

# IMPROVING AND TEACHING POPULATION HEALTH

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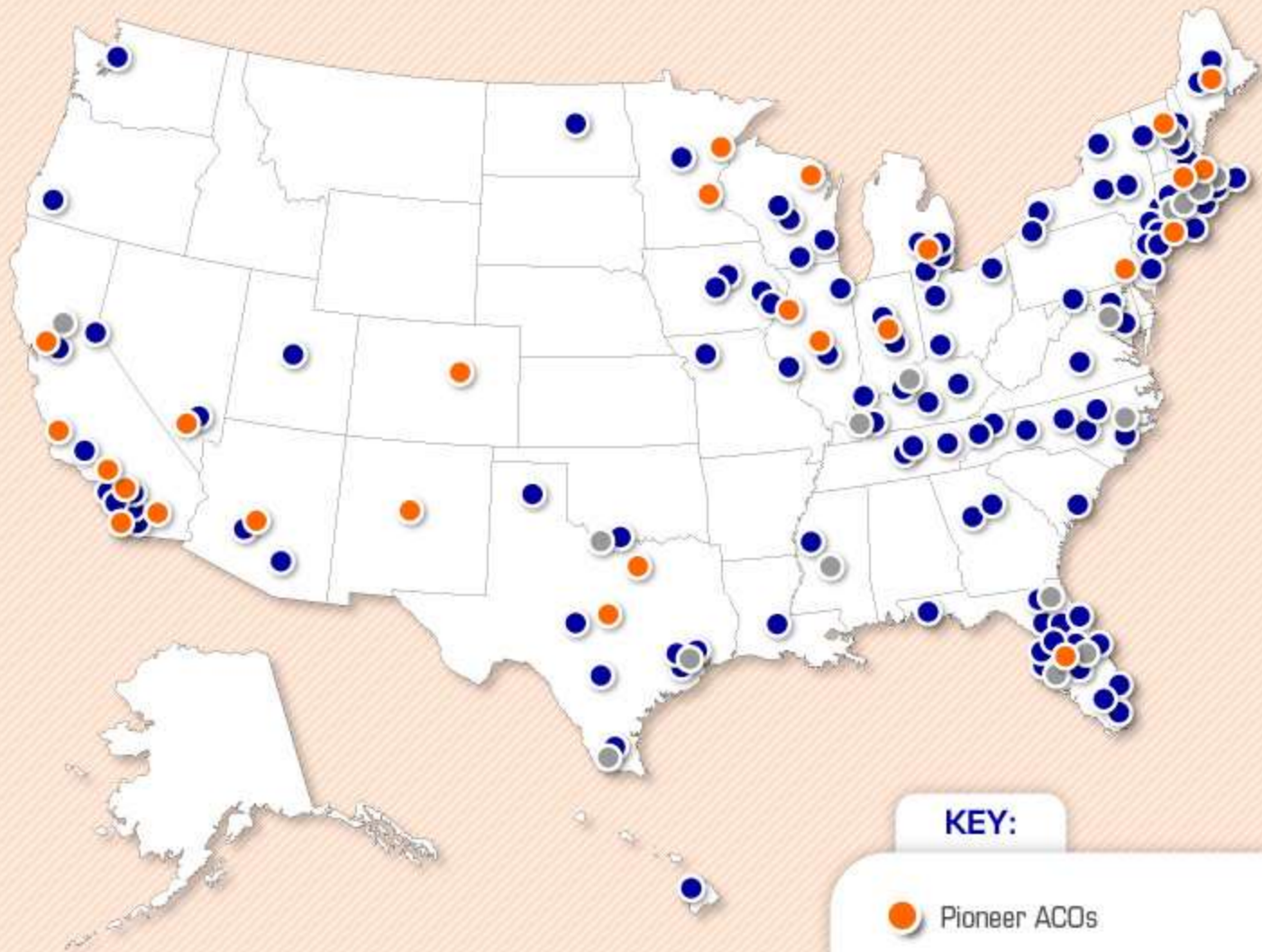
August 21, 2013

CDC Milestones Project Meeting

# Drivers Towards Population Health

- Growth of Networks
  - Clinical Networks – HMOs, ACO, state Medicaid, etc.
  - Practice Based Research Networks :more than 150, encompassing 16,500 practices, 67,000 clinicians
- Big Data
  - Public health and EHR data
- National Strategic Imperative for Health

## MAP: 2012 MEDICARE ACCOUNTABLE CARE ORGANIZATIONS



### KEY:

-  Pioneer ACOs
-  Advance Payment ACOs
-  Medicare Shared Savings ACOs

# Networks

Current View: North Carolina

North Carolina



Go There

Select your Models to display

Select All | Unselect All

Health Care Innovation Awards

Multi-payer Advanced Primary Care Practice Demonstration

Medicaid Emergency Psychiatric Demonstration

Incentives for the Prevention of Chronic Disease in Medicaid Demonstration

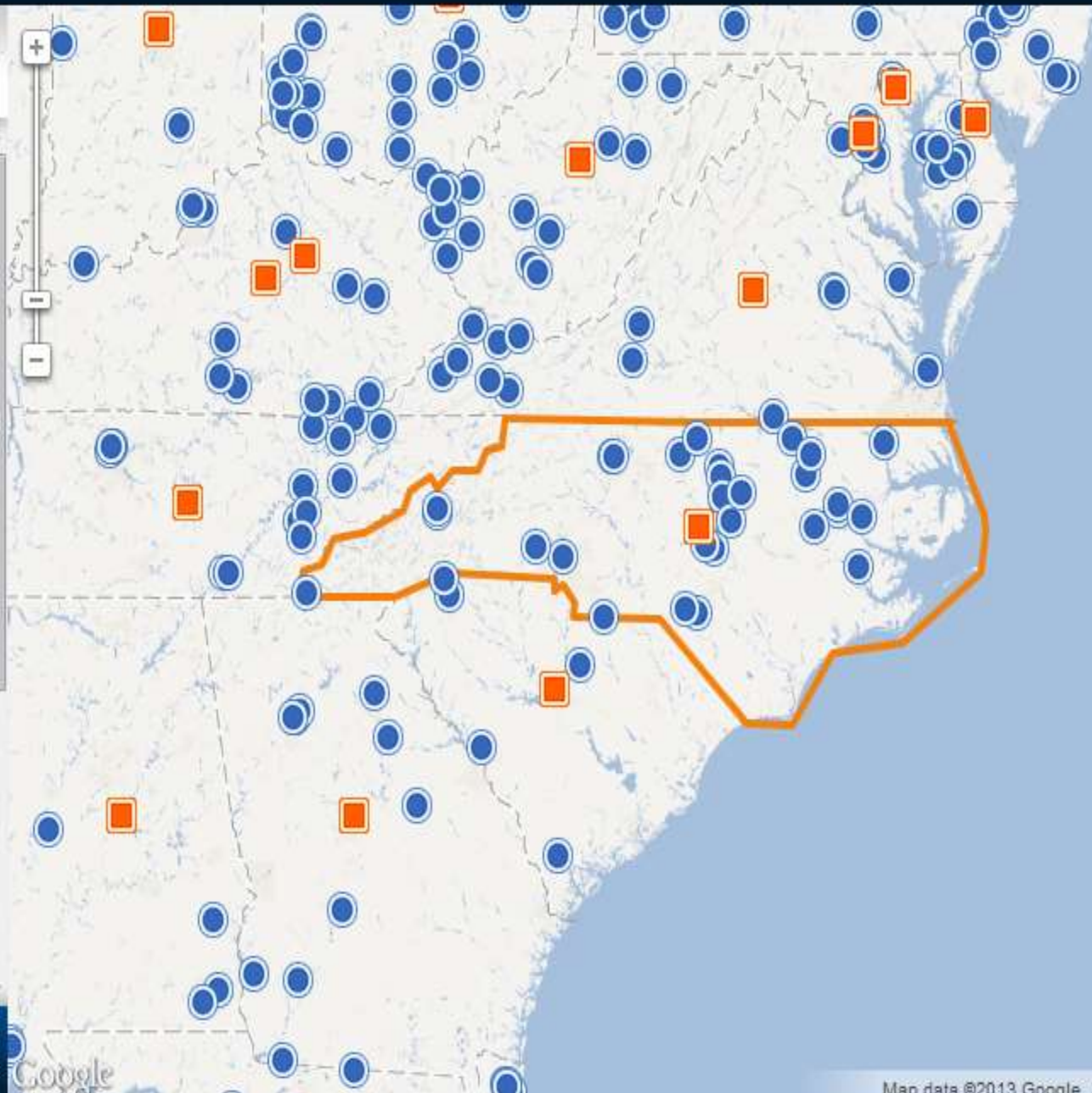
Comprehensive Primary Care Initiative

Community-based Care Transitions Program

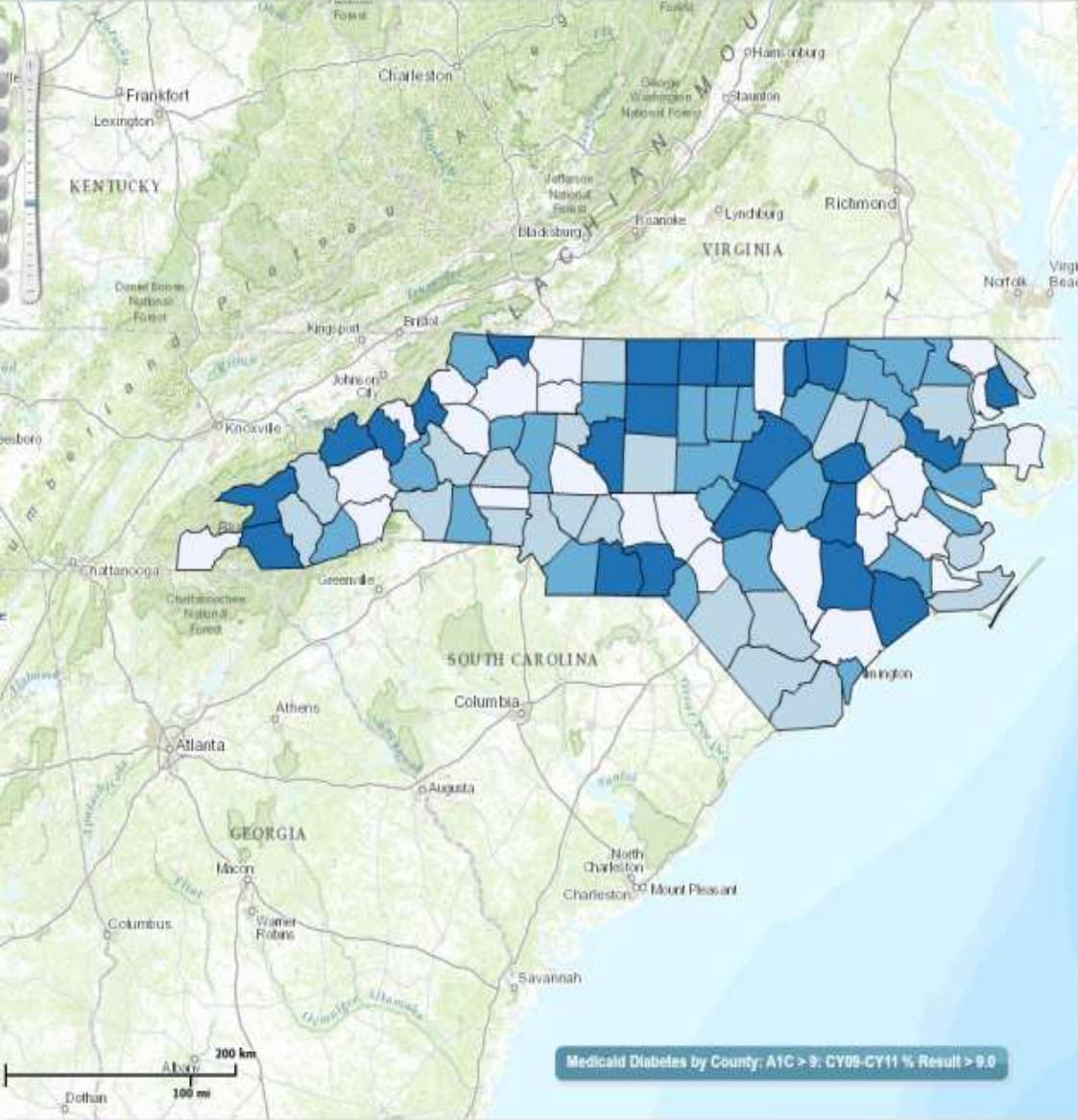
Graduate Nurse Education Demonstration

Independence at Home

Display Selected



Google



Medicaid Diabetes by County; A1C > 9; CY09-CY11 % Result > 9.0

**Legend** All

- 15.0 to 24.6
- 24.7 to 29.9
- 30.0 to 33.2
- 34.7 to 44.3

Show As  Thematic  Threshold

Color Scheme: Quantitative Palette: [Color Swatches]

Number of Categories: 4 Distribution: Quantile

Primary Indicator

Select a topic

Community Characteristics	Community Health Assessment
Medicaid/Medicare Population Profile	Health System Performance: Medicare
Health System Performance: Medicaid	CCNE Quality Improvement

- Select an indicator
- Medicaid Asthma by County [show all](#)
  - Medicaid Cancer Screening by County [show all](#)
  - Medicaid Cardiovascular by County [show all](#)
  - Medicaid Dental Care by County [show all](#)
  - Medicaid Diabetes by County [hide list](#)
    - A1C < 8 [about](#)
    - A1C > 9 [about](#)
    - A1C Testing [about](#)
    - BP < 130/80 [about](#)
    - BP > 140/90 [about](#)
    - Cholesterol Screening [about](#)
    - DM and HTN ACE/ARB Therapy [about](#)
    - Foot Exam [about](#)
    - LDL < 100 [about](#)
    - LDL > 130 [about](#)
    - Nephropathy Treatment or Screening [about](#)
    - Retinal Eye Exam [about](#)
  - Medicaid Heart Failure by County [show all](#)
  - Medicaid Pediatric by County [show all](#)

Select group/category

CY09-CY11 % Result > 9.0

Basemaps and Optional Layers

Layer Controls

Login And Account Settings

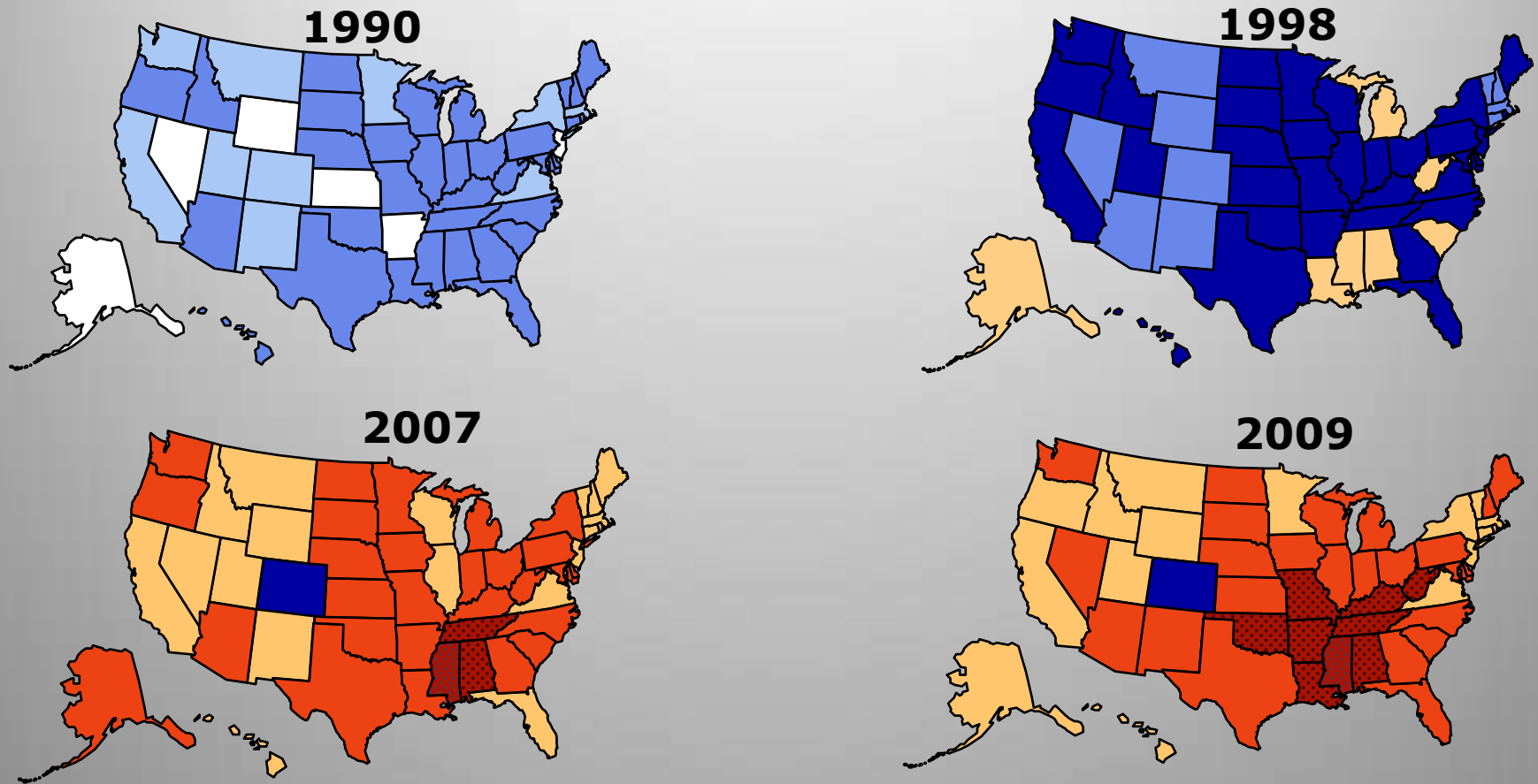
Map Gallery  
Coming Soon



# Obesity Trends\* Among U.S. Adults

**BRFSS, 1990, 1998, 2007, 2009**

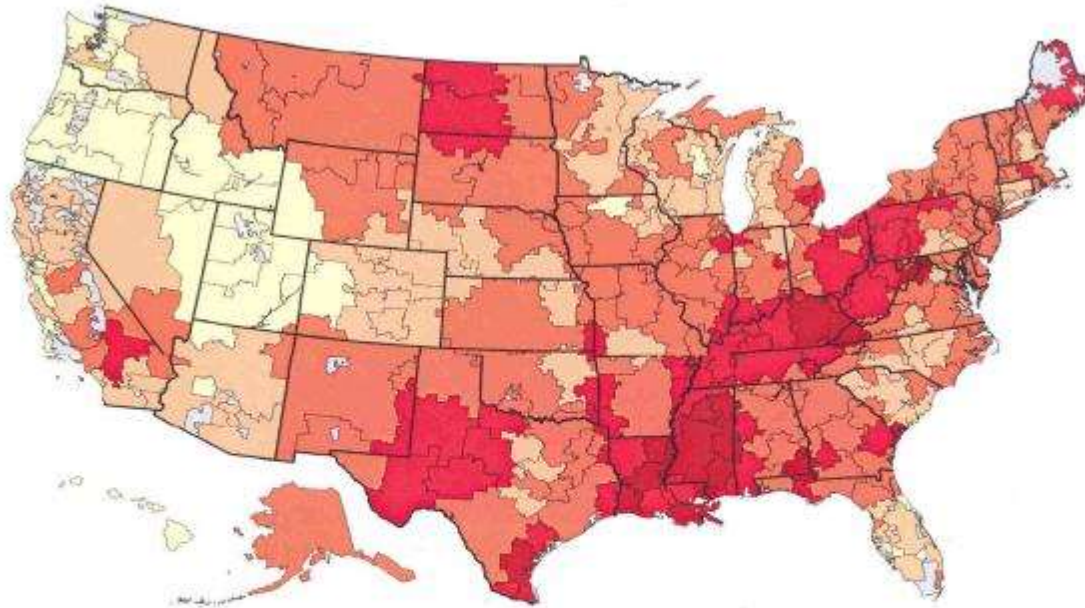
(\*BMI ≥30, or about 30 lbs. overweight for 5'4" person)



Legend: No Data, <10%, 10%–14%, 15%–19%, 20%–24%, 25%–29%, ≥30%

Source: CDC Behavioral Risk Factor Surveillance System

# Disease Burden / Practice Patterns Vary



**Map 4.7. Rates of Hospitalizations for Ambulatory Care-Sensitive Conditions (1995-96)**

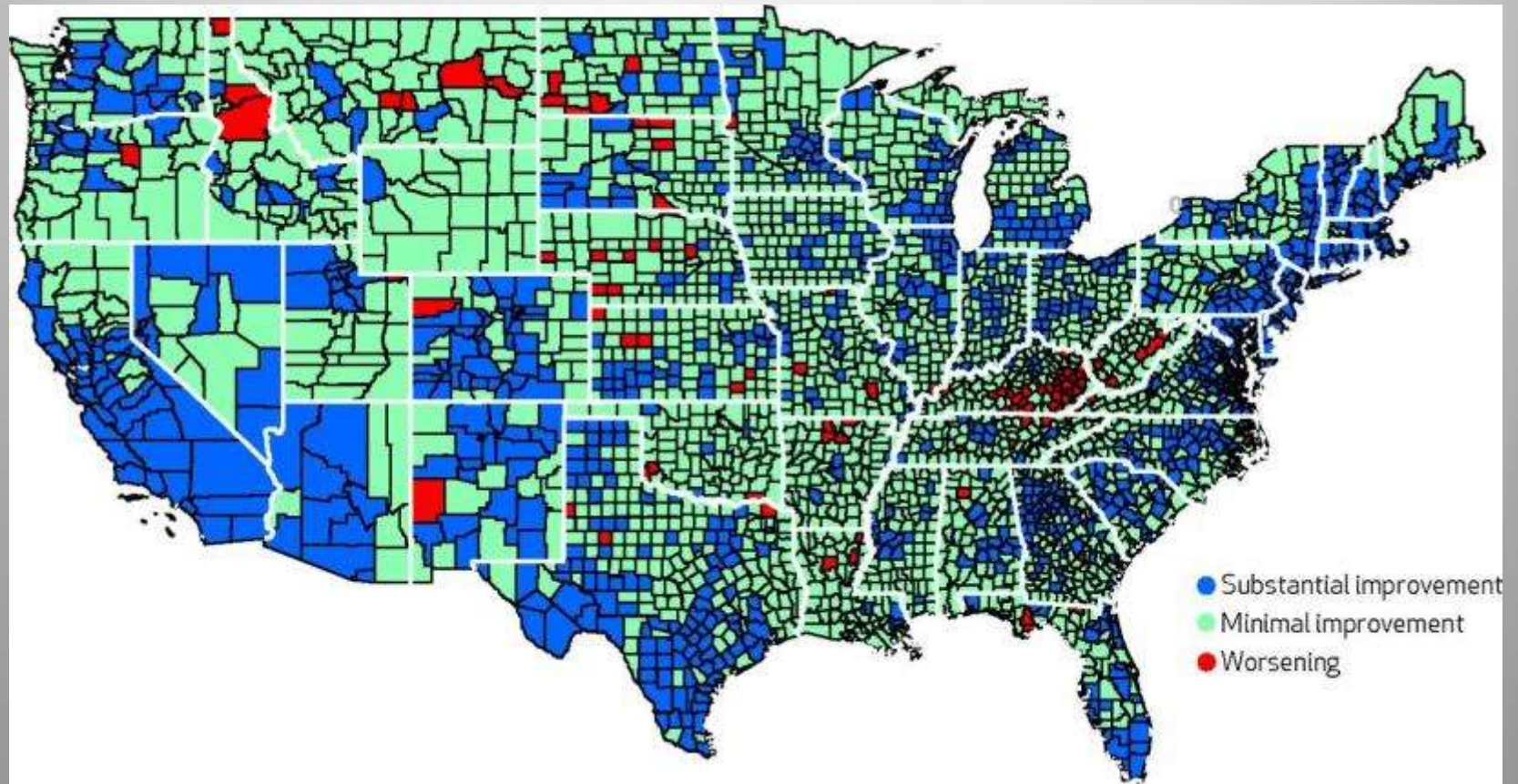
Rates of hospitalizations for ambulatory care-sensitive conditions were higher in the East, particularly in the Southeast, than in the Western United States. Rates were particularly low among Medicare residents of Utah, Idaho, and Oregon.

Ratio of Rates of Hospitalization for Ambulatory Care-Sensitive Conditions to the U.S. Average by Hospital Referral Region (1995-96)

1.30 to 1.63	(17)
1.10 to < 1.30	(62)
0.90 to < 1.10	(116)
0.75 to < 0.90	(79)
0.56 to < 0.75	(32)
Not Populated	

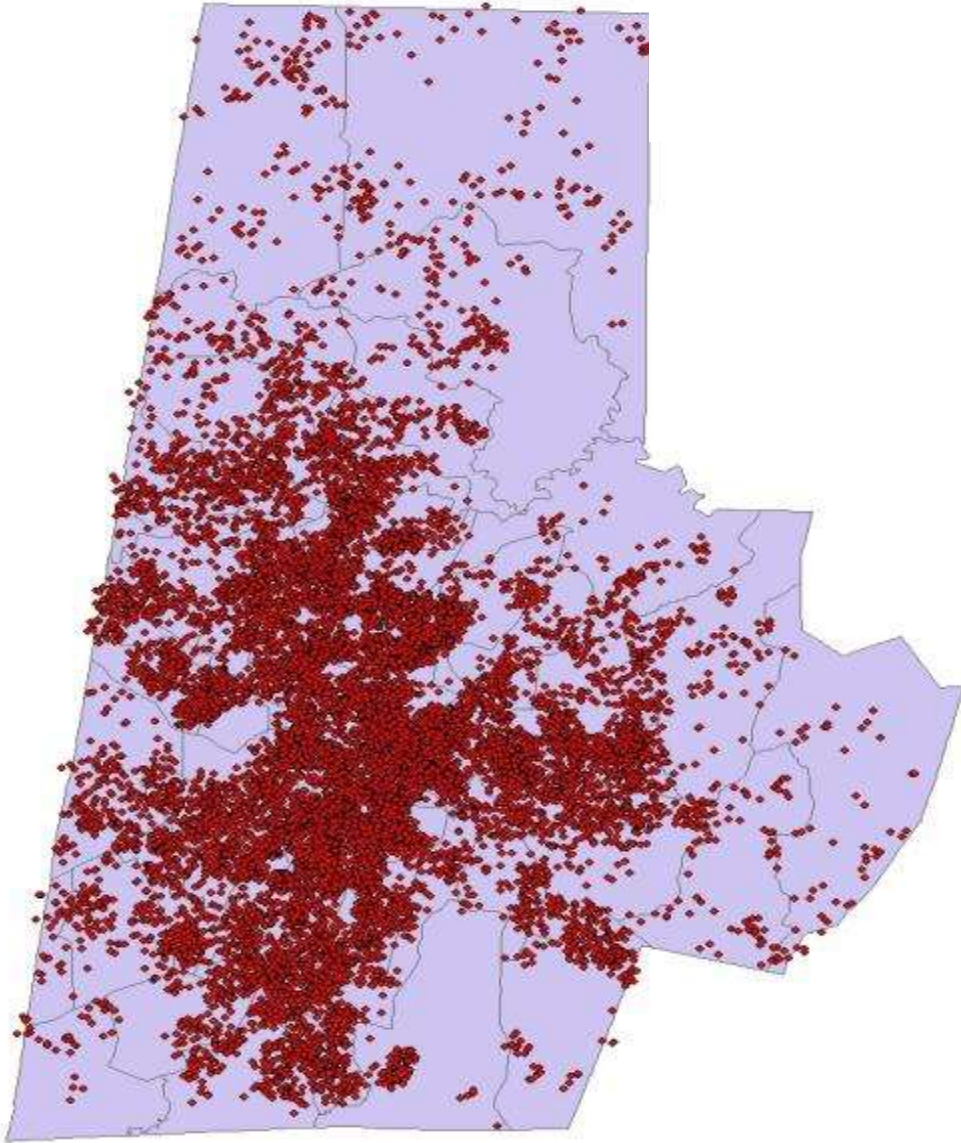
Source: The Quality of Medical Care in the United States: A Report on the Medicare Program. The Dartmouth Atlas of Health Care 1999. The Center for the Evaluative Clinical Sciences Dartmouth Medical School

## Change In Male Mortality Rates From 1992–96 To 2002–06 In US Counties



Kindig D A , and Cheng E R Health Aff 2013;32:451-458





## Durham residents with diabetes (2007-2009)

14,345 unique patients

8.7% of all patients >20 yo

14.3% of all patients >40 yo

### Durham County Stats (per CDC):

2008 ~ 10% of adults diagnosed  
with diabetes

### North Carolina (CDC):

2008 ~ 9% of adults diagnosed  
with diabetes

### By Race:

8.4% White

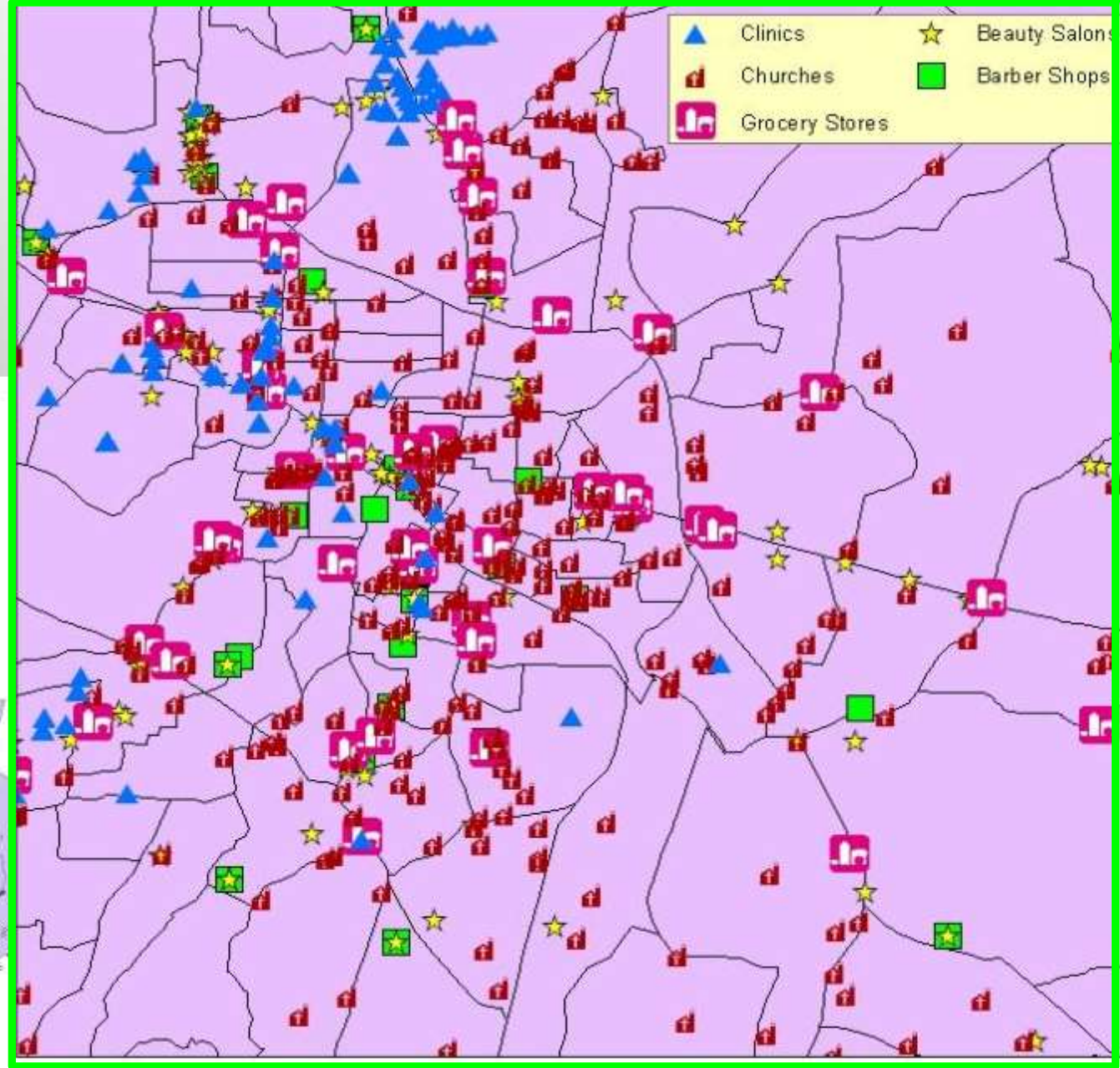
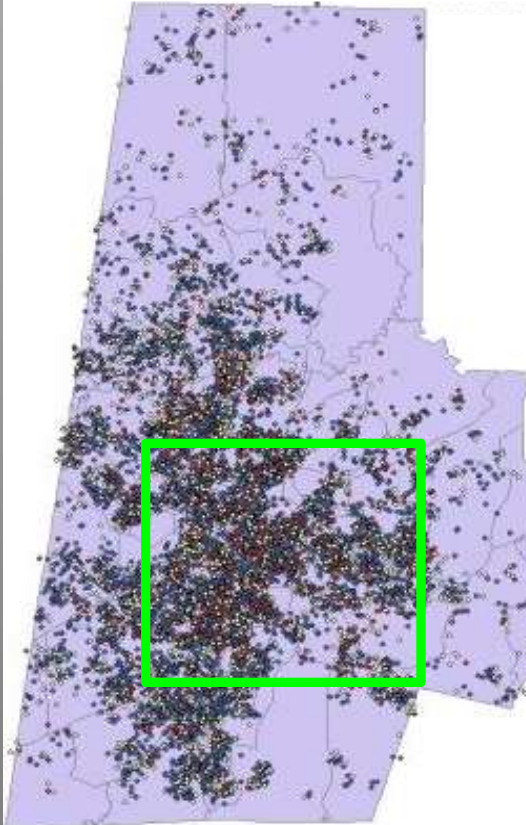
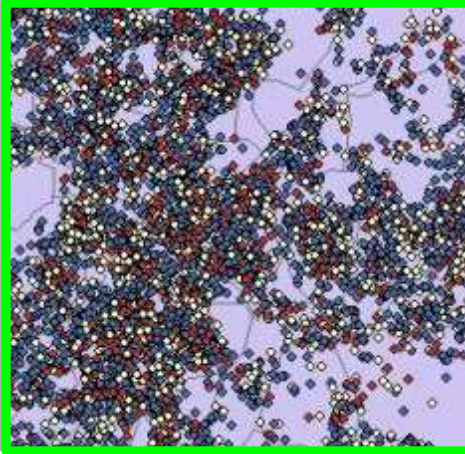
15.6% AA

12.4% NA

4.5% Hispanic

4.3% Other

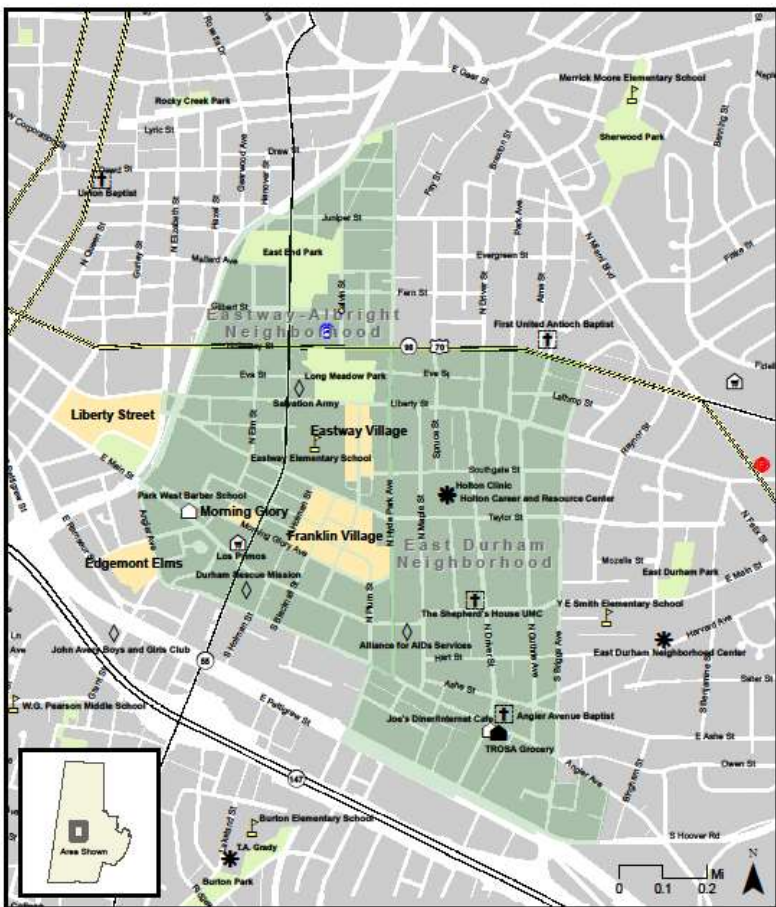
◆ HbA1C < 7 (5817, 54%)    ◆ 7 < HbA1C < 9 (3279, 30%)    ◆ HbA1C > 9 (1715, 16%)



# Building Health Capacity in Durham Neighborhoods

DHI teams are connecting community partners and working with neighborhood residents to ensure:

- Healthy schools and neighborhoods
- Safe places to exercise
- Access to healthy foods
- Access to health information

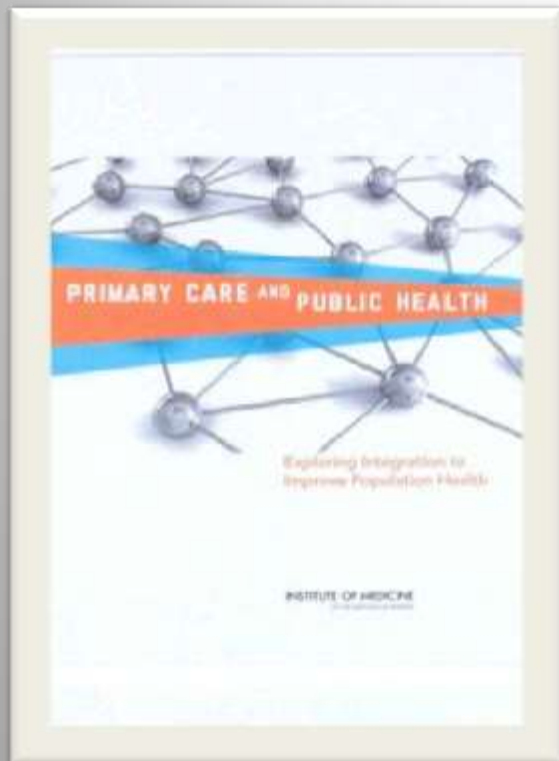


Northeast Central Durham Neighborhood Community Assets

- |                               |                      |                  |
|-------------------------------|----------------------|------------------|
| * Community/Recreation Center | 🏠 Grocery            | 🚓 Police Station |
| 🏛️ Church                     | 📍 Non-Profit         | 🚒 Fire Station   |
| 🏢 Business                    | 🏘️ Housing Community | 🎓 School (K-12)  |
| 🏠 Multiple                    | 🌳 Public Park        |                  |

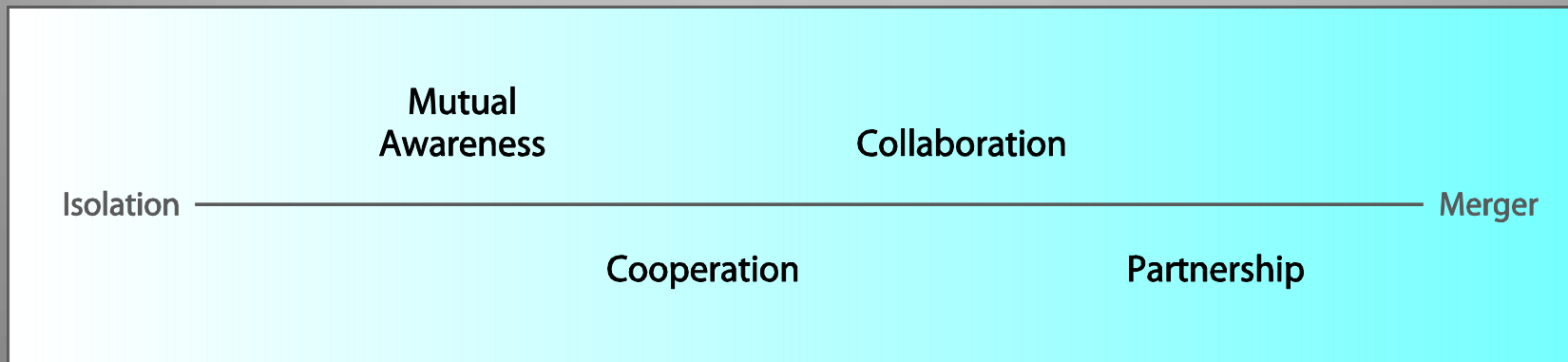


**DURHAM**  
**Health**  
**INNOVATIONS**



[www.iom.edu/primarycarepublichealth](http://www.iom.edu/primarycarepublichealth)

## Degrees of Integration:



# Moving Forward the National Strategic Imperative of Health

Health Futures  
Collaborative  
Roundtable on  
Network Leadership,  
Innovation,  
And Global Health  
Engagement

August 13-14, 2013

## Community Health Engagement

### Strategy Leadership

Identify critical partners needed to be at the table for this to work - NAACHO ASTHO, foundations (NBGH) and employers both as payers and enablers

Make sure communities have the information they need to identify priorities for themselves - identify positive deviance and prioritize what they want to work on

### Strategy Innovation

Use research grants and tools to help enable community involvement

### Strategy Culture

Focus on children: Healthy food choices (thanks, cookie monster for eating more fruits & veggies); healthy activities; get parents on board

Celebrate and build on the "bright spots" already in the community; those innovative strategies are most likely to succeed

Use the concept of Town Hall - literally or figuratively - to help define health, determine needs; leaders engage and focus on how best to communicate with community

### Operations Leadership

Assess: Know what your community assets are - providers, organizations, resources, leaders, community health needs, health strategy.

Develop/Execute: Unified community action plan with all players based on assessment tied to outcomes. Coordination, collaboration, and facilitation. Eliminate unnecessary duplication.

Sustain: Require state/federal strategic support; share best practices; identify/develop leaders; re-evaluate action plan/outcomes

### Operations Innovation

Create a community health improvement innovation fund/marketing plan to foster innovation; include a school challenge to involve children and an annual award.

Break down goals/strategy into smaller steps that a community can understand. Allow a regional/local plan based on culture/values and understanding of local health issues.

Provide analytics to community health teams to inform strategies

Create a community collaborative with regional teams/champions to collect best practices and share knowledge; expand regional teams to include a variety of stakeholders.

### Operations Culture

Understanding health is local; develop community action plans built WITH communities not FOR them. It's about stakeholder buy-in. Maximize community accepted norms and local leaders

Convene and align; utilize diverse groups to host/frame discussions on agency strengths and weaknesses. Build swim lanes and connect local - state - federal as well as in the private sector

### Tactics Leadership

Leaders must be from community: parents, church, employers, school boards, risk takers. There must be network leadership who developed trust with community

Use proactive metrics to assess community stakeholders in order to determine who to engage

Engage business community and show how health improves their bottom line

### Tactics Innovation

Education is key - starting early and continuing throughout life. Engage the community at all levels to build and educate on health. Use local sports stars, celebrities to help motivate youth

Incentivize successful ideas and practices, e.g., school competitions with programs like the President's Fitness program. Leverage the media to tell the story of health and healthy communities

### Tactics Culture

Cultural change has to start at the community level. Use community advocates (teachers, grandmothers, clergy, colonel's, etc.)

Use what the literature says works: targeted behavior change interventions; social media, etc.

Next steps – define what doctors need to know  
and do in and with the community

# The Population Health Competency Map

## Training Levels:

1. **Foundational** — Basic **awareness** of the principles and appreciation for their impact and importance in community health.
2. **Applied** — An intermediate level of learning, enabling **skilled participation** in community-engaged population health activities.
3. **Proficient** — Advanced learners who achieve competence for **independent practice** or leadership of the design and implementation of community-engaged health improvement activities.

## Competencies

- Public Health
- Community Engagement
- Critical Thinking
- Team Skills

# Competency Map: Integrating Population Health into Clinician Education

Learners:	medical PA, PT students	FM residents	nurse leaders	FM faculty
Competency:				
Public Health	F			P
Community Engagement	F			P
Critical Thinking	F			P
Team Skills	F			P



F = Foundational (Basic) Awareness

A = Applied (Intermediate) Skilled participation

P = Proficient (Advanced) Independent practice



# Public Health

Address the role of socioeconomic, environmental, cultural, and other population-level determinants of health on the health status and health care of individuals and populations

**Foundational**  
Discuss how these factors influence health status and health care delivery

**Applied**  
Discuss potential strategies for addressing population-level determinants of health

**Proficient**  
Collaborate with stakeholders to design and implement strategies to address population-level determinants of health

# Community Engagement

Discuss the principles of community engagement and how they contribute to creation of community-academic partnerships

**Foundational**  
Recognize the principles of CEnR as defined by the Centers for Disease Control and Prevention (CDC)

**Applied**  
Discuss the application of the CEnR principles within a specific community

**Proficient**  
Apply the principles of community-engaged research to improve health among diverse populations

# Critical Thinking

Assess process and outcome of interventions

## Foundational

Discuss different methods of data collection, both qualitative and quantitative

## Applied

Critique methods and instruments for collecting valid and reliable quantitative and qualitative data

## Proficient

Independently develop a plan for collecting and analyzing new data

# Team Skills

Lead  
interprofessional  
teams in health  
improvement

**Foundational**  
Observe and  
reflect on  
performance  
including  
one's own

**Applied**  
Assess one's own  
emotional  
intelligence and  
develop plans for  
ongoing self-  
improvement

**Proficient**  
Lead broad-  
based teams in  
developing  
and  
implementing  
community-  
based health  
improvement  
initiatives

# Population Health Curriculum

Training levels	Basic	Intermediate	Advanced
Learner types	<ul style="list-style-type: none"> <li>All students &amp; residents</li> </ul>	<ul style="list-style-type: none"> <li>Primary care residents</li> <li>CFM faculty</li> </ul>	<ul style="list-style-type: none"> <li>Population Health Fellows &amp; Faculty</li> <li>CH faculty</li> </ul>
<b>Apply strategies that improve the health of populations</b>	<ul style="list-style-type: none"> <li><b>Discuss potential population-based interventions to improve health</b></li> </ul>	<ul style="list-style-type: none"> <li><b>Identify appropriate preventive strategies for a population, based upon literature, data assessment and stakeholder input</b></li> </ul>	<ul style="list-style-type: none"> <li><b>Develop and implement population-based prevention strategies in collaboration with community partners</b></li> </ul>
Learning Method	<ul style="list-style-type: none"> <li>Project: design an intervention</li> </ul>		
Evaluation	<ul style="list-style-type: none"> <li>Assess intervention</li> </ul>		

# Population Health Curriculum

## learning methods

- Readings
- Small group discussions
- Access to data sets
- Projects – participate in design and evaluation of projects in the office and in the community

# Population Health Curriculum evaluation methods

- Tests along the way
- Project assessment (“final exam”)
- Real test – health improvement in home communities

# Population Health Curriculum

The result:

Physicians who can care for their patients  
in the context of their communities