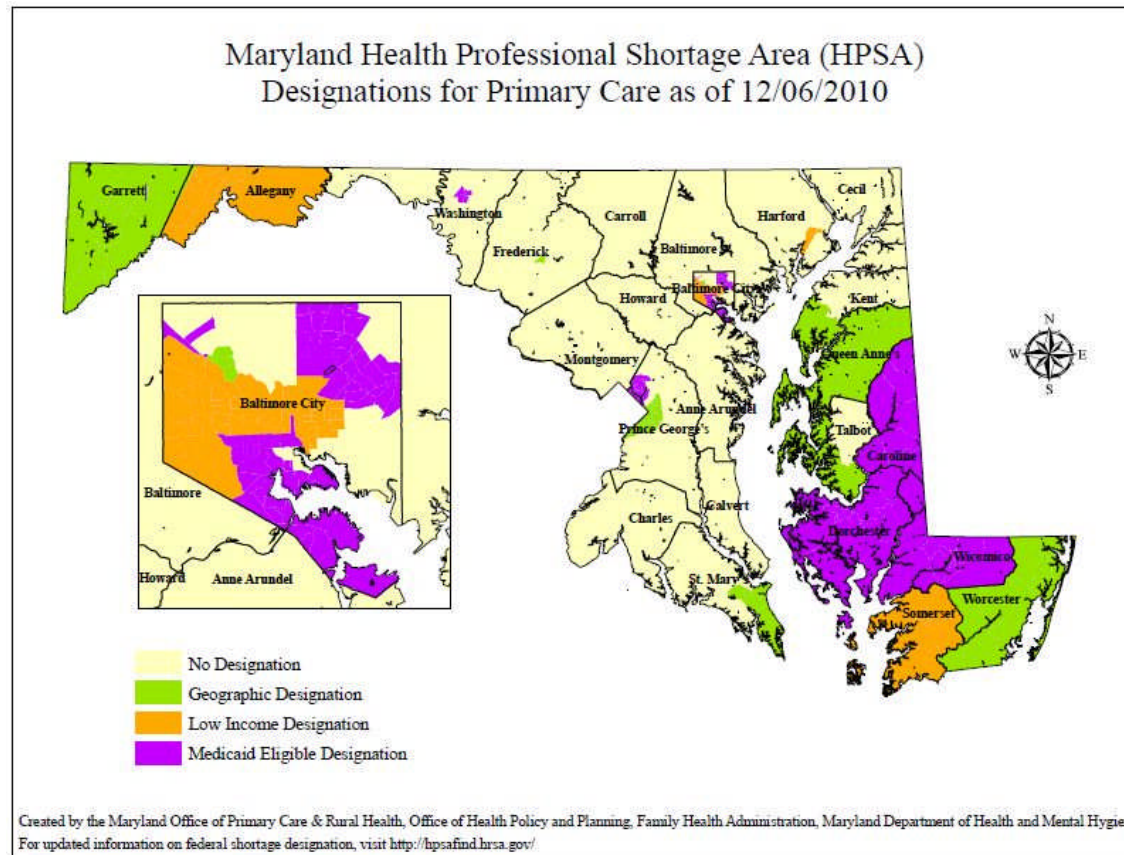
- HRSA framework.
- Account for changes in:
 - Total population
 - Demographics (aging)
 - Insurance status (health reform)
 - From 14% (or so) currently to 7% post-reform.
- Just to maintain status quo.

Primary Care Physicians Required to Maintain Status Quo, 2011 - 2020

2011	5,580
2020 with 50% reduction in uninsured	6,434
Percent increase, 2020/2011	15%
Memo: Breakdown by source	
Population growth	9%
Population aging	4%
Reduction in uninsured	2%
Memo: Annualized rate of growth needed	1.6%
Memo: Annualized rate of growth, historical	1.0%
Source; Requirement are from HRSA 2008, exhibit 29. Population data are U.S.Census Bureau, Population Division, Interim State Population Projections, 2005.	

Geographic Distribution of Physicians is a Separate Issue: Health Professional Shortage Areas

Source: MD DHMH/FHA/OHPP/Office of Primary Care and Rural Health



Summary

- HRSA standard is the US year 2000 average.
- Adjust for trends in population, insurance.
- A policy-neutral, status-quo baseline.
- Maryland:
 - 2009/2010, primary care physician supply 11% above US average.
 - Need 15% more in next 9 years to maintain status quo.
 - Amounts to 60% increase in production/retention of primary care physicians, compared to historical norms.

Appendix: Selected URLs

- **HRSA (2008), The Physician Workforce:**
 - <http://bhpr.hrsa.gov/healthworkforce/reports/physwfissues.pdf>
- **AAMC (2009), State Workforce:**
 - <https://www.aamc.org/download/47340/data/statedata2009.pdf>
- **MHCC (2011), Maryland Physician Workforce Study:**
 - http://mhcc.maryland.gov/workforce/physician_workforce_study_20110513.pdf