



**Research-informed health care
reform:
turning data into information to guide
policy and improve health outcomes**

Bob Phillips, MD MSPH

Andrew Bazemore, MD MPH

Robert Graham Center

- Health Services and Policy Research Center in Washington, DC
- American Academy of Family Physicians
- Editorial independence
- research and analysis to inform
 - the Academy in its public policy work
 - provide a family medicine perspective to policy deliberations in Washington



tools & resources

 **MED SCHOOL MAPPER**

Visualize, map data, and create reports on the community and national impact of any U.S. medical school.

[MORE INFORMATION](#) ▶

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.

[MORE INFORMATION](#) ▶

 **GME TABLES**

Discover how much Graduate Medical Education (GME) funding your hospital receives from Medicare for each resident. Compare across years and to other hospitals.

[MORE INFORMATION](#) ▶

 **HealthLandscape**

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

Access Reports

Learn about the challenges facing America's safety net in a series of reports by the Graham Center and the National Association of Community Health Centers:

[Access Denied: A look at America's medically disenfranchised](#)

[Access Granted: The primary care payoff](#)

[Access Transformed: Building a primary care workforce for the 21st century](#)



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.

THEMES

Guiding the work of the Robert Graham Center

WHAT'S NEW

- [Increasing Graduate Medical Education \(GME\) in Critical Access Hospitals \(CAH\) could enhance physician recruitment and retention in rural America](#) (01/01/2012) (Articles)
- [Rewarding family medicine while penalizing comprehensiveness? Primary care payment incentives and health reform: the Patient Protection and Affordable Care Act \(PPACA\)](#) (11/01/2011) (Articles)
- [What services do family physicians provide in a time of primary care transition?](#) (11/01/2011) (Articles)
- [Refocusing Geriatricians' Role in Training to Improve Care for Older Adults](#) (01/01/2012) (One-Pagers)
- [Where the United States Falls Down and How We Might Stand Up](#) (11/01/2011) (Editorials)

DIRECTOR'S CORNER

Slightly less than a year ago, the Robert Graham Center hosted the

Evidence Not Always Welcome

“Reason is six-sevenths of Treason”

James Thurber

APHCRI Partnerships

- APHCRI origins: Graham Center one model
- 5 year fellow exchange that led to build of web-based data and mapping platform
 - \$2.6 million investment to build platform for research, informing Medicare Locals, and informing policy
- APCHRI = good partner for Australia's academic community to translate research into policy



ARTICLE

The Australian Experiment: How Primary Health Care Organizations Supported the Evolution of a Primary Health Care System

*Caroline Nicholson, MBA, GAICD, GradDipPhty
Claire L. Jackson, MD, MBBS, MPH, FRACGP, John E. Marley, MD, MBCbB, FRACGP
and Robert Wells, BA*

Primary health care in Australia has undergone 2 decades of change. Starting with a vision for a national health strategy with general practice at its core, Australia established local meso-level primary health care organizations—Divisions of General Practice—moving from focus on individual practitioners to a professional collective local voice.

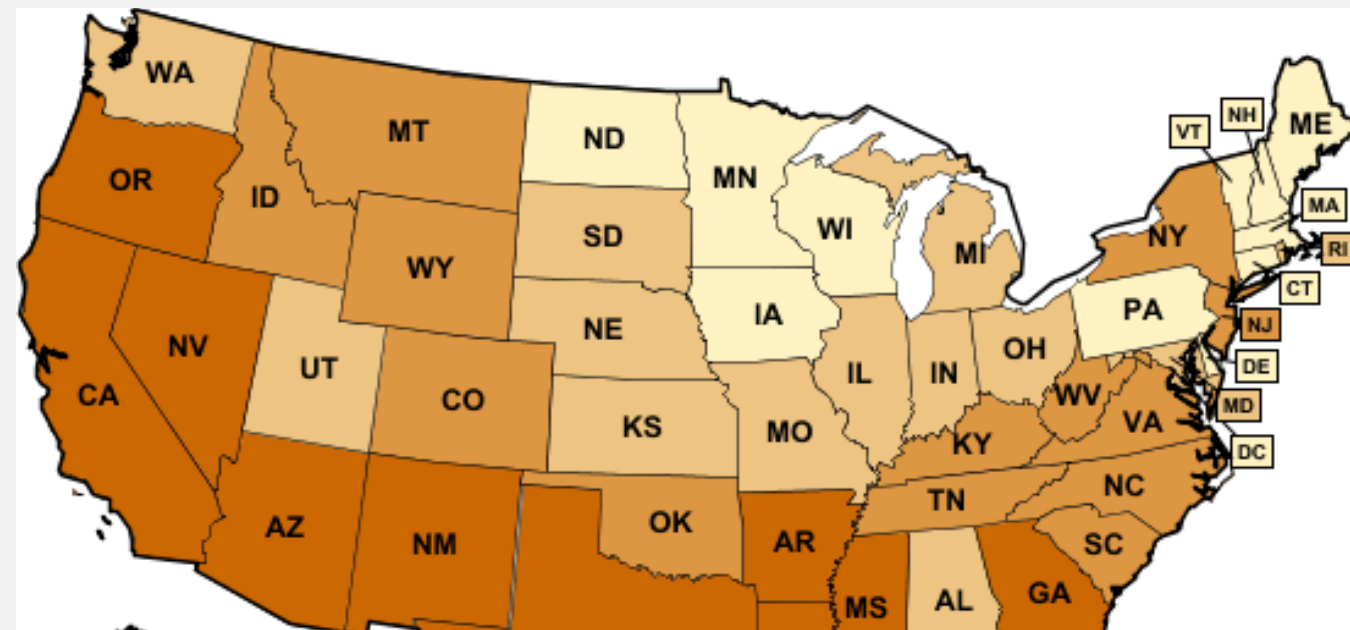
The article identifies how these meso-level organizations have helped the Australian primary health care system evolve by supporting the roll-out of initiatives including national practice accreditation, a focus on quality improvement, expansion of multidisciplinary teams into general practice, regional integration, information technology adoption, and improved access to care. Nevertheless, there are still challenges to ensuring equitable access and the supply and distribution of a primary care workforce, addressing the increasing rates of chronic disease and obesity, and overcoming the fragmentation of funding and accountability in the Australian system. (J Am Board Fam Med 2012;25:S18–26.)

Keywords: Australia, Health Care Reform, Primary Health Care



Patient Protection and Affordable Care Act

- Will insure more people ~ 30-32 million (?)
- Prioritize primary health care
 - Expand community health center capacity
 - Primary care incentive payments
 - Accountable Care Organizations and Patient Centered Medical Home
 - Practice change facilitation



18,000 deaths annually due to
uninsurance—IOM, 2004



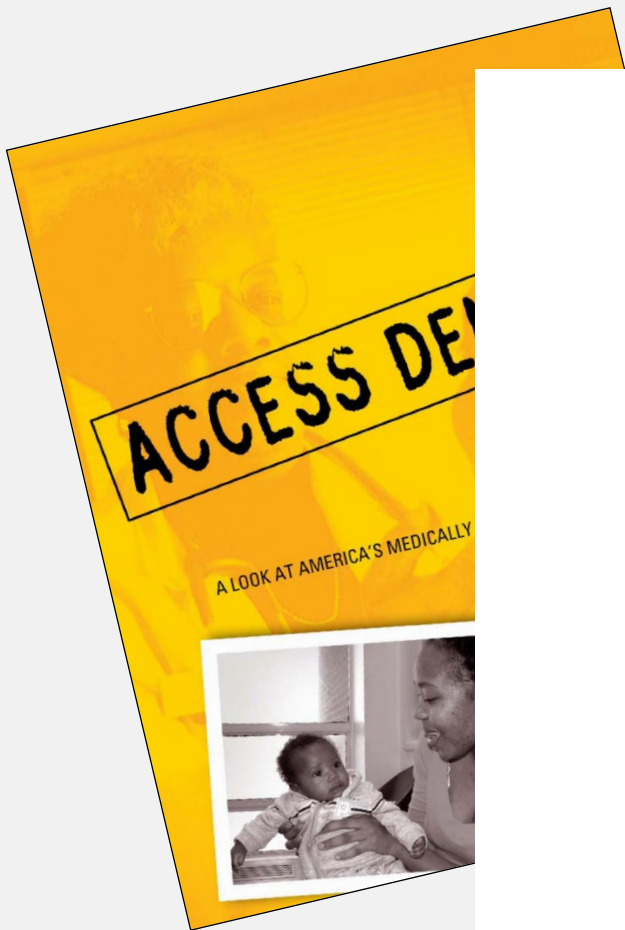
1 in 3
nonelderly
people were
uninsured
sometime in
the last year

87 million
people

Health Insurance Coverage of the Total Population, states (2007-2008), U.S. (2008): Uninsured

Increase Access to Primary Care

- Double Capacity of Community Health Centers
 - Currently serve ~20 million
 - Goal of 40 million by 2015
- Increase National Health Service Corps
 - More than doubles the investment
 - Loan repayment for service
 - Locates them in underserved areas



**Primary Care Extension Program
Conference Report
The Robert Graham Center**

February 25, 2010



AAFP Center for Policy Studies



Primary Care Incentive Payments

\$560 Million in 2011

- Graham Center research = most rural physicians not eligible, broader scope
- Regulation fix helped (\$100MM) but it is still broken

What if we used the Definition of
Primary Care for Incentives?

Primary Care Definition Elements	How to measure and use for payment
first contact care	Family medicine, general internal medicine, general pediatrics and geriatrics (claims-based or NPI)
continuity of care	Patients who see this physician/clinic get the plurality of their care there (claims-based)
comprehensive care	Breadth and depth of ICD-9 codes used by physicians in Medicare claims
coordinated care	Patients who see more than 3 physicians are seen by a PCP or PC practice at least every 6 months
Bridges personal, family, and community	Undetermined

Better Way of assigning Primary Care Incentive Payments?

	Percent of Physicians Meeting Threshold			
	Comprehensiveness	Continuity	Coordination	All Criteria
Non-Hospitalist PC				
FP	92%	92%	91%	80%
GIM	86%	93%	93%	77%
Geriatrics	94%	100%	95%	88%
Rural				
FP	95%	88%	93%	81%
GIM	94%	90%	94%	81%
Geriatrics	61%	100%	100%	61%

ACOs and Patient Centered Medical Homes

- An **ACO** is “a set of physicians and hospitals that accept joint responsibility for the quality of care and the cost

medical homes are building

blocks of effective accountable

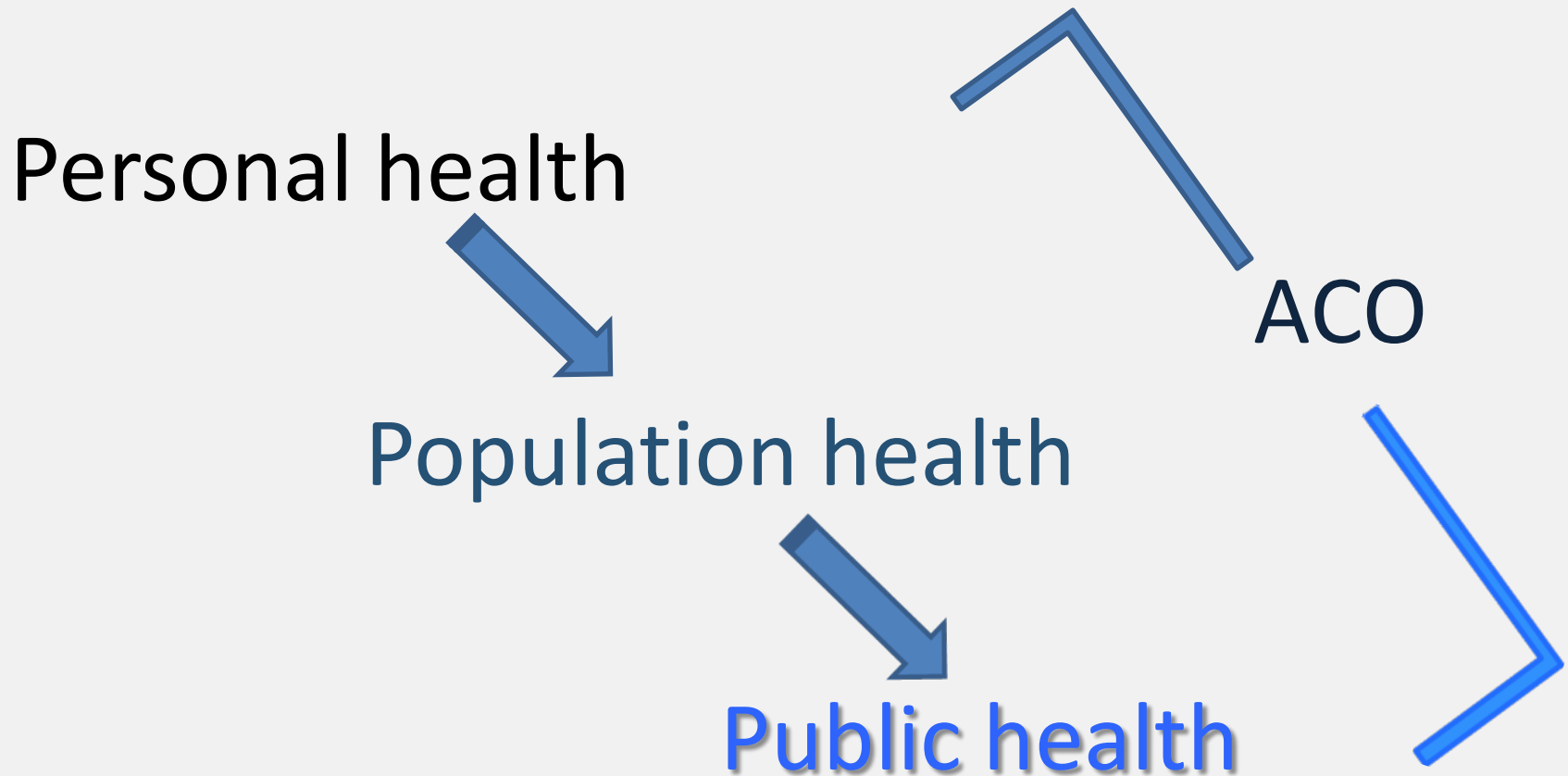
care organizations

access, maintains advance directives, and has a written understanding with each beneficiary that it is the patient’s medical home”

- **MedPAC regards medical homes as building blocks of effective ACOs**

Medicare Payment Advisory Committee (MedPAC). *Accountable Care Organizations*. http://medpac.gov/chapters/Jun09_Ch02.pdf. July 10, 2009.

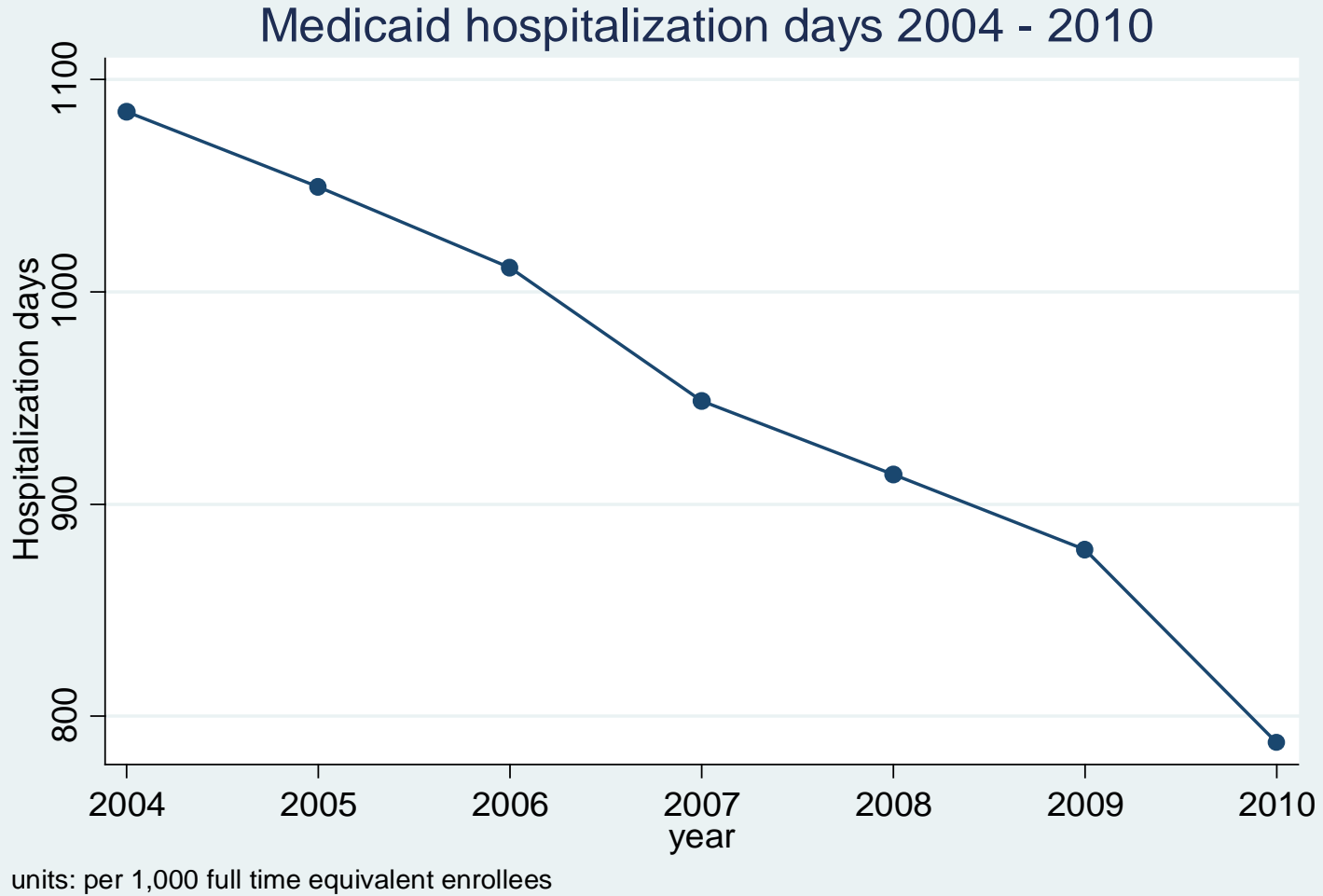
Your Medicare Locals could be ACOs
(with better grasp of who they serve)



Illinois Medicaid Medical Home Experiment

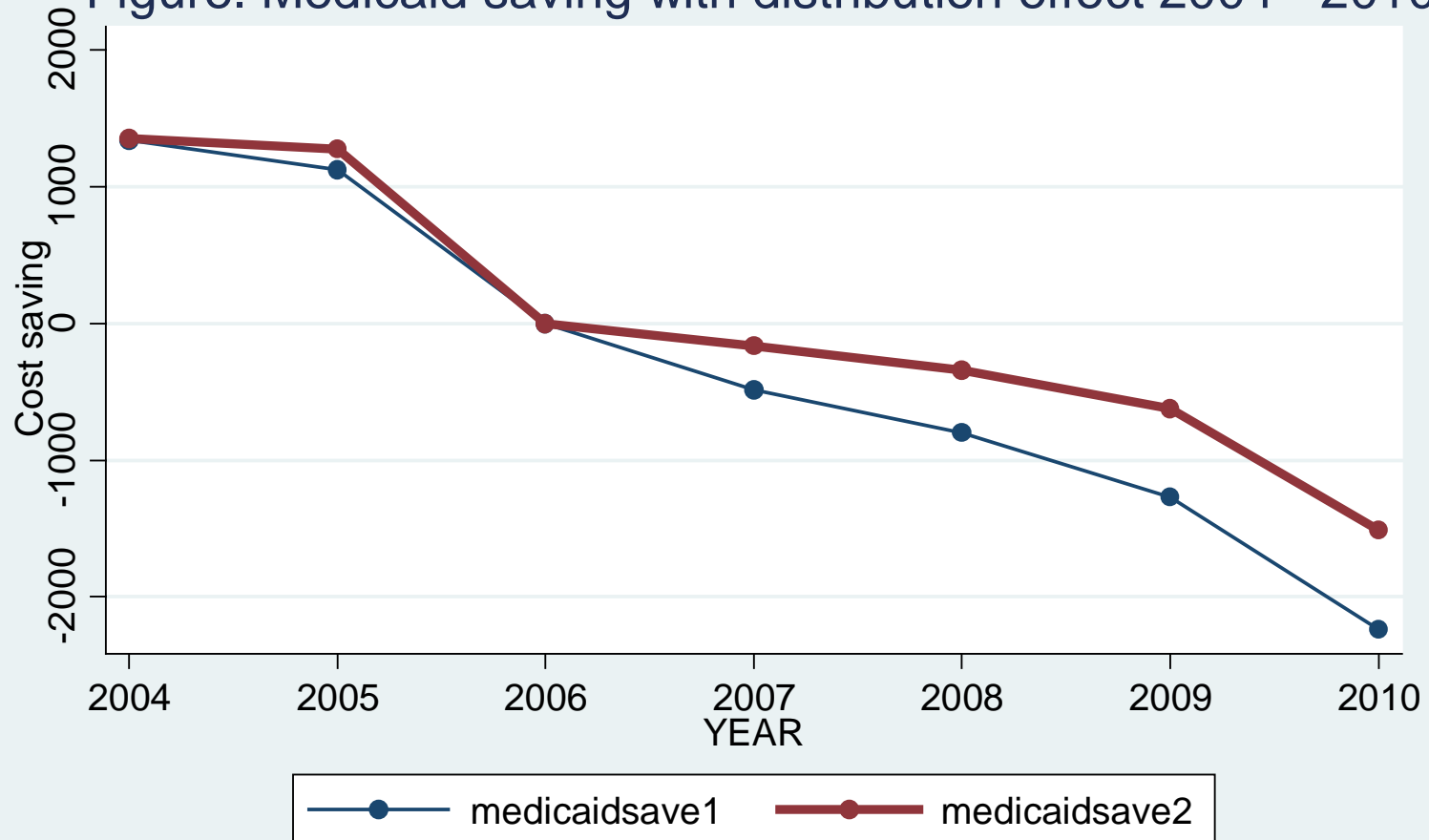
- Insurance program for uninsured, low income families
- Mostly women and children
- Medical Home launch 2005/2006
 - Weak ACO features
- 2.6 million beneficiaries
- Graham Center evaluation funded by the Commonwealth Fund

Reduced Hospitalizations



Bending the Cost Curve

Figure. Medicaid saving with distribution effect 2004 - 2010



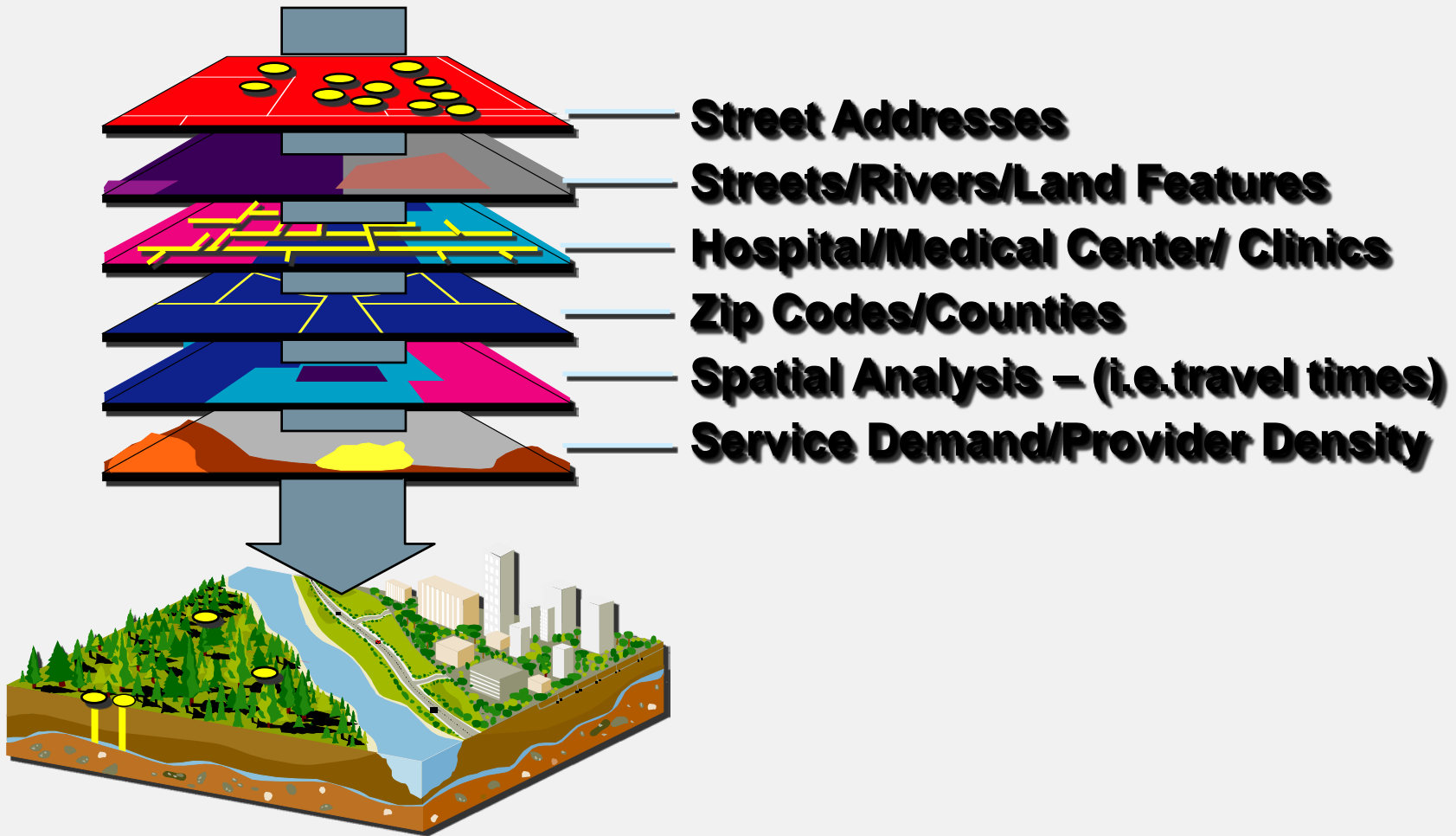
medicaidsave1: medicaid saving using 2006 enrollee distribution
medicaidsave2: medicaid saving using current year enrollee distribution
unit: \$1,000,000

ACO impact on quality

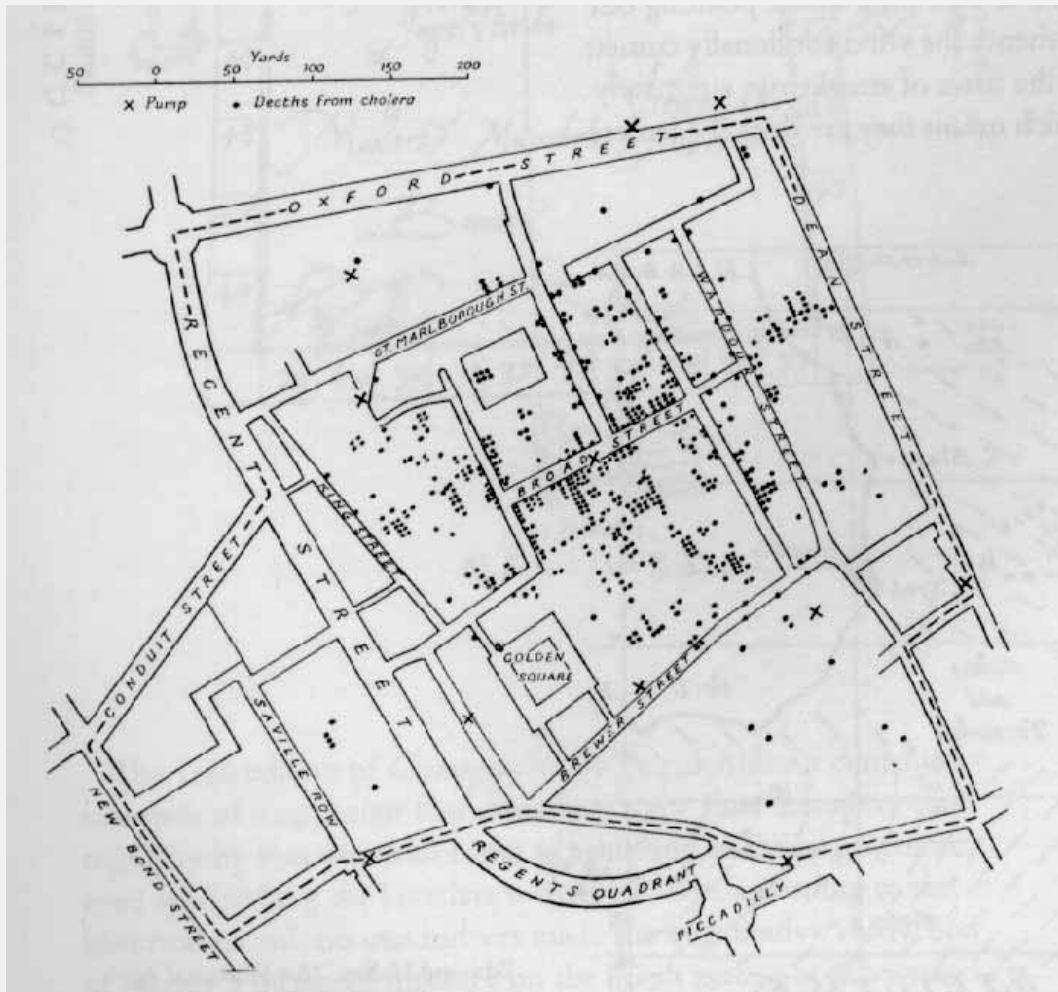
- Necessary focus on primary care and outpatient disease/complex care management
- Designing programs to meet patients where they are, make access and behavior change easier, facilitate continuous relationships
- Continuous feedback
 - to system, clinics, providers
 - Encourage curiosity, innovation, plan-do-study-act cycles
 - System resources for testing solutions (failure is ok)
- Move to population focus but translate to personal health
- Develop relationships with public health to solve problems that affect health

Data and Mapping Tools (the cool stuff)

Geographic Information Systems



The Broad Street Pump



Primary Health Care in the Community Context

Community Oriented Primary Care

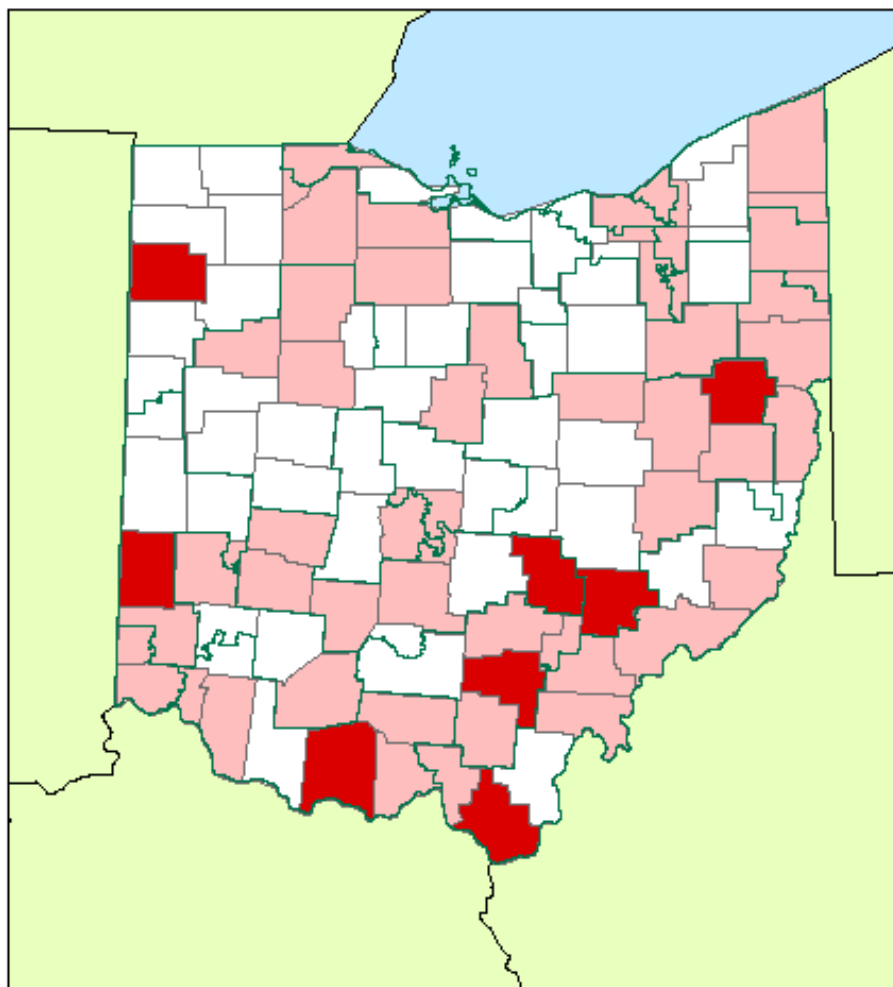


**Drs. Sidney and Emily Kark
early 1940s**



Developed COPC into a model of community engagement for improving health South Africa, Australia, Israel...the US

OHIO: PRIMARY CARE HEALTH PROFESSIONAL SHORTAGE AREAS



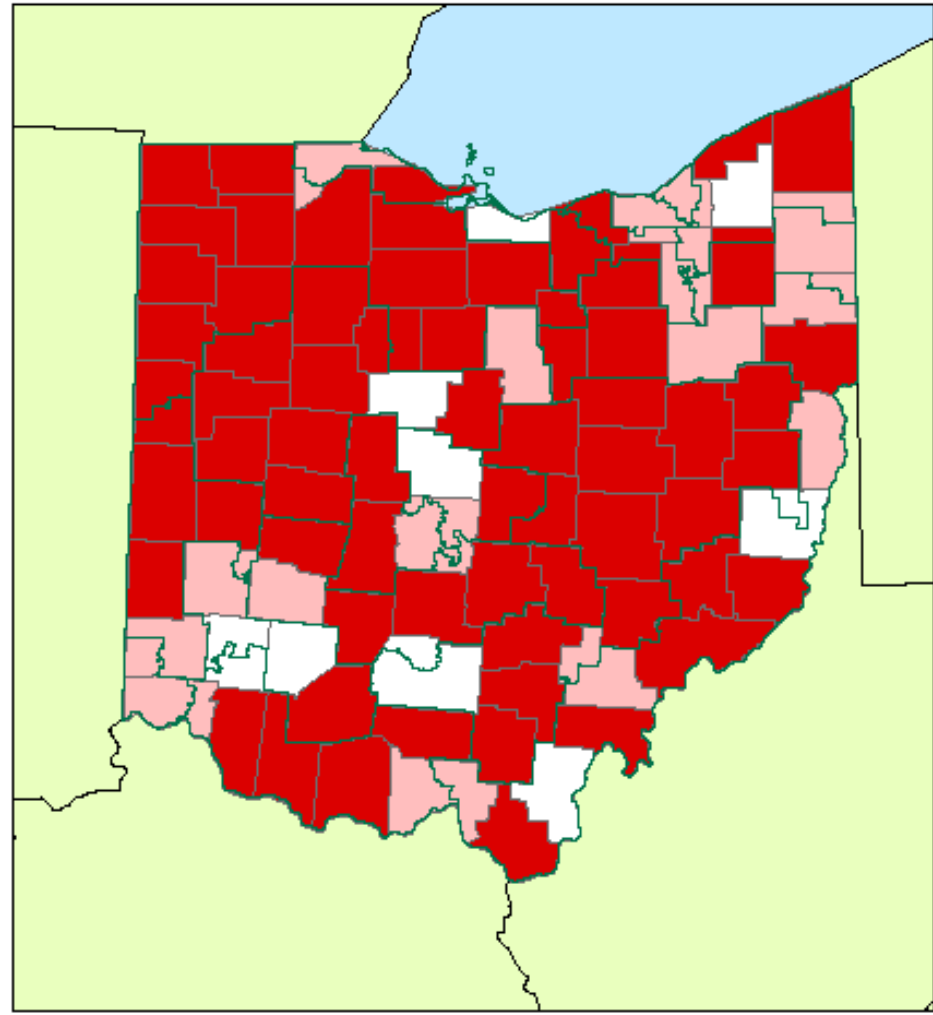
109th Congressional District
2002 County HPSA Status

- Full Primary Care HPSA
- Partial Primary Care HPSA
- Not a Primary Care HPSA

Prepared by the Robert Graham Center:
Policy Studies in Family Medicine
and Primary Care
Data Source: 2003 Area Resource File
(U.S. Department of Health and
Human Services)

www.graham-center.org

OHIO: PRIMARY CARE HEALTH PROFESSIONAL SHORTAGE AREAS IF FAMILY PHYSICIANS WERE WITHDRAWN



109th Congressional District
2002 County Primary Care HPSA Status
After Withdrawal

- HPSA/Becomes Full HPSA
- Remains Partial HPSA
- Not a HPSA

www.graham-center.org

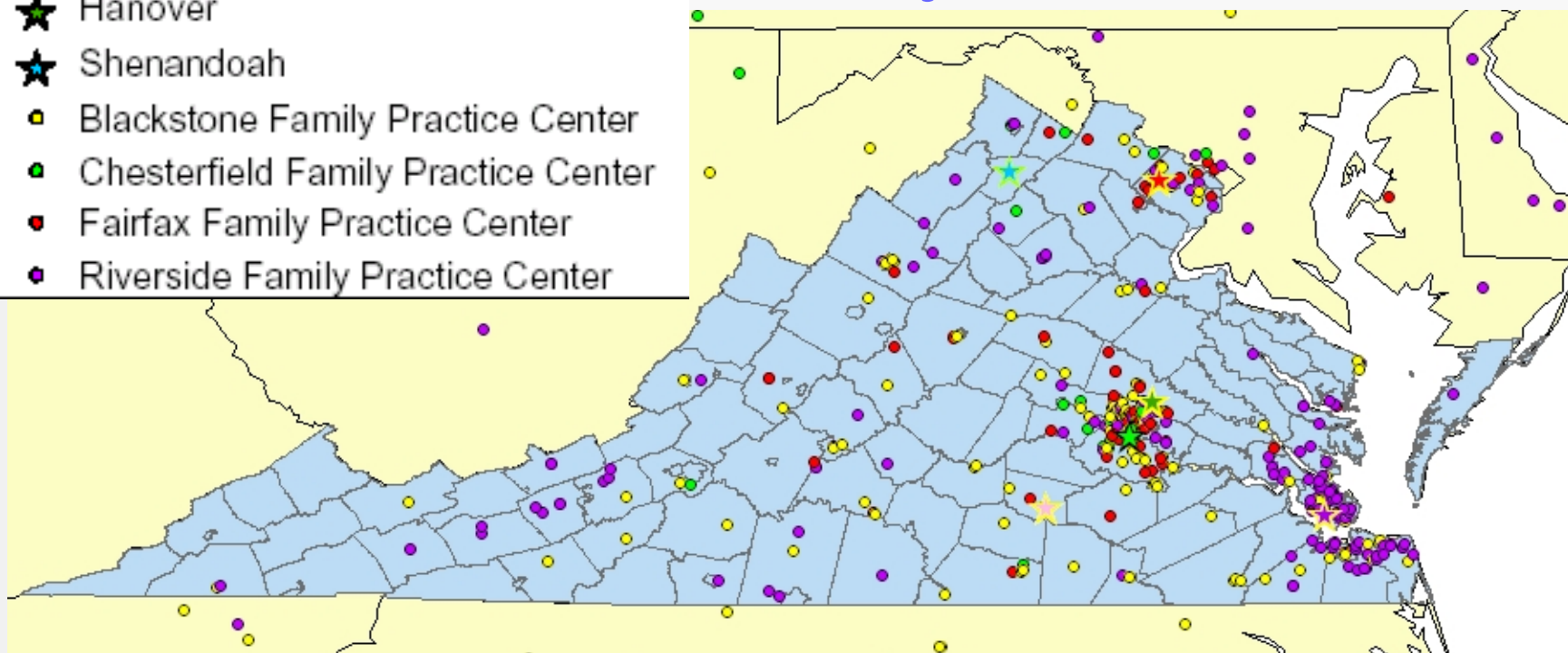
Prepared by the Robert Graham Center:
Policy Studies in Family Medicine
and Primary Care

Data Source: 2003 Area Resource File
(U.S. Department of Health and
Human Services)

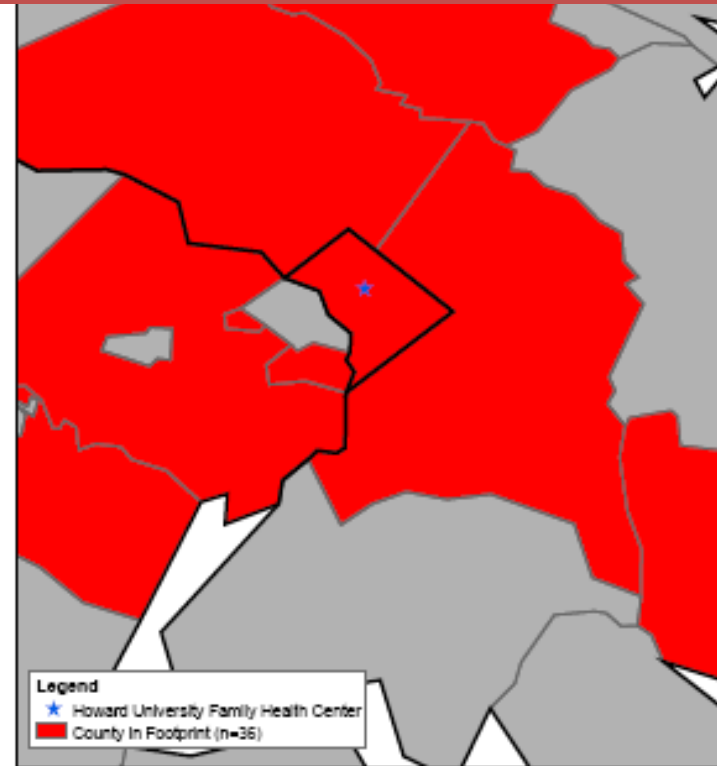
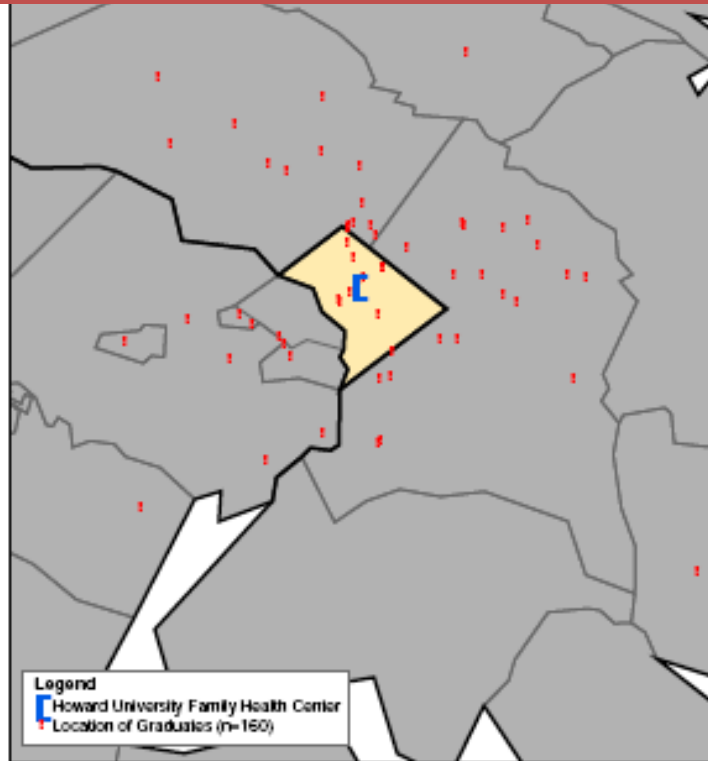
Residency Footprint

- ★ Blackstone
- ★ Chesterfield
- ★ Fairfax
- ★ Riverside
- ★ Hanover
- ★ Shenandoah
- Blackstone Family Practice Center
- Chesterfield Family Practice Center
- Fairfax Family Practice Center
- Riverside Family Practice Center

Virginia Commonwealth University
Residency Graduates



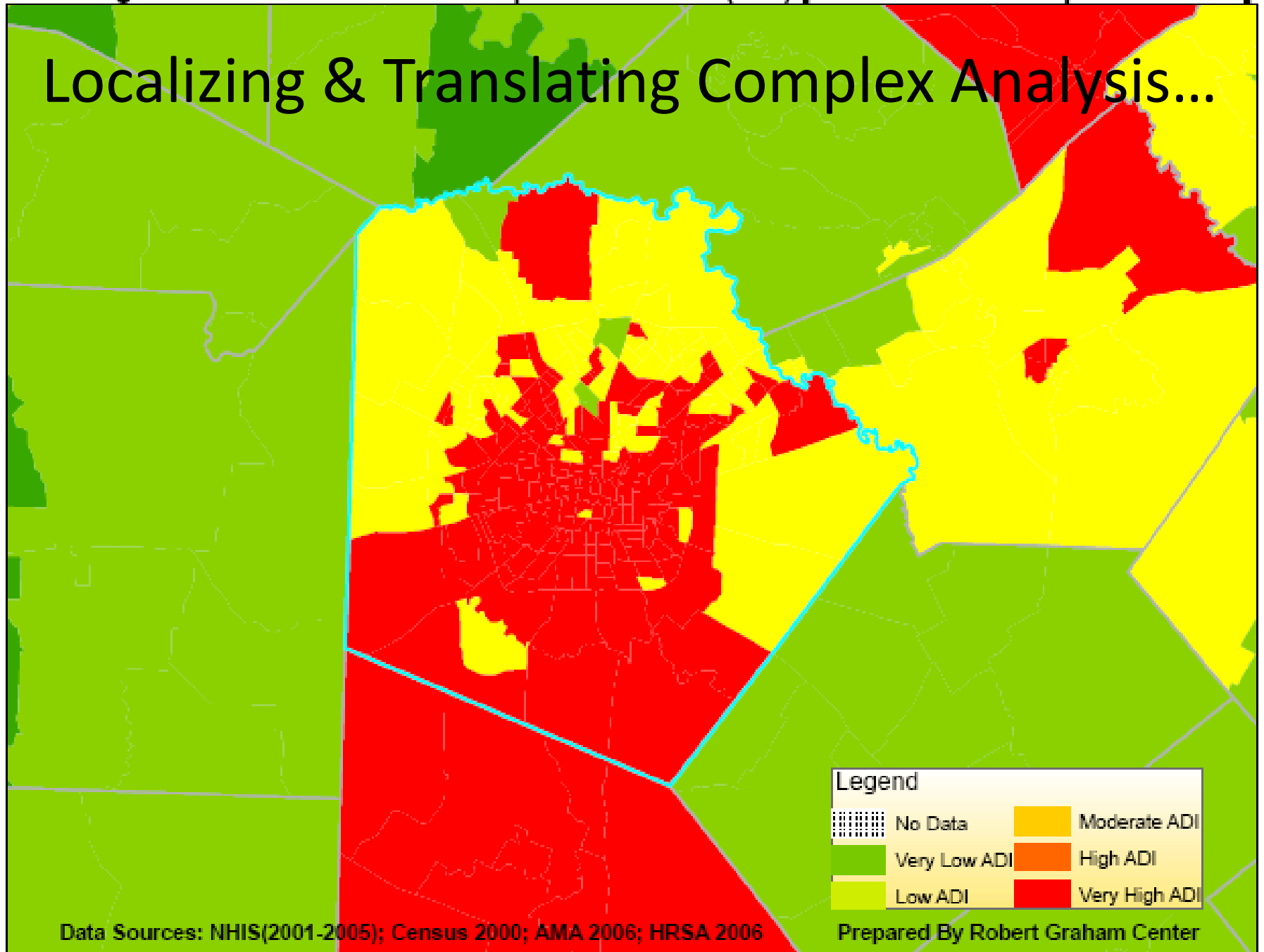
“Footprinting” Training Sites – Residency & Medical School Social Accountability



Graduate Practice Characteristics: 160 Graduates

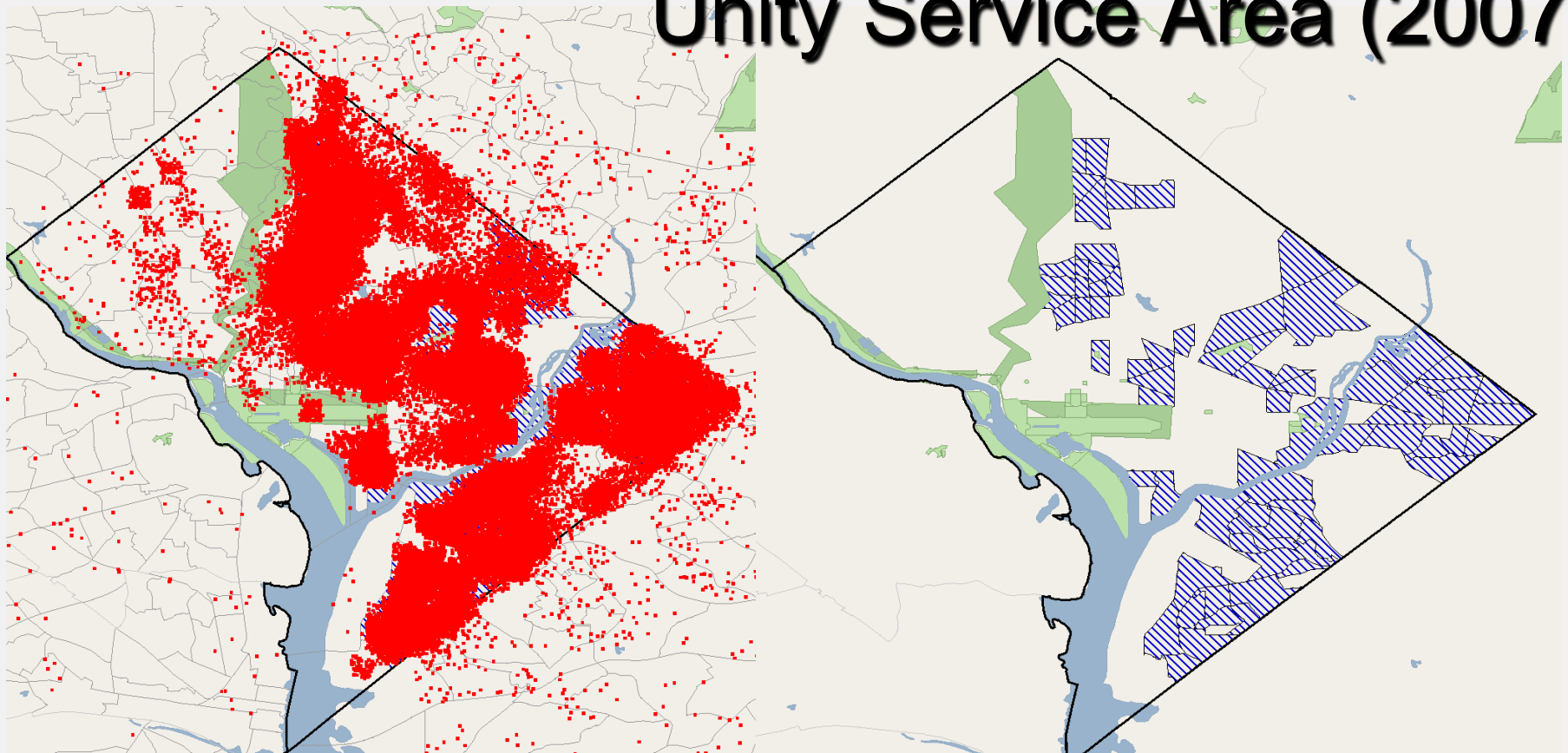
Practicing in District of Columbia	Graduates Practicing in HPSA's*	Graduates Practicing in District of Columbia HPSA's	Graduates Practicing in Rural Areas	Graduates Practicing in Rural District of Columbia
17 (11%)	41 (26%)	11 (7%)	9 (6%)	0 (0%)

Localizing & Translating Complex Analysis...



Why should we support you? So many of your patients come from outside of DC”
(Washington DC City Council)

Unity Service Area (2007)



N= 77,400

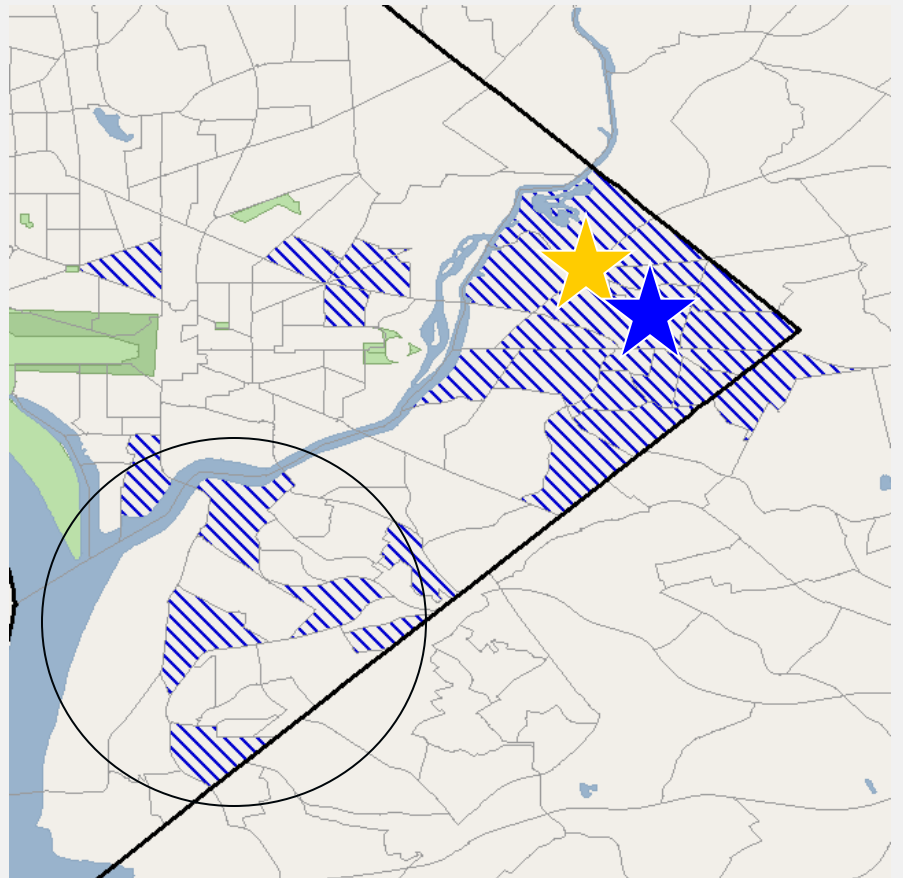
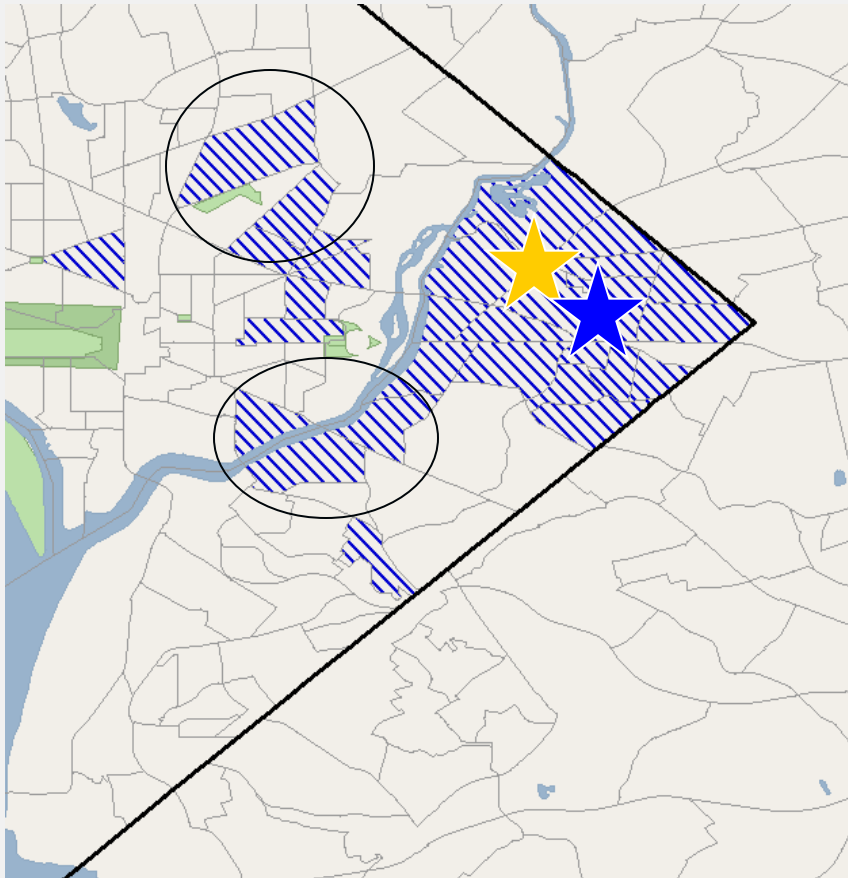
(Service Area Threshold 70%)

“Why have 2 sites in the same neighborhood?”

(Washington DC City Council)

★ Hunt Place HC
Service Area (2006)

★ East of the River HC
Service Area (2006)



Mapping the U.S. Primary Care 'Safety Net'

UDS Mapper

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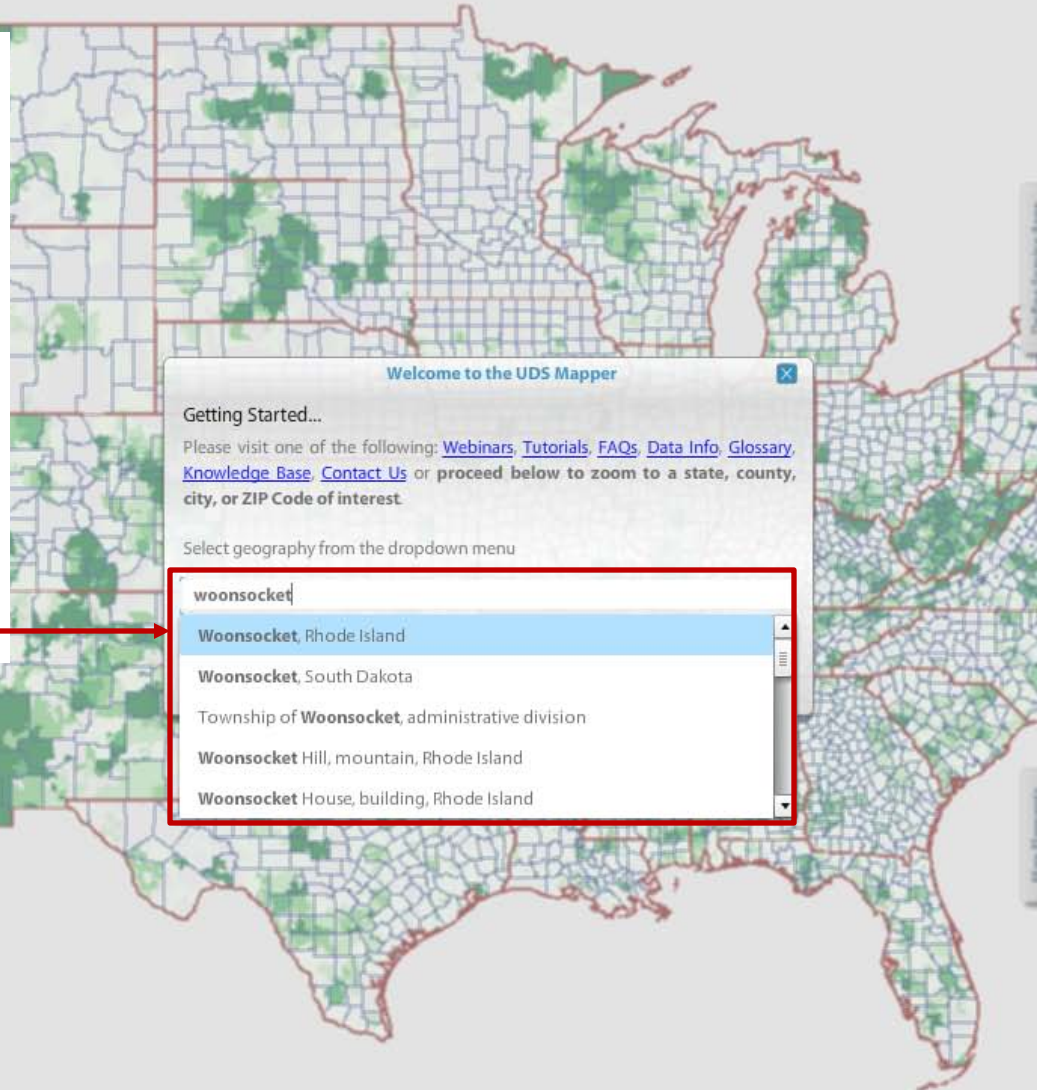
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All Grantee Penetration of Low-Income Population

Map ZCTA Data Table Share Map

Target: Federal Agency, State Planners, Community Health Center Grantee

Can instantly visualize any geography in United States



Welcome to the UDS Mapper

Getting Started...

Please visit one of the following: [Webinars](#), [Tutorials](#), [FAQs](#), [Data Info](#), [Glossary](#), [Knowledge Base](#), [Contact Us](#) or proceed below to zoom to a state, county, city, or ZIP Code of interest.

Select geography from the dropdown menu

- woonsocket
- Woonsocket, Rhode Island**
- Woonsocket, South Dakota
- Township of Woonsocket, administrative division
- Woonsocket Hill, mountain, Rhode Island
- Woonsocket House, building, Rhode Island

Define Service Area

Search to Zoom or Select:
ZIP Code, ZCTA, County or State

Selected ZCTAs:

Map Elements

Main Map Optional Background Analysis

Scope

- Grantee Dominance by ZCTA, 2010
- All Grantee Penetration of Low Income Population**
- All Grantee Penetration of Total Population
- Low Income Not Served by Grantees
- Low Income Not Served by Grantees (Dot Density)
- 4 of Grantees Serving ZCTA, 2010
- 2008-2010 (2-Year) % Change in Patients
- 2009-2010 (1-Year) % Change in Patients
- % Poverty (Pop at/below 100% FPL, 05-09 (est.))
- % Low Income (Pop at/below 200% FPL, 05-09 (est.))
- % Non White, 2010
- % Hispanic, 2010

Exploring Safety Net Gaps and Overlap at the Small Area Level

UDS Mapper

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All Grantee Penetration of Low-Income Population

Map ZCTA Data Table Share Map

02895, Woonsocket

Total Population, 2010:	41,186
Low Income Population, 2010:	15,781
# of Grantees Serving ZCTA, 2010:	7
Total # of Sect. 330 Patients, 2010:	12,166
Dominant Grantee, 2010: THUNDERMIST HEALTH CENTER	
% Dominance, 2010:	93.7 %
All Grantee Penetration of Total Population:	29.5 %
All Grantee Penetration of Low Income Pop.:	77.1 %
2008-2010 (2-Year) % Change in Patients:	11.7 %

Define Service Area

Search to Zoom or Select:

ZIP Code, ZCTA, County or State

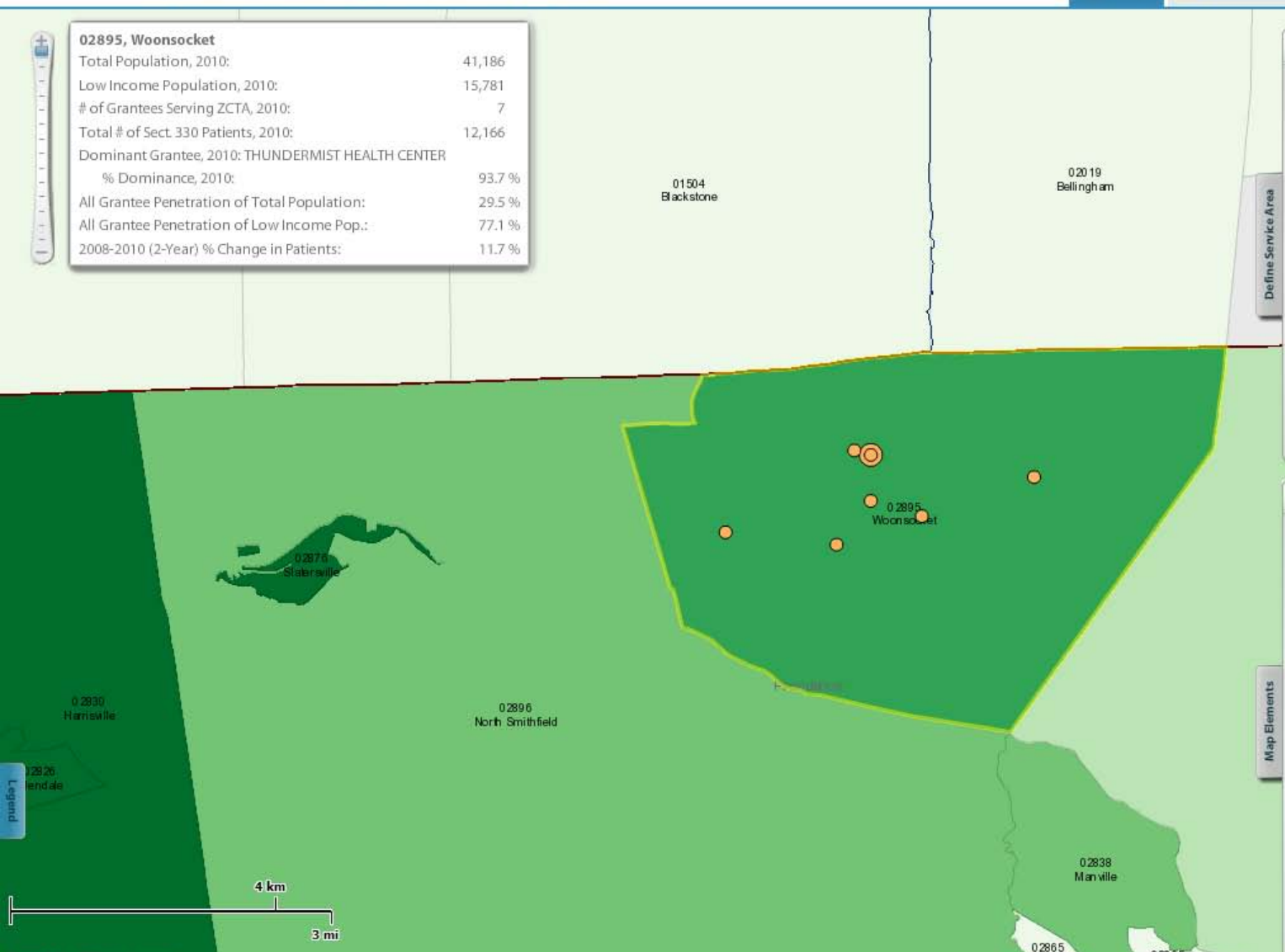
Selected ZCTAs:

[Zoom to Selected Area](#) [Clear Selected ZCTAs](#)

Map Elements

Main Map Optional Background Analysis

- Grantee Service Access Points
- Grantee Locations
- FQHC Look-Alikes
- Rural Health Clinics
- NHSC Sites (by # of Primary Care Provider FTEs)
- Hospitals
- Facility and Point HPSAs
- Health Professional Shortage Areas
- Medically Underserved Areas/Populations
- Highways
- State Boundaries
- County Labels



How has service changed over 2-Years?

UDS Mapper

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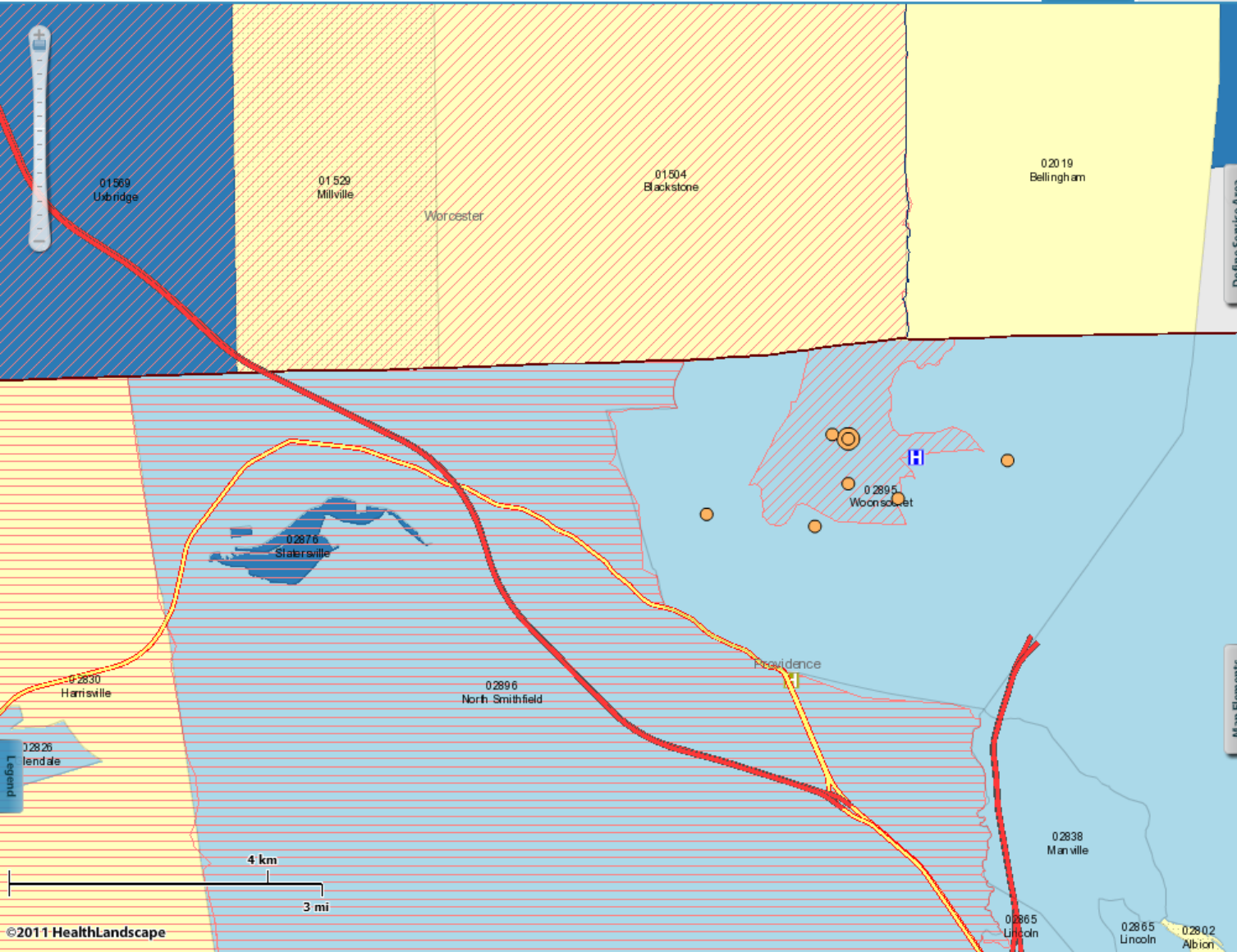
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2008-2010 (2-Year) % Change in Patients

[Map](#)

[ZCTA Data Table](#)

[Share Map](#)



Define Service Area

Search to Zoom or Select:
ZIP Code, ZCTA, County or State

[Zoom](#) [Add](#)

Selected ZCTAs: [Select by Address](#)

[Zoom to Selected Area](#) [Clear Selected ZCTAs](#)

Map Elements

Main Map **Optional** **Background** **Analysis**

- None
- Grantee Dominance by ZCTA, 2010
- All Grantee Penetration of Low-Income Population
- All Grantee Penetration of Total Population
- Low Income Not Served by Grantees
- Low Income Not Served by Grantees (Dot Density)
- # of Grantees Serving ZCTA, 2010
- 2008-2010 (2-Year) % Change in Patients**
- 2009-2010 (1-Year) % Change in Patients
- % Poverty (Pop at/below 100% FPL), 05-09 (est.)
- % Low-Income (Pop at/below 200% FPL), 05-09 (est.)
- % Non-White, 2010
- % Hispanic, 2010

What % of Low-Income population remains unserved?

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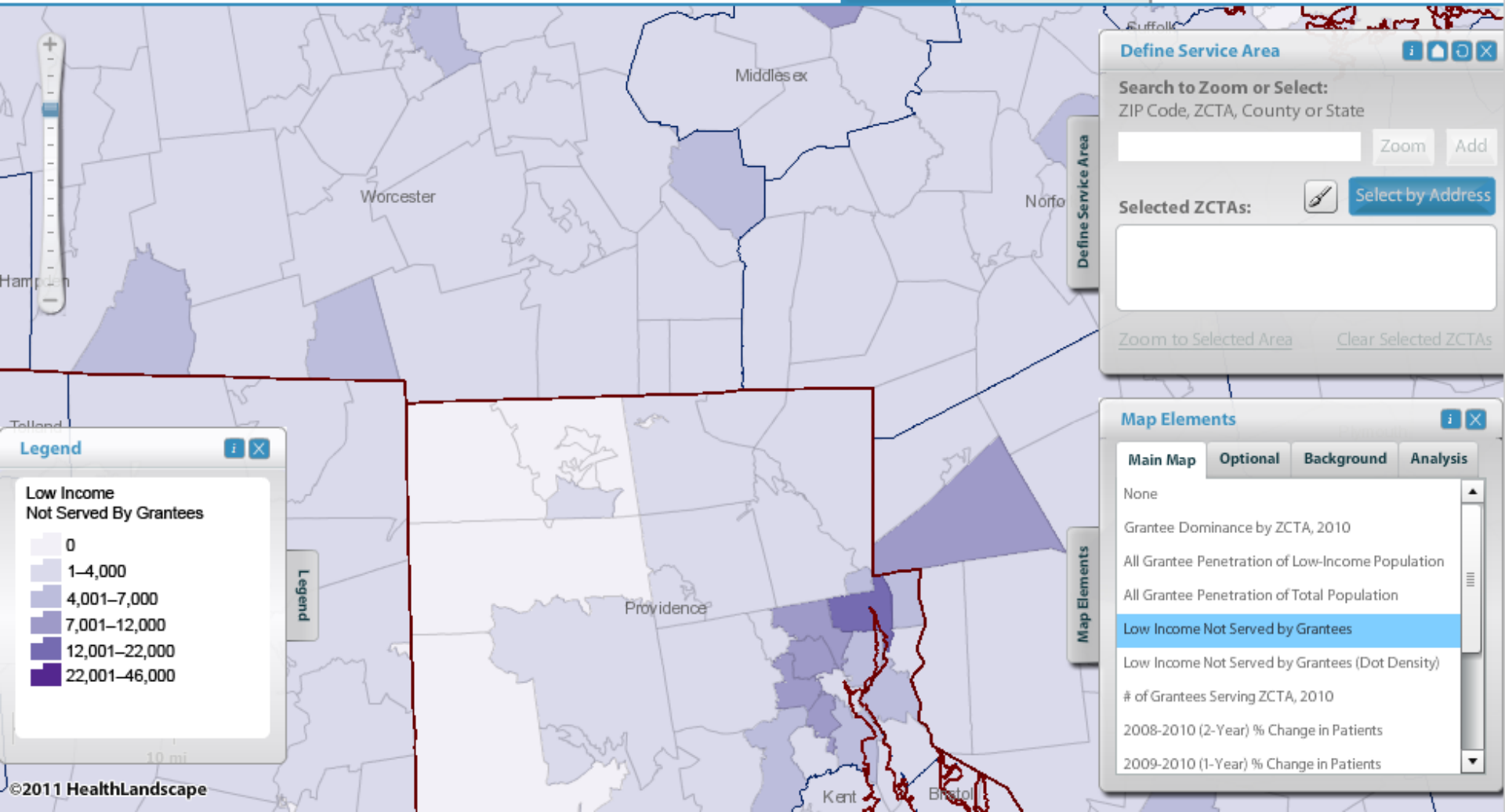
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Low Income Not Served by Grantees

[Map](#)

[ZCTA Data Table](#)

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Define Service Area

Search to Zoom or Select:

ZIP Code, ZCTA, County or State

[Zoom](#) [Add](#)

Selected ZCTAs:

[Select by Address](#)

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Map Elements

[Main Map](#)

[Optional](#)

[Background](#)

[Analysis](#)

None

Grantee Dominance by ZCTA, 2010

All Grantee Penetration of Low-Income Population

All Grantee Penetration of Total Population

Low Income Not Served by Grantees

Low Income Not Served by Grantees (Dot Density)

of Grantees Serving ZCTA, 2010

2008-2010 (2-Year) % Change in Patients

2009-2010 (1-Year) % Change in Patients

Legend

Low Income
Not Served By Grantees

0
1-4,000
4,001-7,000
7,001-12,000
12,001-22,000
22,001-46,000

Legend

10 mi

Where are the Low-Income Not Served?

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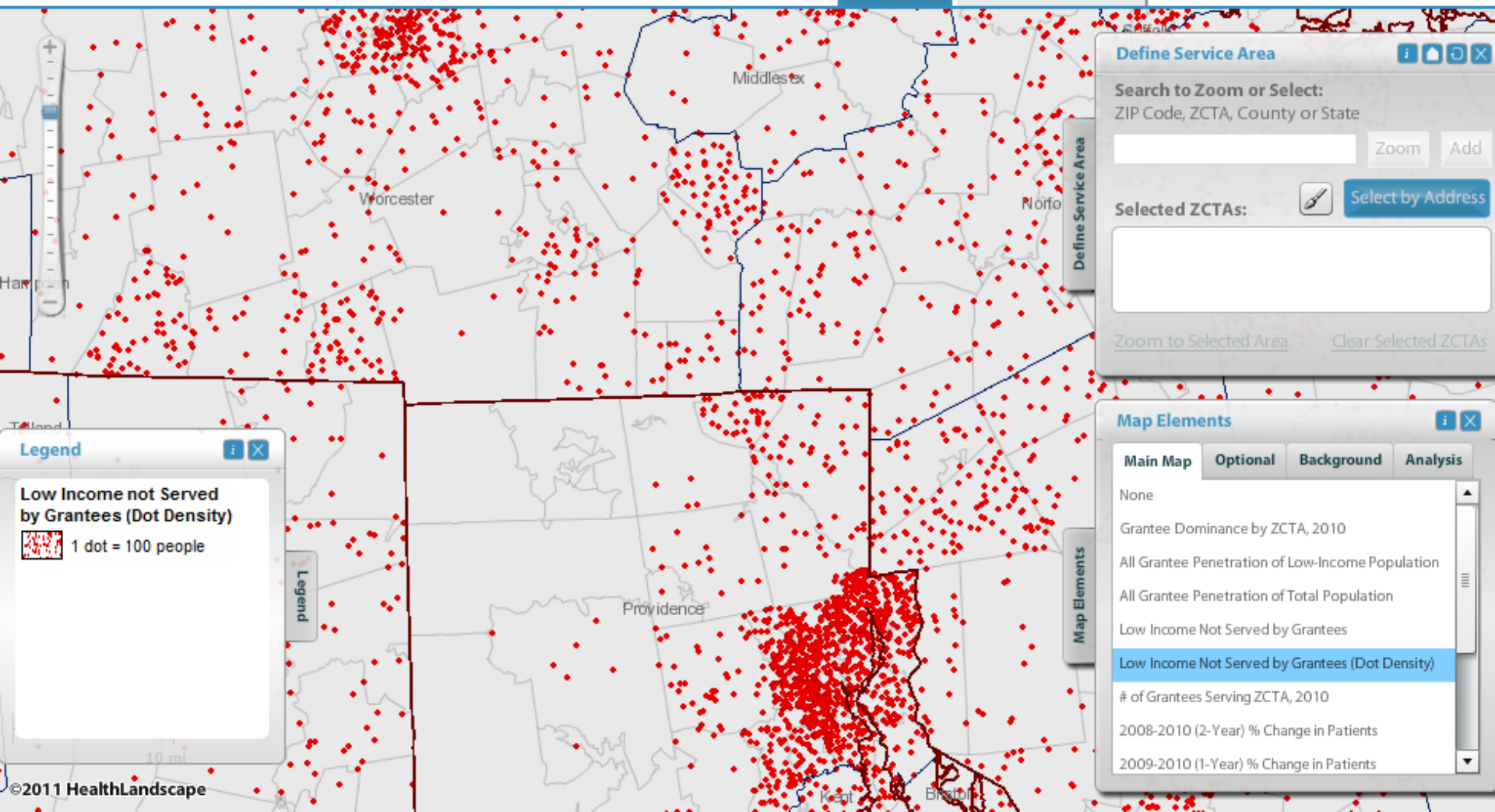
Low Income Not Served by Grantees (Dot Density)

[Map](#)

[ZCTA Data Table](#)



[Share Map](#)



Also permits export and sharing of maps, data by user

Map ZCTA Data Table   Share Map

View Analysis Results

ZCTA	Post Office	State	# of Grantees	Dominant Grantee, 2010	% Dominance, 2010	Total Population	Low Income	Total # Sect. 330	Unservd (by Grantees)	Penetrati of Low	Penetr ation	09-10 Patient	08-10 Patient	08-10 Patient	% Pop. in	% Low-Income	% Non-White,	% Hispanic, 2010
Summar...						89,519	22,2...	14,239	7,967	64.12%	1...	4.5...	13...	1,6...	12...	25...	13...	8.71%

Analysis Results

Total # Sect. 330 Patients	Total Population	Penetration of Total Pop.	Unservd (by	Low Income Pop. 2010	Penetration of Low	Unservd (by Grantees)	08-10 Patient Change (#)	08-10 Patient % Change	09-10 Patient % Change	% Pop. in Poverty 2010	% Low-Income Pop.	% Non-White 2010	% Hispanic 2010
14,239	89,519	15.90%	75,280	22,206	64.12%	7,967	1,686	13.43%	4.52%	12.27%	25.41%	13.66%	8.71%

Enter TOTAL patients to be served

Enter TOTAL NEW patients to be served

Enter NEW LOW INCOME patients to be served

Label	Value	Description
Service Area Total Population	89,519	Total (Census) population for defined Target Area zips
Current (2010) FQHC Patients	14,239	Residents of defined Target Area counted as a patient of any FQHC grantee in 2010
Current FQHC Penetration Rate - Total Pop.	15.90%	Percent of total target area population using an FQHC in 2010
Current Total Pop. Unservd by FQHC Prog.	75,280	Count of target area residents not using an FQHC in 2010
Total Pop Target for proposed site	2,500	Total New Patients to be served by proposed site
% FQHC Unservd Total Pop Targeted	3.32%	Percent of Target Area residents not currently using an FQHC that will be users of FIP

Allowing planner or potential grantee to model impact of new clinic

* Note: Low Income penetration and need assumes all current users to be low income - watch for grantees currently serving large population > 200% of poverty

Save to Excel

Understanding Small Area Poverty Thresholds

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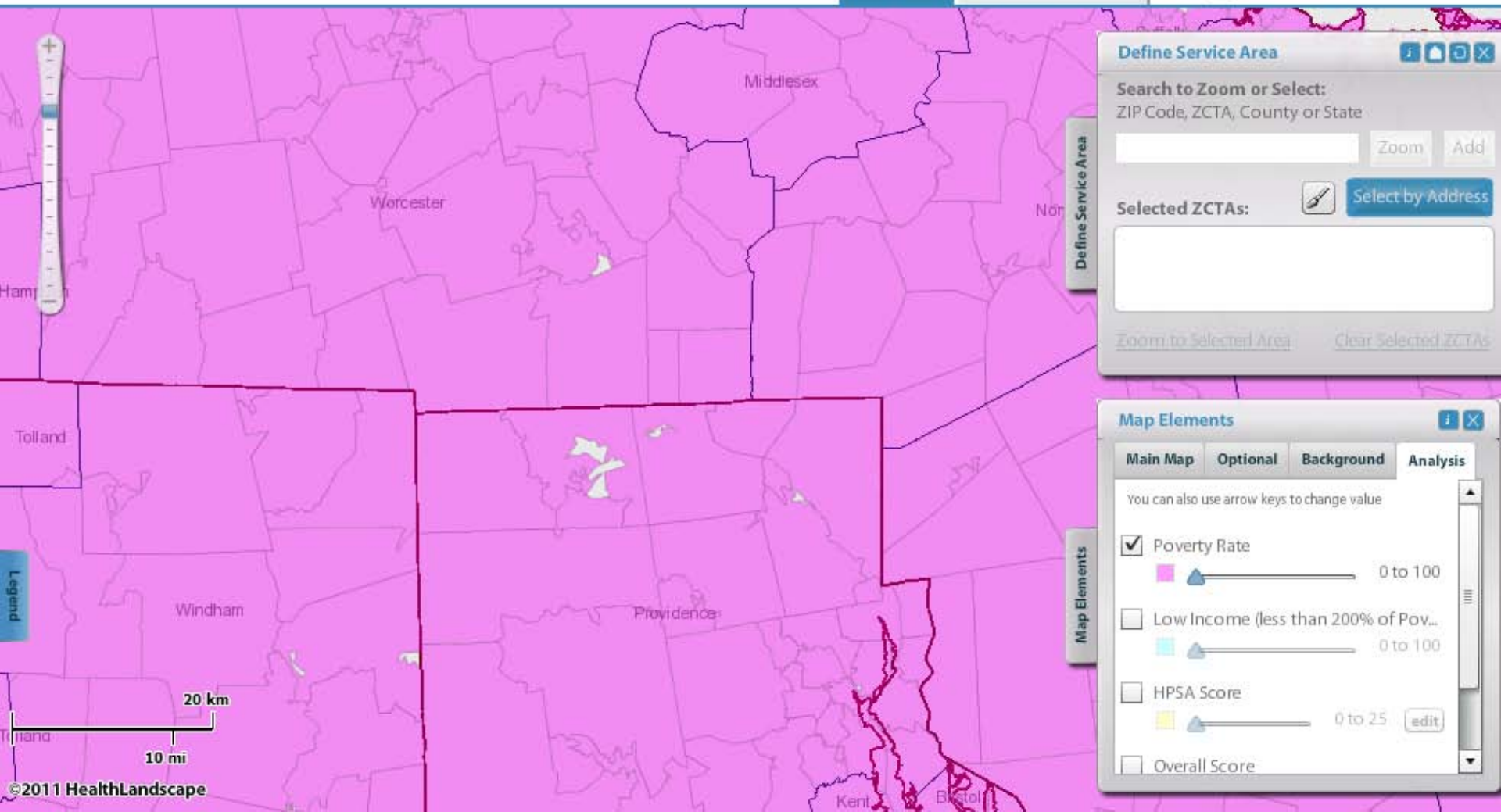
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Define Service Area

Search to Zoom or Select:

ZIP Code, ZCTA, County or State

Zoom Add

Selected ZCTAs:

Select by Address

Zoom to Selected Area

Clear Selected ZCTAs

Map Elements

Main Map Optional Background Analysis

You can also use arrow keys to change value

- Poverty Rate
0 to 100
- Low Income (less than 200% of Pov...
0 to 100
- HPSA Score
0 to 25 [edit](#)
- Overall Score

Areas where 15% of population lives below Poverty

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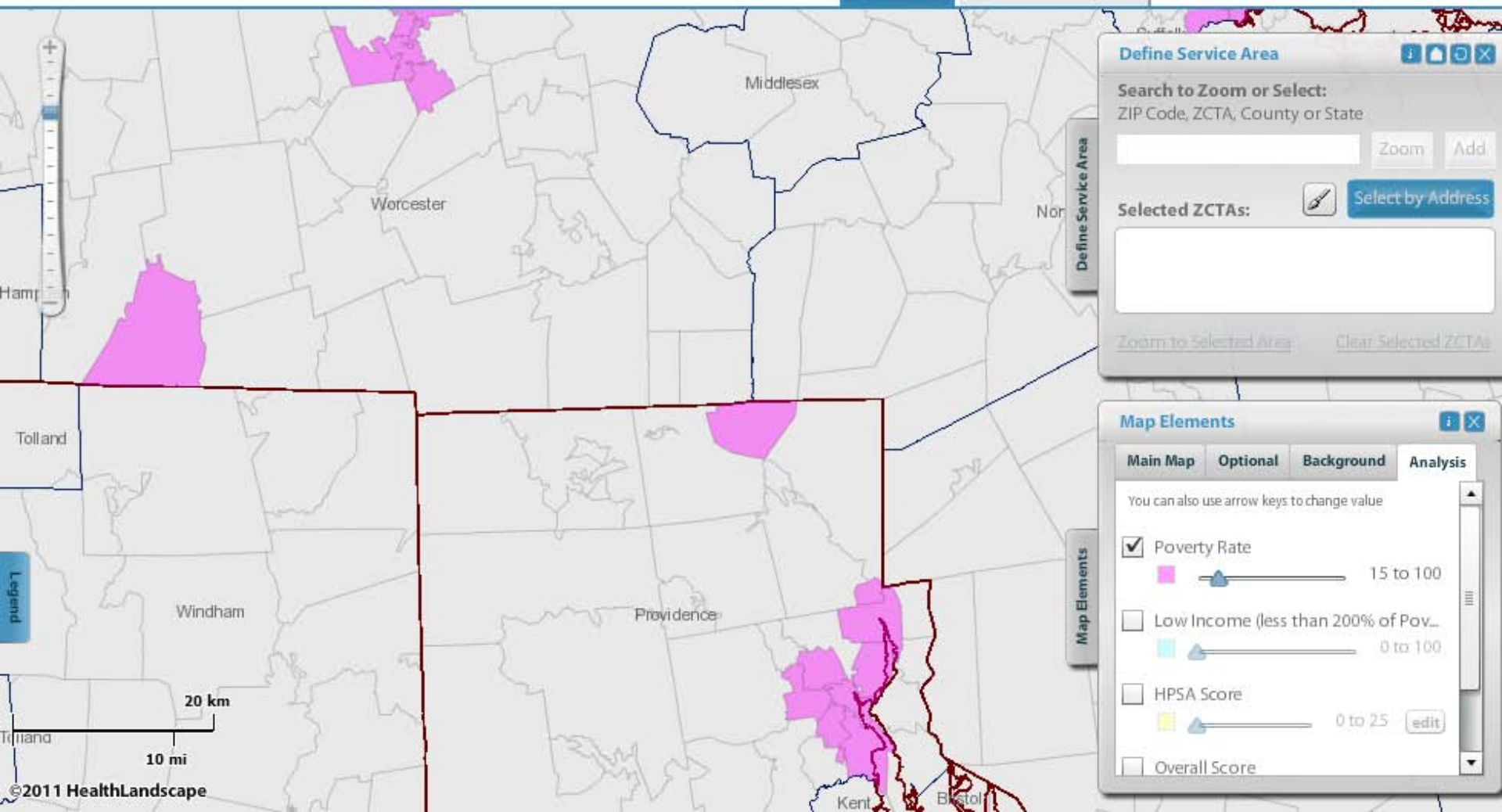
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Define Service Area

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Zoom

Add

Selected ZCTAs:



Select by Address

[Zoom to Selected Area](#)

[Clear Selected ZCTAs](#)

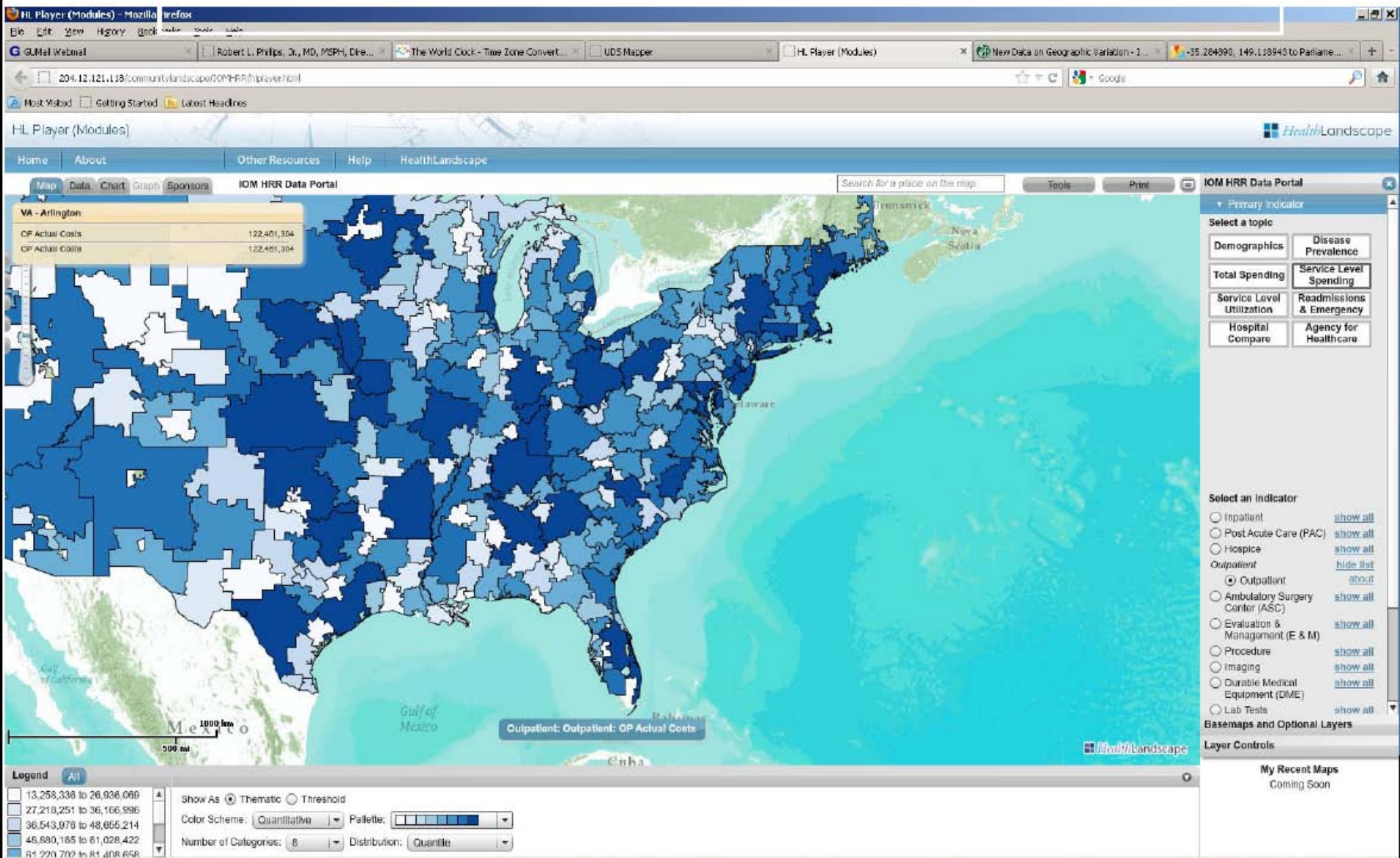
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- Poverty Rate
15 to 100
- Low Income (less than 200% of Pov...
0 to 100
- HPSA Score
0 to 25 [edit](#)
- Overall Score

US Medicare Hospital Region Compare Tool in HealthLandscape in 24 hours in response to National Academies of Science GoViral Challenge



VISUALIZING MEDICAL SCHOOL SOCIAL ACCOUNTABILITY

Firefox | Med School Mapper | http://www.medschoolmapper.org/ | the SOM was unreachable

Disable | Cookies | CSS | Forms | Images | Information | Miscellaneous | Outline | Resize | Tools | View Source | Options

MED SCHOOL MAPPER | HealthLandscape

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Medical School Footprint: Service Area By County Virginia

Zoom To | Select Location

Fairfax County, VA

Population 2007: 1,042,470
 Population density: 2,564 Pop/SM
 Total physicians practicing in county: 2,759
 Population to physician ratio: 368:1
 Population to primary care physician ratio: 1,029:1

Graduates:
 County Doctors / Virginia Grad: 11:1
 County Pop / Virginia Grad: 3,997:1

Schools providing the most grads to this county:

1. Georgetown University School of Medicine 205
2. George Washington Univ. School of Medicine and Health Sciences 14
3. Virginia Commonwealth University School of Medicine 123
4. University of Virginia School of Medicine 91
5. University of Maryland School of Medicine 63

Refine Data on Map

State: **Virginia**

School: University of Virginia School ...
 Virginia Commonwealth Univ...
 Eastern Virginia Medical Sch...
 VIRGINIA TECH CARLILION...
 EDWARD VIA VIRGINIA C...

Clear Selection

% of Grads Included: 70%

Need more analytical options?

ADVANCED TOOL

State View

Rollover a school to see its footprint. Click a school to lock it in. You will need to deselect this state to select another.

Legend

- Counties containing 70% of graduates (Basic Mode: Direct Patient Care only)
- Medical Schools

Virginia

% of Grads in: Blue bars represent all US graduates, white lines re...

	%	Actual #	Nat'l Rank	Actual #	Nat'l Rank
Rural Areas	10%	1,056	33	364	32
Shortage Areas (HPSA/...	33%	3,574	34	954	33
Primary Care	37%	4,037	23	1,749	27
General Surgery	4%	395	20	129	29

Medical School Footprint Service Area By County

Penetration Rate
Graduates per Total Population

Penetration Rate (Physicians)
Graduates per Physicians

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