Making the Case: Family Medicine for America's Health

Andrew Bazemore, MD, MPH

Director, Robert Graham Center

Family Medicine Congressional Conference, 2014



Policy Studies in Family Medicine and Primary Care

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THEMES

TOOLS & RESOURCES

ONE-PAGERS

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Tools & Resources

PRIMARY CARE PHYSICIAN MAPPER

Explore the distribution of primary care physicians by state, country, or census tracts in metropolitan areas.

MORE INFORMATION (2)



UDS Mapper

Explore existing federally-qualified health center service areas, where gaps in the safety net might exist, and which neighborhoods or regions might hold the highest priorities for health center expansion.

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Explore our health data, upload your own, make and print customizable maps that tell stories important to health policy and primary care in your area.

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MED SCHOOL MAPPER

Primary Care Physician Mapper

Quickly visualize the distribution of primary care physicians across the United States to identify workforce gaps and overlaps. Search by area or specialty, and create custom physician-to-population ratio maps.





THE ROBERT GRAHAM CENTER exists to...

Improve individual and population health by enhancing the delivery of primary care.

The Center aims to achieve this vision through the generation or synthesis of evidence that brings a family medicine and primary care perspective to health policy deliberations from the local to international levels

WHAT'S NEW

- Projecting US Primary Care Physician Workforce Needs: 2010-2025 (11/10/2012) (Articles)
- Improving America's Health Requires Community-Level Solutions: Folsom Revisited (08/01/2012) (One-Pagers)
- The percentage of family physicians attending to women's gender-specific health needs is declining (07/01/2012) (Articles)
- Measures of social deprivation that predict health care access and need within a rational area of primary care service delivery (07/01/2012) (Articles)
- A re-emerging political space for linking person and community through primary health care (06/01/2012) (Articles)

DIRECTOR'S CORNER

As the Graham Center enters a



For if medicine is really to accomplish its great task, it must intervene in political and social life. It must point out the hindrances that impede the normal social functioning of vital processes, and effect their removal.

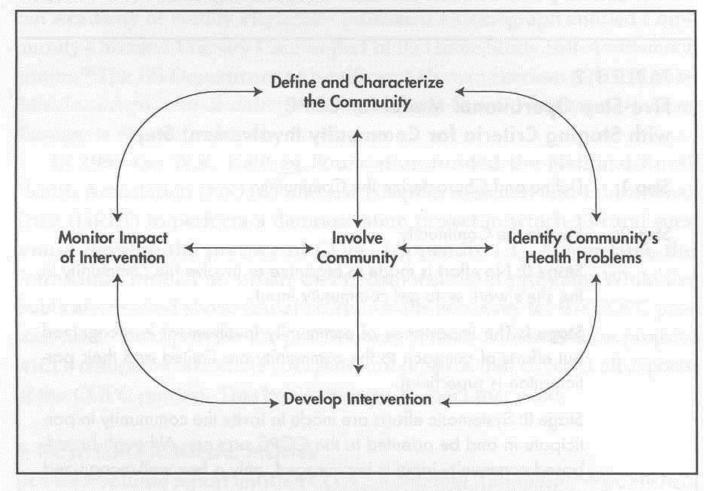
(Rudolf Virchow)

izquotes.com





FIGURE 1.2: The COPC Process





Definers of Primary Care, Family Medicine,

• 19

• 19

• 19

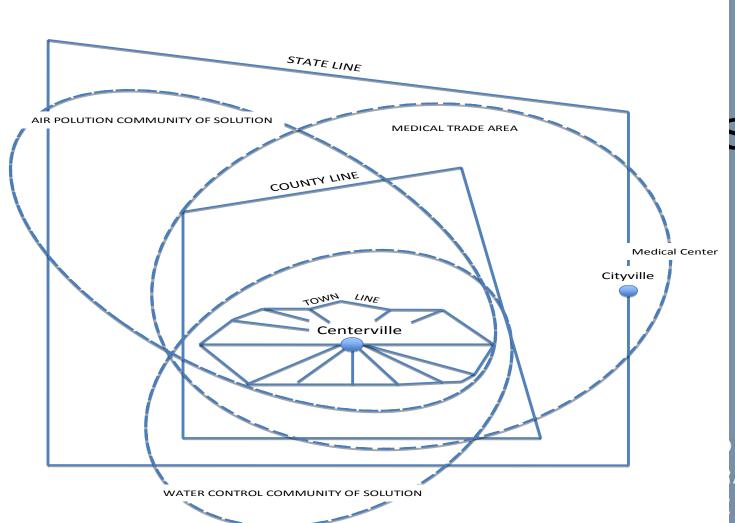


Figure 1. One city's communities of solution. Political boundaries, shown in solid lines often bear little relation to a community's problem-sheds or its medical trade area.

BERT AHAM NTER

e and Primary Care

1978: Declaration of Alma Ata

"Primary care is essential health care based on practical, scientifically sound and socially acceptable methods and technology made *universally accessible* to individual and families in the community through their *full participation* and at a cost that the *community and country can afford*...

It forms an integral part of both the country's health system, of which it is *the central function* and main focus, and overall *social economic development* of the community



Institute of Medicine, 1996

Primary care is the provision of *integrated*, *accessible* health care services by *clinicians* who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the *context* of family and community.

Primary care is the "logical foundation of an effective health care system," and, "essential to achieving the objectives that together constitute value in health care."

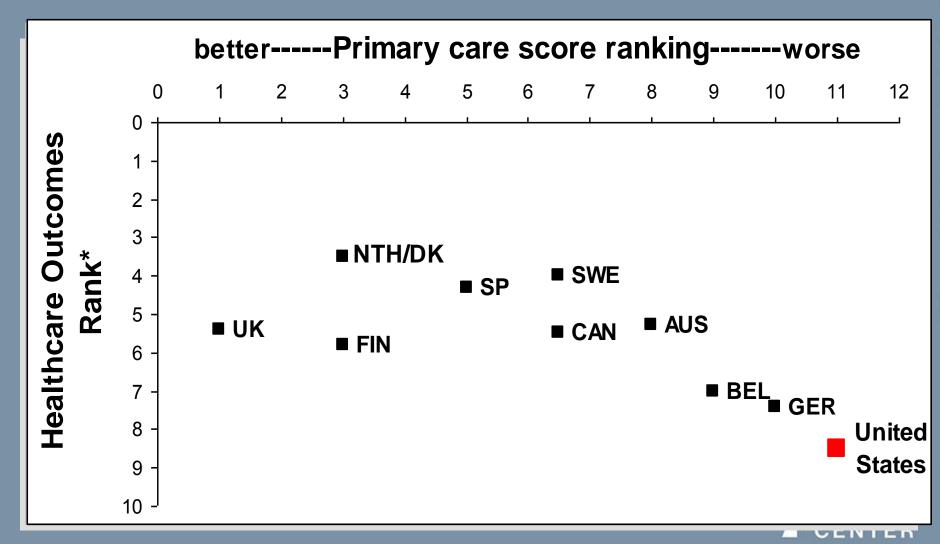


How does health in the US compare? World Health Organization, 2000 Report

•	Country	DALE Rank	Overall Rank
•	France	4	1
•	Japan	9	10
•	UK	24	18
•	Cuba	36	39
•	Canada	35	30
•	US	72	37



Evidence supporting need to support PC prior to reform: Expenditures vs Primary Care Score



Adapted with permission from Starfield B. Policy relevant determinants of the permission from Starfield B. Policy 2002; 60:201-21.

The State of our Primary Care Workforce: Best of Times?

Table 1. U.S. primary care workforce by provider type, 2010

Primary care provider	Number
Physicians	208,807
Nurse practitioners	55,625
Physician assistants	30,402
Total	294,834

Table 2. Geographic distribution of health care professionals, 2010

	All specialties								
Geography	NP PA Physicians		NP	PA	Family physicians / GPs	General internal medicine	General pediatrics	U.S. population	
Urban	84.4%	84.4%	89.0%	72.2%	75.1%	77.5%	89.8%	91.2%	80%
Large rural	8.9%	8.8%	7.1%	11.0%	11.7%	11.1%	6.7%	6.2%	10%
Small rural	3.9%	3.8%	2.6%	7.7%	6.9%	7.2%	2.4%	1.8%	5%
Remote rural/frontier	2.8%	3.0%	1.3%	9.1%	6.3%	4.2%	1.1%	0.8%	5%

Note: Data derived from analysis of National Provider Identifier file, November, 2010; U. S. Census Bureau Population Estimate, 2008. Rural and urban designations are taken from the Rural tract-based classification scheme that uses standard Census Bureau definitions in combination with work commuting information to characterize rural and urban status and relationships of populations = 10,000-50,000; small rural populations = 2,500 − 9,999; and remote rural/frontier populations = less than 2,500 people. For more information, go to: http://depts.washington.ed/uwruca/ruca-uses.php

Software Help) and http://depts.washington.ed/uwruca/ruca-uses.php

Populations = 10,000-50,000; small rural populations = 2,500 − 9,999; and remote rural/frontier populations = less than 2,500 people. For more information, go to: http://depts.washington.ed/uwruca/ruca-uses.php

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AHRQ Publication No. 12-P001-4-EF Current as of January 2012

Internet Citation:







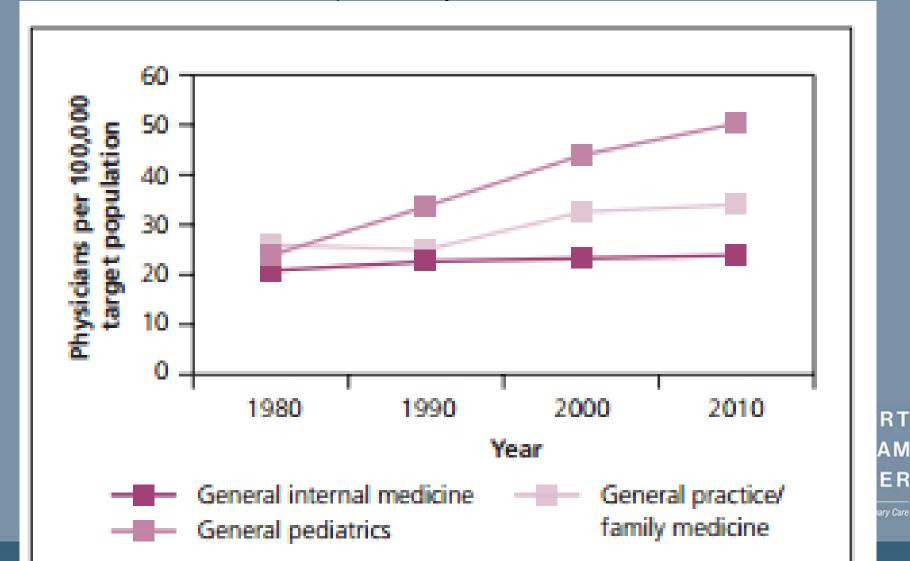








Historical perspective suggests longterm boom: Phys/Pop Ratios 1980-2010



RT

ER

ary Care

Or worst of Times?

Projecting US Primary Care Physician Workforce Needs: 2010-2025

Stephen M. Petterson, PbD¹
Winston R. Liaw, MD, MPH²
Robert L. Phillips, Jr, MD, MSPH¹
David L. Rabin, MD, MPH³
David S. Meyers, MD⁴
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⁴Agency for Healthcare Research and Quality, Washington, DC

ABSTRACT

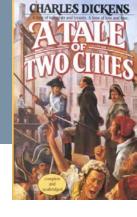
PURPOSE We sought to project the number of primary care physicians required to meet US health care utilization needs through 2025 after passage of the Affordable Care Act.

METHODS In this projection of workforce needs, we used the Medical Expenditure Panel Survey to calculate the use of office-based primary care in 2008. We used US Census Bureau projections to account for demographic changes and the American Medical Association's Masterfile to calculate the number of primary care physicians and determine the number of visits per physician. The main outcomes were the projected number of primary care visits through 2025 and the number of primary care physicians needed to conduct those visits.

RESULTS Driven by population growth and aging, the total number of office visits to primary care physicians is projected to increase from 462 million in 2008 to 565 million in 2025. After incorporating insurance expansion, the United States will require nearly 52,000 additional primary care physicians by 2025. Population growth will be the largest driver, accounting for 33,000 additional physicians, while 10,000 additional physicians will be needed to accommodate population aging. Insurance expansion will require more than 8,000 additional physicians, a 3% increase in the current workforce.

CONCLUSIONS Population growth will be the greatest driver of expected increases in primary care utilization. Aging and insurance expansion will also contribute to utilization, but to a smaller extent.

Ann Fam Med 2012;10:503-509. doi:10.1370/afm.1431.



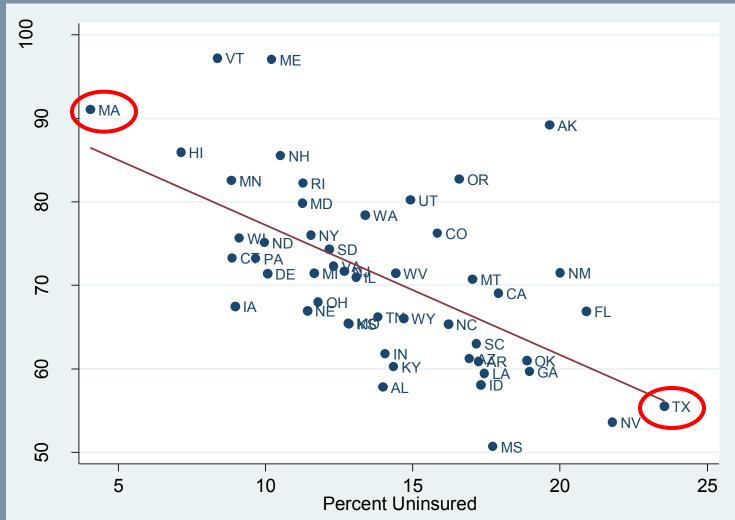
Needing 52,000 more...

Table 2. Projected Primary Care Physician Need Under Various Conditions by Year

Condition	2010	2015	2020	2025
Baseline	209,662	209,662	209,662	209,662
Aging of population	-	2,693	6,264	9,894
Population growth	-	11,201	21,952	32,852
ACA coverage	_	7,104	8,097	8,279
Total	209,662	230,660	245,975	260,687

ACA = Affordable Care Act.

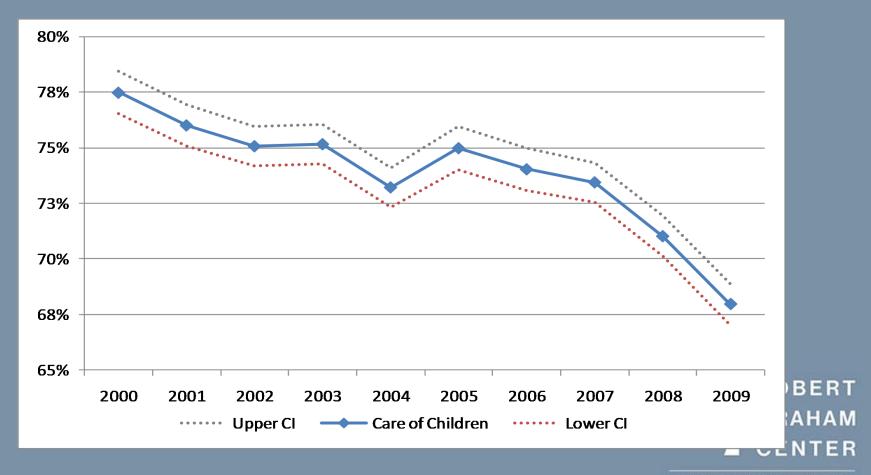
ACA impacts demand differently across states: PC Supply and Uninsurance



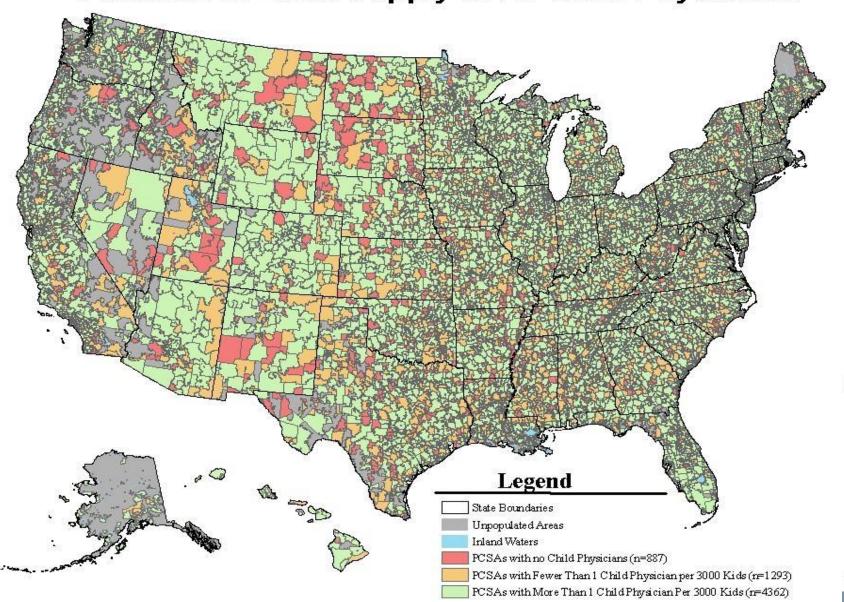
ROBERT GRAHAM CENTER

ly Medicine and Primary Care

Comprehensiveness?: Trends in the Reported Care of Children by FPs



Variation in Local Supply of All Child Physicians



The Health of the Training Pipeline & Primary Care





Rapid NP/PA Growth

Medical specialty MD

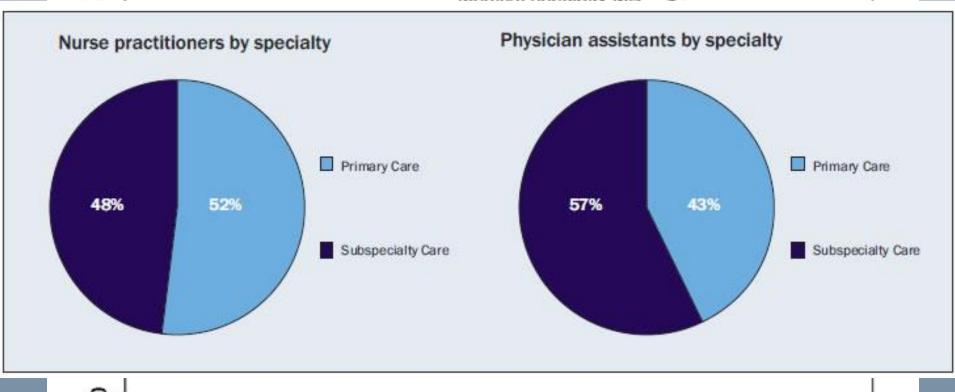
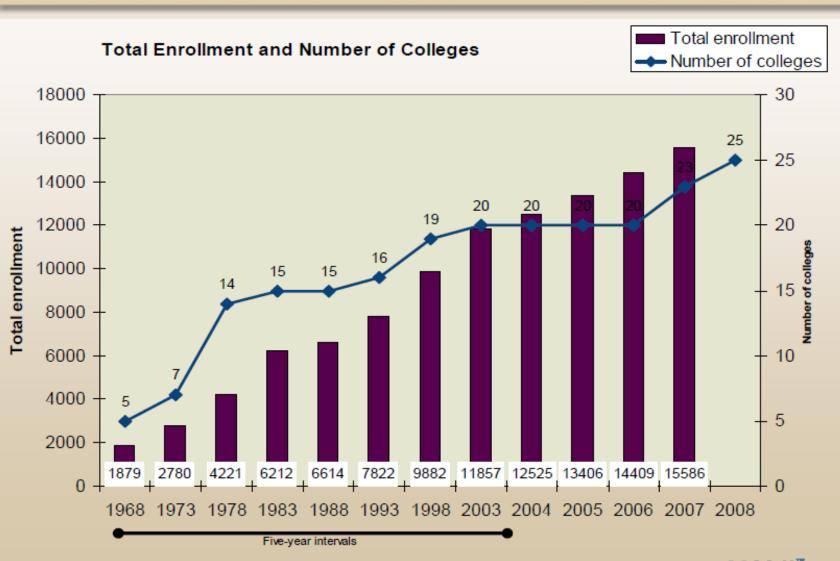


Fig. 1. Aggregate trends in health care providers, 1980–2008.

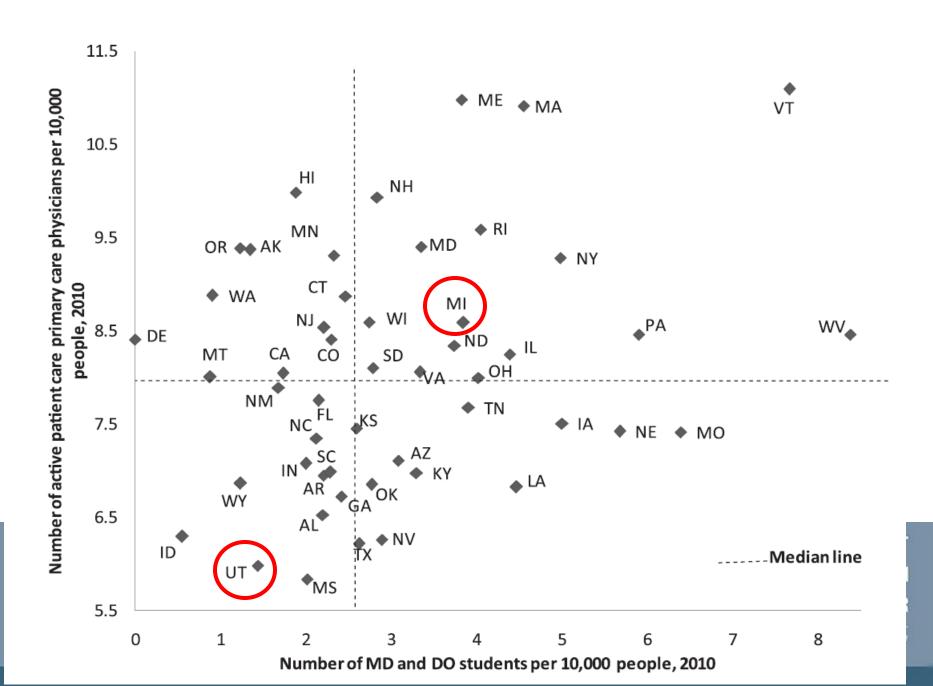
Source: Health Resources and Service Administration Area Resource File, National Survey Sample of Registered Nurses, American Academy of Physician Assistants.

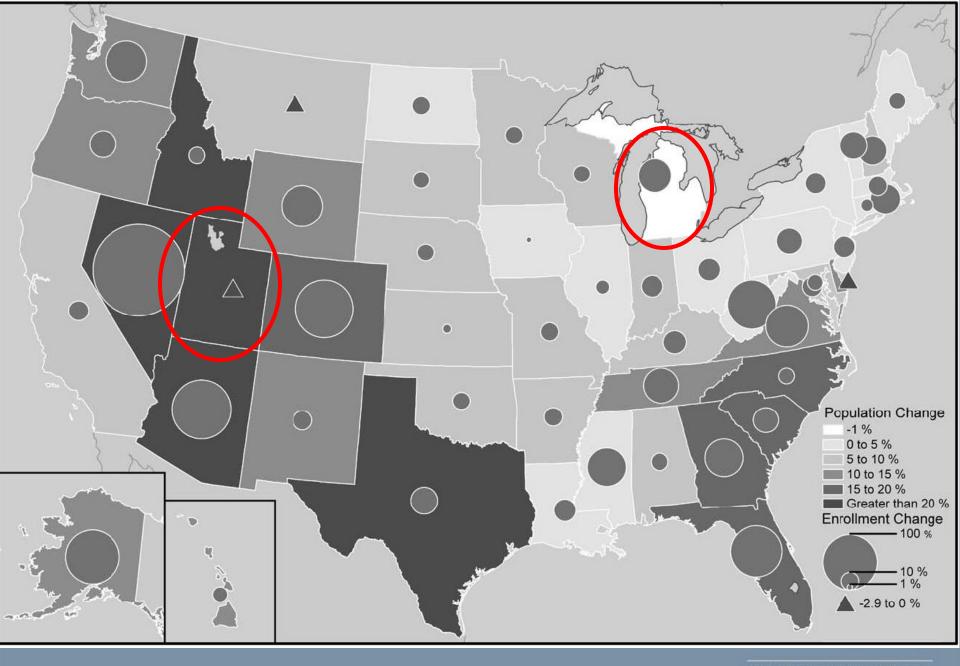
Growth of Osteopathic Medical Colleges (1968 – 2008)



But what will all this growth yield?







Student Interest

General Internal Medicine 2.0%

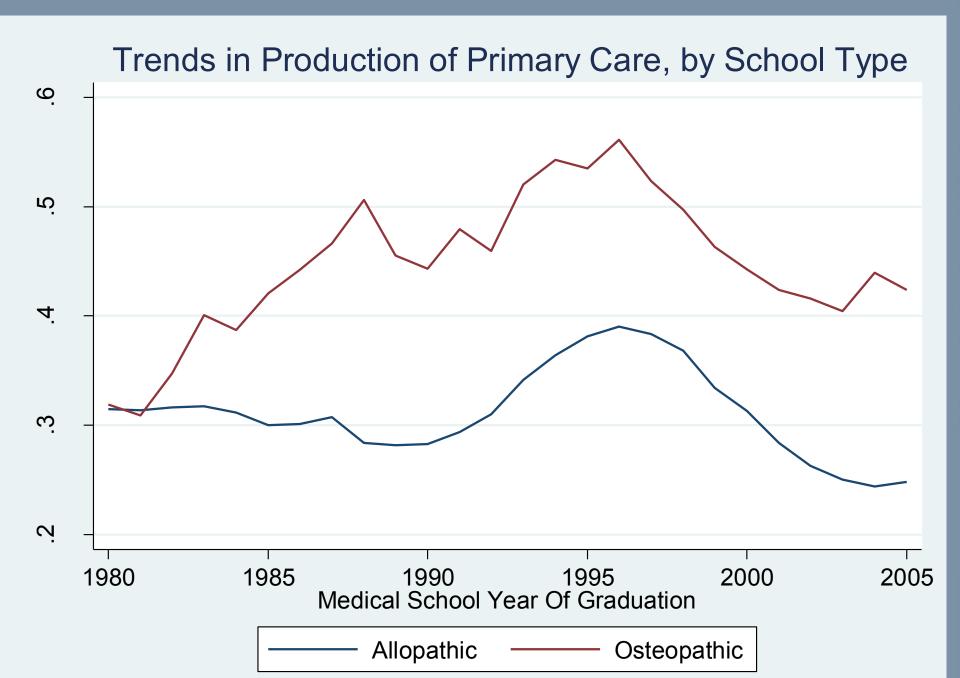
Med/Peds 2.7%

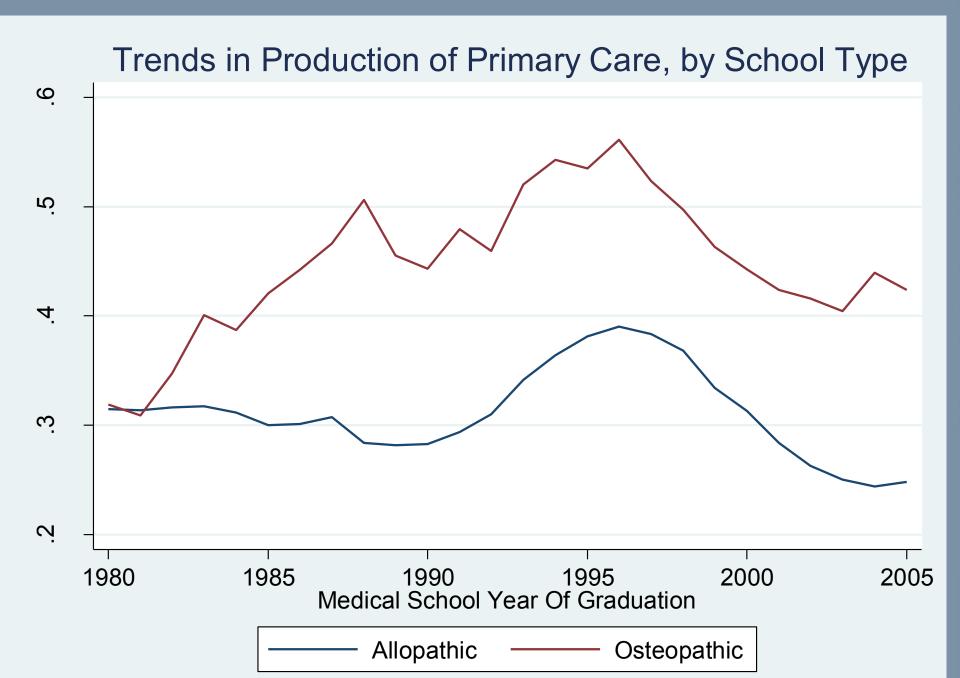
Family Medicine 4.9%

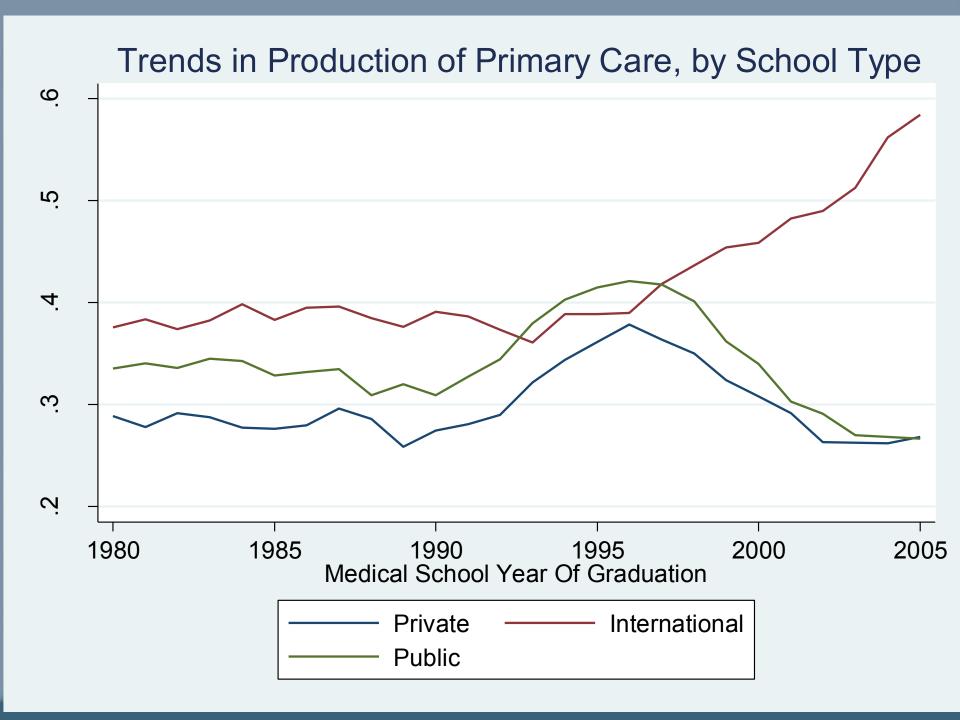
General Pediatrics
 11.7%

• Total: 21.3%

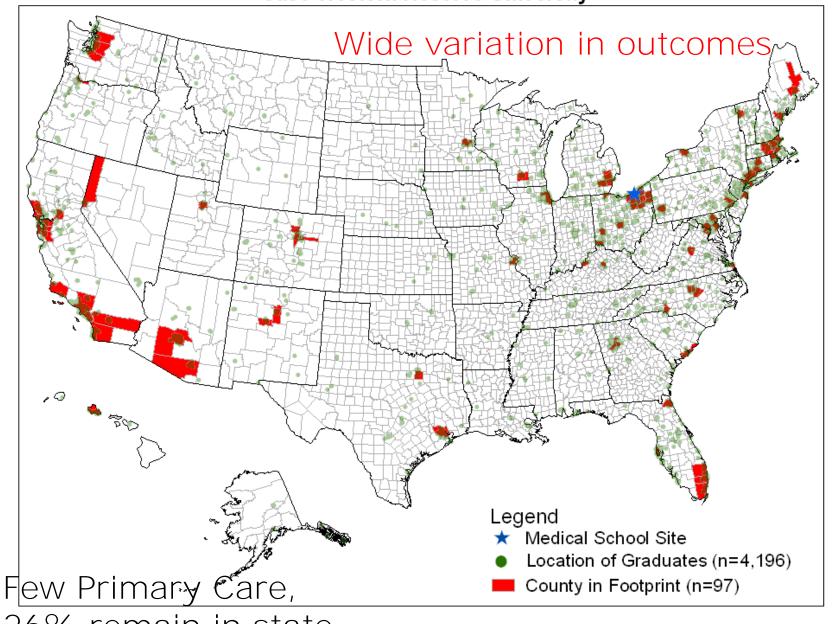






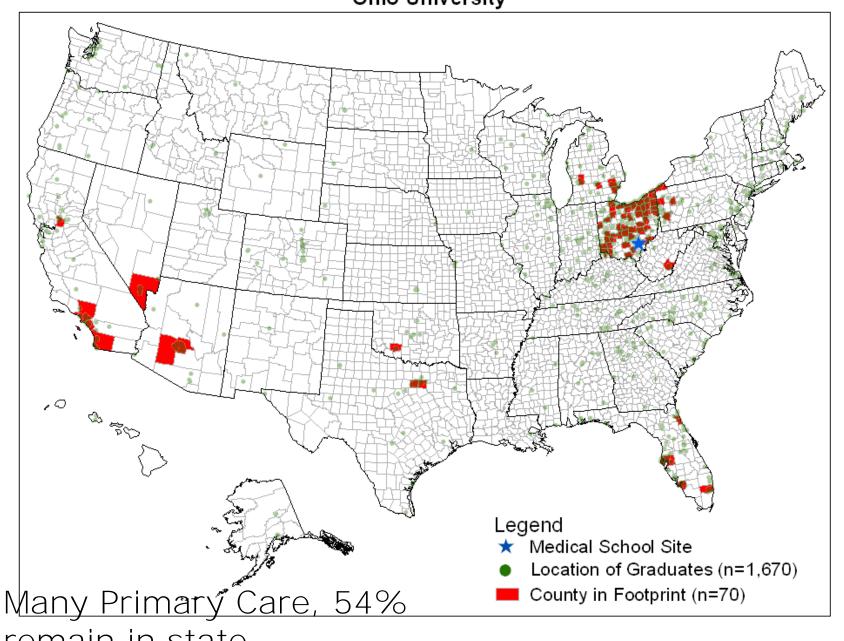


Case Western Reserve University



26% remain in state

Ohio University



remain in state

Table 1. Medical School Rankings Based on Social Mission Score*

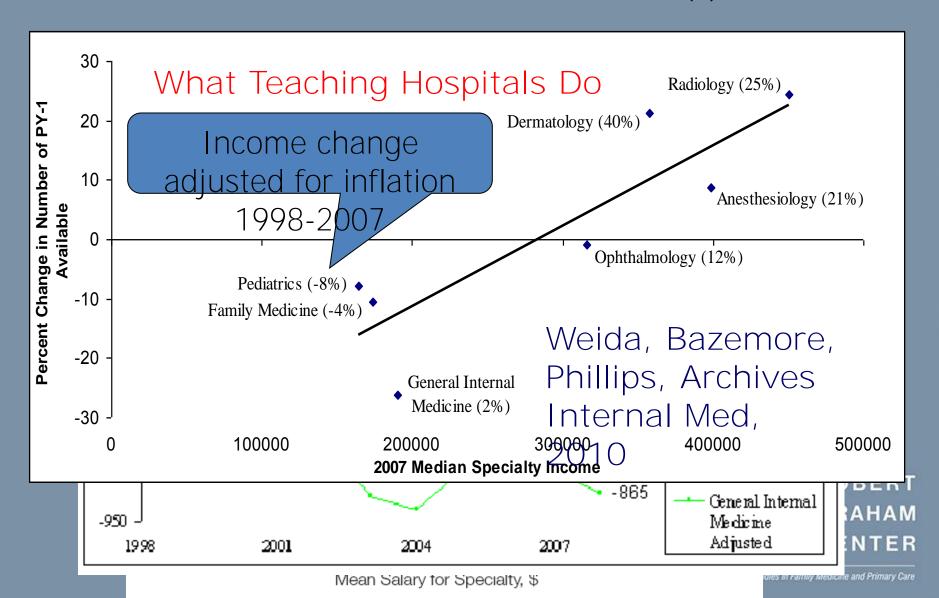
Rank	School	State	Social Mission Score†	Primary Care Physicians		Physicians Practicing in HPSAs		School-State (Nation) Ratio of Underrepresented Minorities		Underrepresented Minorities in the School, %	Underrepreser Minorities in State (Nation)
Highest 20				Total,	Standardized Score‡	Total,	Standardized Score‡	Ratio	Standardized Score‡		
1	Morehouse School of Medicine	GA	13.98	43.7	1.20	39.1	1.40	3.15	11.38	83.3	26.5
2	Meharry Medical College	TN	12.92	49.3	2.00	28.1	0.14	2.99	10.78	79.3	26.5
3	Howard University	DC	10.66	36.5	0.19	33.7	0.78	2.71	9.68	71.9	26.5
4	Wright State University Boonshoft School of Medicine	OH	5.34	49.2	1.98	28	0.12	1.31	3.23	19.0	14.5
5	University of Kansas	KS	4.49	45.2	1.42	43.9	1.96	0.77	1.12	11.6	15.1
6	Michigan State University College of Human Medicine	MI	4.13	43.6	1.20	26.5	-0.05	1.24	2.99	23.7	19.1
7	East Carolina University Brody School of Medicine	NC	3.72	51.9	2.36	34.2	0.84	0.62	0.52	17.3	28.1
8	University of South Alabama	AL	3.15	42	0.97	52.7	2.97	0.29	-0.78	8.2	28.7
9	Ponce School of Medicine	PR	3.02	33	-0.31	43.8	1.94	0.84	1.38	82.5	98.8
10	University of Iowa Carver College of Medicine	IA.	2.97	37.1	0.28	21	-0.69	1.35	3.38	8.1	6.0
11	Oregon Health & Science University	OR	2.93	43.8	1.22	43.8	1.94	0.43	-0.23	5.5	13.0
12	East Tennessee State University Quillen College of Medicine	TN	2.88	53.5	2.58	32.7	0.67	0.39	-0.37	7.6	19.5
13	University of Mississippi	MS	2.86	33.5	-0.24	62.5	4.11	0.23	-1.01	8.8	38.3
14	University of Kentucky	KY	2.61	39.8	0.65	32.5	0.64	0.82	1.32	8.0	9.8
15	Southern Illinois University	IL.	2.59	45	1.39	46.5	2.26	0.22	-1.06	6.1	28.3
16	Marshall University Joan C. Edwards University	WV	2.51	46.8	1.64	20.9	-0.70	0.89	1.58	4.2	4.7
17	University of Massachusetts Medical School	MA	2.48	45.9	1.52	36.7	1.12	0.44	-0.16	5.9	13.3
18	University of Illinois	IL.	2.27	36.7	0.21	35.7	1.01	0.75	1.05	21.2	28.3
19	University of New Mexico	NM	2.25	46.7	1.63	30.7	0.43	0.53	0.19	28.8	53.9
20	University of Wisconsin	WI	2.24	35.7	0.07	19.3	-0.87	1.26	3.03	13.8	11.0
Lowest 20§											
1	Vanderbilt University	TN	-3.95	21.9	-1.86	20.8	-0.70	0.13	-1.38	3.6	26.5
2	University of Texas Southwestern Medical Center	TX	-3.64	26.8	-1.18	15.1	-1.36	0.21	-1.09	9.3	44.7
3	Northwestern University Feinberg School of Medicine	IL	-3.11	24.4	1.51	19.5	-0.86	0.30	-0.74	7.9	26.5
4	University of California, Irvine	CA	-3.02	32.9	-0.32	14.2	-1.47	0.17	-1.24	7.0	41.2
5	New York University	NY	-2.65	24.3	-1.53	22.1	-0.55	0.34	-0.57	9.0	26.5
6	University of Medicine and Dentistry of New Jersey—NJ	NJ	-2.46	23.7	-1.61	17.8	-1.05	0.54	0.20	14.8	27,7
7	Uniformed Services University of the Health Sciences	MD	-2.36	29.6	-0.78	21.4	-0.64	0.24	-0.95	6.5	26.5
8	Thomas Jefferson University	PA	-2.34	32.1	-0.42	20.6	-0.72	0.18	-1.19	4.8	26.5
9	Stony Brook University	NY	-2.21	29.1	-0.85	20.4	-0.76	0.33	-0.60	10.5	31.7
10	Albert Einstein College of Medicine of Yeshiva University	NY	-2.13	26.1	-1.28	24.8	-0.25	0.33	-0.60	8.8	26.5
11	Boston University	MA	-2.12	26.7	-1.19	23.3	-0.42	0.35	-0.52	9.4	26.5
12	Loyola University Chicago Stritch School of Medicine	IL.	-2.06	33.7	-0.20	20.7	-0.72	0.20	-1.14	5.2	26.5
13	University of Pennsylvania	PA.	-2.03	19.1	-2.27	20.4	-0.76	0.74	0.99	19.5	26.5
14	Medical College of Wisconsin	WI	-2.02	33.5	-0.23	15.9	-1.28	0.36	-0.51	9.4	26.5
15	Albany Medical College	NY	-2.00	30.7	-0.63	24.2	-0.32	0.22	-1.06	5.7	26.5
16	Columbia University	NY:	-1.98	20.3	-2.10	31.8	0.57	0.37	-0.45	9.8	26.5
17	Texas A&M University	TX	-1.95	37	0.26	16.2	-1.24	0.24	-0.97	10.6	44.7
18	Duke University	NC	-1.91	22.3	-1.82	23.9	-0.34	0.55	0.24	14.5	26.5
19	Stanford University	CA	-1.90	27.4	-1.10	16.2	-1.23	0.59	0.43	15.7	26.5
20	Johns Hopkins University	MD	-1.90	24.3	-1.53	26.7	-0.02	0.40	-0.35	10.5	26.5

The sum of the primary care, HPSA, and underrepresented minority standardized scores. The standardized value calculated for each measure, with a mean value of 0 (SD, 1). Ranked from lowest to highest (i.e., rank 1 is the lowest-performing school).

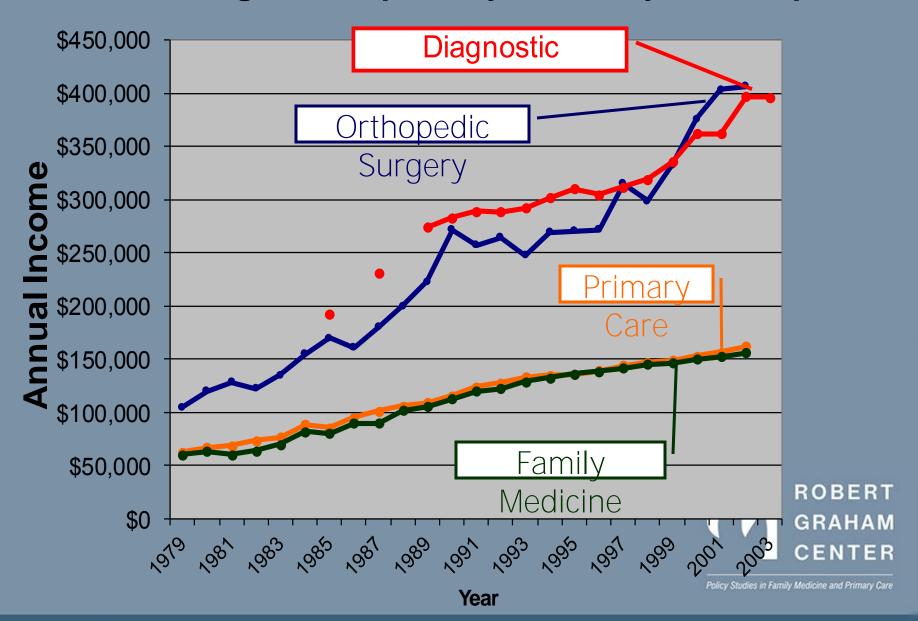
And what of Graduate Medical Education?



GME Follows Green(\$)



Driving force: Specialty to PC Payment Gap



\$13 billion in public investment for what? (GME Outcomes Study)

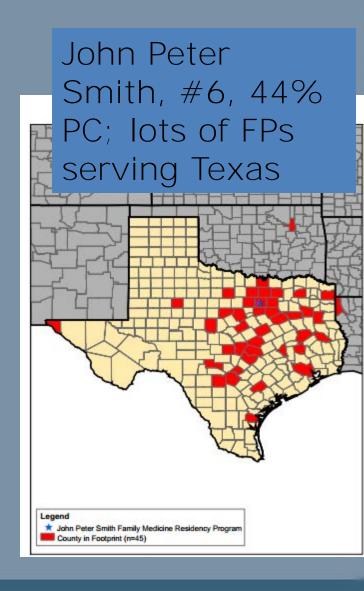
We examined current practice for all 2006-08 grads:

- Avg overall primary care production rate: 25.2%.
- 759 sponsoring institutions, 158 produced 0 PC graduates, 184 (small) produced more than 80%.
- 4.8% of graduates practiced in rural areas
 - 198 institutions produced no rural physicians,
 - 283 institutions produced no Federally Qualified Health Center or Rural Health Clinic physicians.
- Additional studies underway
 - Does training in a high cost area yield high cost physicians?
 - What additional institutional factors explain this variation in training outcomes?

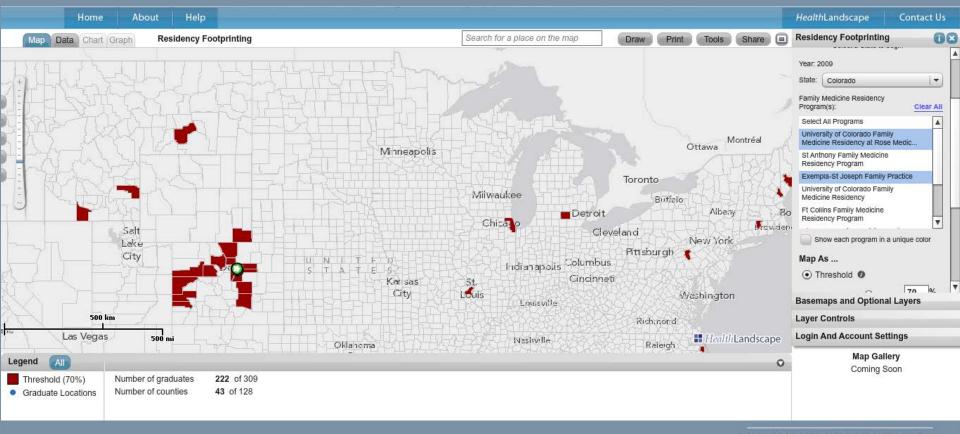


And again, the outcomes vary widely

Primary Teaching Site Name (ACGME)	# Grads	# Spec	# PC	% PC
138. Duke University Hospital	861	71	77	8.94
139. Northwestern Memorial Hospital	722	39	64	8.86
140. Baylor University Medical Center	170	16	15	8.82
141. Vanderbilt University Medical Center	775	55	67	8.65
142. Medical Center of Louisiana at New	375	27	32	8.53
143. Cleveland Clinic Foundation	761	55	64	8.41
145. Brigham and Women's Hospital	844	40	69	8.18
146. Temple University Hospital	429	27	34	7.93
147. Thomas Jefferson University Hospit	515	43	37	7.18
148. Tulane University Hospital and Clini	382	31	27	7.07
149. University of Chicago Medical Cent	523	44	35	6.69
150. Massachusetts General Hospital	842	42	55	6.53
151. Stanford Hospital and Clinics	623	49	29	4.65
152. Johns Hopkins Hospital	848	70	39	4.6
153. Barnes-Jewish Hospital	848	50	30	3.54
154. Harper-Hutzel Hospital	244	17	5	2.05
155. Indiana University Health University	411	27	3	0.73
156. NYU Hospitals Center	352	29	2	0.57
157. Mayo Clinic (Rochester)	243	30	0	0
158. Memorial Sloan-Kettering Cancer C	169	10	0	0

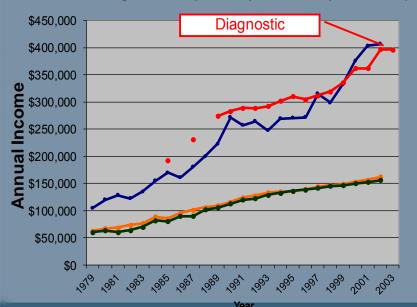


And should be transparent... Residency Footprinting Tool



So other than reduce the payment gap, what can we do?

Driving force: Specialty to PC Payment Gap





Redistribution of slots to date has failed

- 2003, Medicare Modernization Act
 - Redistributed nearly 3000 GME slots
 - Goal: Benefit Primary Care & Rural
 - Our findings:
 - Only 12 of 300 hospitals recipients of slots are rural, only 3% of all slots are rural
 - Redistributed slots = 2:1 Specialty:Primary Care



Graham Center Policy One I agor

Migration After Family Medicine Residency: 56% of Graduates Practice Within 100 Miles of Training

E. BLAKE FAGAN, MD; SEAN C. FINNEGAN, MS; ANDREW W. BAZEMORE, MD, MPH; CLAIRE B. GIBBONS,

PhD, MPH; and STEPHEN M. PETTERSON, PhD With state planners working to address primary care shortages and federal graduate medical education payment reform looming, regional retention statistics for

family medicine residency programs are a subject of high interest. Using the 2009 American Medical Association Physician Masterfile, we found that 56% of family medicine residents stay within 100 miles of where they gradu-Insurance expansion, paired with evidence of a priate from residency.

mary care physician shortage and a known geographic maldistribution of primary care physicians,1 has policymakers and stakeholders eager to understand the influence of family medicine residency program location on postgraduation practice location. It is often quoted that 50% of family medicine residents stay within 100 miles of where they graduate, whereas in reality, little evidence this claim ^{2,3} A study in 1995 assessed

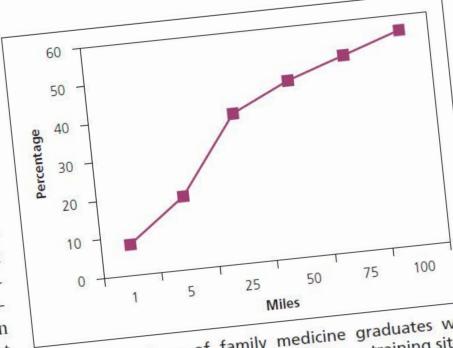


Figure. Percentage of family medicine graduates w practice within 100 miles of their residency training sit Data from the 2009 American Medical Association Physician Masterfile

What trains in Vegas... stays in Vegas?

Do Residents Who Train in Safety Net Settings Return for Practice?

Robert L. Phillips, MD, MSPH, Stephen Petterson, PhD, and Andrew Bazemore, MD, MPH

Abstract

Purpose

To examine the relationship between training during residency in a federally qualified health center (FQHC), rural health clinic (RHCs), or critical access hospital (CAH) and subsequent practice in these settings.

Method

The authors identified residents who trained in safety net settings from 2001 to 2005 and in 2009 using 100% Medicare Part B claims files for FQHCs, RHCs, and CAHs and 2011 American Medical Association Masterfile residency start and end date histories.

They used 2009 Medicare claims data to determine the relationship between this training and subsequent practice in safety net settings.

Results

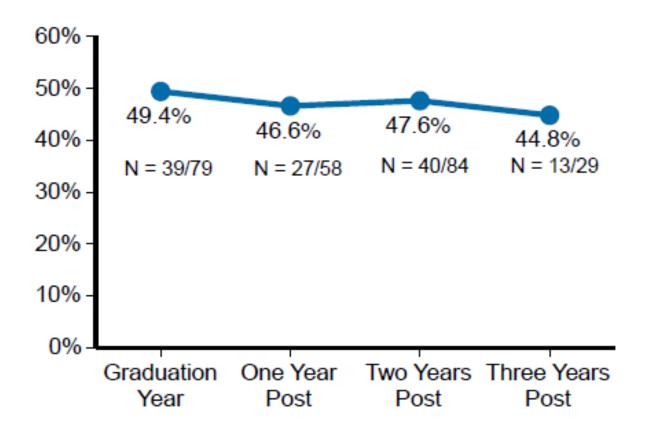
The authors identified 662 residents who had a Medicare claim filed in their name by an RHC, 975 by an FQHC, and 1,793 by a CAH from 2001 to 2005 and in 2009. By 2009, that number of residents per year had declined for RHCs and FQHCs but increased substantially for CAHs. The percentage of physicians practicing in a safety net setting in 2009 who had trained in a

similar setting from 2001 to 2005 was 38.1% (205/538) for RHCs, 31.2% (219/703) for FQHCs, and 52.6% (72/137) for CAHs.

Conclusions

Using Medicare claims data, the authors identified residents who trained in safety net settings and demonstrated that many went on to practice in these settings. They recommend that graduate medical education policy support or expand training in these settings to meet the surge in health care demand that will occur with the enactment of the Affordable Care Act insurance provision in 2014.

Figure 2. Family Medicine Rural Training Track Residency Graduates, 2007-08 to 2010-11: Proportion Practicing in Rural Areas



Data sources: graduates identified by 18 RTT programs, AMA Masterfile, Robert Graham Center; rural as defined by Rural-Urban Commuting Areas.



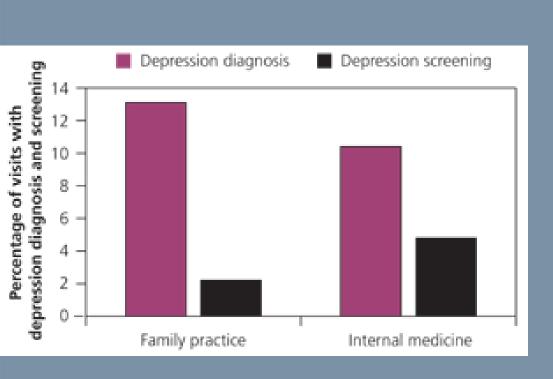
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and Primary Care

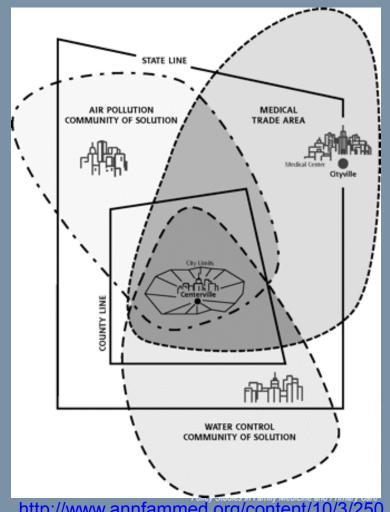
Failing to extend and expand on GME gains (PCEP, THC) would signal little commitment to rehabilitate a failing pipeline

Projected Work Areas of Residents Funded by the Primary Care Residency Expansion Program

TYPE OF	NUMBER OF RESIDENTS	PROJECTED WORK AREAS			
RESIDENCY		PRIMARY CARE	HEALTH PROFESSIONAL SHORTAGE AREA	RURAL AREAS	
Family medicine	425	393 (92%)	110 (26%)	50 (12%)	
Internal medicine	285	112 (39%)	69 (24%)	14 (5%)	
Pediatrics	190	97 (51%)	39 (21%)	3 (2%)	
Total	900	602 (67%)	218 (24%)	67 (7%)	

Our future must be team-based, and integrated with Public, Community and Behavioral Health





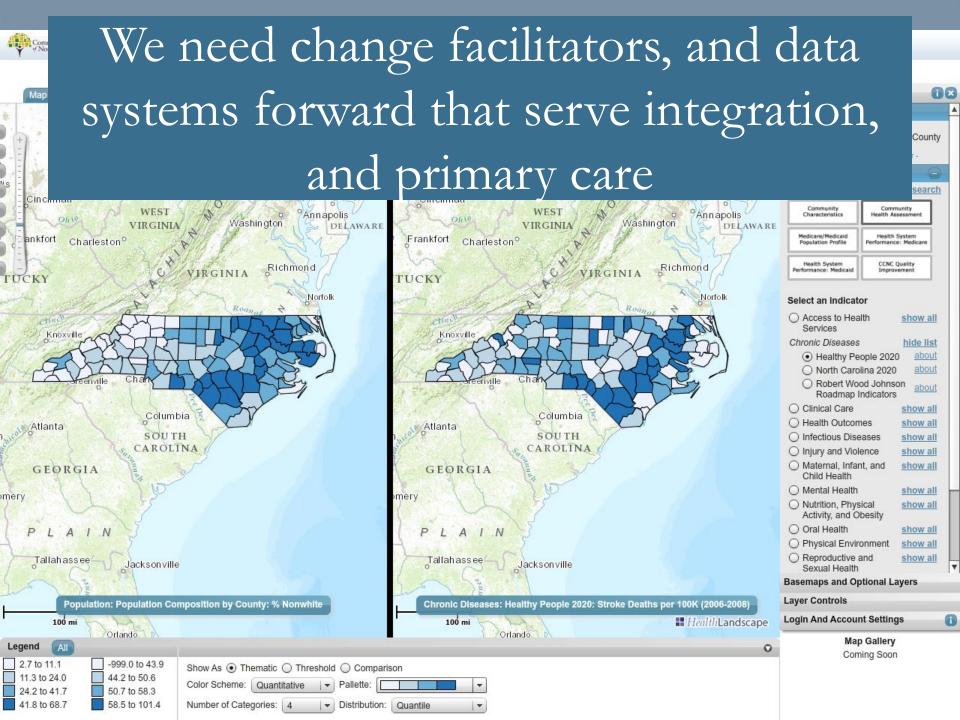
And we remain the frontline for many Americans

Table 1. Family Physicians (FPs) Providing Mental Health Care (MHC) by Rurality

Rural-Urban Continuum Code	Psychiatrists Per 10,000 Population	FPs Per 10,000 Population	FPs Providing MHC (%)	FPs Providing MHC Per 10,000 Population*
1 (Most urban)	1.29	2.21	40	0.89
2	1.07	2.98	43	1.28
3	0.92	3.17	44	1.40
4	0.51	2.70	48	1.30
5	0.74	3.52	48	1.69
6	0.32	2.94	49	1.44
7	0.36	3.58	53	1.90
8	0.10	2.29	51	1.17
9 (Most rural)	0.11	2.85	52	1.48
National	1.07	2.60	43	1.12

^{*}Adjusted.

Data Sources: 2010 US Census; 2012 American Medical Association Physician Masterfile; American Board of Family Medicine Examination Application Demographic Data (2007–2009).

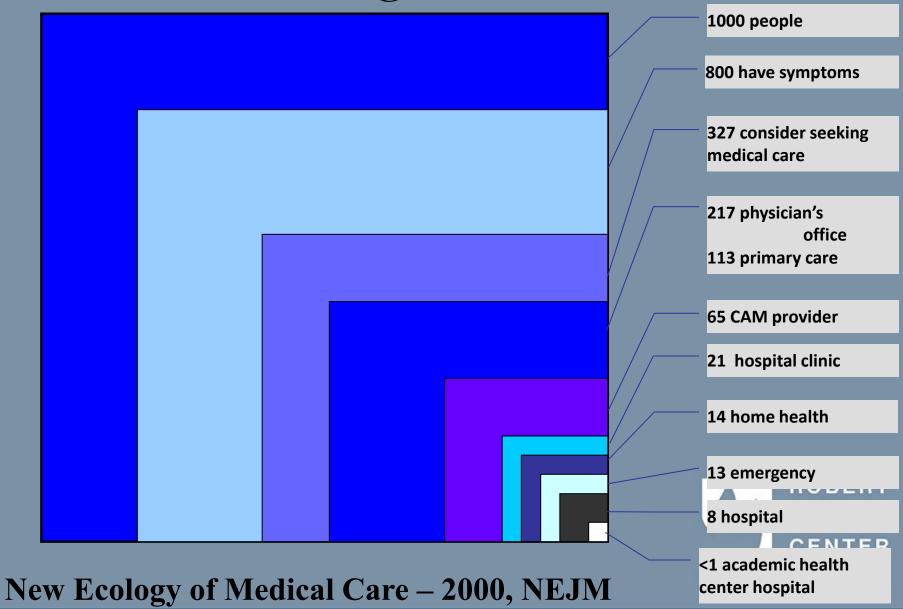


And remember...to most Policymakers: *Primary Care remains a Solution*

- Starfield (and many others):
 - Systems built around primary care have
 - Lower costs
 - Higher quality
 - Broader access
- The ACA endorsed this solution, and widely expanded the number of Americans with 'a card'
- Remind policymakers where most care, particularly complex care, is occurring, and that real access requires 'a card and a home'

ROBERT

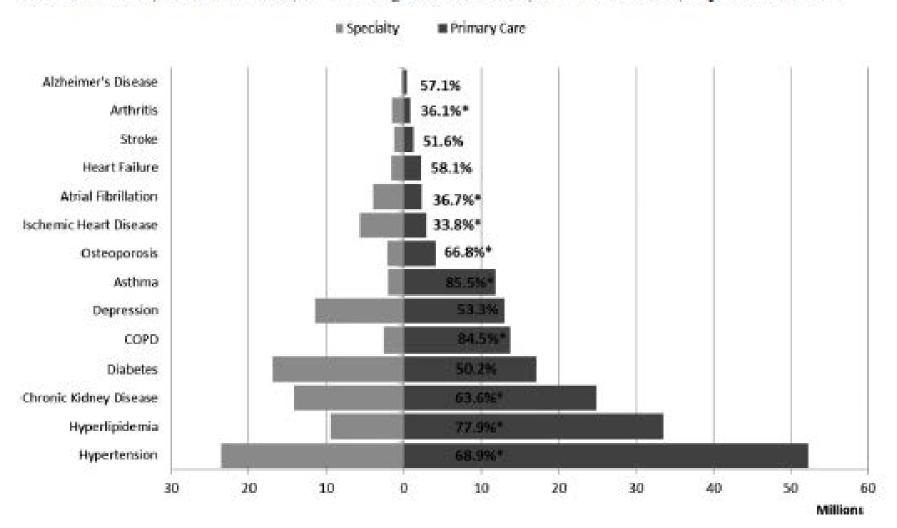
In an average month:





And Care of Complex Chronic Disease is mostly taking place in that Home...

Figure 1. Number and percentage of outpatient chronic condition visits by physician type in the past year, based on the 2008 National Ambulatory Medical Care Survey. *P < 0.05 significant test done by SAS Procedure Surveyfreq Roa-Scott χ^2 test.



Remembering our roots 1978: Declaration of Alma Ata

"Primary care is essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to *individual and families* in the community through their full participation and at a cost that the community and country can afford...

It forms an integral part of both the country's health system...and overall social economic development of the community



Final Thoughts

- Primary Care is needed, "Now More than Ever", and your Advocacy on its behalf is essential and appreciated
- We exist to support your efforts with evidence, and more information is readily available at www.graham-center.org





